

## *Implicit followership theory to employee creativity: The roles of leader–member exchange, self-efficacy and intrinsic motivation*

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### **Abstract**

Leaders' implicit followership theory describes leaders' personal assumptions about the traits and behaviors that characterize followers. Unlike traditional organizational behavior research, studies on leaders' implicit followership theory can deepen our understandings of 'how leaders and followers perceive, decide and take action' from follower-centric perspective. Adopting 267 follower–leader dyads from 16 Chinese enterprises as our final sample, we found that: (1) positive leaders' implicit followership theory had significant positive effect on followers' creativity; (2) followers' leader–member exchange with leader, intrinsic motivation and creative self-efficacy mediated the positive relationship between positive leaders' implicit followership theory and followers' creativity; (3) no significance difference was found between the mediating effects of leader–member exchange, intrinsic motivation and creative self-efficacy. The current study not only extended the application of social cognitive theory in leadership research, but also made contributions to the enrichment of social exchange theory and componential theory of creativity.

**Keywords:** followers' creativity, leader–member exchange, intrinsic motivation, creative self-efficacy

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### **INTRODUCTION**

Social cognition theory indicates that individuals have a natural propensity to classify leaders and followers (Fiske & Taylor, 1991). However, a large body of organizational behavior research mainly adopts leader-centric perspective, while neglecting the exploration of the followership (Bjugstad, Thach, Thompson, & Morris, 2006). As a response to these research gaps, implicit followership theory (IFT) is proposed and paid more attention by scholars recently. IFT is defined as 'individuals' personal assumptions about traits and behaviors that characterize followers' (Shondrick & Lord, 2010; Sy, 2010; Whiteley, Sy, & Johnson, 2012). In the current research, we focus on the effects of leaders' implicit followership theory (LIFT), which affects leaders' cognitive and information-processing processes of comparing followers' actual behaviors with their inherent schema for those followers, forming impression

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of followers and finally taking corresponding actions based on the match degree (Shondrick & Lord, 2010; Sy, 2010; Whiteley, Sy, & Johnson, 2012).

According to social cognitive theory, LIFT is likely to exert influence on leaders' behaviors, for the reason that leaders may use LIFT as a benchmark to form impressions and cognitions of their followers (Lord & Maher, 2002). Also, as implicit theory indicate, leaders' cognitions shape their judgment of and response to others (Fiske & Taylor, 1991). Thus, it is likely that leaders will internalize and endorse a particular kind of LIFT and gradually adopt LIFT as fixed standards to select, evaluate and treat their followers (Shondrick & Lord, 2010). From this perspective, exploring the effects of LIFT on followers' attitudes, abilities, cognitions and performance can help scholars understand how LIFT influences leaders' interpretations of their surrounding environmental cues and further influence their sequential behaviors (Lord & Brown, 2004; Avolio, Walumbwa, & Weber, 2009), consequently deepen our understanding of 'how leaders and followers perceive, decide and take action' from follower-centric perspective (Shondrick & Lord, 2010; Sy, 2010; Whiteley, Sy, & Johnson, 2012).

After developing series of related measurement scales (Carsten, Uhl-Bien, West, Patera, & McGregor, 2010; Sy, 2010; Van Gils, Van Quaquebeke, & Van Knippenberg, 2010), the number of research exploring antecedents and effects of IFT gradually increases. Specifically, previous research has explored big five-factor personalities (Duong, 2012), individual traits and states (e.g., emotions) (Kruse & Sy, 2011), leadership styles (Wofford & Goodwin, 1994; Goodwin, Wofford, & Boyd, 2000) and, etc. as antecedents of IFT. As for the effects of IFT, positive LIFT exerts significant impacts on leader-centric outcomes, follower-centric outcomes as well as the quality of the relationship between leaders and followers. Specifically, positive LIFT predicts leaders' liking toward and the relationship quality with their followers (Shondrick & Lord, 2010; Sy, 2010), further influences followers' job satisfaction, sense of well-being as well as performance (Carsten & Uhl-Bien, 2009; Kruse, 2010; Sy, 2010; Whiteley, Sy, & Johnson, 2012). The research literatures are summarized as Figure 1.

However, relatively few studies have tested how and why LIFT relates to followers' creativity, and if so, the mechanisms through which positive LIFT relates to followers' creativity. We choose creativity as the outcome variables for two main reasons. First, employees' creativity is the source and basis of enterprise innovation (Gregory & Joseph, 2000) and is playing an increasingly important role in the organizational

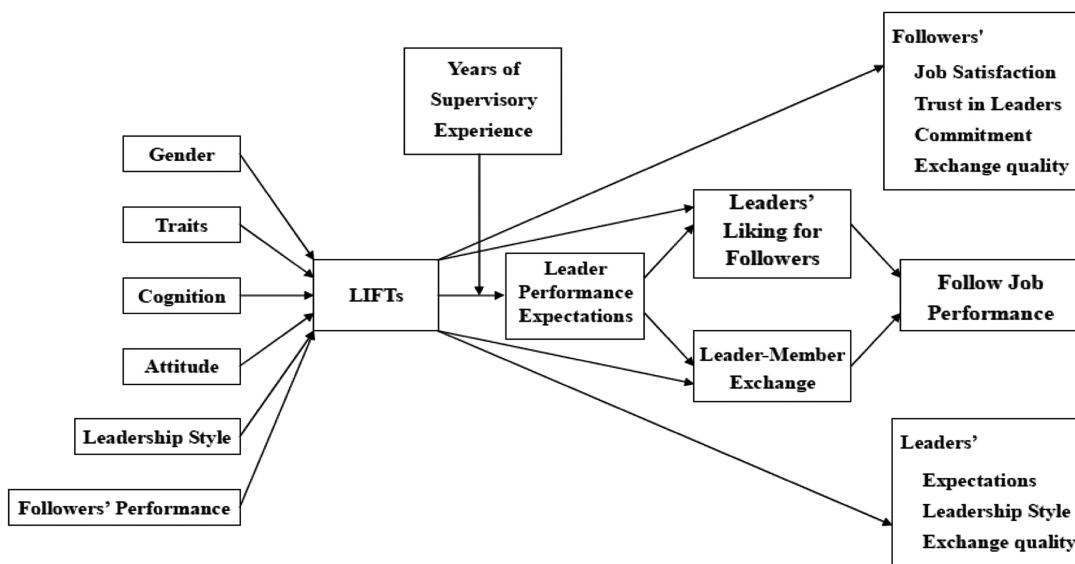


FIGURE 1. SUMMARY OF RESEARCH ON LEADERS' IMPLICIT FOLLOWERSHIP THEORY (LIFT)

viability and success; thus enterprises highly emphasize and value employees' creativity and eagerly want to figure out what predicts creativity (Zhou & Shalley, 2003; Ng & Lucianetti, 2016). Second, LIFT could potentially affect employees' creativity. According to social cognitive theory, leader will adopt his/her internalized and endorsed LIFT as fixed standards to select, evaluate and treat their followers (Shondrick & Lord, 2010), which, arguably, will further influences a wide range of employee attitudinal and behavioral outcomes (Sy, 2010; Whiteley, Sy, & Johnson, 2012). Creativity might be one of the affected outcomes.

The previous IFT literature mainly used social learning theory (i.e., Whiteley, Sy, & Johnson, 2012) and social exchange theory (i.e., Kong & Qian, 2015) to explain why positive LIFT can affect employees' outcomes. The rationale is that leader with positive IFT will have more positive performance expectation for their followers and form higher-quality leader–member exchange (LMX) relationship with them, thus eliciting followers' positive attitudes and behaviors. Apart from the two mentioned theoretical frameworks, we argue that self-determination theory (Deci & Ryan, 1985), which highlights individuals' intrinsic motivation in predicting their behaviors, could also have explanatory power in explaining positive LIFT's effect, given the fact that employees' intrinsic motivation is an important underlying mechanism linking leaders' cognition/behaviors and followers' creativity (Zhang & Bartol, 2010). Regretfully, there is still no study simultaneously examining the three intermediate mechanisms in one model. To fill this gap, the current study examines the mediating roles of the core variables of the three mentioned theories – LMX as a social exchange process, intrinsic motivation as a self-determination process and creative self-efficacy as a social learning process – in the positive LIFT–creativity relationship.

Specifically, LMX is defined as the quality of exchange between a leader and a follower (Graen & Scandura, 1987); creative self-efficacy is defined as followers' belief that they can be creative in their work roles (Tierney & Farmer, 2002); intrinsic motivation is manifest in the enjoyment of and interest in an activity for its own sake, and it is a fundamentally approach form of motivation (Deci & Ryan, 1985). Together, we argue that the reason why positive LIFT predicts followers' creativity is that positive LIFT enhances high-quality LMX, followers' creative self-efficacy and intrinsic motivation. In turn, high-quality LMX, followers' creative self-efficacy and intrinsic motivation improve followers' creativity.

In general, the current research attempts to answer the following questions: (1) Does positive LIFT influence employees' creativity? If so, what is the nature of the relationship? (2) How the effect of positive LIFT on employees' creativity occur? By answering these two basic questions, we contribute to the extant literature in two ways. First, the current studies extends the LIFT literature by being the first to explore the effect of positive LIFT on creativity. Further, our simultaneously examination of three mediating effects helps to offer in-depth insights into the question of how positive LIFT and employees' creativity are related, and give direct empirical test to the explanatory value of three potential theoretical frameworks in explicating the effects of positive LIFT. Second, we also advances the creativity research by considering the role leader's cognition in predicting creativity. To the best of our knowledge, most of the studies focus on the effects of leaders' behaviors and attitudes on employees' creativity. Insights into the influence of leaders' implicit cognitions on creativity are needed in order to push the literature forward (Figure 2).

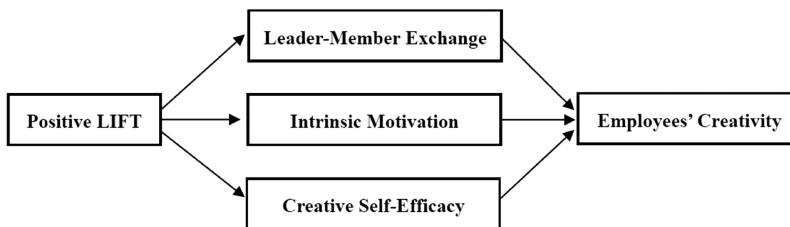


FIGURE 2. RESEARCH MODEL. LIFT = LEADERS' IMPLICIT FOLLOWERSHIP THEORY

## THEORY AND HYPOTHESES

### Positive LIFT and followers' creativity

The main components of LIFT are cognitive structures or prototypes, which are defined as abstract composites of the most representative member or the most commonly shared attributes of a particular category. During the interactions with followers, leaders' extant cognitive structures will be activated and then automatically or spontaneously categorize their followers accordingly (Epitropaki & Martin, 2004). Throughout these above processes, leaders understand, interpret and respond to their followers through the 'sense-making' function of their LIFT (Weick, 1995). More details, when a leader engages in comparing their LIFT with a real follower, he will shape attitudes and behaviors toward the follower base on the congruence of his/her LIFT and impressions of the follower. Previous conceptual and empirical research has provided strong evidence that leaders view upon and sequential interact with their followers account for great variances in explaining followers' performance (Collinson, 2006; Carsten & Uhl-Bien, 2009). In the current study, we only pay attention to the effect of positive LIFT, which refers to positive conceptions and assumptions leaders hold about their followers' traits, characters and behaviors (Whiteley, Sy, & Johnson, 2012). Considering from the viewpoint of broader concept (Cronbach & Gleser, 1965), the traits of outcome variable depend on the choice of antecedent variable (Hogan & Roberts, 1996). Once positive LIFT is established and activated, it will further induces the correlated actions such as setting high goals for 'good employees' (Conger & Kanungo, 1988), consequently exerting influence on a series of interactional outcomes (e.g., leader's liking toward followers, and relationship quality between leaders and followers) (Hogan & Roberts, 1996; Epitropaki & Martin, 2004). Also, there are empirical studies finding that positive LIFT has significant positive effects on followers' job performance (Whiteley, Sy, & Johnson, 2012).

Based on the LIFT and creativity literature, we argue that positive LIFT can also help to enhance followers' creativity. Creativity is defined as the generation, promotion, and implementation of novel and useful ideas about products, practices, services or products; and it is a resource-intensive and risky endeavor (Amabile, 1988). Although there are no direct empirical supports regarding the positive relationship between positive LIFT and followers' creativity, several studies can provide indirect supports (Kong & Qian, 2015; Tierney, 2015). For example, Whiteley, Sy, and Johnson (2012) have explored and examined a 'naturally occurring Pygmalion effect' process linking positive LIFT and employee job performance. We argue that the same 'Pygmalion effect' logic can also be applied to explaining why positive LIFT can improve followers' creativity. That is, leaders with positive LIFT will hold high expectation for employees regarding creative performance and communicate this high expectation with employees in daily interactions, which will further triggers the 'Pygmalion effect' and makes the enhancement of employee creativity become a reality.

Hypothesis 1: Positive LIFT is positively related to followers' creativity.

### The mediating role of LMX

Social exchange theory holds that organization can obtain followers' positive attitudinal and behavioral reciprocations through forming high-quality exchanges with their followers (Blau, 1964; Graen & Scandura, 1987; Rhoades & Eisenberger, 2002). Furthermore, LMX argues that the focus of leadership effectiveness research should be shifted to the topic of the mutual relationship between leaders and followers. Under organization situation, due to leaders' limited time, energy and resources, leaders will form differential exchange relationship with different followers and accordingly adopt different management styles (Wayne, Shore, Bommer, & Tetrick, 2002). For followers who have high-quality exchanges relationship with their leaders (Scott & Bruce, 1994), they will get more trust as well as care

from their leaders and simultaneously will even be given privileges (e.g., work autonomy, work flexibility, more promotion opportunities and rewards).

We argue that LMX will mediate the relationship between positive LIFT and employees' creativity. First, it is both theoretically and empirically supported that leaders with positive LIFT will build high-quality LMX relationship with followers (Sy, 2010; Whiteley, Sy, & Johnson, 2012; Kong & Qian, 2015). As noted above, once positive LIFT is built up and activated, it will activate the generations of numerous kinds of related conceptual representations that are consistent with the activated positive concepts (e.g., followers are good employees) and accordingly induce a series of related behaviors, such as building high-quality LMX relationship with them (Kong & Qian, 2015). Further, high LMX relationship will enable employees to achieve superior creative performance when engaging in the time-consuming, resource-intensive and risky creativity activities (Tierney, 2015). In one respect, high LMX relationship will provide followers with the essential tangible and intangible resources (Sparrowe & Liden, 2005) which are needed for the resource-intensive creativity activities (Amabile, 1988), which helps to facilitate their creativity (Tierney, 2015). In another respect, high LMX followers will perceive their jobs and tasks as more challenging, meaningful and have a strong sense of achievement associated with their job (Liden & Graen, 1980); these positive perceptions will augment employees' level of efforts extended to the task necessary for creativity, which is beneficial for their enhancement of creativity (Amabile, 1988). In addition, according social exchange theory and the norm of reciprocity (Blau, 1964), high-LMX employees will tend to reciprocate their leaders' good treatment with positive workplace behaviors, such as high level of creativity.

Hypothesis 2: LMX mediates the positive relationship between positive LIFT and followers' creativity.

### The mediating role of intrinsic motivation

Intrinsic motivation is manifest in the enjoyment of and interest in an activity for its own sake, and it is one of the several fundamental forms of motivation (Deci & Ryan, 1985). According to self-determination theory (Deci & Ryan, 1985), intrinsic motivation is the most autonomous form of motivation and is argued to be associated with higher levels of performance (particularly for complex tasks) compared with less autonomous form of motivation (extrinsic motivation) (Gagne & Deci, 2005). High-intrinsic motivation followers put emphasis on the job itself, and pay more attention to the enjoyment that job brings about. Also, they are more apt to face up to the challenges of work, take up moderately adventurous activities, for that these challenges and adventures can not only help them obtain more interest from work (Amabile, 1997), but also satisfy their curiosity and realize their self-value (Forbes & Domm, 2004). One key point for followers' creativity management is to understand followers' intrinsic feelings about creativity activities (Amabile, 1988).

We argue that positive LIFT can lead to follower's high intrinsic motivation by satisfying the three basic needs of follower. Specifically, followers will be given more guidance and coaching, encouragement, and social support from the leaders with positive LIFT (Whiteley, Sy, & Johnson, 2012; Kong & Qian, 2015). These good treatments from leaders can make followers more likely to focus on their tasks instead of the external controls such as worries and fears, which helps to boost followers' intrinsic motivation (Shin & Zhou, 2003). Also, leaders with positive LIFT will also express high expectation for followers (Whiteley, Sy, & Johnson, 2012). In order to help followers achieve such high performance, leaders might encourage followers to challenge the *status quos*, or even reformulate issues or problems; this might also contribute to the enhancement of followers' intrinsic motivation (Shin & Zhou, 2003).

Further, the enhanced intrinsic motivation will lead to follower's high creativity. Amabile's (1988, 1996) componential theory of creativity argues that intrinsic motivational is one of the most important and powerful antecedents of followers' creativity. Specifically, when faced with the time-consuming

and resource-intensive creativity activities, employees with high intrinsic motivation are more apt to devote more efforts to facing up to the challenging and difficult creativity activities, and consequently more likely to come up with creative ideas and finally put these ideas (e.g., novel methods, technology and service) into practice (Shin & Zhou, 2003; Zhang & Bartol, 2010).

Hypothesis 3: Intrinsic motivation mediates the positive relationship between positive LIFT and followers' creativity.

### **The mediating role of creative self-efficacy**

The concept of self-efficacy is first proposed by Bandura as a major component of social cognitive theory. Self-efficacy refers to individuals' perceptions and confidence of their ability to execute a specific task, and it is suggested to be able to activate individuals' motivations and sequential behaviors (Bandura, 1977; Tierney & Farmer, 2002). Based upon the work of Bandura, Tierney and Farmer (2002) proposed the concept of creative self-efficacy, which is defined as followers' belief that they can be creative in their work roles. It has been suggested that creative self-efficacy is positive correlated to followers' creativity (Tierney & Farmer, 2002). Moreover, the Pygmalion process for creativity, which explores the positive influence of creative self-efficacy on followers' creativity, has been examined by scholars (Tierney & Farmer, 2004). In the current study, we argue that creative self-efficacy is also a mediating mechanism linking positive LIFT and follower's creativity.

First, positive LIFT will boost follower's creative self-efficacy. There are four major techniques for enhancing follower's creative self-efficacy: enactive mastery or personal attainments, vicarious experience or learning, verbal persuasion, and affective or physiological arousal (Bandura, 1977); at least two of them (enactive mastery, verbal persuasion) can be influenced by positive LIFT. First, positive LIFT can enhance follower's creative efficacy through enactive mastery or personal attainment. According to Pygmalion effect, leader would hold higher creative performance expectation for followers who match positive LIFT and express more liking toward as well as building higher-quality relationship with them (Whiteley, Sy, & Johnson, 2012), making those followers more easily to achieve successful creative experience. Second, positive LIFT can also ameliorate follower's creative self-efficacy by verbal persuasion. Leader will have more intimate communications will followers who match their positive LIFT. During these communication processes, leader will verbally convey the message to supervisors that creative behaviors is appropriate and encouraged (Bandura, 1977).

Further, creative self-efficacy facilitates the follower's creativity (Bandura, 1977). Followers who have higher creative self-efficacy will have more confidence in their creative capabilities and further have stronger intrinsic motivation under the working situations (Bandura & Locke, 2003). According to Ford's (1996) theory of creative individual action, creative self-efficacy is the major driving force of followers' creativity. Creative processes, to a large degree, involve putting new ideas and thoughts into practices, which necessitates long-term investment of time, resources and energy (Bandura, 1977; Amabile, 1988).

Hypothesis 4: Creative self-efficacy mediates the positive relationship between positive LIFTs and followers' creativity.

## **METHOD**

### **Sample and procedure**

We selected full-time employees from traditional work teams of 16 Chinese companies in diverse industries and with various job types to increase external validity of proposed relationships. In order to minimize common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), the study uses



time-lagged data. Two questionnaire surveys apart by 3 months were conducted. The objects of the first survey (T1) are followers, and the survey questions cover followers' creative self-efficacy, LMX, intrinsic motivation and demographic information. The objects of the second survey (T2) are leaders, and the survey content includes positive LIFT and followers' creativity. Completed questionnaires were sealed in envelopes by participants and then returned to either the researcher or the human resources departments.

Before T1, we randomly chose 400 employees as the sample. In T1, 400 questionnaires, along each with a cover letter assuring confidentiality and voluntary participation, were distributed to followers, and among them 352 (88%) were finally collected. After 2 months, T2 was conducted with leaders of the surveyed followers as objects. Among 352 followers, 11 had left their positions or changed their supervisors, we thus excluded these 11 cases and accordingly distributed 341 questionnaires to the matched supervisors, among which 319 (93.5%) were finally collected. After excluding several invalid questionnaires, our final sample included 267 (83.7%) leader–follower dyads. Among the 267 followers, 52.1% were male, with average age of 31.4, and average working experience of 7.81 years. As for educational level, 92.3% got 'bachelor or above' degree. For position level, 37.4% were frontline employees, 16.5% were frontline supervisors, and 10.2% were technical workers. Although our data collection procedures did not completely eliminate the common methods variance, it reduced common method variance to a large degree (Atwater & Carmeli, 2009).

## Measures

Measuring scales of this study all come from leading international research literature and have been proven as high reliability and validity in both China and the west. Questionnaires used in both surveys were in Chinese. Translation/back-translation procedures (Brislin, 1980) were followed to translate the English-based measures into Chinese.

### *Positive LIFT*

Positive LIFT was measured with the nine positive attributes from the LIFT scale (Sy, 2010). Leaders were asked to indicate on a 7-point scale. The LIFT scale consists of three dimensions with three items each, including Industry (hardworking, productive, goes above and beyond), Enthusiasm (excited, outgoing, happy) and Good Citizen (loyal, reliable, team player). Cronbach's  $\alpha$  for the scale was 0.834.

### *Followers' creativity*

Followers' creativity was measured with the 9-item scale developed by Tierney, Famer, and Graen (1999). Leaders were asked to indicate on a 7-point scale. Sample items are 'The follower can demonstrated originality in his/her work,' 'The follower can find new uses for existing methods and equipment.' Cronbach's  $\alpha$  of this scale was 0.913.

### *LMX*

We adopted the 7-item scale developed by Liden, Wayne, and Stilwell (1993) to measure LMX, which was adapted from Scandura and Graen (1984). This scale is the most widely adopted scale in LMX research area. Followers were asked to indicate on a 7-point scale. Sample items are 'I understand my leader's problems and needs.' Cronbach's  $\alpha$  of this scale was 0.834.

### *Followers' intrinsic motivation*

We assessed followers' intrinsic motivation with 5-items scale of Tierney, Famer, and Graen (1999). Followers were asked to indicate on a 7-point scale. Sample items are 'I enjoy finding solutions to complex problems.' Cronbach's  $\alpha$  of this scale was 0.824.

**Followers' creative self-efficacy**

Creative self-efficacy was assessed with Tierney and Farmer's (2002) 4-item scale. Followers were asked to indicate on a 7-point scale. Sample items are 'I have confidence in my ability to solve my problems.' Cronbach's  $\alpha$  of this scale was 0.856.

**Control variables**

Besides the aforementioned variables, we also included followers' age, gender, organizational tenure as well as organizational level as the control variables.

**RESULTS****Confirmatory factor analysis**

In order to examine discriminant validity among the variables (positive LIFT, follower's creativity, LMX, intrinsic motivation and creative self-efficacy) as well as examining the measuring parameters of the adopted measuring scales, confirmatory factor analysis of the study variables was conducted with Lisrel 8.80. Comparisons among models with different numbers of factors have been conducted and the results as illustrated in Table 1 show that five-factor model has the closest fit. The indices for the five-factor model included the following:  $\chi^2(109) = 454.56$ , confirmatory fit index (CFI) = 0.94, goodness-of-fit index (GFI) = 0.83, normed fit index (NFI) = 0.92, root mean square error of approximation (RMSEA) = 0.109.

**Descriptive statistics and correlations**

Means, standard deviations and correlations among variables are presented in Table 2. Positive LIFT is significantly correlated with followers' creativity ( $r = 0.43, p < .01$ ) LMX ( $r = 0.41, p < .01$ ), intrinsic motivation ( $r = 0.28, p < .01$ ) and creative self-efficacy ( $r = 0.30, p < .01$ ). Moreover, LMX ( $r = 0.33, p < .01$ ), intrinsic motivation ( $r = 0.65, p < .01$ ) and creative self-efficacy ( $r = 0.61, p < .01$ ) are significantly correlated with followers' creativity. As for the control variables, none of the four variables – followers' age ( $r = 0.18, ns$ ), gender ( $r = 0.02, ns$ ), organizational tenure ( $r = 0.19, ns$ ) and organizational level ( $r = 0.17, ns$ ) – has significant relationship with positive LIFT, suggesting that positive LIFT among followers of different ages, gender, organizational tenure or organizational level did not vary significantly.

**TABLE 1. MODEL FIT RESULTS FOR CONFIRMATORY FACTOR ANALYSES**

Model	$\chi^2$	df	RMSEA	NFI	CFI	GFI
Five-factor model	454.56	109	0.109	0.92	0.94	0.83
Four-factor model <sup>a</sup>	517.40	113	0.116	0.91	0.92	0.81
Three-factor model <sup>b</sup>	844.41	116	0.154	0.85	0.86	0.73
Two-factor model <sup>c</sup>	1,190.20	118	0.185	0.78	0.80	0.66
Single-factor model <sup>d</sup>	1,272.55	119	0.191	0.77	0.79	0.64

Note.  $n = 267$ .

<sup>a</sup>Positive leaders' implicit followership theory (LIFT) and leader-member exchange (LMX) are merged into one potential factor.

<sup>b</sup>Positive LIFT, LMX and intrinsic motivation are merged into one potential factor.

<sup>c</sup>Positive LIFT, LMX, intrinsic motivation and creative self-efficacy are merged into one potential factor.

<sup>d</sup>All variables are merged into one potential factor.



TABLE 2. MEANS, STANDARD DEVIATIONS AND CORRELATIONS

Variables	M	SD	1	2	3	4	5	6	7	8
1. Gender	1.42	0.50								
2. Age	31.38	5.55	-0.19							
3. Organizational tenure	7.81	3.97	-0.15	0.76**						
4. Organizational level	3.02	1.41	-0.19	0.63**	0.65**					
5. Positive LIFT	5.81	0.56	0.02	0.18	0.19	0.17				
6. Followers' creativity	5.23	0.72	-0.23*	0.18	0.16	0.18	0.43**			
7. LMX	4.88	0.88	-0.12	0.14	0.43	0.10	0.41**	0.33**		
8. Intrinsic motivation	5.27	0.82	-0.17	0.12	0.15	0.16	0.28**	0.65**	0.13	
9. Creative self-efficacy	5.64	0.75	-0.07	0.25*	0.26*	0.25*	0.30**	0.62**	0.09	0.53**

Note.  $n = 267$ .

LIFT = leaders' implicit followership theory; LMX = leader-member exchange.

\* $p < .05$ ; \*\* $p < .01$ .

### Hypothesis tests

Hypothesis 1 assumed that positive LIFT had significant positive effect on followers' creativity. In order to test this hypothesis, we set positive LIFT as an independent variable and followers' creativity as the dependent variable in a hierarchical regression analysis along with control variables. The result illustrated in M8 of Table 3 shows that after controlling for followers' demographic variables, the positive effect of positive LIFT on followers' creativity is significant ( $b = 0.66, p < .01$ ), which is supportive of Hypothesis 1.

Hypothesis 2 proposed that LMX mediated the positive relationship between positive LIFT and follower's creativity. We drew on Baron and Kenny's (1986) work to test the mediating effect. First, in M2 of Table 3, positive LIFT was positively related to LMX ( $b = 0.86, p < .01$ ). Second, in M9 of Table 3, the entering of LMX added significantly to the explained variance in follower creativity with a positive coefficient ( $b = 0.19, p < .01$ ). These results provided initial support for Hypothesis 2. In order to provide further support for Hypothesis 2, Sobel test and PRODCLIN program (MacKinnon, Fritz, Williams, & Lockwood, 2007) were applied. Sobel test indicated that the mediating effect of LMX in the relationship between positive LIFT and follower creativity was supported ( $Z = 3.96, p < .01$ ). The results of PRODCLIN program also showed the mediating effect was significant (95% confidence interval [CI] = [0.09, 0.25], [not containing 0]). Thus, Hypothesis 2 was fully supported.

Hypothesis 3 proposed that intrinsic motivation mediated the positive relationship between positive LIFT and follower's creativity. First, in M4 of Table 3, positive LIFT was positively related to intrinsic motivation ( $b = 0.63, p < .01$ ). Second, in M9 of Table 3, the entering of intrinsic motivation added significantly to the explained variance in follower creativity with a positive coefficient ( $b = 0.33, p < .01$ ). These results provided initial support for Hypothesis 3. In order to provide further support for Hypothesis 2, Sobel test and PRODCLIN program (MacKinnon et al., 2007) were applied. Sobel test indicated that the mediating effect of intrinsic motivation in the relationship between positive LIFT and follower creativity was supported ( $Z = 4.28, p < .01$ ). The results of PRODCLIN program also showed the mediating effect was significant (95% CI = [0.12, 0.31], [not containing 0]). Thus, Hypothesis 3 was fully supported.

Hypothesis 4 proposed that creative self-efficacy mediated the positive relationship between positive LIFT and follower's creativity. First, in M6 of Table 3, positive LIFT was positively related to creative self-efficacy ( $b = 0.58, p < .01$ ). Second, in M9 of Table 3, the entering of self-efficacy added significantly to the explained variance in follower's creativity with a positive coefficient ( $b = 0.42, p < .01$ ). These results provided initial support for Hypothesis 4. In order to provide further support for

TABLE 3. RESULTS OF REGRESSION ANALYSIS

	LMX		Intrinsic motivation		Creative self-efficacy		Creativity		
	M1	M2	M3	M4	M6	M6	M7	M8	M9
Control variables									
Gender	-0.33**	-0.39**	-0.28*	-0.32**	-0.13	-0.17	-0.29**	-0.33**	-0.08
Age	0.09	0.21*	-0.10	-0.02	-0.02	0.06	-0.19	-0.10	-0.16*
Organization tenure	0.12	-0.05	0.28**	0.15	0.15	0.03	0.31**	0.18	0.13*
Organizational level	-0.01	-0.05	0.04	0.01	0.09	0.06	0.04	0.00	-0.02
Independent variables									
Positive LIFT		0.86**		0.63**		0.58**		0.66**	0.04
Mediating variables									
LMX									0.19**
Intrinsic motivation									0.33**
Creative self-efficacy									0.42**
R <sup>2</sup>	0.11	0.32	0.16	0.28	0.11	0.21	0.16	0.30	0.72
ΔR <sup>2</sup>		0.21**		0.12**		0.10**		0.14**	0.42**
F	6.32**	19.92**	10.18**	16.66**	6.21**	11.06**	9.78**	17.92**	66.45**

Note.  $n = 267$ .

LIFT = leaders' implicit followership theory; LMX = leader-member exchange.

\* $p < .05$ ; \*\* $p < .01$ .

TABLE 4. COMPARISON OF INDIRECT EFFECTS

	Bootstrapping estimate	CI
Positive LIFT–mediators–creativity		
Total indirect effect	0.76	[0.52, 1.02]
Indirect effect via LMX	0.20	[0.09, 0.34]
Indirect effect via intrinsic motivation	0.26	[0.15, 0.43]
Indirect effect of creativity self-efficacy	0.30	[0.18, 0.45]
Comparison of indirect effects		
Creativity self-efficacy vs. Intrinsic motivation	0.04	[-0.13, 0.20]
Creativity self-efficacy vs. LMX	0.10	[-0.09, 0.28]
Intrinsic motivation vs. LMX	0.06	[-0.10, 0.23]

Note. CI = confidence interval; LIFT = leaders' implicit followership theory; LMX = leader-member exchange.

Hypothesis 2, Sobel test and PRODCLIN program (MacKinnon et al., 2007) were applied. Sobel test indicated that the mediating effect of creative self-efficacy in the relationship between positive LIFT and follower's creativity was supported ( $Z = 4.44$ ,  $p < .01$ ). The results of PRODCLIN program also showed the mediating effect was significant (95% CI = [0.14, 0.36], [not containing 0]). Thus, Hypothesis 4 was fully supported.

Further investigation showed that there was no significant difference between the indirect effects via creativity self-efficacy, intrinsic motivation and LMX. Specifically, the indirect effect through creativity self-efficacy was not significantly different from that through intrinsic motivation (difference = 0.04, 95% CI = [-0.13, 0.20]) and LMX (difference = 0.10, 95% CI = [-0.09, 0.28]); the indirect through intrinsic motivation was not significantly different from that through LMX (difference = 0.06, 95% CI = [-0.10, 0.23]) (Table 4).

## DISCUSSION

LIFT is a booming research area and have captured many scholars' attention in recent years. Since the proposition of this concept, numerous studies have been launched and provided us with deeper insight into the leadership and followership processes inside the organization settings (Shondrick & Lord, 2010; Sy, 2010; Whiteley, Sy, & Johnson, 2012). However, extant IFT literature only has explored the effects of positive LIFT on followers' attitudinal outcomes (e.g., job satisfaction, organizational commitment, well-being, etc.) (Shondrick & Lord, 2010; Sy, 2010; Whiteley, Sy, & Johnson, 2012), while neglecting the potential effects of positive LIFT on other outcomes (e.g., followers' behavior, perception, exchange quality with organization or supervisor, etc.). The current study filled the research gap and explored the influence of positive LIFT on follower's creativity.

### Theoretical implications

The current research contains several theoretical implications. First, this study makes contributions to social cognitive theory and IFT. Research on IFT addresses a major gap in the leadership literature on how leaders and followers 'perceive, decide, behavior, and take action' (Shondrick & Lord, 2010; Sy, 2010; Whiteley, Sy, & Johnson, 2012). Also, IFT research facilitates the application of social cognitive theory and implicit theory in the practice of management. Related research on IFT is launched based upon implicit leadership theory (Strenberg, 1985). Implicit leadership theory and IFT are both theory extended from the implicit theory (Sy, 2010). Implicit leadership theory describes cognitive structures or prototypes specifying the traits and abilities that characterize leaders (Strenberg, 1985), while IFT explains how leaders judge and respond to their followers (Engle & Lord, 1997). However, while there have been numerous studies exploring implicit leadership theory (Strenberg, 1985), the antecedents and effects of IFT are still understudied, which is conducive to deepen and enrich the leadership and followership processes within the organizational settings (Lord & Brown, 2004). Under this circumstance, our study, to some degree, deepens our understanding of organizational followership process.

Second, the current study contributes to the LIFT literature by examining the 'positive LIFT-employees' creativity' relationship. By doing so, the study also advances our understanding of workplace leadership phenomenon by among the first to explore the roles of leaders' implicit cognition in influencing followers' creativity. In the present study, we found that followers under the leadership of leaders with positive LIFT are more likely to exhibit high level of creativity behaviors. Further, in order to clarify the question of how positive LIFT influence employees' creativity, the study explores the underlying mechanisms linking positive LIFT and followers' creativity. It was found that LMX, intrinsic motivation and creative self-efficacy fully mediated the positive relationship between positive LIFT and followers' creative, indicating that social exchange theory, self-determination theory and social leaning theory are all reasonable theoretical frameworks to give account for how positive LIFT can exert influence on creativity.

Finally, the current study extends the creativity literature by investigating the effect of leader's implicit cognition on employees' creativity. Under social background, innovation plays a more important role in the survival and development of enterprises (George & Zhou, 2002), followers' creativity has been highly valued and emphasized by enterprises due to the fact that it is the source and basis for enterprises' innovation and innovative performance (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Oldham & Cummings, 1996; Zhou, 1998; George & Zhou, 2002). Attempting to help enterprises to gain their competitive advantages, the study investigates the antecedent of followers' creativity from LIFT perspective, which is also the first to explore the 'positive LIFT-followers' creativity' link and its 'black box.'

## Practical implications

The current study also has several practical implications. First, positive LIFT is conducive to enhance followers' creativity. Broader concept perspective indicates that positive antecedents often lead to positive outcomes (Hogan & Roberts, 1996). The study provides support and evidence for this viewpoint. The result indicated that, in order to enhance follower's creativity, efforts from triple sides of organizations, leaders and followers are required: First, for organizations, some intervention strategies should be taken to increase positive LIFT. For example, organization can enact norms and policy for positive leader and follower interaction through frequent and constructive team-working task or outdoor activities. These constructive activities enable leaders have more opportunities to capture the good qualities of their followers and thus are conducive to the forming of positive LIFT.

Second, high-quality LMX, intrinsic motivation and creative self-efficacy are found to have positive relationship with followers' creativity. Under the highly competitive society, in order to improve followers' creativity, leaders should not solely pay attention to the build-up of creative climate through job design and policy making, but also try to: (1) form high-quality leader-member relationship through giving followers more care and support; (2) motivate follower's intrinsic motivation by satisfying their basic needs of a sense of competency, autonomy and relatedness; (3) boost follower's creative self-efficacy through helping or guiding followers achieve success in creative activities, verbally encouraging them to carry out creative activities and giving them psychological arousal toward creative activities.

## Limitations and future directions

In modern leadership research, studies on IFT have provided a novel and follower-centered perspective for scholars to uncover followers' psychological mechanisms during the processes of leadership, which also offer us a new approach to leadership research (Shondrick & Lord, 2010; Sy, 2010; Whiteley, Sy, & Johnson, 2012). A noteworthy strength of the current study lies in its rigorous research design. Specifically, longitudinal research design was adopted to reduce common methods variance to a large extent, hence ensuring us to get more convincing and accurate findings from the collected data. However, like every previous research, the study is not without limitations. First, the variable measurement scales we adopted in the current study were all developed in Western cultural backgrounds which show good psychometrical properties in both Western and Chinese cultural background. However, due to the fact that our research, it may be more appropriate for us to adopt scales which are developed basing on Chinese sample and thus are more suitable for Chinese cultural background. Second, our sample only includes 16 large- and medium-sized Chinese enterprises and these enterprises were randomly selected by researcher, which, to some degree, limited the external validity of our research findings.

Under the background situation of followers diversity and value diversity, it is obviously insufficient that we explore the leadership process within the organizational settings solely from the explicit theories perspective. From the above perspective, we argue that future research have several directions as follows: (1) exploring the leadership process in the organizational settings adopting a more comprehensive perspective. Traditional organizational behavior research explores the leadership process mainly from leader-centric perspective. Future research should explore leadership process from follower-centric perspective and also lay more emphasis on the role of situation. (2) Strengthening the researching and studying of implicit theory, one effective way for which is to integrate the views and methods of cognitive psychology, sociology, and strategic leadership. Also, when explaining how implicit theory affect the potential outcome variables, future research can introduce more mediators as well as moderators. (3) The present study assessed LIFT at the individual level. This was done because LIFT

represents broad conceptions of followers that are likely to guide global leadership judgments and interpersonal dynamics, such that they have a relatively equal impact on all follower outcomes. In this research, there are more than 100 supervisors managed only one subordinate. This also had the added benefit of substantially reducing the length of the surveys, and potential survey fatigue and response bias. As such, we deemed it appropriate to assess LIFT for their workgroup, rather than one-one. (4) Filling the research voids by paying more attention to the exploration of the outcomes of LIFT. As new-generation followers and knowledge followers gradually becomes the majority of the labor, future LIFT research should concentrate more on the delineation of the constitutes and structure of LIFT aimed at the above two groups as well as how the LIFT influence their interaction with leaders and performance expectation. (5) Looking for new or alternative approach to learn about the leadership process. IFTs give us insights into how leaders make judgments and responses to followers according to their pre-existing schemas, which reply scholars' calls of strengthening the research on how leaders and followers 'perceive-decide-act-execute' (Avolio, Walumbwa, & Weber, 2009). Apart from implicit theory, more new approach should be proposed to promote the studies of leadership.

## Conclusion

The current study introduced LMX, intrinsic motivation and creative self-efficacy as mediators to explore the underlying mechanisms linking positive LIFT and creativity, answering when the strength of the link becomes stronger or weaker. Adopting 267 leader–follower dyads as our final sample, we found that: (1) positive LIFT had significant positive effect on followers' creativity; (2) followers' LMX with leader, intrinsic motivation and creative self-efficacy LMX mediated the positive relationship between positive LIFT and followers' creativity; (3) no significance difference was found between the mediating effects of LMX, intrinsic motivation and creative self-efficacy.

## References

- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in Organizational Behavior*, 10(1), 123–167.
- Amabile, T. M. (1996). *Creativity in context: Update to 'the social psychology of creativity'*. New York: Westview Press.
- Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California Management Review*, 40(1), 39–58.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154–1184.
- Atwater, L., & Carmeli, A. (2009). Leader-member exchange, feelings of energy, and involvement in creative work. *The Leadership Quarterly*, 20(3), 264–275.
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: current theories, research, and future directions. *Annual Review of Psychology*, 60, 421–449.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.
- Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*, 88(1), 87–99.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Bjugstad, K., Thach, E. C., Thompson, K. J., & Morris, A. (2006). A fresh look at followership: A model for matching followership and leadership styles. *Journal of Behavioral and Applied Management*, 5, 304–319.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: John Wiley & Sons.
- Brislin, R. W. (1980). Translation and content analysis of oral and written material. *Handbook of cross-cultural psychology*, 2(2), 349–444.
- Carsten, M. K., & Uhl-Bien, M. (2009). Implicit Followership Theories (IFT): Developing and validating an IFT scale for the study of followership. Presented at the Southern Management Association, 11–14 November, Asheville, NC.

- Carsten, M. K., Uhl-Bien, M., West, B. J., Patera, J. L., & McGregor, R. (2010). Exploring social constructions of followership: A qualitative study. *The Leadership Quarterly*, *21*, 543–562.
- Collinson, D. (2006). Rethinking followership: A post-structuralist analysis of follower identities. *The Leadership Quarterly*, *17*, 179–189.
- Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, *13*(3), 471–482.
- Cronbach, L. J., & Gleser, G. C. (1965). *Psychological tests and personnel decisions*. Oxford, England: University of Illinois Press.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Duong, J. (2012). Leaders' conceptions and evaluations of followers as antecedents of leadership style, leader-member exchange and employee outcomes. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, *72*(8-A), 2984.
- Engle, E. M., & Lord, R. G. (1997). Implicit theories, self-schemas, and leader-member exchange. *Academy of Management Journal*, *40*, 988–1010.
- Epitropaki, O., & Martin, R. (2004). Implicit leadership theories in applied settings: Factor structure, generalizability and stability over time. *Journal of Applied Psychology*, *89*, 293–310.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed, New York: McGraw-Hill).
- Forbes, J. B., & Domm, D. R. (2004). Creativity and productivity: Resolving the conflict. *SAM Advanced Management Journal*, *69*(2), 4–11.
- Ford, C. (1996). A theory of individual creative action in multiple social domains. *Academy of Management Review*, *21*, 1112–1142.
- Gagne, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, *26*(4), 331–362.
- George, J. M., & Zhou, J. (2002). Understanding when bad moods foster creativity and good ones don't: The role of context and clarity of feelings. *Journal of Applied Psychology*, *87*(4), 687–697.
- Goodwin, V. L., Wofford, J. C., & Boyd, N. G. (2000). A laboratory experiment testing the antecedents of leader cognitions. *Journal of Organizational Behavior*, *21*, 769–788.
- Graen, G. B., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. *Research in Organizational Behavior*, *9*, 175–208.
- Gregory, G. D., & Joseph, C. P. (2000). Changing roles: Leadership in the 21st century. *Organizational Dynamics*, *28*(3), 18–34.
- Hogan, J., & Roberts, B. W. (1996). Issues and non-issues in the fidelity-bandwidth trade-off. *Journal of Organizational Behavior*, *17*, 627–637.
- Kong, M., & Qian, X. J. (2015). Mr. Right & Superman: Effect of implicit followership on employee's behaviors. *Acta Psychologica Sinica*, *47*(9), 1162–1171.
- Kruse, E. (2010). Positive cascade: Prototypical LIFTs scores predict interpersonal success. Paper presented at the Annual Academy of Management Conference, Montréal, Canada.
- Kruse, E. T., & Sy, T. (2011). Manipulating implicit theories through inducing affect. Presented at the Academy of Management, 12-16 August, San Antonio, TX.
- Liden, R. C., & Graen, G. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal*, *23*(3), 451–465.
- Liden, R. C., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology*, *78*(4), 662–674.
- Lord, R. G., & Brown, D. J. (2004). *Leadership processes and follower identity*. Mahwah, NJ: Psychology Press.
- Lord, R. G., & Maher, K. J. (2002). *Leadership and information processing: Linking perceptions and performance*. New York, NY: Routledge.
- MacKinnon, D. P., Fritz, M. S., Williams, J., & Lockwood, C. M. (2007). Distribution of the product confidence limits for the indirect effect: Program PRODCLIN. *Behavior Research Methods*, *39*(3), 384–389.
- Ng, T. W., & Lucianetti, L. (2016). Within-individual increases in innovative behavior and creative, persuasion, and change self-efficacy over time: A social-cognitive theory perspective. *Journal of Applied Psychology*, *101*(1), 14–34.



- Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, 39(3), 607–634.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714.
- Scandura, T. A., & Graen, G. B. (1984). Moderating effects of initial leader–member exchange status on the effects of a leadership intervention. *Journal of Applied Psychology*, 69(3), 428–436.
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580–607.
- Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of Management Journal*, 46(6), 703–714.
- Shondrick, S. J., & Lord, R. G. (2010). Implicit leadership and followership theories: Dynamic structures for leadership perceptions, memory, and leader-follower processes. *International Review of Industrial and Organizational Psychology*, 25(1), 1–33.
- Sparrowe, R. T., & Liden, R. C. (2005). Two routes to influence: Integrating leader-member exchange and social network perspectives. *Administrative Science Quarterly*, 50(4), 505–535.
- Strenberg, R. J. (1985). Implicit theories of intelligence, creativity, and wisdom. *Journal of Personality and Social Psychology*, 49, 607–627.
- Sy, T. (2010). What do you think of followers? Examining the content, structure, and consequences of implicit followership theories. *Organizational Behavior and Human Decision Processes*, 113, 73–84.
- Tierney, P. (2015). LMX and creativity. New York, NY: Oxford University Press.
- Tierney, P., Famer, S. M., & Graen, G. B. (1999). The examination of leadership and employee creativity: The relevance of traits and relationship. *Personnel Psychology*, 52(3), 591–620.
- Tierney, P. T., & Farmer, S. M. (2002). Creative self-efficacy: Its potential antecedents and relationship to creative performance. *Academy of Management Journal*, 45(6), 1137–1148.
- Tierney, P. T., & Farmer, S. M. (2004). The Pygmalion process and employee creativity. *Journal of Management*, 30(3), 413–432.
- Van Gils, S., Van Quaquebeke, N., & Van Knippenberg, D. (2010). The X-factor: On the relevance of implicit leadership and followership theories for leader–member exchange (LMX) agreement. *European Journal of Work and Organizational*, 19, 333–363.
- Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2002). The role of fair treatment and rewards in perceptions of organizational support and leader-member exchange. *Journal of Applied Psychology*, 87(3), 590–598.
- Weick, K. E. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage.
- Whiteley, P., Sy, T., & Johnson, S. K. (2012). Leaders' conceptions of followers: Implications for naturally occurring Pygmalion effects. *The Leadership Quarterly*, 23(5), 822–834.
- Wofford, J. C., & Goodwin, V. L. (1994). A cognitive interpretation of transactional and transformational leadership theories. *The Leadership Quarterly*, 5, 161–186.
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, 53(1), 107–128.
- Zhou, J. (1998). Feedback valence, feedback style, task autonomy, and achievement orientation: Interactive effects on creative performance. *Journal of Applied Psychology*, 83(2), 261–276.
- Zhou, J., & Shalley, C. E. (2003). Research on employee creativity: A critical review and directions for future research. *Research in Personnel and Human Resources Management*, 22, 165–218.