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THE THRESHOLD EFFECT OF PARTICIPATIVE LEADERSHIP AND THE ROLE OF LEADER INFORMATION SHARING

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Drawing on implicit leadership theory (Brown & Lord, 2001; Eden & Leviatan, 1975), we hypothesize that the relationship between participative leadership and employee performance is curvilinear (J-shaped), suggesting that participative leadership is unrelated to employee performance when participative leadership is below a moderate level (i.e., a threshold). Above this threshold, increased participative leadership is related to higher employee performance. Building on adaptive resonance theory (Grossberg, 1999), a variant of implicit leadership theory, we further hypothesize that leaders' information-sharing behavior will moderate this curvilinear relationship. We test this model using two independent samples: office and call-center employees (Study 1) and factory workers (Study 2). Results from Study 1 reveal that this curvilinear relationship is stronger when leaders' information sharing is high and weaker when information sharing is low. Furthermore, in Study 2, we find that leadership effectiveness mediates the interactive effect of participative leadership and information sharing on objective work performance.

Participative leadership is defined as shared influence and joint decision making between a leader and their followers (Armenakis, Harris, & Mossholder, 1993; Koopman & Wierdsma, 1998), and its goal is to give followers greater discretion, extra attention and support, and involvement in solving problems and making decisions (Nystrom, 1990). Many practicing managers acknowledge the potential motivational benefits of participative management practice, and value its performance implications (e.g., Randolph, 2000). However, participative leadership requires that leaders share or give up a certain amount of control over decision making. Conceivably, some leaders may be reluctant to embrace participative management whole-heartedly because employee participation entails a potential loss of power (Heller, 2003), because there is a risk of blame if employees fail to perform to expectations, or because they simply have no discretion to delegate and need to selectively engage some employees in participation (Ford & Fottler, 1995). Instead, managers may merely exhibit a moderate degree of participative leadership, assuming that this may be enough to improve employees' performances. This is a common phenomenon in organizations—participation is widely recognized but often done half-heartedly by managers.

We contend that this incomplete implementation of participative leadership presents mixed cues to employees and constrains their positive responses. Specifically, since participation requires employees to invest extra effort and resources in decision making, they are stimulated to search for information and cues to make sense of participative leadership behavior. According to implicit leadership theory (Brown & Lord, 2001; Eden & Leviatan, 1975), employees possess a knowledge representation or schema of prototypical traits and behaviors of leaders. When such a schema is activated, its associated "if–then" behavioral scripts will guide employees in their interactions with leaders (Labianca, Barbara, & Brass, 2000; Lord, Brown, Harvey, & Hall, 2001). The half-hearted implementation of participative leadership, however, does not signal sufficiently strong cues to match employees' prototypical expectations of a participative leader, hindering the activation of the participation schema. In this situation, employees tend to stick to the status quo and be non-responsive to their participative leader. This indifferent reaction remains until employees perceive that their leader's participative behavior reaches

a certain level (i.e., a threshold) so as to make the participative leader prototype salient enough to activate the participation schema. The behavioral scripts of the participation schema will then steer employees to increase performance. Therefore, we propose a *threshold effect* of participative leadership such that participative leadership and performance have a J-shaped, curvilinear (rather than a positive linear) relationship. Performance is irrelevant to participative leadership when employees perceive their leader's participative behavior is below the threshold; when it is perceived to be above the threshold, performance increases.

Research on leadership perception and cognitive representations of leaders further suggests that individuals evaluate leaders' behaviors based on multiple interconnected sources of information (Grossberg, 1999; Wyer, 2004). The extent to which employees see their leaders as a participative leader who can effectively motivate employees' performance depends on whether employees observe behavioral cues that are consistent with the initial participative-like behavior of the leader. These cues then resonate to form a strong signal that matches a holistic prototypical expectation of a participative leader, activating employees' participation schemas and thus inducing their positive reactions toward the leader (Carpenter & Grossberg, 1995). Leadership researchers have suggested that leaders' information-sharing behavior is a particularly relevant behavioral cue for participative leadership, given that employees would understandably expect the participative leader to share important information (e.g., goals, reasons, expectations) to facilitate their participation in decision making (Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Chen & Tjosvold, 2006). Therefore, we argue that leaders' information sharing moderates the J-shaped, curvilinear linkage between participative leadership and performance.

We posit that employees will perceive inconsistent signals if their leader encourages them to participate in decision making yet shares only limited information about the decisions (i.e., perceptions of high participative leadership but low information sharing). Such inconsistent behavioral cues may cause ambiguity and confusion, lowering employees' evaluations of the leader and preventing them from seeing their leader as fitting the prototype of participative leadership. In this situation, we expect that the effect of high participative leadership on performance is impaired. In contrast, a combination of high participative leadership and information sharing may jointly amplify the perception of a prototypical participative leader, which, in turn, activates the participation schema that guides subordinates to move beyond their state of inaction and improve performance. Accordingly, research has suggested that employees tend to assess leaders as more effective when leaders' behaviors are perceived as consistent and matching their prototypical expectations (van Quaquebeke, van Knippenberg, & Brodbeck, 2011). To test this logic, we further propose that employees' perceptions of leadership effectiveness play a critical intermediating role in the joint effect of participative leadership and information sharing on performance.

In sum, we contribute to the participative leadership literature by: (a) proposing a threshold effect of participative leadership, and testing whether there is a non-linear relationship between participative leadership and performance; (b) testing the moderating role of information sharing on this curvilinear linkage, highlighting the possible detrimental effect of inconsistent leadership behaviors on employees; and (c) uncovering the cognitive processes (perceptions of leadership effectiveness) that underlie the moderated J-shaped relationship between participative leadership and performance.

THEORY AND HYPOTHESES

Threshold Effect of Participative Leadership

Scholars have devoted much effort to understanding the effects of participative leadership on subordinates' performance (Lam, Chen, & Schaubroeck, 2002; Locke & Latham, 1990). This relationship has been extensively examined from the individual perspective (e.g., Huang, Iun, Liu, & Gong, 2010; Lam et al., 2002) and the organizational perspective (e.g., Labianca et al., 2000; Randolph, 2000; Seibert, Silver, & Randolph, 2004). Nevertheless, empirical studies have not yet obtained a definite conclusion about this relationship. Some studies have found a small or moderate positive effect of participative leadership on performance (e.g., Guzzo, Jette, & Katzell, 1985; Miller & Monge, 1986), whereas others have not (e.g., Wagner, 1994; Wagner & Gooding, 1987). In an attempt to address these inconsistent findings, prior research has examined boundary conditions and predominantly focused on understanding the linear effect of participative leadership (Bartunek, Foster-Fishman, & Keys, 1996; Lam et al., 2002; Huang, 2012; Wagner & Gooding, 1987).

Elsewhere, theory and anecdotal evidence have suggested that employees' passive and indifferent reactions toward participative management may well be caused by its half-hearted implementation by management (e.g., Labianca et al., 2000; Randolph, 2000). For example, Ahearne, Mathieu, and Rapp (2005: 945) stated that "the inhibiting factors appear to be more attributable to failures of implementation." In their study of the failure of organization-wide participative management programs, Ford and Fottler (1995: 22) argued that it is "the matter of degree" of the implementation of participative management that determines the effect on job performance. Their report further revealed that some supervisors only superficially involved employees in participation, making them reluctant to respond positively toward participative management (Ford & Fottler, 1995). It appears that, unless employees perceive a substantial increase in participation, positive performance results are unlikely.

Therefore, we propose a non-linear, J-shaped relationship between participative leadership and performance. That is, before a subordinate perceives a leader's participative leadership to have attained a certain degree or level, performance improvement may be limited. The positive effects of participative leadership can only be realized when the degree of the leader's participative behavior is perceived to exceed a threshold. This threshold effect may help explain—at least in part—why prior research has often only found a weak linear relationship, or no relationship, between participative management and performance.

In this study, we conceptualize participative leadership as a dyadic construct for two reasons. First, theoretically, it has long been obvious that managers treat different employees differently, to the extent that various subordinates may perceive a different degree of participative leadership behavior from the same supervisor (Scandura & Graen, 1984). Second, empirically, several studies have followed this perspective to investigate perceptions of participative leadership at the dyadic level (Huang, 2012; Huang, Shi, Zhang, & Cheung, 2006; Huang et al., 2010; Zhang & Bartol, 2010). Drawing on implicit leadership theory, we further extend this dyadic phenomenon by proposing a threshold effect of participative leadership.

Researchers of implicit leadership theory (Brown & Lord, 2001; Eden & Leviatan, 1975) have proposed that people tend to develop a knowledge representation, or schema, of prototypical traits and behaviors of leaders. Such schemas are a set of "if–then" scripts informing people that, if they interact with a certain type of prototypical leader, they should respond in a certain manner (Lord et al., 2001). Employees may develop different leadership prototypes, such as participative, transformational, and charismatic leadership (House, Hanges, Javidan, Dorfman, & Gupta, 2004), which they use to make sense of and interpret leadership behaviors, either consciously or unconsciously (Lord & Maher, 1991). These prototypes form a cognitive basis of schemas that guide individuals' social sensemaking, behavioral expectations, and memory. Employees use this foundation to decide how to interact with their leaders and to reduce uncertainty (Epitropaki & Martin, 2005). More importantly, based on their schemas of prototypical leaders, employees distinguish effective leaders from non-effective leaders, and then respond to leadership behaviors accordingly. Whether a leader can successfully activate employees' positive behaviors and attitudes depends on the extent to which the leader's behaviors match a specific, positive leader prototype (Lord, Foti, & De Vader, 1984).

According to cognitive research, although employees may envisage multiple leader prototypes (House et al., 2004), a particular knowledge representation or schema of leadership is not always readily activated (Wyer, 2004). It depends on whether the stimulus (e.g., exposure to or perceptions of leaders' behavior; Medvedeff & Lord, 2007; Sherman, 1996) reaches a certain level (i.e., a threshold) to activate the specific leader prototype. Given that participative leadership behavior typically requires followers to put forth effort and invest resources in response to their leaders (Ford & Fottler, 1995; Labianca et al., 2000), employees are stimulated to make sense of and interpret the leadership behavior. However, only when employees perceive a more persistent participative leadership behavior will the signal be strong enough to match their prototypical expectations of a participative leader and facilitate them to adopt a more specific, participation schema over other schemas (Labianca et al., 2000; Shetzer, 1993). Once this participation schema is activated and adopted, employees will respond to participative leadership positively—for example, by improving their performance.

Conversely, a perceived low or moderate level of participative leadership may not be sufficient to match employees' expected prototypical behaviors of participative leaders, thereby causing those

employees to feel uncertain about what will happen if they react to the leader's actions. They may even hold a negative assessment of the leader's participative action, interpreting it as a way for their workload and responsibilities to be increased with no reward (Labianca et al., 2000; Shetzer, 1993). This situation will hamper the activation of participation schemas, and it will prevent employees from viewing participative leadership positively, inhibit their positive reactions, and drive them to maintain a state of inaction (i.e., a threshold; Medvedeff & Lord, 2007).

In contrast, a substantially high (beyond moderate) level of participative leadership may activate the schema for participation and the relevant positive behavioral scripts. A level of participative leadership that is perceived to be high is likely to match the prototype of a participative leader and make employees believe that their investment of effort will lead to better performance and meaningful outcomes (Huang, 2012). This expectancy, associated with the participation schema, makes subordinates feel empowered and perceive that they will gain more control and power to influence organizational decision making, thus promoting self-efficacy and performance (Ford & Fottler, 1995; Zhang & Bartol, 2010).

Thus, we propose that participative leadership will have a J-shaped, curvilinear relationship with employee performance. We predict that performance will be largely unrelated to participative leadership when participative leadership is low (i.e., below the threshold), whereas, above this threshold, performance will be positively associated with participative leadership.

Hypothesis 1. Participative leadership has a curvilinear relationship with employee task performance such that moderate to high levels of participative leadership are more conducive to higher performance.

Leaders' Information Sharing as a Moderator

More recent studies on implicit leadership have suggested that individuals may assess a leader based on a pattern or an interaction of multiple leadership behaviors (i.e., a set of stimuli) rather than on a single behavioral trait or stimulus (Grossberg, 1999; Lord et al., 2001). Employees may assess their leaders holistically through the activation of a network of interconnected behavioral cues (Kunda & Thagard, 1996; Smith, 1996). Building on this work, Grossberg (1999) proposed the adaptive resonance theory (ART), which advances that the matching of several leadership behaviors is more likely to result in the state of resonance, which amplifies the strength of the stimulus set and activates the holistic schema of prototypical leaders. Indeed, after being exposed to a stimulus, people tend to look for thematically related information to make sense of that stimulus (Wyer, 2004).

Applying ART to implicit leadership, when employees witness behavior that resembles participative leadership, the stimulus is encoded as an initial interpretation that generates expectations of prototypical leadership behavior from employees and drives them to search for similar behavioral cues to match the prototypical traits they expect of a participative leader (Medvedeff & Lord, 2007; Shondrick, Dinh, & Lord, 2010). In a similar vein, research on participation has suggested that, when employees are invited by managers to participate in decision making, the employees tend to seek information from managers, facilitating them to interpret the behavior of their managers and guide their reactions (Ford & Fottler, 1995). Based on this reasoning, we propose that leaders' tendency to share information with subordinates (i.e., information sharing) is particularly relevant in the context of participative leadership. The combination of high participative leadership and information sharing is especially effective in matching employees' prototypes of participative leaders and thereby induces high performance.

We conceptualize information sharing as the degree to which leaders openly share, discuss, and communicate important information needed to make decisions and form judgments (Arnold, Arad, Rhoades, & Drasgow, 2000; Avolio et al., 2004). We consider it to be an important contingency factor because leaders are a central source of information (e.g., Dineen, Lewicki, & Tomlinson, 2006). Previous research on leadership has suggested that subordinates seek behavioral cues to make sense of leaders' participative motives. They expect their leaders to share information about their participative goals, expectations, reasons for their participative actions, and guidance to meet participative objectives (Avolio et al., 2004; Shetzer, 1993; Wallace, Johnson, Mathe, & Paul, 2011). Participative leadership accompanied with information sharing delivers consistent and compatible participative cues, building powerful psychological situations that lead employees to perceive their leaders as implementing genuine participative practice (Mischel, 1973). In contrast, inadequate information sharing may reduce the clarity and consistency of the situation, inhibiting employees' positive reactions toward participative leadership (Meyer, Dalal, & Hermida, 2010).

In the previous section, we hypothesized a J-shaped link between participative leadership and performance. In light of the importance of information sharing in participative management, we further contend that information sharing may influence this curvilinear relationship. We argue that the failure of participative leaders to provide sufficient information to subordinates (i.e., perceptions of leaders' information sharing are low) may disrupt the cognitive registration of prototypical participative leaders and the associated activation of positive behavioral scripts, thus inhibiting employees' performance.

Specifically, we do not expect positive effects on performance when there is low participative leadership and low information sharing. In this situation, participative leadership is unlikely to be registered, and low information sharing further introduces uncertainty, which, in turn, keeps employees in a state of inaction. Moreover, when information sharing is low, even perceptions of high participative leadership may not be sufficient to activate participation schema and induce employees' positive responses, simply because high participative leadership accompanied with low information sharing will inevitably result in perceptions of inconsistent leadership behaviors.

A similar logic can also be applied to a situation in which participative leadership is perceived as low but information sharing is perceived to be high. Recent theoretical advances in leadership research have found that employees do observe contradictory behaviors in their leaders (e.g., open sometimes and dishonest at other times; Lord et al., 2001). According to ART, such mismatched behaviors violate employees' implicit expectations of typical participative leader behaviors, and do not provide sufficient cues to resolve the ambiguity of participation practices (Medvedeff & Lord, 2007). As a result, employees may be forced to rely on their own biases to make sense of leadership behavior in a negative way (Lord & Smith, 1983; Louis & Sutton, 1991), impeding their positive behavioral reactions (De Cremer, 2003; Meindl, Ehrlich, & Dukerich, 1985; Yukl, 2006).

In contrast, when employees perceive both participative leadership and information sharing to be high, they are likely to view their leader as consistently promoting participation. This positive match between leaders' behavioral cues, as suggested by ART, is a strong signal that produces intelligible resonance to sustain participation schemas, reinforcing employees' beliefs about the positive aspects of participative leadership (e.g., that influence, autonomy, and decision power can be expected and obtained from the leader), which can effectively turn their investment of effort into positive performance consequences (Huang, 2012). This increased certainty produces uniform participative expectancies and adequate incentives, motivating employees to go the extra mile and improve their performance (Bashshur, Hernández, & González-Romá, 2011). Therefore, when information sharing is perceived to be high, high levels of participative leadership are more effective in improving performance.

Along this line, the leadership literature has also suggested that employees are more likely to recognize consistently positive leadership behaviors because consistent actions reflect leaders' core values (Gardner, Avolio, & Walumbwa, 2005), reduce uncertainty about leader–member interactions (De Cremer, 2003), and increase the clarity and visibility of leaders' roles (Johnson, Venus, Lanaj, Mao, & Chang, 2012). Indeed, experimental research has further suggested that, when leaders' behavior is congruent, information processing about leaders is favorably colored (Baumeister & Leary, 1995). Accordingly, leaders are typically perceived as more sincere (Cuddy, Fiske, & Glick, 2007), prompting subordinates to make positive attributions concerning leaders' participative intentions (Lord & Smith, 1983). As a consequence, this may motivate subordinates to invest more in their job (Huang et al., 2010; Keller & Dansereau, 1995). In sum, we propose:

Hypothesis 2. Information sharing moderates the J-shaped link between participative leadership and task performance such that employees who perceive high information sharing from their leaders perform better in response to moderate to high levels of participative leadership. In contrast, performance is not related to participative leadership when employees perceive low information sharing.

Perceived Leadership Effectiveness as a Mediator

Implicit leadership theory and ART are major theoretical tenets of Hypotheses 1 and 2 of our study. Central to our argument is the idea that employees' cognitive representations or schemas of participative leaders can be activated only when: (a) they perceive a sufficiently high level of participative leadership behavior and (b) high participative leadership is accompanied with high information sharing. This match of behavioral cues forms a strong stimulus that activates a participation schema in

subordinates and promotes performance. What remains unknown is the mechanism that underlies the threshold effect of participative leadership, guiding employees to increase performance. A key conceptual foundation of implicit leadership theory, as mentioned above, is that subordinates tend to draw on the schemas activated by their leaders' behavioral cues to differentiate between effective and non-effective leaders, and then decide how to react to the leadership behaviors (Brown & Lord, 2001). Therefore, a consideration of the potentially mediating role of employees' perceptions of leaders' effectiveness may offer a more complete understanding of our theoretical model.

Leaders' effectiveness denotes subordinates' perceptions of leaders' ability to motivate and direct followers toward goals and create positive outcomes for followers, such as stability and harmony (van Knippenberg & Hogg, 2003; Yukl, 2006). Following implicit leadership research, we suggest that, when a leader's behaviors match employees' expected prototypical traits of participative leaders (as in Hypotheses 1 and 2), the employees are more likely to regard the leader as capable of leading them to attain goals and facilitating them to achieve high levels of performance. This is because the leader's participative behavioral consistency reduces employees' uncertainty and highlights the leader's sincerity and core value in this leadership approach (De Cremer, 2003), promoting employees' positive evaluations of the quality and effectiveness of his/her overall leadership. In line with this view, research has also suggested that employees tend to assess their leader as more effective when the leader exhibits consistent behaviors that match a positive leader prototype (van Knippenberg & van Knippenberg, 2005; van Quaquebeke et al., 2011).

Implicit leadership research further suggests that the reasons for why perceived prototypical leaders can promote higher employee performance is that they are likely to receive stronger trust and endorsement from subordinates, giving such leaders more leeway to effectively lead subordinates in new directions (Giessner & van Knippenberg, 2008). When subordinates implicitly judge that their leaders' participative behaviors match the prototype of an effective leader, these positive perceptions will strengthen their belief in their leader's empowerment approach and allow them to access appropriate behavioral response scripts, increasing their favorable response toward the leader (Grossberg, 1999; Medvedeff & Lord, 2007). Supporting this argument, substantial research has suggested that, when leaders are perceived as more effective, they have greater potential to increase subordinates' performance (e.g., Epitropaki & Martin, 2005; Lord & Maher, 1991).

Taken together, the above considerations point toward an important mediating role of leadership effectiveness that explains a rather complex picture of the relationship between participative leadership and performance. That is, participative leadership interacts with information sharing to influence perceived leaders' effectiveness (in a J-shaped pattern); such perceptions of leadership effectiveness, in turn, are positively associated with employees' objective performance. Specifically, when subordinates perceive that their leaders share information with them and show consistently high participative leadership, they tend to assess their leaders as more effective, and, thus, perform better. In contrast, low perceptions of leaders' information sharing may mitigate the indirect, curvilinear linkage between participative leadership and performance.

Hypothesis 3. Participative leadership has an indirect, curvilinear relationship with employees' objective performance (through leadership effectiveness) such that this relationship is more pronounced when information sharing is higher rather than lower.

We conducted two independent studies to test our hypotheses. In Study 1, we examined the J-shaped relationship between participative leadership and performance (Hypothesis 1), and how this relationship is moderated by leaders' information sharing (Hypothesis 2). Study 2 investigated the intervening mechanism that underlies the J-shaped linkage between participative leadership and performance (contingent on leaders' information sharing). Specifically, we empirically examined the mediating role of employees' perceptions of leadership effectiveness (Hypothesis 3). Although we collected data from Chinese organizations, these companies have employed international consulting companies to launch company-wide "employee involvement" campaigns, and have invested heavily in the development of training programs for managers and employees, increasing their exposure to Western-style participative management. As such, the companies' employees have ample opportunities to voice their views and influence managers' decisions on, for example, improving work procedures, how to address customers' inquiries, and promoting the company's products. Therefore, these organizations are suitable contexts for a study of participative leadership.

STUDY 1: METHOD

Sample and Procedure

Data for Study 1 were collected from two organizations: a textile manufacturing company headquartered in Hong Kong and a state-owned telecommunication services company in China. We randomly selected 844 office and call-center employees and their supervisors to participate in the study. Participation was voluntary and confidential. Subordinates and supervisors completed their surveys at separate locations, and participants returned the completed surveys directly to the researchers at the end of their survey session. After excluding incomplete dyads (i.e., data from either member of the subordinate–supervisor dyad were missing), our final dataset contained 625 subordinates (level 1) rated by 203 supervisors (level 2), yielding an effective response rate of 74.05%. Employees' average age was 28.48; 44.6% were female; the average organizational tenure was 2.99 years; and 84.5% had received a high school education or above.

Measures

Measures were translated into Chinese using a double-blind back-translation procedure. Participative leadership and information sharing measures were rated by subordinates, and task performance was rated by supervisors.

Participative leadership. We measured participative leadership using six items based on the work of Arnold and colleagues (2000); Huang and colleagues (2010) also adapted this measure to assess leaders' participative behavior. A sample item is "My immediate supervisor encourages us to express ideas/suggestions" ("1" = *strongly disagree*, "5" = *strongly agree*). Cronbach's α was .86.

Information sharing. We used six items from Arnold and colleagues' (2000) information sharing behavior scale to measure leaders' information sharing. A sample item is "My immediate supervisor explains his/her decision and actions to my workgroup" ("1" = *strongly disagree*, "5" = *strongly agree*). Cronbach's α was .93.

Task performance. We used Podsakoff and MacKenzie's (1989) five-item scale to assess employees' task performance. Supervisors were asked to indicate how much they agreed or disagreed with statements about the quality and quantity of each of their direct subordinate's overall performance. A sample item is "He/she always completes the duties specified in his/her job description" ("1" = *strongly disagree*, "7" = *strongly agree*). Cronbach's α was .77.

Control variables. Because demographic variables may influence employees' job attitudes and performance (van der Vegt & Bunderson, 2005), we controlled for participants' gender ("0" = male; "1" = female), age (in years), highest educational attainment ("0" = below high school, "1" = high school or above), and organizational tenure (in years). We also controlled for group size, because this may affect participation opportunities (Lam et al., 2002). Finally, we controlled for organization type, because data were collected from two companies ("1" = textile company, "2" = telecommunication services company).

Statistical Analyses

All study variables were located at the individual employees' level of analysis (level 1). Importantly, however, employees were nested within groups (level 2), with the respective supervisors rating multiple employees' performance. Hence, ordinary regression analysis was not appropriate because group-specific factors (e.g., size) and supervisor-specific rating tendencies might violate the assumption of independent observations (Snijders & Bosker, 1999). In fact, the results showed significant between-group variance in task performance (χ^2 = 1420.80, df = 190, $p < .001$; ICC1 = .22). We therefore used multilevel methods to test the hypotheses.

We used random intercept models to test hypotheses at the individual employees' level of analysis (level 1), while taking into account possible supervisor-level effects (level 2). These multilevel analyses produce estimates comparable to unstandardized regression coefficients, and the χ^2 difference between two subsequent models indicates change in model fit. Furthermore, we computed proportions of incremental explained variance ($\Delta {R_1}^2$; Bickel, 2007: 133), which are comparable to ΔR^2 statistics in ordinary regression analysis. All variables were standardized prior to the analyses (Aiken & West, 1991). To test the hypothesized interaction between squared participative leadership and information sharing on performance, we used the following equation:

$$Y = B_0X + B_1X^2 + B_2Z + B_3XZ + B_4X^2Z + c_0$$

where X is the linear term of participative leadership, X^2 is the squared term of participative

leadership, Z is the linear moderator of information sharing, XZ is the linear interaction between participative leadership and information sharing, and X^2Z is the interaction term of squared participative leadership and information sharing.

STUDY 1: RESULTS

Table 1 presents the descriptive statistics and bivariate correlations. Before testing the hypotheses, we conducted confirmatory factor analyses (CFA) and average variance extracted (AVE) calculations (Fornell & Larcker, 1981) to evaluate the discriminant validity of the two subordinate-rated measures (participative leadership and information sharing). The CFA results suggested that the expected two-factor model provided significantly better fit to the data ($\chi^2 = 367.68$, $df = 53$, $p < .001$, CFI = .94, RMSEA = .08) than a single-factor model ($\chi^2 = 1258.17$, $df = 54$, $p < .001$, CFI = .76, RMSEA = .19), with a significant χ^2 difference ($\Delta\chi^2 = 890.49$, $\Delta df = 1$, $p < .001$). Furthermore, the coefficients of the AVE for participative leadership and information sharing were .92 and .96, which were above the recommended .50 level (Hair, Anderson, Tatham, & Black, 1992). This indicates that more than half of the variance observed in the items was accounted for by their respective hypothesized factors. Overall, these findings supported the discriminant validity of the two variables.

Hypotheses Tests

Hypothesis 1 proposes that participative leadership has a J-shaped curvilinear relationship with task performance, and Hypothesis 2 puts forward that information sharing will moderate this J-shaped linkage.

As shown in Table 2 (Model 3), after entering all the control variables and the main effect, the squared term of participative leadership was not significant ($B = .03$, n.s.). Therefore, Hypothesis 1 was not supported. However, the interaction term of squared participative leadership and information sharing (Model 6) was significant ($B = .07$, $p < .01$). We further examined the simple slopes (Table 3) of the regression curve corresponding to all possible combinations of high (1 *SD* above the mean), moderate (mean), and low (1 *SD* below the mean) participative leadership with high and low information sharing (Aiken & West, 1991). Figure 1 plots this threshold effect, illustrating how the relationship between participative leadership and task performance follows a J-shaped pattern in the case of high information sharing but not when information sharing is low. As shown in Table 3 and Figure 1, in the case of high information sharing, low participative leadership was not related to task performance ($B = -.07$, n.s.), but increasingly high participative leadership (ranging from moderate to high levels) was positively related to task performance ($B = .37$, $p < .001$). In contrast, when information sharing was low, task performance was

TABLE 1
Means, Standard Deviations, and Correlations (Study 1)

	Variable	M	*SD*	1	2	3	4	5	6	7	8
Control											
1	Sex	.45	.50	—							
2	Age	28.48	8.49	.04	—						
3	Education	.85	.26	.17***	.08	—					
4	Organizational tenure	2.99	.41	−.01	.55***	−.28***	—				
5	Group size	9.09	2.69	.01	.06	.02	−.04	—			
6	Organization	1.5	.50	−.15***	−.11**	−.64***	.32***	−.23***	—		
Key variable											
7	Participative leadership	3.91	.80	−.02	−.09*	−.01	−.11**	.10*	−.12**	—	
8	Information sharing	4.63	.85	−.08*	−.01	−.42***	.18***	−.04	.45***	.40***	—
9	Task performance	5.47	.80	.01	.05	−.11**	.04	−.03	.19***	.09*	.19***

Notes: $n = 625$ dyads.
* $p < .05$
** $p < .01$
*** $p < .001$

TABLE 2
Hierarchical Multilevel Analyses for Task Performance (Study 1)

Predictor	Task performance					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Control variables						
Sex	.01	.01	.00	.00	.00	.00
Age	.01**	.01**	.01**	.01**	.01**	.02**
Education	.02	.03	.04	.04	.05	.04
Organizational tenure	−.01	−.01	−.01	−.01	−.01	−.01
Group size	.00	.00	.00	.00	.00	.00
Organization	.46***	.49***	.49***	.50***	.50***	.48***
Independent variables						
PL		.13***	.15***	.13**	.14**	.09
PL^2			.03	.03	.04	.04
IS				.04	.02	−.04
Interaction terms						
PL × IS					−.03	.06
PL^2 × IS						.07**
χ^2	1308.10	1290.72	1289.40	1288.63	1287.68	1277.63
$\Delta\chi^2$	112.72***	17.37***	1.32	.77	.95	10.05**
ΔR^2	.04	.01	.00	.00	.00	.02

Notes: n = 625 dyads. IS = information sharing; PL = participative leadership.
** $p < .01$
*** $p < .001$

unrelated to participative leadership.[1] In sum, these results provided support for Hypothesis 2.[2]

STUDY 2: METHOD

Study 1 found that the J-shaped linkage between participative leadership and performance is dependent on leaders' information sharing. This result was compelling; however, it did not tell us what the intervening mechanism was for this moderated J-shaped linkage. Also, we could not rule out the possibility that some other individual and relational factors might contribute to potential spurious relationships between the focal variables. Therefore, we undertook Study 2 to address these important issues by: (a) testing perceptions of leadership effectiveness as mediating mechanisms that link the conditional indirect, curvilinear effect of participative leadership with performance (Hypothesis 3) and (b) controlling for two important factors—negative affectivity (Watson, Clark, & Tellegen, 1988) and leader–member exchange (LMX) (Scandura & Graen, 1984)—to rule out alternative explanations for our hypothesized relationships.

Data for Study 2 were collected from manufacturing workers and their direct supervisors working in a large garment-manufacturing firm located in southern China. We randomly selected 200 employees and their supervisors to participate in the study. After excluding incomplete dyads (i.e., data from either member of the subordinate–supervisor dyad were missing), the final data set had 148 subordinates (level 1) supervised by 19 supervisors (level 2), for an effective response rate of 74%. Employees' average age was 23.06; 56.3% were female; average organizational tenure was 1.60 years; and 7.4% had received a high school education or above.

Measures

Participative leadership, information sharing. Participative leadership (α = .76) and information

[1] The hypothesized model was also supported by supplementary analyses (e.g., one-way analysis of variance to examine task performance ratings provided by more participative and less participative leaders, a comparison between a second-order model and a two-factor model of participative leadership and information sharing, repeating hypothesis tests by following Cortina's (1993) approach, and testing the mediating role of information sharing for the participative leadership–performance linkage). These results are available from the first author.

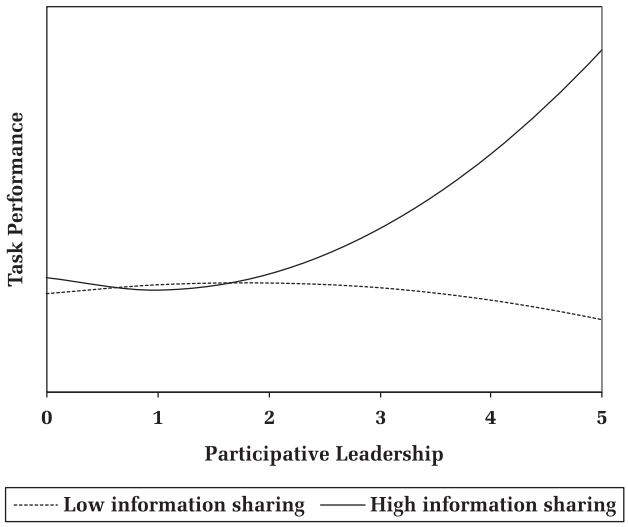
[2] Substantial findings remained virtually unchanged when we repeated the analyses on the two samples separately.

TABLE 3
Tests of Simple Slopes (Study 1)

Information sharing	Participative leadership	Task performance	
		B	*SE*
High	Low	−.07	.08
High	Medium	.15**	.05
High	High	.37***	.09
Low	Low	.08	.05
Low	Medium	.03	.08
Low	High	−.02	.14

Notes: High = 1 *SD* above the mean; medium = mean value; low = 1 *SD* below the mean.
** $p < .01$
*** $p < .001$

FIGURE 1
Moderating Effect of Information Sharing on the Relationship between Participative Leadership and Task Performance (Study 1)



sharing (α = .80) were assessed with the same instruments used in Study 1.

Leadership effectiveness. Using van Knippenberg and van Knippenberg's (2005) six-item scale, subordinates assessed their direct supervisor's overall leadership effectiveness. Sample items included "This team leader is very effective" and "This team leader is a good leader" ("1" = *not successful*; "7" = *very successful*). Cronbach's α was .87.

Objective performance. The company uses a piece-rate pay system. Supervisors monitor daily productivity for each subordinate. We obtained subordinates' monthly salary records (based on their respective production output) from the company one month after the paper surveys had been collected.

Control variables. As in Study 1, we used demographic information (gender, age, education, organizational tenure, and group size). We also controlled for LMX (α = .75; Scandura & Graen, 1984) and employees' negative affectivity (α = .78; Watson et al., 1988), as both could affect leadership perceptions and performance (Medvedeff & Lord, 2007; Rothbard & Wilk, 2011; Scandura & Schriesheim, 1994).

Statistical Analyses

As in Study 1, the data have a nested structure, with all study variables located at the individual employees' level of analysis (level 1), while employees were nested within groups (level 2). Therefore, we used a multilevel analytical strategy (see Bickel, 2007) to test the interaction term of squared participative leadership and information sharing, as well as the effect of leadership effectiveness on performance. To test the appropriateness of multilevel analyses, we ran null models with leadership effectiveness or objective performance as the dependent variable. The results showed significant between-group variance in leadership effectiveness ($\chi^2 = 780.39$, $df = 16$, $p < .001$; ICC1 = .34) and objective performance ($\chi^2 = 2079.86$, $df = 16$, $p < .001$; ICC1 = .15).

Hypothesis 3 suggested a mediated moderation model, wherein the strength of the indirect relationship between participative leadership and objective performance, through leadership effectiveness, was contingent on the value of the moderator (i.e., information sharing). We drew on Krull and MacKinnon's (2001) procedures to test this hypothesis. In brief, we used the simple slopes estimates of the curvilinear relation between participative leadership—ranging from high (+1 *SD*), to moderate (mean), to low (−1 *SD*) values—and leadership effectiveness at high and low values of information sharing, and we also drew on the relationship between leadership effectiveness and objective performance. Then, we used these estimates to examine the conditional indirect relationships between participative leadership and objective performance (through leadership effectiveness) at high and low values of information sharing. In doing so, we first applied the Sobel (1982) test. Additionally, we estimated percentile confidence intervals around

the population values of the conditional indirect relations using Selig and Preacher's (2008) Monte Carlo method (for similar approaches, see Lorinkova, Pearsall, & Sims, 2013 and Zhou, Wang, Chen, & Shi, 2012). The use of such confidence intervals is considered superior to traditional methods, such as the Sobel test, because it ameliorates power problems introduced by non-normal sampling distributions of an indirect relationship (MacKinnon, Lockwood, & Williams, 2004; Preacher, Zyphur, & Zhang, 2010).

STUDY 2: RESULTS

Table 4 presents the descriptive statistics and bivariate correlations. As in Study 1, we conducted CFA and AVE calculations to evaluate the discriminant validity of the subordinate-rated measures (participative leadership, information sharing, and leadership effectiveness). As shown in Table 5, the hypothesized three-factor model yielded a substantially better fit than all of the alternative models in a CFA ($p < .001$). In addition, the AVE results were .70 (participative leadership), .53 (information sharing), and .85 (leadership effectiveness)—all above the recommended .50 level (Hair et al., 1992). These findings support the discriminant validity of the variables.

As shown in Table 6 (Model 3), the squared term of participative leadership was not significant (B = .01, n.s.). However, the interaction term of squared participative leadership and information sharing (Model 6) was significantly related to leadership effectiveness (B = .15, $p < .001$). As shown in Table 7 and Figure 2, when information sharing was high, low participative leadership was not related to leadership effectiveness (B = .02, n.s.), but increasingly high participative leadership (ranging from medium to high levels) was positively related to leadership effectiveness (simple slope: B = .80, $p < .001$). In contrast, when information sharing was low, participative leadership was unrelated to leadership effectiveness (see Footnote 1).

Objective performance scores were standardized prior to analyses. As shown in Table 6 (Model 7a), the respective coefficient for leadership effectiveness was indeed significant and positive (B = .21, $p < .05$), even after incorporating the linear and squared terms of participative leadership, information sharing, and the respective interaction terms.

These results show the links between the independent variables (the interaction term of squared participative leadership and information sharing) with the mediator (leadership effectiveness) and

TABLE 4
Means, Standard Deviations, and Correlations (Study 2)

Variable	M	*SD*	1	2	3	4	5	6	7	8	9	10
Control												
1. Sex	.56	.50	—									
2. Age	23.06	6.23	−.17*	—								
3. Education	.09	.28	−.01	−.11	—							
4. Organizational tenure	1.60	1.98	−.09	.48***	−.14*	—						
5. Group size	19.55	4.38	−.07	.11	−.03	.14*	—					
6. LMX	2.94	.59	.01	.12	.14*	.11	−.05	—				
7. Negative affectivity	2.20	.61	.24***	−.01	−.09	.09	.02	.00	—			
Key variable												
8. Participative leadership	3.56	.72	.06	−.06	−.02	−.05	.11	.39***	−.05	—		
9. Information sharing	3.76	.71	.02	.07	.10	−.01	.07	.25***	−.08	.40***	—	
10. Leadership effectiveness	4.85	1.03	.04	.21**	−.06	.13*	.21***	.48***	.07	.48***	.27***	—
11. Objective performance	2530.73	372.12	−.09	.11	.08	.16*	.09	.19**	−.16**	.12*	.03	.30**

Notes: n = 148 dyads. LMX = leader–member exchange.
* $p < .05$
** $p < .01$
*** $p < .001$

TABLE 5
Confirmatory Factor Analyses (Study 2)

Models	χ^2	*df*	$\Delta\chi^2$	Δdf	RMSEA	CFI
Three-factor	262.81	132	–	–	.06	.91
Two-factor (participative leadership and information sharing combined)	413.08	134	150.27***	2	.08	.81
Two-factor (participative leadership and leadership effectiveness combined)	405.19	134	142.38***	2	.08	.82
Two-factor (information sharing and leadership effectiveness combined)	559.61	134	296.80***	2	.10	.71
One-factor	645.83	135	383.02***	3	.11	.65

Notes: $n = 148$ dyads. All alternative models were compared with the three-factor model. CFI = comparative fit index; RMSEA = root mean square error of approximation.
*** $p < .001$

between the mediator and the dependent variable (objective performance). These satisfy the conditions of mediation analyses for Hypothesis 3, stating that information sharing moderates the indirect, curvilinear relationship between participative leadership and employees' objective performance, as transmitted by leadership effectiveness.

To formally test this hypothesis, we analyzed the indirect relationship between participative leadership—ranging from low (−1 *SD*), to medium (mean), to high (+1 *SD*) levels—and objective performance at higher and lower levels of information sharing. As shown in Table 8, when information sharing was high, low participative leadership was not related to objective performance ($B = .00$, n.s.), but medium ($B = .09$, $p < .05$) and high ($B = .17$, $p < .05$) participative leadership were positively and indirectly related to objective performance (via leadership effectiveness), as indicated by both a significant Sobel test and a percentile confidence interval that did not include zero. In contrast, when information sharing was low, these indirect relationships were nonsignificant. Therefore, Hypothesis 3 was supported.

DISCUSSION

Overall, the present study advances our understanding of the influence of participative leadership by uncovering a J-shaped relationship between participative leadership and performance (Studies 1 and 2), and by demonstrating *when* (the moderating role of leaders' information sharing in Studies 1 and 2) and *how* (the mediating role of perceptions of leadership effectiveness in Study 2) it matters. Specifically, Study 1 showed that employees had high performance only when they perceived their leaders to show consistently high participative leadership (versus low to moderate levels) and high information sharing. Conversely, employee performance was unrelated to participative leadership when information sharing was low. Furthermore, Study 2 demonstrated that leadership effectiveness is a mediating mechanism that, under conditions of high information sharing, links the curvilinear relationship between participative leadership and employees' objective performance. This threshold, curvilinear pattern of participative leadership remains significant even after controlling for the effect of individual difference and relational factors (i.e., negative affectivity and LMX) in Study 2, providing confidence in the robustness of our findings.

Theoretical Contributions

This study makes several distinct theoretical contributions. First, the impact of participative leadership is controversial in the literature because researchers have so far predominately focused on examining a linear pattern of participative leadership with performance and failed to find consistent, positive relationships. Accordingly, a critical review of participation research (Heller, 2003: 154) concluded that "employees in general have very little decision-making influence in modern organizations" because of the inauthentic practice of participation with no real shift in authority or influence. Drawing on theories of implicit leadership, our research builds theory by conceptualizing a threshold effect that depicts the phenomenon of pseudo-participation (i.e., a J-shaped participative leadership–performance linkage). Across two studies, we consistently found that the positive effect of participative leadership can only be realized when the perceived magnitude of participative leadership

TABLE 6
Hierarchical Multilevel Analyses for Leadership Effectiveness and Objective Performance (Study 2)

	Leadership effectiveness						Objective performance						
Predictor	**M1**	**M2**	**M3**	**M4**	**M5**	**M6**	**M1a**	**M2a**	**M3a**	**M4a**	**M5a**	**M6a**	**M7a**
Control variables													
Sex	.28	.26	.28	.28	.34*	.33*	.02	.00	.00	.00	.02	.02	.02
Age	.03	.02	.01	.01	.02	.02	−.01	−.01	−.01	−.01	−.01	−.01	−.01
Education	−.13	−.06	−.17	−.17	−.20	−.23	−.02	.00	.02	.01	.00	.00	.03
Organizational tenure	.00	.00	.00	.00	.00	.00	.01*	.01*	.01*	.01*	.01*	.01*	.01*
Group size	.07*	.06*	.08*	.08*	.07*	.07*	.01	.01	.01	.01	.01	.01	.00
LMX	.88***	.67***	.66***	.65***	.64***	.60***	.13	.06	.07	.06	.06	.06	−.03
Negative affectivity	.22	.22	.22	.22	.24*	.23*	−.25*	−.26*	−.26*	−.26*	−.26*	−.26*	−.26*
Independent variables													
PL		.33***	.34***	.33**	.37***	.29**		.14	.07	.06	.08	.08	.03
PL^2			.01	.01	.07	.03			−.11	−.03	−.04	−.04	−.05
IS				.03	−.01	−.20				.04	.04	.04	.06
Interaction terms													
PL × IS					−.22***	−.01					−.10	−.06	−.04
PL^2 × IS						.15***						.04	−.01
Mediator													
Leadership effectiveness													.21*
χ^2	344.28	329.00	328.96	328.84	314.33	301.59	374.12	371.58	371.40	370.90	369.10	368.40	362.08
$\Delta\chi^2$	436.11***	15.28***	.04	.12	14.51***	12.74***	12.25**	2.54	.18	.05	1.80	.70	6.32*
ΔR^2	.25	.26	.00	.00	.10	.06	.11	.01	.00	.00	.02	.00	.03

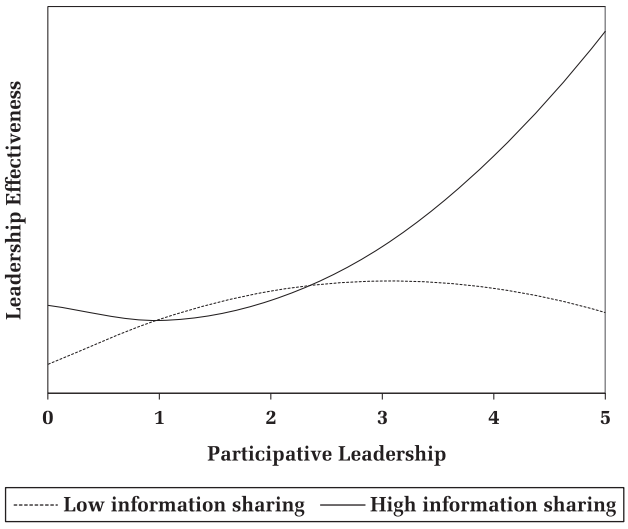
Notes: n = 148 dyads. IS = information sharing; LMX = leader–member exchange; M = model; PL = participative leadership.
* $p < .05$
** $p < .01$
*** $p < .001$

TABLE 7
Tests of Simple Slopes (Study 2)

Information sharing	Participative leadership	Leadership effectiveness	
		B	*SE*
High	Low	.02	.12
High	Medium	.42***	.11
High	High	.80***	.19
Low	Low	.40	.21
Low	Medium	.39	.19
Low	High	.30	.28

Notes: $n = 148$. High = 1 *SD* above the mean; medium = mean value; low = 1 *SD* below the mean.
*** $p < .001$

FIGURE 2
Moderating Effect of Information Sharing on the Relationship between Participative Leadership and Leadership Effectiveness (Study 2)



reaches a certain point that goes beyond the moderate level (threshold) and is accompanied with high information sharing. Thus, we advocate that researchers expand their conceptualizations of participative leadership to include nontraditional relationships, such as nonlinearity and moderated nonlinearity.

Second, our research offers new insights into *under what circumstances* employees' perceptions of participative leadership can attain a level that could activate employee performance. Building on implicit leadership theories and ART (Brown & Lord, 2001; Grossberg, 1999), we suggest that employees tend to search for interconnected information in order to make sense of participative leadership behavior, and that leaders' information sharing is a key contingency factor in this regard. Our findings indicate that perceptions of high information sharing enhance an adoption of participation schema, which helps employees dissolve their defensive cognitions against the participative leader (as reflected in the threshold pattern), and, consequently, improves work performance. In contrast, perceptions of low information sharing—regardless of the level of participative leadership—may give employees inconsistent cues and create uncertainty about the consequences of participation, thereby constraining employees' attention and work effort. As such, our study advances leadership theories by

TABLE 8
Conditional Indirect Effect of Participative Leadership on Objective Performance through Leadership Effectiveness (Study 2)

Moderator Information sharing	Predictor Participative leadership	Objective performance		
		Indirect effect	Sobel *Z*	95% confidence interval[a]
High	Low	.00	.17	−.05, .06
High	Medium	.09	1.9*	.01, .20
High	High	.17	1.9*	.01, .36
Low	Low	.06	1.41	−.01, .23
Low	Medium	.06	1.47	−.01, .22
Low	High	.05	.95	−.05, .23

Notes: $n = 148$.
[a] Based on 20,000 Monte Carlo samples (Selig & Preacher, 2008). High = 1 *SD* above the mean; medium = mean value; low = 1 *SD* below the mean.
* $p < .05$

highlighting the importance of information sharing to optimize the development of participative leadership (Huang et al., 2010; Johns, 2006).

These findings contribute to not just participative leadership in particular, but also leadership theory in general by underscoring that leadership consistency is relevant to employee performance. The results indicate that the positive consequences of participative leadership are negated if employees perceive that their leaders' participative and information-sharing behaviors are inconsistent. These results also support dissonance theory, which suggests that inconsistent perceptions create aversive states such as mistrust, fear, skepticism, and uncertainty, possibly driving employees to withhold work effort and reduce commitment (Festinger, 1957). Therefore, we suggest that future research might adopt the dissonance explanation to understand the detrimental effects of leaders' inconsistent behavior.

Although many studies have investigated the relationship between participative leadership and performance (e.g., Huang et al., 2010; Lam et al., 2002), our study departs from prior work to highlight that the perception of leadership effectiveness may be a proximal cognitive process that is at the heart of the threshold effect of participative leadership in ultimately influencing employees' objective performance. Again, such a curvilinear, indirect effect of participative leadership is more salient when leaders share lots of information with their subordinates. By demonstrating the curvilinear patterns, mediating mechanisms, boundary conditions, and actual behavioral consequences, this study sets the stage for a new, more comprehensive understanding of the importance and complexity of participative leadership.

Strengths and Limitations

Despite notable strengths (e.g., replication of the initial results on multiple samples and multisource performance data), this study also has limitations. First, common method variance may be a concern. However, we note that several analyses (e.g., CFA, AVE) supported the discriminant validity of our variables. Furthermore, we note that common source variance cannot explain the complex quadratic-by-linear interaction effect (Evans, 1985). Also, this complicated interaction effect on subordinate-rated leadership effectiveness was identical to the effects on supervisor-rated task performance, supporting the robustness of our hypothesized model.

Second, the correlational design of this study precludes causal conclusions, although our predictions are based on a strong theoretical foundation and the time-lagged performance data makes alternative explanations less likely (e.g., reverse causality such as performance predicting participative leadership). Future work based on experimental or longitudinal data is required to address this concern. Relatedly, an alternative model might suggest that, rather than serving as a moderator, information sharing could be a mediator in the relationship between participative leadership and performance (Larson, Foster-Fishman, & Franz, 1998). However, post-hoc analyses demonstrated that this alternative mediation model was less viable than our hypothesized relationship pattern (see Footnote 1).

In addition, the generalizability of our findings to other cultures is limited because all of the studies were conducted in China. Given that Chinese culture is characterized by high power distance and collectivism (Hofstede, 2001), Chinese employees may be more likely than their counterparts in other cultures to hold authority-based leader prototypes (e.g., paternalistic leadership; Chan, Huang, Snape, & Lam, 2013) and attach less value to participation and autonomy (Huang & Van der Vliert, 2003; Huang et al., 2010). This might influence their positive responses to participative leadership, and make our hypothesis tests more conservative.

However, cross-cultural studies on leadership have suggested that employees from different nations may endorse multiple positive leader prototypes such as participative and charismatic leadership, demonstrating that employees from the East or the West might both respond positively to these leader prototypes (House et al., 2004). For example, Lam and colleagues (2002) found that participative management might exert a similar influence on group and individual performance in both China and the United States. Nevertheless, research that replicates the present investigation in different cultures would give higher confidence in the generalizability of our findings. Equally importantly, future research could benefit from further examining the role of cultural factors (e.g., power distance and dominance hierarchy; Fiske, 1992; Hofstede, 2001), exploring the possible differential effects of participative threshold on performance among employees from different cultural settings.

Future Research

Beyond addressing limitations, future research could build on our findings in various ways. Scholars may extend our model by investigating

additional moderators originating from employee attributes and dispositional factors that may influence employees' reactions to participative leadership. Employees' differential arousal, attention, and effort in response to leadership styles may be caused by individual attributes, such as experience and knowledge (Sy et al., 2010), goals and purpose of judgment (Operario & Fiske, 2004), and employee readiness (Ahearne et al., 2005). Similarly, research on implicit leadership has suggested that the activation of mental representations of prototypical leaders can be shaped by dispositional factors such as need for closure, pessimism, internal causal attribution, commitment to one's leader, and romanticized beliefs about leadership (Medvedeff & Lord, 2007). Future work should evaluate how these factors might regulate the threshold effect of participative leadership.

Although we used supervisor ratings of task performance and objective performance data to provide insights into individual performance, future scholars can extend our study by drawing on other dimensions of performance. Of particular interest is innovative behavior. Previous research has demonstrated that leaders demonstrating participative and empowering behavior tend to increase employees' creativity (Zhang & Bartol, 2010), possibly because such leadership behavior implicates the overall effectiveness of the leader, which may also increase employee trust and psychological safety (van Knippenberg & van Knippenberg, 2005). Based on these theoretical arguments, researchers can more broadly explain the mechanism underlying the possible curvilinear effects of participative leadership on other behavioral outcomes, enhancing the generalizability of the present model.

In addition, practices of participative leadership and increased information sharing with employees may be a stressor for leaders because being held accountable for their actions and increased employee influence in decision making introduces social pressure (i.e., sanctions) and increases the likelihood of losing control over employees (Ford & Fottler, 1995; Hall, Royle, Brymer, Perewe, Ferris, & Hocwarter, 2006). Therefore, researchers could examine leaders' well-being and emotional responses as outcome variables (e.g., emotional exhaustion, job tension, job satisfaction, and anxiety). Such extensions could provide a more comprehensive depiction of the potential positive and negative consequences of participative leadership for both employees and leaders.

Practical Implications

This study also offers important practical implications for managers. First, managers can curtail employees' defensive cognitions against participation by demonstrating sufficient participative leadership. For instance, they could offer opportunities and support for participation, show receptivity to employees' suggestions, consider a wide range of decision alternatives, and provide sufficient resources and information for employees to achieve the tasks in which they are participating.

Second, organizations are well advised to take decisive steps to facilitate the development of effective participative leadership by facilitating information sharing among employees, leaders, and companies. For example, leaders should be trained to foster two-way communication with their employees, such that employees have all the information needed to understand how much participation the organization expects, the possible positive consequences of participation, and the good participative intentions of their leaders.

In addition, companies should implement procedures, policies, and systems to develop leadership accountability (Wallace et al., 2011) and a culture of sharing (Srivastava, Bartol, & Locke, 2006). By emphasizing the importance of both participative leadership behavior and sharing information with employees, organizations may reduce employees' resistance to participation, thus maximizing the benefit of participative management practice.

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