



## Regulatory focus trickle-down: How leader regulatory focus and behavior shape follower regulatory focus



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### ARTICLE INFO

#### Article history:

Received 18 November 2015

Revised 15 March 2017

Accepted 23 March 2017

#### Keywords:

Leadership

Regulatory focus

Transformational leadership

Transactional leadership

### ABSTRACT

Regulatory focus is critical at work and is shaped by cues in the environment. We examine how supervisor regulatory foci can activate analogous foci in subordinates. We test this idea across five studies. In Study 1 we find that supervisor regulatory focus predicted change in new hires' regulatory focus in the first three months after organizational entry. In Studies 2 and 3 we find that leaders' regulatory foci had unique effects on leadership behaviors, and that these behaviors primed subordinates' regulatory foci. Specifically, transformational behavior is linked to promotion focus, management by exception behavior to prevention focus, and contingent reward behavior to both foci. In Study 4 we find that leader regulatory focus relates to follower regulatory focus via the mediating effects of the aforementioned leader behaviors. Finally, in Study 5 we additionally find that contingent punishment mediates the relationship between leader and follower prevention focus and that weak regulatory foci increase the likelihood of laissez-faire leadership. Taken together, these results reveal how leader regulatory focus and behavior can be leveraged to shape the motivation of followers.

Published by Elsevier Inc.

### 1. Introduction

Regulatory focus theory (Higgins, 1998) purports that people regulate their behavior during goal pursuit via two fundamental and independent strategies. One strategy involves a promotion focus, such that people approach ideal goal states and are concerned with the quantity and speed of work accomplishments. The second strategy involves a prevention focus, where behavior is motivated by obligation and people are concerned with security and quality. Distinguishing between these foci is important because they have unique effects on affect, cognition, and behavior (Lanaj, Chang, & Johnson, 2012). For example, employees with a strong promotion focus emphasize accomplishment and innovation, whereas those with a prevention focus emphasize safety and minimizing inefficiencies (Förster, Higgins, & Bianco, 2003; Lin & Johnson, 2015; Wallace, Johnson, & Frazier, 2009). These unique outcomes suggest that it is advantageous for companies to have employees with a particular regulatory focus, depending

on current goal pursuits. For example, a company with a current emphasis on new product innovation would benefit by maximizing a promotion focus, whereas maximizing a prevention focus would be desirable for reducing workplace accidents. An important question that naturally follows, then, is how can the regulatory focus of employees be effectively shaped at work?

One answer to this question may be through leadership. As a result of their prominence and position in the organizational hierarchy, leaders' behaviors toward followers represent particularly salient interpersonal cues that influence followers' self-concept and motivation (Lord & Brown, 2004; Shamir, House, & Arthur, 1993; Stam, van Knippenberg, & Wisse, 2010). Given that promotion and prevention foci are dynamic and context-specific, leaders may be able to shape their followers' regulatory foci via their language and behavior (Brockner & Higgins, 2001; Kark & Van Dijk, 2007). In fact, leaders' own regulatory focus may even influence the behaviors they enact toward their followers (Hamstra, Sassenberg, Van Yperen, & Wisse, 2014), thus triggering a trickle-down process whereby the effects of leader regulatory focus on follower regulatory focus are mediated by leader behavior.

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With this in mind, the goal of our investigation is to integrate Higgins' (1997) regulatory focus theory with Bass and Avolio's (1997) full-range theory of leadership in order to illuminate whether and how leaders can change the regulatory foci of their followers. As a start, we draw from a conceptual model (Kark & Van Dijk, 2007) that positions leaders' promotion and prevention foci as antecedents of transformational and transactional behaviors, respectively, and transformational and transactional behaviors as elicitors of followers' promotion and prevention foci, respectively. While this model provides a nice foundation for our theorizing, we extend it in several respects. First, Kark and Van Dijk's (2007) coverage of transactional behavior was limited to management by exception, yet transactional leadership also encompasses contingent reward (Bass, 1985). Contingent reward is "as universal as the concept of leadership itself" (Bass, 1997, p. 132), and its absence from Kark and Van Dijk's model is surprising because, as we elaborate below, contingent reward has qualities that map onto promotion focus (e.g., attaining desired rewards) and prevention focus (e.g., fulfilling exchange-based obligations). Contingent reward may therefore have ties to *both* foci, thereby giving leaders a way to have 'the best of both worlds.' Although the elicitation of both promotion and prevention foci in followers may be desirable in some instances, current research has only considered leader behaviors that influence one or the other focus (e.g., Neubert, Kacmar, Carlson, Lawrence, & Roberts, 2008).

Two other potentially relevant leader behaviors – contingent punishment and laissez-faire – are also conspicuously absent from Kark and Van Dijk's (2007) model. Despite receiving less attention than contingent reward (Podsakoff, Bommer, Podsakoff, & MacKenzie, 2006), contingent punishment nevertheless has implications for prevention focus because it directs followers' attention to failures to meet minimal standards for quality and safety. While laissez-faire leadership might not seem relevant *prima facie*, this non-responsive style may manifest when leaders have weak regulatory foci and/or followers' own regulatory foci may weaken when guidance and feedback are lacking. Thus, a key contribution is that we offer a more nuanced and accurate understanding of the intersection of regulatory focus and leadership by teasing apart the unique roles played by management by exception, contingent reward, contingent punishment, and laissez-faire behaviors. Importantly, these leader behaviors serve as the mechanisms through which leaders' regulatory foci trickle down to influence followers' regulatory foci, which Kark and Van Dijk stopped short of proposing in their model.

We conducted five studies, relying on a mix of correlational and experimental methods and data collected from multiple sources and at different times, to test core tenets of Kark and Van Dijk's (2007) model and our extensions to it. To date, this model has yet to be directly tested, thus an empirical examination of its propositions represents a needed step in verifying the role of regulatory focus in leadership processes. In the process of doing so, we also ruled out other leader characteristics (e.g., personality traits, goal orientation) and behaviors (e.g., initiating structure, consideration) and contextual factors (e.g., company values) that pose as alternative explanations for regulatory focus trickle-down effects. Overall, our investigation extends theory and practice on both regulatory focus and leadership by highlighting how leaders, through their behavior, can effectively trigger desired regulatory foci in followers.

## 2. Theoretical overview

### 2.1. Regulatory focus theory

Regulatory focus theory posits there are two fundamental self-regulation systems (Higgins, 1998). One system regulates the

achievement of gains (promotion focus), whereas the other system regulates the avoidance of losses (prevention focus). Although both foci aid goal accomplishment, they represent unique means that involve different behaviors and emotions. A *promotion focus* aims to bring people's actual selves in alignment with their ideal selves (i.e., maximal goals based on aspirations of who one desires to be; Kark & Van Dijk, 2007). This focus sensitizes people to the presence and absence of gains (e.g., bonuses, promotions), which motivates an eagerness strategy concerned with maximizing gains and avoiding non-gains. A promotion focus also emphasizes change, prompting approach-oriented behaviors centered on innovating, acquiring, and taking risks (Crowe & Higgins, 1997; Gamache, McNamara, Mannor, & Johnson, 2015). When people are promotion focused, their emotional experiences range from activated positive emotions like excitement (when a gain is attained) to low activation negative emotions like dejection (in the presence of a non-gain; Higgins, Shah, & Friedman, 1997).

A *prevention focus*, in contrast, aims to match people's actual selves with their ought selves (i.e., minimal goals based on felt responsibilities and obligations) and push them away from feared selves (i.e., avoidance goals based on unwanted self-attributes; Kark & Van Dijk, 2007). This focus sensitizes people to losses (e.g., errors and injuries), which motivates a vigilance strategy aimed at preventing loss. A prevention focus also emphasizes stability and conservatism, prompting avoidance-oriented behaviors centered on security and risk aversion (Crowe & Higgins, 1997; Gamache et al., 2015). When people are prevention focused, success (i.e., avoiding a loss) elicits low activation positive emotions like quiescence, and failure (i.e., experiencing a loss) elicits high activation negative emotions like anxiety (Higgins et al., 1997).

Two other characteristics deserve mention. First, it is possible for people to have high levels of both foci, just one focus, or neither focus (Lanaj et al., 2012). This is because the two foci involve unique self-guides (ideals vs. oughts), frames (gains vs. losses), goals (maximal vs. minimal), and emotions (excitement vs. anxiety). This gives rise to the possibility that a leader may exhibit multiple leader behaviors if s/he has high levels on both foci. Although this might appear to prohibit leaders from being consistent in their behavior and thus reduce their effectiveness (cf. Johnson, Venus, Lanaj, Mao, & Chang, 2012), quite the opposite is true. For example, leaders can simultaneously exhibit both transformational and transactional behaviors to augment their effects (Bass, 1985; Judge & Piccolo, 2004).

Second, regulatory focus operates as both a trait and state, thus people can be predisposed toward a particular strategic orientation, which can nevertheless be overridden in the presence of salient situational cues (Brockner & Higgins, 2001). However, the effects of regulatory focus tend to be comparable across trait and state levels. With respect to our model, we do not distinguish between leaders' trait and state regulatory focus because the hypothesized effects on behavior are not expected to differ.<sup>1</sup> As for follower regulatory focus, it is best thought of as a state in our model because it is shaped by leader behavior, a salient situational cue. However, repeated exposure over time to the same leader behaviors can establish a relatively stable work-based regulatory focus in followers (Lanaj et al., 2012).

### 2.2. Transformational and transactional leader behavior

We suspect that regulatory focus is particularly relevant for four types of leader behavior: transformational, contingent reward, management by exception, and contingent punishment (Hamstra

<sup>1</sup> We test this assumption by examining both trait (Study 2 Sample A) and state (Study 2 Sample B) foci.

et al., 2014; Kark & Van Dijk, 2007). Transformational leadership involves behaviors that challenge and motivate followers to achieve desirable goals (Bass, 1985). Communicating value-laden visions of ideal future states, encouraging accomplishment, and expressing support for change are defining transformational behaviors (Bass & Riggio, 2006; House, 1976). Transformational leaders also express high activation positive emotions (e.g., enthusiasm) to inspire confidence and optimism in their followers (Bono & Ilies, 2006).

Transformational behavior is often contrasted with three types of transactional behavior. One – *contingent reward* – involves creating exchange-based transactions with followers by establishing concrete goals that clarify minimal and maximal task requirements, and then communicating these expectations to followers (Bass, 1997). Monitoring whether followers comply with exchange-based obligations and motivating them to do so via the use of positive reinforcement (i.e., providing desirable outcomes) and negative reinforcement (i.e., removing undesirable outcomes) are key elements of contingent reward behavior (Bass, Avolio, Jung, & Berson, 2003). Judge and Piccolo (2004) concluded that contingent reward is especially effective because it makes followers aware of the minimal standards for avoiding failure and the maximal standards for triggering rewards and reinforcement.

The second and third transactional behaviors – *management by exception* and *contingent punishment* – are more corrective than contingent reward in that they stress the importance of accuracy and the costs associated with mistakes and losses (Bass, 1985). They both involve specifying minimal requirements for task and interpersonal conduct and then vigilantly monitoring performance and taking corrective action when deviations from set standards are expected or have already occurred (Bass et al., 2003). Management by exception entails giving guidance and negative feedback when problems arise, whereas contingent punishment ensures compliance by imposing penalties for failing to meet minimal task requirements (Podsakoff et al., 2006). Both behaviors are intertwined with avoidance-oriented emotions (e.g., anxiety) and they encourage conservative and risk-averse strategies to fulfill duties (Kark & Van Dijk, 2007).

In their review of personality and leadership, Bono and Judge (2004, p. 906) concluded that “transformational and transactional leadership behaviors are more malleable, more transient, and less trait-like than one might otherwise believe,” thus they called for research on dynamic, non-dispositional determinants of leader behavior. Regulatory focus is well-suited in this regard because it is a proximal motivational construct with both trait and state qualities (Lanaj et al., 2012). As we explain next, there are compelling reasons to expect effects of leader regulatory focus on transformational and transactional behaviors. While a few studies have explored the intersection of regulatory focus and leader behavior (e.g., Hamstra et al., 2014; Venus, Stam, & van Knippenberg, 2013), we extend this work by separating transactional behaviors into contingent reward, contingent punishment, and management by exception, which have unique effects. Another extension is our experimental and lagged tests of the consequences of leader regulatory focus and the antecedents of follower regulatory focus, which avoids the disconnect of investigating a dynamic phenomenon like regulatory focus using static cross-sectional methods (e.g., Neubert et al., 2008; Wallace, Little, Hill, & Ridge, 2010).

### 3. Hypothesis development

A central premise of our research is that leaders' regulatory focus influences the types of behaviors they exhibit toward followers, ultimately eliciting a corresponding regulatory focus in followers. We first discuss the effects of leaders' regulatory foci on

transformational, contingent reward, management by exception, and contingent punishment behaviors. We then describe how these behaviors are responsible for how leaders shape their followers' regulatory foci.

#### 3.1. Promotion focus and leader behavior

There are theoretical reasons to expect that leaders with a strong promotion focus will exhibit more transformational behavior (Kark & Van Dijk, 2007). A promotion focus involves growth and striving for ideals (e.g., maximal performance), which motivates people to value change (Lieberman, Idson, Camacho, & Higgins, 1999) and to take risks (Gino & Margolis, 2011). Transformational behavior is inherently change-oriented and risky (Bass & Riggio, 2006), and its purpose is to challenge and motivate followers to achieve ideal goals. Consequently, transformational leadership represents a compatible behavior that can serve as a means to achieve the “ideal” goals underlying a promotion focus. Consistent with this idea, transformational behavior is more readily performed by leaders who are predisposed to experience and express promotion-oriented emotions (Bono & Judge, 2004; Rubin, Munz, & Bommer, 2005). Overall, a strong promotion focus is expected to increase the likelihood of exhibiting transformational behavior (Hamstra et al., 2014; Kark & Van Dijk, 2007).

In addition to influencing transformational behavior, there are reasons to expect that a strong promotion focus may also influence leaders' contingent reward behavior. A strong promotion focus directs individuals toward goal achievement and the rewards and gains that follow (Crowe & Higgins, 1997). As discussed above, contingent reward entails setting up exchange transactions with followers and rewarding those who meet or exceed expectations. For leaders with a strong promotion focus, maximal goals and gains are particularly salient to them, and they are likely to emphasize ideal goals and opportunities for gains to their followers. Although contingent reward may be less grandiose than transformational behavior in achieving the hopes and aspirations of promotion-focused leaders, it is nevertheless an additional strategy that pulls followers towards goal accomplishment. Thus, we expected that leader promotion focus will be positively related to transformational behavior (*Hypothesis 1a*) and contingent reward behavior (*Hypothesis 1b*).

#### 3.2. Prevention focus and leader behavior

There are theoretical reasons to expect that leaders with a strong prevention focus will exhibit management by exception and contingent punishment behaviors. A prevention focus involves setting specific expectations regarding minimal performance standards and then meeting these duties and obligations via vigilant behaviors (Higgins, 1998). Prevention-focused individuals are more likely to follow rules and regulations and to adopt conservative tactics that focus on minimizing errors (Lanaj et al., 2012). The aim of management by exception and contingent punishment behaviors are to increase follower compliance to organizational rules and regulations as they are “concerned with deviations, details, duties, and obligations, safety and security, and the maintenance of routines and the status quo” (Kark & Van Dijk, 2007, p. 509). Consequently, the use of negative feedback and punishment are complementary behaviors that leaders can leverage to fulfill the “ought” and “feared” goals accompanying a prevention focus. A strong prevention focus is therefore expected to increase the likelihood that leaders exhibit management by exception (*Hypothesis 2a*) and contingent punishment (*Hypothesis 2b*).

Interestingly, a strong prevention focus may also trigger contingent reward behavior. This focus directs individuals toward goal maintenance, minimal standards of performance, and short-term

details (Crowe & Higgins, 1997). Contingent reward is a manifestation of this focus because it involves specifying concrete and short-term expectations for exchange, motivating follower compliance via positive and negative reinforcement, and then monitoring exchange-based obligations with followers to ensure that minimal performance standards are met. Such tactics embody an avoidance-oriented strategy that moves followers away from failure (Hamstra et al., 2014). A leader who, for example, promises followers that they will be exempt from an unfavorable work assignment in exchange for fulfilling certain obligations is using contingent reward to motivate compliance. Thus, we expected that leader prevention focus will be positively related to contingent reward behavior (*Hypothesis 2c*).

### 3.3. Leader behavior and follower regulatory focus

In addition to shaping behavior, regulatory focus is also shaped by behavior, including the behavior of others (Brockner & Higgins, 2001). Thus, we suggest that transformational, contingent reward, contingent punishment, and management by exception behaviors have a reciprocal effect on followers' regulatory foci, ultimately creating correspondence between the regulatory foci of leaders and followers. Followers are especially susceptible to the influence of leaders because leaders are salient figures in work contexts, and employees view them as the face of the organization (Eisenberger et al., 2010). As a result, leaders are in an advantageous position to transfer their own attributes to followers through a variety of processes, including situational framing (Kark & Van Dijk, 2007) and social learning (Bandura, 1986).

Beginning with transformational behavior, leaders exhibiting this behavior shape the self-concept and goals of their followers by envisioning a desirable future, communicating this vision to their followers, and serving as appropriate role models (Bass, 1985; Bass et al., 2003). The leader's vision and corresponding rhetoric convey what the leader deems to be important and what ideally will be accomplished. By emphasizing to followers what they can develop into (i.e., a maximal goal), leaders exhibiting transformational behavior frame the situation in terms of gains and ideal selves (Kark & Van Dijk, 2007). This attention on maximal goals, gains, and ideals, coupled with followers' modeling of the leader's beliefs and behaviors geared toward achievement, are likely to prime a promotion focus in followers (Kark & Van Dijk, 2007).

Leaders exhibiting management by exception and contingent punishment behaviors, in contrast, minimize errors through close monitoring of the correctness of work (Bass, 1985). Leader rhetoric thus tends to focus on accuracy, responsibility, and corrective and punitive activities. By emphasizing the importance of avoiding failure (i.e., a minimal goal), such leaders frame the situation in terms of loss (Kark & Van Dijk, 2007). Given this loss-focus, management by exception and contingent punishment behaviors often elicit avoidance-oriented reactions in followers (Atwater, Camobreco, Dionne, Avolio, & Lau, 1997; Bass, 1985). In short, the attention that management by exception and contingent punishment behaviors place on minimal goals and losses, coupled with the leader's corrective and punitive responses, is likely to induce a prevention focus in followers (Kark & Van Dijk, 2007).

Finally, we expect contingent reward behavior to prime both foci in followers. According to Bass (1985), contingent reward is framed both in terms of gains and the maximal goals that indicate success (invoking a promotion focus), and in terms of the minimal goals that denote obligations (invoking a prevention focus). Even when contingent reward behavior mostly emphasizes gains, rewards can take the form of either positive reinforcement (e.g., earning a monetary bonus) or negative reinforcement (e.g., being freed from an unpleasant work assignment). The latter reward is

aligned with prevention focus because it involves removing adverse stimuli, which represents non-losses. Contingent reward therefore has the capacity to simultaneously prime both a promotion and a prevention focus in followers. There is some indirect evidence to support this notion, as contingent reward has demonstrated positive relationships with both creativity (Baer, Oldham, & Cummings, 2003) and safety (Zohar, 2002), which are associated with a promotion and prevention focus, respectively (Lanaj et al., 2012).

In sum, we propose that leaders' regulatory foci are proximal motivational phenomena that directly affect their behavior (Higgins & Spiegel, 2004). As a result of situational framing and social learning, these leader behaviors induce corresponding regulatory foci in followers. Thus, leader behaviors serve as a mediating mechanism explaining the trickle down effects of leaders' regulatory foci on followers' regulatory foci. Moreover, there are close conceptual connections between regulatory focus and these leader behaviors, which owe to analogous gain/loss frames and maximal/minimal goals. We therefore suspect that these trickle down processes operate independently of other individual differences (e.g., personality traits, goal orientations). For example, goal orientations are associated with implicit beliefs about intelligence (Dweck, 1986), which are different from gain/loss frames and maximal/minimal goals. Promotion and prevention foci, which reflect strategic means that drive motivated action, are also more proximal to behavior than personality and other dispositions (Ferris et al., 2013; Lanaj et al., 2012), and thus are expected to play a larger role in trickle down processes.<sup>2</sup> In sum, we predicted that the relationship of leader and follower promotion focus will be mediated by transformational behavior (*Hypothesis 3a*) and contingent reward (*Hypothesis 3b*), and that the relationship of leader and follower prevention focus will be mediated by management by exception (*Hypothesis 4a*), contingent punishment (*Hypothesis 4b*), and contingent reward (*Hypothesis 4c*).

We conducted five studies to examine our trickle down model. In Study 1 we collected regulatory focus data from supervisor-subordinate dyads at two time points. The first assessment occurred within subordinates' first month on the job, before their work-based regulatory focus had presumably crystallized. Controlling for initial regulatory focus, we examined whether supervisor regulatory focus at time 1 predicts change in subordinate regulatory focus three months after organizational entry (time 2). Study 2 explored the links between supervisors' regulatory focus and their behavior. In Sample A we examined whether supervisors' trait regulatory focus predicts reports of their leader behavior, and in Sample B we examined whether supervisors' state regulatory focus primes intentions to exhibit different leader behavior. Study 3 was an experiment in which we tested whether transformational, contingent reward, and management by exception language prime subordinates' regulatory foci, enabling us to draw causal inferences. Finally, we tested the full trickle down model in Studies 4 and 5 by collecting data from supervisor-subordinate dyads at multiple times. We examined transformational, contingent reward, and management by exception behaviors in Study 4, and added contingent punishment and laissez-faire behaviors in Study 5.

## 4. Study 1

### 4.1. Method

Data were collected from 105 supervisor-subordinate dyads in the US. We recruited participants in the final semester of their MBA

<sup>2</sup> In Study 2 we examined whether regulatory focus predicts leader behaviors incremental to personality.

coursework who were not currently working but had employment opportunities lined up post-graduation. Within the first month of starting their new jobs, participants were given a survey packet for them to complete and one to give to their supervisor (surveys were returned via self-addressed, stamped envelopes provided by the researchers). These time 1 surveys contained a measure of regulatory focus. A second survey was provided to subordinates three months later, which contained a measure of regulatory focus. In total, 125 survey packets were distributed (84% response rate). Because subordinates were responsible for passing survey packets to their supervisors, we contacted a subsample of supervisors (approximately 25%) following receipt of their data to verify that they indeed participated. All supervisors indicated that they did complete the survey.

Subordinates were mostly Caucasian (53%), Hispanic (21%), or African American (19%), slightly more than half were male (63%), their average age was 34.2 years ( $SD = 8.9$ ), average hours worked per week was 44.5 ( $SD = 7.2$ ), and they were employed in industries ranging from professional and retail to manufacturing and government. Supervisors were mostly male (85%), they had an average age of 45.1 years ( $SD = 11.7$ ), and they worked an average of 45.3 h per week ( $SD = 8.8$ ). The average length of subordinates' and supervisors' relationship at time 1 was 16.2 days ( $SD = 7.2$ ).

Supervisors and subordinates rated their regulatory focus using items adapted from Lockwood, Jordan, and Kunda's (2002) measure. Items were rewritten to reference the workplace. Six items each assessed promotion focus ( $\alpha$ s ranged from 0.83 to 0.87; e.g., "I typically focus on the success I hope to achieve at work") and prevention focus ( $\alpha$ s ranged from 0.85 to 0.89; e.g., "In general, I am focused on preventing negative events at work"). Participants responded to the items using a 5-point Likert scale (from 1 = "Strongly disagree" to 5 = "Strongly agree").

## 4.2. Results and discussion

Reported in Table 1 are descriptive statistics and correlations. We tested the trickle-down relations by specifying a latent structural model with paths from time 1 supervisor regulatory focus to time 2 subordinate regulatory focus. We also controlled for time 1 subordinate regulatory focus, thus our outcome is change in subordinate regulatory focus over the ensuing three months. These and all other structural equation models were conducted using Mplus 6.0 software (Muthén & Muthén, 2012). Item parcels (created using the isolated uniqueness strategy recommended by Hall, Snell, & Foust, 1999) served as indicators for each variable. We first assessed the fit of the 6-factor measurement model, which was acceptable based on commonly used indices (see Kline, 2004):  $\chi^2_{(120)} = 174.36$ ; CFI = 0.96; SRMR = 0.05; and RMSEA = 0.04, and all factor loadings were significant. Next we tested the hypothesized structural model, which also had good fit:  $\chi^2_{(124)} = 179.85$ ; CFI = 0.95; SRMR = 0.05; and RMSEA = 0.04, and all paths and factor loadings were significant (see Fig. 1). As a further test, we freed up non-hypothesized paths from time 1 supervisor promotion focus to time 2 subordinate prevention focus ( $\gamma = 0.12$ ,  $p > 0.10$ ), and from time 1 supervisor prevention focus to time 2 subordinate promotion focus ( $\gamma = 0.05$ ,  $p > 0.10$ ). Neither path was significant nor did model fit improve ( $\Delta\chi^2 = 2.88$ , critical  $\chi^2$  for 2  $df = 5.99$ ). Thus, supervisor promotion and prevention foci were uniquely related to changes in subordinate promotion and prevention foci, respectively.

## 5. Study 2

In Study 2 we examined whether leader regulatory focus predicts leader behavior. These relations were not expected to differ across trait versus state regulatory focus. In Sample A we examined

relations of trait regulatory focus with leader behavior, whereas in Sample B we examined the effects of primed (i.e., state) regulatory focus on intentions to exhibit leader behavior. We also controlled for non-focal individual differences and leader behaviors to establish whether leader regulatory focus is uniquely related to the focal leader behaviors.

### 5.1. Sample A method

Data were collected from 134 supervisors employed in the US who we recruited via Mechanical Turk (MTurk). Data obtained through MTurk has psychometric properties that are similar to data obtained using other convenient sampling approaches (Buhrmester, Kwang, & Gosling, 2011), and findings are comparable to those based on employee and MBA samples (e.g., Lanaj, Johnson, & Barnes, 2014). The supervisors were mostly Caucasian (69%), African American (16%), or Asian (11%), and slightly more than half were male (60%). Their average age was 33.6 years ( $SD = 9.6$ ), average hours worked per week was 41.2 ( $SD = 6.7$ ), and average tenure in their current position was 6.0 years ( $SD = 4.8$ ). The supervisors worked in a variety of industries ranging from manufacturing and professional to government. All participants occupied supervisory positions and had an average of 5.8 direct reports ( $SD = 5.6$ ).

The supervisors completed two surveys on consecutive days. On day 1, supervisors completed measures of regulatory focus, personality traits, and goal orientation. We assessed these latter individual differences because, like regulatory focus, personality traits and goal orientation shape the behaviors that leaders enact and may also account for trickle-down effects (Bono & Judge, 2004; Dragoni, 2005). On day 2, supervisors reported the extent to which they engage in the focal leader behaviors. We also measured non-focal leader behaviors (initiating structure and consideration) to ascertain whether regulatory focus is uniquely associated with transformational, contingent reward, and management by exception. Supervisors responded to all survey items using a 5-point Likert scale (from 1 = "Never" to 5 = "Always").

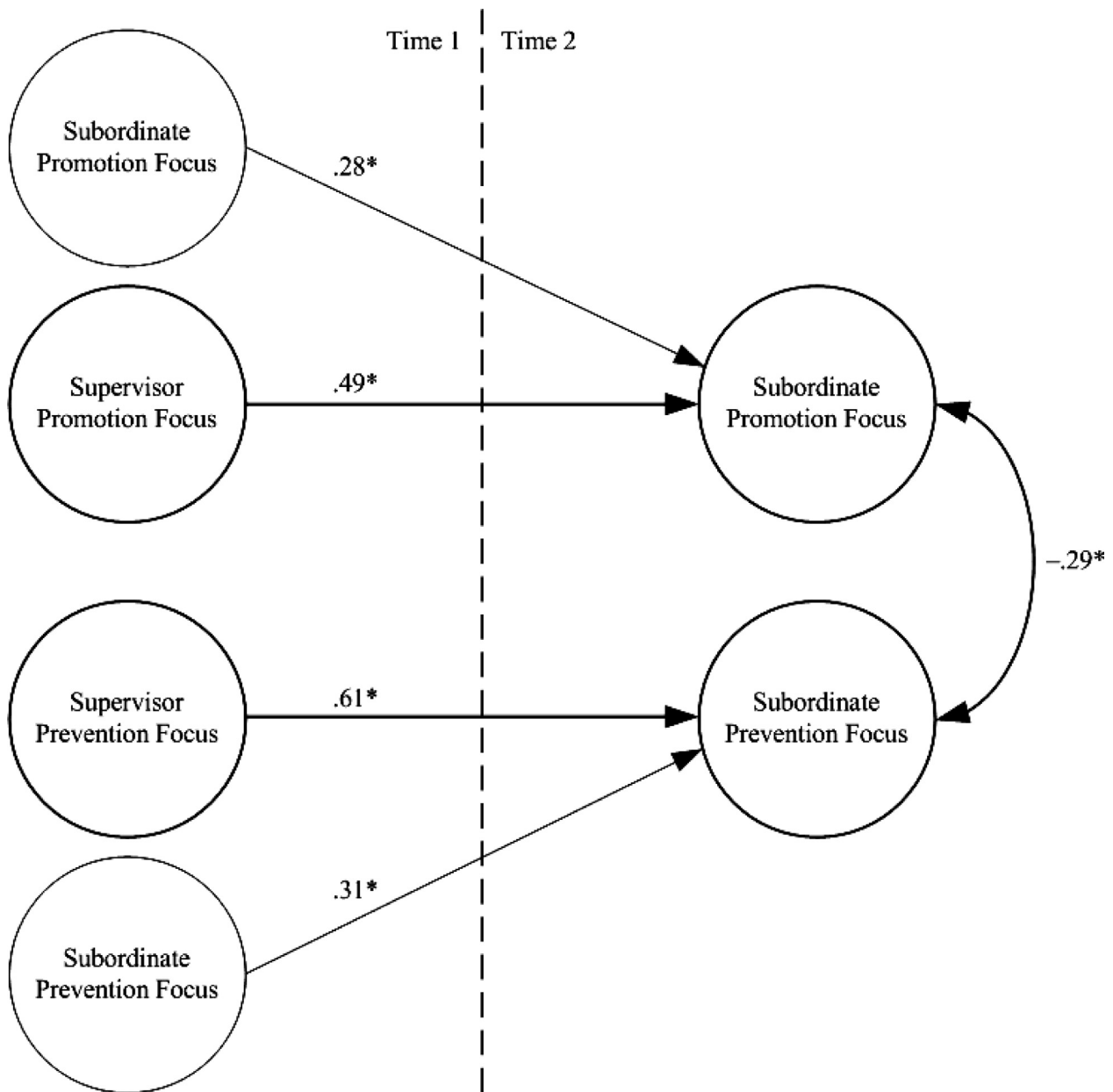
We measured regulatory focus using Wallace and Chen's (2006) scale. Six items each capture promotion focus ( $\alpha = 0.83$ ; e.g., "I am focused on accomplishing a lot") and prevention focus ( $\alpha = 0.91$ ; e.g., "I am focused on completing tasks correctly"). Validity evidence for this scale is provided by Wallace et al. (2009). We measured the personality traits using 5 items each from Goldberg's (1999) personality item pool: conscientiousness ( $\alpha = 0.84$ ; e.g., "I am always prepared"), extraversion ( $\alpha = 0.91$ ; e.g., "I feel at ease with people"), neuroticism ( $\alpha = 0.91$ ; e.g., "I get stressed out easily"), agreeableness ( $\alpha = 0.91$ ; e.g., "I sympathize with others' feelings"), and openness ( $\alpha = 0.85$ ; e.g., "I spend time reflecting on things"). Goal orientation was assessed using VandeWalle's (1997) measure: learning (6 items,  $\alpha = 0.91$ ; e.g., "I often look for opportunities to develop new skills and knowledge"), performance prove (4 items,  $\alpha = 0.90$ ; e.g., "I enjoy it when others at work are aware of how well I am doing"), and performance avoid (4 items,  $\alpha = 0.91$ ; e.g., "I prefer to avoid situations at work where I might perform poorly"). We included goal orientation because promotion focus and learning and performance prove orientations are considered approach motivations, whereas prevention focus and performance avoid orientation are considered avoidance motivations (Johnson, Chang, Meyer, Lanaj, & Way, 2013). Thus, we are able to verify that it is leader regulatory focus which uniquely shapes follower regulatory focus (and not other related approach and avoidance constructs like goal orientation).

Focal leader behaviors were measured using items from the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1997). Six items assessed transformational behavior ( $\alpha = 0.88$ ; e.g., "I express confidence that goals will be achieved"), 4 items assessed

**Table 1**  
Descriptive statistics and inter-correlations among the variables in Study 1.

Variable	1	2	3	4	5	6
<i>Time 1</i>						
1. Supervisor promotion focus	(0.83)					
2. Supervisor prevention focus	-0.27	(0.85)				
3. Subordinate promotion focus	0.18	-0.01	(0.84)			
4. Subordinate prevention focus	-0.08	0.16	-0.25	(0.86)		
<i>Time 2</i>						
5. Subordinate promotion focus	0.55	-0.19	0.31	-0.20	(0.87)	
6. Subordinate prevention focus	-0.23	0.61	-0.13	0.45	-0.22	(0.89)
Mean	3.42	2.55	3.67	2.59	3.96	2.69
SD	0.57	0.98	0.72	0.78	0.74	0.96

Note: N = 105 supervisor–subordinate dyads; Times 1 and 2 were separated by three months. Scale scores are reported in the table. Coefficient alphas are reported along the diagonal in parentheses. Correlations with absolute values greater than 0.19 are statistically significant at  $p < 0.05$ .



**Fig. 1.** Structural Model of Supervisor and Subordinate Regulatory Focus in Study 1. Note: Standardized path estimates are reported in the figure. \*  $p < 0.05$ .

contingent reward behavior ( $\alpha = 0.82$ ; e.g., “I make clear what my subordinates can expect to receive when performance goals are achieved”), and 5 items assessed management by exception behavior ( $\alpha = 0.73$ ; e.g., “I direct my subordinates’ attention toward failures to meet standards”). Initiating structure ( $\alpha = 0.82$ ; e.g., “I decide what shall be done and how it shall be done”) and consideration ( $\alpha = 0.86$ ; e.g., “I treat all group members as my equals”) were each measured via 5 items from the Leader Behavior Description Questionnaire (Stogdill, Goode, & Day, 1962).

## 5.2. Sample A results

Reported in Table 2 are descriptive statistics and correlations. We examined relations of time 1 regulatory focus with time 2 behavior by regressing each leader behavior on the set of individual differences. We entered the control variables (personality, goal orientation) in step 1, followed by regulatory focus in step 2. As shown in Table 3, promotion and prevention foci predicted unique variance in transformational and management by exception behaviors, respectively, and both foci explained unique variance in contingent reward behavior.<sup>3</sup> With respect to the non-focal behaviors, regulatory foci did not explain unique variance in initiating structure and consideration (albeit prevention focus had a marginal relation with initiating structure;  $\beta = 0.15$ ,  $p = 0.09$ ). In line with Hypotheses 1 and 2, supervisor promotion and prevention foci are unique predictors of transformational, contingent reward, and management by exception behaviors, and these foci are not redundant with other individual differences.

## 5.3. Sample B method

We conducted an experiment to assess whether primed regulatory foci influence supervisors’ intentions to exhibit different leader behaviors. Data were collected from 163 supervisors employed in the US who we recruited via MTurk. Supervisors were randomly assigned into promotion ( $n = 54$ ), prevention ( $n = 54$ ), and control ( $n = 55$ ) conditions. About half of the supervisors were male (57%), their average age was 36.6 years ( $SD = 9.1$ ), the majority were Caucasian (74%) or African American (17%), average hours worked per week was 44.5 ( $SD = 7.4$ ), and average tenure in their current position was 7.1 years ( $SD = 5.1$ ). The supervisors worked in a variety of industries ranging from retail to manufacturing. All participants occupied supervisory positions and had an average of 7.2 direct reports ( $SD = 5.9$ ).

We primed the regulatory focus of supervisors in the experimental conditions at the outset of the experiment. The manipulation was based on established techniques for priming promotion and prevention foci (see Freitas & Higgins, 2002; Lockwood et al., 2002). Instructions in the promotion condition were as follows:

“Think about your current job. List *five* of your current *hopes* and *aspirations* at work (i.e., things you *ideally* would like to accomplish). How will achieving these *hopes*, *aspirations*, and *ideals* help you to be *successful* and *promote positive outcomes* in your career? Write about your *hopes*, *aspirations*, and *ideals*, and how they will help you be *successful* in the space provided below.”

Instructions in the prevention conditions read as follows:

“Think about your current job. List *five* of your current *duties* and *obligations* at work (i.e., things you think you *ought* to do). How will meeting these *duties*, *obligations*, and *oughts* help you to *avoid failure* and *prevent negative outcomes* in your

career? Write about your *duties*, *obligations*, and *oughts*, and how they will help you *avoid failure* in the space provided below.”

After writing a response, supervisors in the experimental conditions completed manipulation checks and leader behavior intention items. In the control condition, supervisors completed these items in the absence of a prime.

We assessed the efficacy of the manipulation by selecting items from existing regulatory focus scales (Lockwood et al., 2002; Wallace & Chen, 2006) that reference accomplishment and success (for promotion focus) and obligation and avoiding failure (for prevention focus). Four items each served as checks for promotion focus ( $\alpha = 0.90$ ; e.g., “I am focused on successes I hope to achieve at work”) and prevention focus ( $\alpha = 0.87$ ; e.g., “I am thinking about preventing negative events at work”). We also verified that the content of supervisors’ written responses matched their assigned condition. Afterwards, supervisors rated their likelihood of exhibiting each leader behavior based on how they currently felt. We measured transformational behavior ( $\alpha = 0.86$ ), contingent reward ( $\alpha = 0.80$ ), management by exception ( $\alpha = 0.72$ ), initiating structure ( $\alpha = 0.79$ ), and consideration ( $\alpha = 0.87$ ) using the same items as in Sample A.

## 5.4. Sample B results

We first assessed the efficacy of the manipulation. One-way ANOVAs indicated that the promotion scores,  $F(2,160) = 20.31$ ,  $\eta^2 = 0.20$ ,  $p < 0.01$ , and prevention scores,  $F(2,160) = 22.25$ ,  $\eta^2 = 0.22$ ,  $p < 0.01$ , were significantly different across the three conditions. Follow-up comparisons indicated that supervisors in the promotion condition ( $M = 4.40$ ,  $SD = 0.62$ ) reported higher promotion focus than those in the prevention ( $M = 3.57$ ,  $SD = 0.70$ ;  $t_{(106)} = 6.44$ ,  $\eta^2 = 0.28$ ,  $p < 0.01$ ) and control conditions ( $M = 3.72$ ,  $SD = 0.81$ ;  $t_{(107)} = 4.87$ ,  $\eta^2 = 0.18$ ,  $p < 0.01$ ). Ratings did not differ across the prevention and control conditions ( $t_{(107)} = 1.01$ ,  $\eta^2 = 0.01$ ,  $p = 0.31$ ). Supervisors in the prevention condition ( $M = 4.25$ ,  $SD = 0.73$ ) reported higher prevention focus than those in the promotion ( $M = 3.31$ ,  $SD = 0.89$ ;  $t_{(106)} = 5.96$ ,  $\eta^2 = 0.25$ ,  $p < 0.01$ ) and control conditions ( $M = 3.45$ ,  $SD = 0.73$ ;  $t_{(107)} = 5.69$ ,  $\eta^2 = 0.23$ ,  $p < 0.01$ ). There was no difference across the latter two conditions ( $t_{(107)} = 0.89$ ,  $\eta^2 = 0.01$ ,  $p = 0.37$ ). Thus, the regulatory focus manipulation was deemed successful.

Next we assessed the effects of supervisors’ regulatory focus on their stated intention to enact different leader behaviors. One-way ANOVAs indicated that transformational scores,  $F(2,160) = 6.80$ ,  $\eta^2 = 0.08$ ,  $p < 0.01$ , contingent reward scores,  $F(2,160) = 4.15$ ,  $\eta^2 = 0.05$ ,  $p < 0.05$ , and management by exception scores,  $F(2,160) = 6.21$ ,  $\eta^2 = 0.07$ ,  $p < 0.01$ , differed significantly across the conditions. Transformational behavior was rated higher in the promotion condition ( $M = 4.47$ ,  $SD = 0.60$ ) than in the prevention ( $M = 4.12$ ,  $SD = 0.59$ ;  $t_{(106)} = 3.01$ ,  $\eta^2 = 0.08$ ,  $p < 0.01$ ) and control conditions ( $M = 4.11$ ,  $SD = 0.52$ ;  $t_{(107)} = 3.30$ ,  $\eta^2 = 0.09$ ,  $p < 0.01$ ). There was no difference across the latter two conditions ( $t_{(107)} = 0.11$ ,  $\eta^2 < 0.001$ ,  $p = 0.91$ ). Contingent reward was also rated higher in the promotion condition ( $M = 4.35$ ,  $SD = 0.60$ ) than in the control condition ( $M = 4.01$ ,  $SD = 0.68$ ;  $t_{(107)} = 2.84$ ,  $\eta^2 = 0.07$ ,  $p < 0.01$ ) but not in the prevention condition ( $M = 4.29$ ,  $SD = 0.72$ ;  $t_{(106)} = 0.47$ ,  $\eta^2 < 0.01$ ,  $p = 0.64$ ). Contingent reward was rated higher in the prevention condition than in the control condition ( $t_{(107)} = 2.12$ ,  $\eta^2 = 0.04$ ,  $p < 0.05$ ). Management by exception was rated higher in the prevention condition ( $M = 3.13$ ,  $SD = 0.74$ ) than in the promotion ( $M = 2.63$ ,  $SD = 0.70$ ;  $t_{(106)} = 3.27$ ,  $\eta^2 = 0.09$ ,  $p < 0.01$ ) and control conditions ( $M = 2.76$ ,  $SD = 0.69$ ;  $t_{(107)} = 2.61$ ,  $\eta^2 = 0.06$ ,  $p < 0.05$ ). There was no difference across the latter two conditions ( $t_{(107)} = 0.90$ ,  $\eta^2 < 0.01$ ,  $p = 0.36$ ). In sum, a primed pro-

<sup>3</sup> Relations of leader regulatory focus with behavior were comparable when the control variables were removed.

**Table 2**  
Descriptive statistics and inter-correlations among the variables in Study 2 Sample A.

Variable	1	2	3	4	5	6	7	8	9	10
<i>Time 1</i>										
1. Promotion focus	(0.83)									
2. Prevention focus	0.14	(0.91)								
3. Conscientiousness	0.09	0.10	(0.84)							
4. Extraversion	0.29	-0.08	0.15	(0.91)						
5. Neuroticism	0.02	0.34	-0.18	-0.23	(0.91)					
6. Agreeableness	0.10	0.01	0.13	0.15	-0.18	(0.91)				
7. Openness	0.14	0.06	0.09	0.09	-0.01	0.18	(0.85)			
8. Learning goal orientation	0.21	-0.11	0.24	0.19	-0.17	0.13	0.33	(0.91)		
9. Performance prove goal orientation	0.24	0.06	-0.07	-0.02	0.21	-0.15	0.10	0.06	(0.90)	
10. Performance avoid goal orientation	-0.06	0.33	-0.09	-0.16	0.36	-0.06	-0.16	-0.19	0.15	(0.91)
<i>Time 2</i>										
11. Transformational behavior	0.47	0.16	0.14	0.34	-0.08	0.21	0.17	0.33	-0.03	-0.19
12. Contingent reward behavior	0.38	0.25	0.19	0.16	-0.09	0.18	0.12	0.21	-0.02	-0.08
13. Management by exception	0.12	0.52	-0.16	0.14	0.33	0.03	0.01	-0.05	0.16	0.22
14. Initiating structure behavior	0.09	0.20	0.39	0.19	0.05	0.16	0.16	0.24	0.09	-0.05
15. Consideration behavior	0.09	-0.05	0.26	0.16	-0.20	0.33	0.18	0.20	-0.14	-0.15
Mean	3.68	3.63	3.90	3.41	2.53	3.63	3.85	3.89	3.24	2.61
SD	0.77	0.92	0.72	0.82	0.80	0.76	0.77	0.75	0.79	1.01
Variable		11		12		13		14		15
<i>Time 1</i>										
1. Promotion focus										
2. Prevention focus										
3. Conscientiousness										
4. Extraversion										
5. Neuroticism										
6. Agreeableness										
7. Openness										
8. Learning goal orientation										
9. Performance prove goal orientation										
10. Performance avoid goal orientation										
<i>Time 2</i>										
11. Transformational behavior		(0.88)								
12. Contingent reward behavior		0.54	(0.82)							
13. Management by exception		0.11	0.10	(0.73)						
14. Initiating structure behavior		0.23	0.31	0.20	(0.82)					
15. Consideration behavior		0.38	0.17	-0.08	0.18	(0.86)				
Mean		3.83	3.01	2.78	3.85	4.05				
SD		0.75	0.70	0.69	0.71	0.69				

Note: N = 134 supervisors; Times 1 and 2 were separated by one day. Coefficient alphas are reported along the diagonal in parentheses. Correlations with absolute values greater than 0.16 are statistically significant at  $p < 0.05$ .

**Table 3**  
Supervisor regulatory focus predicting leader behavior in Study 2 Sample A.

Predictors	Focal Leader Behaviors (day 2)						Non-Focal Leader Behaviors (day 2)			
	Transformational		Contingent Reward		Mgmt by Exception		Initiating Structure		Consideration	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
<i>Control Variables (day 1)</i>										
Conscientiousness	0.05	0.06	0.20*	0.16*	-0.13	-0.10	0.34**	0.31**	0.04	0.04
Extraversion	0.23**	0.19*	0.05	0.01	0.12	0.13	0.08	0.06	0.04	0.03
Neuroticism	-0.10	-0.03	-0.02	-0.04	0.27**	0.18*	0.05	0.02	-0.23**	-0.24**
Agreeableness	0.15	0.13	0.08	0.07	-0.02	-0.01	0.14	0.14	0.25**	0.24**
Openness	0.11	0.10	0.07	0.05	0.01	0.03	0.13	0.11	0.01	0.01
Learning orientation	0.22**	.11	0.15	0.13	-0.02	-0.02	0.07	0.03	0.20**	0.18*
Performance prove orientation	-0.03	-0.01	0.01	0.01	0.06	0.05	0.10	0.07	-0.10	-0.10
Performance avoid orientation	-0.11	-0.12	-0.02	-0.04	0.18*	0.11	0.01	0.01	-0.07	-0.04
R <sup>2</sup>	0.20		0.14		0.17		0.22		0.25	
F	5.41**		3.15**		3.96**		5.98**		6.92**	
<i>Regulatory Focus (day 1)</i>										
Promotion Focus		0.38**		0.32**		0.05		0.09		0.05
Prevention Focus		0.10		0.25**		0.44**		0.15		0.03
ΔR <sup>2</sup>		0.16		0.17		0.20		0.03		0.002
ΔF		14.18**		15.86**		21.18**		2.48		0.19

Note: N = 134 supervisors. Standardized regression coefficients are reported in the table.

\*  $p < 0.05$ .

\*\*  $p < 0.01$ .



motion focus increased stated intentions for exhibiting transformational and contingent reward behaviors, whereas a primed prevention focus increased stated intentions for management by exception and contingent reward behaviors. Moreover, regulatory focus did not impact the non-focal leader behaviors: one-way ANOVAs indicated that initiating structure,  $F(2, 160) = 1.77$ ,  $p = 0.17$ , and consideration,  $F(2, 160) = 0.53$ ,  $p = 0.58$ , did not differ across the three conditions.

## 6. Study 3

### 6.1. Method

In order to assess whether exposure to different leadership styles primes subordinate regulatory focus, we conducted an experiment. We recruited 155 participants from business and psychology undergraduate courses at a university in the US, who received extra credit in exchange for participating. Participants were randomly assigned into transformational ( $n = 50$ ), contingent reward ( $n = 52$ ), and management by exception ( $n = 53$ ) conditions. Slightly more than half of the participants were female (61%), their average age was 20.7 years ( $SD = 3.8$ ), and the majority were either Caucasian (72%), African American (9%), or Hispanic (7%).

At the beginning of the session, participants were told that they would role play as new hires of a magazine company. Participants were then administered the manipulation, which consisted of a memo from the company CEO that contained either a transformational, contingent reward, or management by exception message. Although leadership styles are multifaceted (e.g., verbal and non-verbal cues, emotional displays, etc.), leader rhetoric is a key ingredient that shapes subordinate motivation (Shamir, Arthur, & House, 1994; Stam et al., 2010), and leadership interventions often target leader speech (Antonakis, Fenley, & Liechti, 2011; Frese, Beigel, & Schoenborn, 2003). Thus, it is reasonable to manipulate leadership styles via speech content. The memo contained similar information and was comparable in length across the conditions, but the manner in which the information was communicated differed. The memo emphasized shared values and group welfare in the transformational condition, setting performance standards and rewarding employees in the contingent reward condition, and monitoring for errors and taking corrective action in the management by exception condition (see Appendix A). After reading the memo and imagining the situation as if they were experiencing it, participants wrote a description of the CEO's leadership style (this ensured that participants carefully attended to the information contained in the memo). Participants then completed the manipulation checks and regulatory focus items. Three items each, adapted from the MLQ (Bass & Avolio, 1997), served as manipulation checks for transformational ( $\alpha = 0.72$ ; e.g., "The CEO articulated a compelling vision of the future"), contingent reward ( $\alpha = 0.74$ ; e.g., "The CEO made clear what employees can expect to receive when performance goals are achieved"), and management by exception ( $\alpha = 0.70$ ; e.g., "The CEO focused attention on irregularities, mistakes, exceptions, and deviations from standards"). Promotion ( $\alpha = 0.76$ ) and prevention ( $\alpha = 0.76$ ) foci were measured using the same items as in Study 2.

### 6.2. Results and discussion

We first assessed the efficacy of the manipulation. One-way ANOVAs indicated that transformational,  $F(2, 152) = 42.49$ ,  $\eta^2 = 0.35$ ,  $p < 0.01$ , contingent reward,  $F(2, 152) = 41.22$ ,  $\eta^2 = 0.34$ ,  $p < 0.01$ , and management by exception,  $F(2, 152) = 63.17$ ,  $\eta^2 = 0.46$ ,  $p < 0.01$ , differed across the three conditions. Follow-up comparisons revealed that participants in the transformational

condition ( $M = 4.64$ ,  $SD = 0.42$ ) viewed the CEO as more transformational than those in the contingent reward ( $M = 3.57$ ,  $SD = 0.50$ ;  $t_{(100)} = 7.71$ ,  $\eta^2 = 0.37$ ,  $p < 0.01$ ) and management by exception conditions ( $M = 3.48$ ,  $SD = 0.48$ ;  $t_{(101)} = 8.35$ ,  $\eta^2 = 0.40$ ,  $p < 0.01$ ). Those in the contingent reward condition ( $M = 4.68$ ,  $SD = 0.47$ ) rated the CEO higher on contingent reward than participants in the transformational ( $M = 3.12$ ,  $SD = 0.51$ ;  $t_{(100)} = 8.03$ ,  $\eta^2 = 0.39$ ,  $p < 0.01$ ) and management by exception conditions ( $M = 2.95$ ,  $SD = 0.63$ ;  $t_{(103)} = 8.77$ ,  $\eta^2 = 0.42$ ,  $p < 0.01$ ). Lastly, those in the management by exception condition ( $M = 4.80$ ,  $SD = 0.43$ ) rated the CEO higher on management by exception than participants in the transformational ( $M = 2.95$ ,  $SD = 0.64$ ;  $t_{(101)} = 10.09$ ,  $\eta^2 = 0.50$ ,  $p < 0.01$ ) and contingent reward conditions ( $M = 3.04$ ,  $SD = 0.54$ ;  $t_{(103)} = 9.94$ ,  $\eta^2 = 0.48$ ,  $p < 0.01$ ). The leadership manipulation was therefore deemed successful.

Next we assessed whether leadership style influenced participants' regulatory focus. One-way ANOVAs indicated that promotion focus,  $F(2, 152) = 28.75$ ,  $\eta^2 = 0.30$ ,  $p < 0.01$ , and prevention focus,  $F(2, 152) = 20.59$ ,  $\eta^2 = 0.22$ ,  $p < 0.01$ , differed significantly across the conditions. Follow-up comparisons revealed that participants in the transformational condition ( $M = 4.87$ ,  $SD = 0.37$ ) reported stronger promotion focus than those in the contingent reward ( $M = 4.29$ ,  $SD = 0.58$ ;  $t_{(100)} = 5.98$ ,  $\eta^2 = 0.26$ ,  $p < 0.01$ ) and management by exception conditions ( $M = 3.83$ ,  $SD = 0.67$ ;  $t_{(101)} = 9.67$ ,  $\eta^2 = 0.48$ ,  $p < 0.01$ ). Promotion focus was also rated higher in the contingent reward condition compared to the management by exception condition ( $t_{(103)} = 3.75$ ,  $\eta^2 = 0.12$ ,  $p < 0.05$ ). Prevention focus was rated higher in the management by exception condition ( $M = 4.66$ ,  $SD = 0.44$ ) than in the transformational condition ( $M = 3.79$ ,  $SD = 0.59$ );  $t_{(101)} = 8.51$ ,  $\eta^2 = 0.41$ ,  $p < 0.01$ ) and contingent reward condition ( $M = 4.28$ ,  $SD = 0.72$ );  $t_{(103)} = 3.27$ ,  $\eta^2 = 0.09$ ,  $p < 0.05$ ). Prevention focus was also rated higher in the contingent reward condition compared to the transformational condition ( $t_{(100)} = 3.71$ ,  $\eta^2 = 0.12$ ,  $p < 0.05$ ). In line with Hypotheses 3 and 4, transformational and management by exception leadership primed subordinate promotion and prevention foci, respectively, whereas contingent reward leadership primed both foci.

## 7. Study 4

### 7.1. Method

We tested the full trickle down model by collecting data from 144 subordinate-supervisor dyads from different companies in the US. We recruited participants via alumni lists, business contacts, and part-time students enrolled in weekend and evening business courses. In total, we distributed 249 survey packets and received useable data from 144 dyads (58% response rate). Subordinates were mostly Caucasian (62%), African American (12%), or Asian (10%), and more than half were female (60%). Their average age was 29.5 years ( $SD = 6.9$ ), average tenure in their current job was 23.1 months ( $SD = 25.9$ ), and average hours worked per week was 36.7 ( $SD = 6.3$ ). Participants worked in a variety of industries ranging from professional and manufacturing to retail and government. More than half of the supervisors were male (57%), they were primarily Caucasian (78%) or African American (11%), their average age was 47.9 years ( $SD = 11.5$ ), average tenure in their current position was 93.3 months ( $SD = 80.3$ ), and average hours worked per week was 45.6 ( $SD = 9.7$ ). The average relationship tenure of subordinates and supervisors was 19.5 months ( $SD = 18.4$ ).

Survey data were collected in two waves. At time 1, supervisors rated their regulatory focus and subordinates rated leader behavior and organizational values, then two months later at time 2 subordinates rated their regulatory focus. Separate surveys were admin-

istered to supervisors and subordinates, who completed and returned them via self-addressed, stamped envelopes. Subordinates were responsible for passing along the time 1 survey to their supervisor. We therefore contacted a subsample of supervisors (approximately 25%) following receipt of their data to verify that they indeed participated, and all of them indicated they had.

Supervisors and subordinates rated their promotion focus ( $\alpha = 0.89$  and  $0.86$ ) and prevention focus ( $\alpha = 0.87$  and  $0.85$ ) using Wallace and Chen's (2006) scale. Subordinates rated leader behavior using the MLQ (Bass & Avolio, 1997). Transformational behavior was assessed via 20 items from 5 subscales: idealized influence–attributed and –behavior, inspirational motivation, intellectual stimulation, and individualized consideration. Correlations among subscale scores ranged from 0.59 to 0.71, and factor analysis results revealed a 1-factor solution. We therefore aggregated the subscales into an overall score ( $\alpha = 0.92$ ). Contingent reward was measured using the 4-item contingent reward subscale ( $\alpha = 0.80$ ). Management by exception was measured via two 4-item subscales: management by exception–behavior and management by exception–attributed. These subscales were significantly correlated ( $r = 0.61$ ,  $p < 0.05$ ) and factor analysis results indicated a 1-factor solution, thus we aggregated them ( $\alpha = 0.75$ ).

Subordinates also rated the extent to which their company values change and stability because promotion- and prevention-focused individuals may be attracted to and selected by companies that value change and stability, respectively. Thus, an alternative explanation is that supervisor and subordinate regulatory foci are products of the organizational context. We measured higher-order change and stability values based on Schwartz's (1992) value circumplex. Subordinates rated the extent to which their company endorses self-direction and stimulation values (which comprise change), and conformity, security, and tradition values (which comprise stability). Factor analysis results confirmed that self-direction and stimulation loaded on one factor, whereas conformity, security, and tradition loaded on a second factor, thus we created composite change ( $\alpha = 0.75$ ) and stability ( $\alpha = 0.76$ ) values scores. Participants responded to all survey items using a 5-point Likert scale (from 1 = "Strongly disagree" to 5 = "Strongly agree").

## 7.2. Results and discussion

Reported in Table 4 are descriptive statistics and correlations. We tested our hypotheses by specifying a latent structural model with paths from time 1 supervisor regulatory focus to time 1 leader behavior, and from time 1 leader behavior to time 2 subordinate regulatory focus. We created 3 item parcels to serve as indicators for every variable except transformational and management by exception (subscale scores served as indicators), contingent reward (item-level indicators), and company values (manifest variables). Prior to testing the structural model, we first assessed a 7-factor measurement model that included the latent regulatory focus and leader behavior variables. This model had acceptable fit:  $\chi^2_{(254)} = 326.33$ ; CFI = 0.97; SRMR = 0.06; RMSEA = 0.05, and all loadings were significant. The hypothesized structural model also had acceptable fit:  $\chi^2_{(265)} = 343.31$ ; CFI = 0.96; SRMR = 0.06; RMSEA = 0.05. In support of our predictions, all hypothesized paths were significant (see Fig. 2). We tested the indirect effects using Preacher and Hayes (2008) bootstrap approach. Supervisor promotion focus had significant indirect effects on subordinate promotion focus via transformational behavior (estimate = 0.18, 95% confidence interval [CI] = 0.08, 0.27) and contingent reward (estimate = 0.09, 95% CI = 0.001, 0.18). The indirect effect of supervisor prevention focus on subordinate prevention focus was significant via management by exception (estimate = 0.16, 95% CI = 0.09, 0.22) but only marginal via contingent reward (estimate = 0.05, 95% CI = -0.01, 0.11).

We conducted three sets of supplementary analyses to further test our model. First, we included direct paths from supervisor regulatory focus to subordinate regulatory focus. Neither path was significant ( $\gamma = 0.03$  for supervisor–subordinate promotion focus, and  $\gamma = 0.05$  for supervisor–subordinate prevention focus,  $p > 0.10$  for both), and adding them did not improve model fit ( $\Delta\chi^2 = 0.53$ , critical  $\chi^2$  for 2  $df = 5.99$ ). Thus, leader behavior fully mediated supervisor–subordinate regulatory focus relations. Second, we controlled for company values by adding paths from change value to supervisor and subordinate promotion foci, and from stability value to supervisor and subordinate prevention foci. The resultant model had mediocre fit:  $\chi^2_{(312)} = 491.70$ ; CFI = 0.91; SRMR = 0.13; RMSEA = 0.07; and none of the paths were significant ( $\gamma = 0.08$  for change value–supervisor promotion,  $\gamma = 0.07$  for change value–subordinate promotion,  $\gamma = 0.14$  for stability value–supervisor prevention, and  $\gamma = 0.10$  for stability value–subordinate prevention,  $p > 0.05$  for all). Including company values in the model did not alter the pattern of hypothesized relationships, thus this contextual factor does not account for the relations among supervisor and subordinate regulatory foci. Third, we freed up non-hypothesized paths from supervisor regulatory focus to behavior. Neither path was significant ( $\gamma = 0.02$  for promotion focus–management by exception, and  $\gamma = -0.04$  for prevention focus–transformational behavior,  $p > 0.10$  for both), and adding them did not improve model fit ( $\Delta\chi^2 = 0.21$ , critical  $\chi^2$  for 2  $df = 5.99$ ). Thus, supervisor regulatory focus has differential relations with leader behavior.

## 8. Study 5

This study adds to our research in two key ways. First, although vigilance and punitive action are pertinent to contingent punishment, we have yet to verify its ties to prevention focus. We therefore test whether leader contingent punishment, like management by exception, mediates the relationship between leader and follower prevention focus. Second, besides transformational and transactional behaviors, Bass and Avolio's (1997) full-range theory also includes laissez-faire leadership. This non-responsive style includes failures to reinforce good performance (reward omission) and to redress poor performance (punishment omission; Hinkin & Schriesheim, 2008). Regulatory focus may contribute to such inaction because leaders with weak promotion and prevention foci are insensitive to cues for reward and punishment, and thus neglect to appropriately reward or punish followers. We therefore explore what impact, if any, that reward and punishment omission have on leader–follower regulatory focus dynamics.

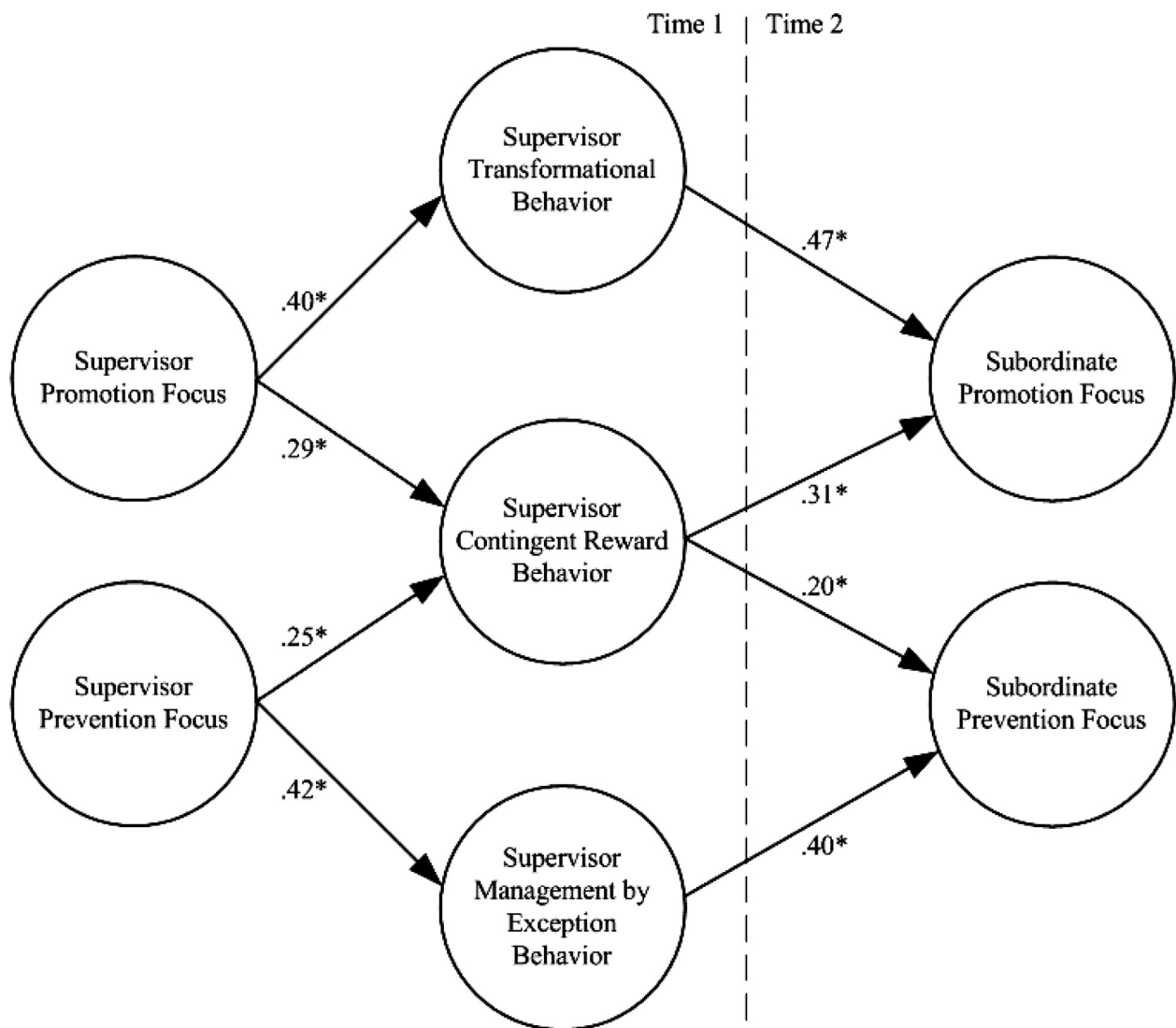
### 8.1. Method

Data were collected from 180 supervisor-subordinate dyads employed in the US who we recruited via MTurk. Supervisors were initially recruited, and they provided contact information for up to three subordinates. We then contacted one randomly-selected subordinate. Supervisors were mostly Caucasian (80%), slightly more than half were male (57%), their average age was 33.3 years ( $SD = 10.5$ ), average hours worked per week was 42.6 ( $SD = 7.9$ ), average tenure in their current position was 6.5 years ( $SD = 6.4$ ), and they had an average of 7.0 direct reports ( $SD = 4.8$ ). Subordinates were mostly Caucasian (66%) or Hispanic (17%), more than half were male (65%), their average age was 31.2 years ( $SD = 8.9$ ), average hours worked per week was 39.6 ( $SD = 5.1$ ), and average tenure in their current position was 3.6 years ( $SD = 3.0$ ). The dyads worked in a variety of industries ranging from retail and manufacturing to education. The average relationship tenure of subordinates and supervisors was 13.3 months ( $SD = 9.5$ ).

**Table 4**  
Descriptive statistics and inter-correlations among the variables in Study 4.

Variable	1	2	3	4	5	6	7	8	9
<i>Time 1</i>									
1. Supervisor promotion focus	(0.89)								
2. Supervisor prevention focus	0.18	(.87)							
3. Transformational behavior	0.37	0.17	(0.92)						
4. Contingent reward behavior	0.39	0.27	0.60	(0.80)					
5. Management by exception	0.17	0.33	0.24	0.17	(0.75)				
6. Change value	0.10	-0.09	0.15	0.18	0.04	(0.75)			
7. Stability value	-0.08	0.11	0.15	0.13	0.07	0.12	(0.76)		
<i>Time 2</i>									
8. Subordinate promotion focus	0.28	0.14	0.55	0.42	0.17	0.23	0.13	(0.86)	
9. Subordinate prevention focus	0.16	0.22	0.24	0.32	0.32	0.20	0.22	0.17	(0.85)
Mean	3.06	3.62	3.95	4.11	3.45	3.15	3.93	3.92	3.67
SD	0.75	0.65	0.72	0.64	0.51	0.70	0.69	0.60	0.60

Note: N = 144 supervisor-subordinate dyads; Times 1 and 2 were separated by two months. Supervisors provided data on supervisor regulatory focus, whereas subordinates provided data on subordinate regulatory focus, leader behavior, and organizational values. Scale scores are reported in the table. Coefficient alphas are reported along the diagonal in parentheses. Correlations with absolute values greater than 0.15 are statistically significant at  $p < 0.05$ .



**Fig. 2.** Structural Model of Regulatory Focus Trickle Down in Study 4. Note: Standardized path estimates are reported in the figure. \*  $p < 0.05$ .

Supervisors reported their regulatory focus on Monday, and they reported their frequency of leader behaviors for the week on Friday. Subordinates reported their current regulatory focus at the end of the week on Friday. Regulatory focus ( $\alpha$ s ranged from

0.85 to 0.91), transformational behavior ( $\alpha = 0.85$ ), contingent reward ( $\alpha = 0.81$ ), and management by exception ( $\alpha = 0.80$ ) were assessed using the same items as in Study 4. Additionally, we assessed three other leader behaviors: contingent punishment

was assessed using Schriesheim, Hinkin, and Tetrault's (1991) 5-item scale ( $\alpha = 0.87$ ; e.g., "I reprimanded a subordinate when her/his work was below standard"), and reward omission ( $\alpha = 0.95$ ; e.g., "I did nothing when a subordinate performed well") and punishment omission ( $\alpha = 0.88$ ; e.g., "A subordinate's poor performance received no response from me") were each assessed via 6 items developed by Hinkin and Schriesheim (2008). Supervisors rated the frequency of their leader behaviors for the past week via a 5-point Likert scale (from 1 = "Never" to 5 = "Multiple times per day").

## 8.2. Results and discussion

Reported in Table 5 are descriptive statistics and correlations. We tested our hypotheses by specifying a latent structural model with paths from supervisor regulatory focus at the start of the week to leader behavior during the week, and from leader behavior during the week to subordinate regulatory focus at the end of the week. As in Study 4, we created 3 item parcels to serve as indicators for all variables except transformational and management by exception behaviors (subscale scores served as indicators), and contingent reward and punishment behaviors (item-level indicators). Prior to testing the structural model, we first assessed a 10-factor measurement model that included the regulatory focus and leader behavior variables. This model had good fit:  $\chi^2_{(515)} = 912.69$ ; CFI = 0.94; SRMR = 0.06; RMSEA = 0.06, and all loadings were significant. The hypothesized structural model had adequate fit:  $\chi^2_{(544)} = 1007.08$ ; CFI = 0.92; SRMR = 0.07; RMSEA = 0.07, and mirrored the Study 4 findings (see Fig. 3). In regards to the additional behaviors, contingent punishment was related to supervisor and subordinate prevention focus, whereas reward and punishment omission only related to leader promotion and prevention focus, respectively. Supervisor promotion focus had significant indirect effects on subordinate promotion focus via transformational behavior (estimate = 0.28, 95% CI = 0.15, 0.40) and contingent reward (estimate = 0.10, 95% CI = 0.03, 0.18). The indirect effect of supervisor prevention focus on subordinate prevention focus was significant via management by exception (estimate = 0.24, 95% CI = 0.11, 0.38) and contingent punishment (estimate = 0.11, 95% CI = 0.05, 0.19), but only marginal via contingent reward (estimate = 0.06, 95% CI = -0.01, 0.14).

We conducted two sets of supplementary analyses to further test our model. First, we included direct paths from supervisor regulatory focus to subordinate regulatory focus. Neither path was significant ( $\gamma = 0.12$  for supervisor–subordinate promotion focus, and  $\gamma = 0.14$  for supervisor–subordinate prevention focus,  $p > 0.05$  for both), and adding them did not improve model fit ( $\Delta\chi^2 = 3.27$ , critical  $\chi^2$  for 2  $df = 5.99$ ). Thus, leader behavior fully mediated relations between supervisor and subordinate regulatory foci. Second, we freed up non-hypothesized paths from supervisor regulatory focus to behavior, but none of the paths were significant ( $\gamma = -0.10$  for promotion focus–management by exception,  $\gamma = 0.02$  for promotion focus–contingent punishment,  $\gamma = 0.01$  for promotion focus–punishment omission,  $\gamma = -0.11$  for prevention focus–reward omission, and  $\gamma = -0.03$  for prevention focus–transformational behavior,  $p > 0.05$  for all), and adding them did not improve model fit ( $\Delta\chi^2 = 8.63$ , critical  $\chi^2$  for 5  $df = 11.07$ ). Thus, promotion and prevention foci differentially predict the leader behaviors.

## 9. General discussion

As noted by Kark and Van Dijk (2007, p. 500), "the leadership literature, in general, has paid limited attention to the underlying psychological processes and mechanisms through which leaders

motivate followers." To shed light on these processes, we integrated regulatory focus theory (Higgins, 1998) with full-range leadership theory (Bass, 1985) to test a trickle-down model whereby leaders' regulatory foci influence followers' regulatory foci via leader behaviors. Cumulative evidence from five studies using diverse methods and multisource and multiwave data supported the proposition that leader regulatory focus shapes follower regulatory focus independent of company values and other leader characteristics. For both trait and state regulatory focus, we empirically corroborated key tenets in Kark and Van Dijk's theory.

Importantly, our research extends existing theory in several ways. First, we showed that relations of regulatory focus with transactional behaviors are more nuanced than previously thought. It was assumed that transactional behaviors are aligned exclusively with a prevention focus (e.g., Hamstra et al., 2014; Kark, Katz-Navon, & Delegach, 2015), yet our results run counter to this conclusion. While management by exception and contingent punishment are associated with prevention focus, contingent reward is associated with prevention and promotion foci. Thus, it is crucial to distinguish between transactional behaviors because they have differential effects. Second, we also broadened knowledge of regulatory focus–leadership processes by considering laissez-faire behaviors, which are understudied (Hinkin & Schriesheim, 2008) and absent from Kark and Van Dijk's theory. These non-responsive behaviors proved relevant because leaders with a weak promotion focus failed to recognize follower successes whereas those with a weak prevention focus failed to redress follower deficiencies. Interestingly, regulatory focus–laissez-faire relations were asymmetrical – laissez-faire behaviors were shaped by leader regulatory focus but they did not shape follower regulatory focus (likely because the lack of behavior is a weak situational cue). Nevertheless, given that laissez-faire is associated with poor leader and follower outcomes (Judge & Piccolo, 2004), our findings indicate it is not desirable to have leaders who are low on both foci. Third, we verified that initiating structure and consideration behaviors are not responsible for trickle down effects. It is important to rule out these behaviors as alternative mechanisms because they may still have ties to regulatory focus. For example, Neubert et al. (2008) found that initiating structure predicts follower prevention focus, yet our results suggest that leader prevention focus does not elicit initiating structure.

Besides contributing to existing theory, our findings have practical implications as well. For example, they suggest that effective leadership may be based, in part, on a leader's ability to recognize when particular regulatory foci are needed in their followers and to strategically adapt their own regulatory foci and behaviors to elicit that combination. For example, if innovation is needed, then leaders ought to display transformational behavior to prime follower promotion focus, whereas priming follower prevention focus by enacting management by exception behavior is recommended when vigilance and safety are vital. Note also that different means can be used to attain the same end. For example, both management by exception and contingent punishment can be used to enhance follower prevention focus, but keep in mind that other factors may make one behavior preferable (e.g., punishment can have unintended consequences, such as harming relationships and reducing performance; Podsakoff et al., 2006).

There may also be instances when it is advantageous for followers to have high levels on both foci. Lanaj et al. (2012) asserted that the optimal situation may be one where motivation for accomplishment (which coincides with a strong promotion focus) is paired with motivation for avoiding errors (which coincides with a strong prevention focus). For example, task performance involves ideal goals and maximizing the quantity of accomplishments (which is facilitated by promotion focus), yet it also involves obligations and minimal expected standards to ensure quality (which

**Table 5**  
Descriptive statistics and correlations among the variables in Study 5.

Variable	1	2	3	4	5	6	7	8	9	10
<i>Time 1</i>										
1. Supervisor promotion focus	(0.85)									
2. Supervisor prevention focus	−0.22	(0.87)								
<i>Time 2</i>										
3. Transformational behavior	0.48	−0.17	(0.85)							
4. Reward omission	−0.32	−0.06	−0.23	(0.95)						
5. Contingent reward	0.29	0.22	0.24	−0.54	(0.81)					
6. Management by exception	−0.10	0.55	−0.02	0.14	−0.15	(0.80)				
7. Contingent punishment	0.08	0.32	0.08	−0.19	0.37	0.28	(0.87)			
8. Punishment omission	−0.03	−0.24	−0.04	0.13	0.01	0.08	−0.07	(0.88)		
9. Subordinate promotion focus	0.34	−0.07	0.47	−0.29	0.28	−0.03	−0.14	0.03	(0.91)	
10. Subordinate prevention focus	−0.09	0.39	−0.13	−0.19	0.23	0.44	0.35	0.18	0.03	(0.89)
Mean	3.39	2.59	3.82	1.90	3.85	2.74	3.31	2.21	3.71	2.53
SD	0.70	0.90	0.67	0.85	0.81	0.85	0.84	0.81	0.81	0.94

Note:  $N = 180$  supervisor–subordinate dyads; Times 1 and 2 were at the beginning and end of the same work week. Supervisors provided data on supervisor regulatory focus and leader behavior, whereas subordinates provided data on subordinate regulatory focus. Scale scores are reported in the table. Coefficient alphas are reported along the diagonal in parentheses. Correlations with absolute values greater than 0.13 are statistically significant at  $p < 0.05$ .

is facilitated by prevention focus). Contingent reward behavior is relevant in this regard because it primes both foci, potentially giving it the broadest impact. This finding is intriguing because transformational behavior is typically viewed as superior (Judge & Piccolo, 2004), yet our results indicate that transactional behaviors play an important role. This idea parallels the *augmentation effect* (Bass, 1985), which posits that transformational and transactional leadership behaviors have synergistic effects. Regulatory focus can account for this effect because pairing transformational and transactional behaviors enables leaders to cultivate both regulatory foci in followers and, in doing so, have a broader impact on follower outcomes.

Given that leader regulatory focus predicts followers' subsequent regulatory focus, companies can benefit from ensuring that leaders have an appropriate regulatory focus. Unlike stable individual difference variables (e.g., general mental ability, affectivity), regulatory focus has both chronic and malleable elements, which offers flexibility for how companies might regulate the foci of their leaders. For example, companies hoping to promote innovation could hire leaders with a strong trait promotion focus. Alternatively, they could prime a promotion focus in leaders who have an incompatible focus. The desired focus (and by extension leader behavior) could be primed via contextual cues (e.g., setting maximal goals or framing feedback in terms of gains; see Brockner & Higgins, 2001). It might also be possible for leaders to regulate this process themselves if they can be trained to have greater awareness of their own regulatory focus and the focus that would help followers successfully complete their work. Leaders can then align their foci and behaviors to the situation as needed. Doing so is especially important in dynamic environments where task demands are continually shifting (e.g., from innovation to efficiency). Thus, future research is needed to explore the merits of interventions intended to prime specific regulatory foci in leaders to aid goal accomplishment.

Another application of our findings pertains to emerging research on regulatory fit effects (Higgins, 2000), which are such that employees hold more favorable appraisals and exert greater effort when congruence exists between their regulatory foci and the foci of some entity in the environment (e.g., Hamstra, Van Yperen, Wisse, & Sassenberg, 2011; Shin, Kim, Choi, Kim, & Oh, 2014). For instance, Stam et al. (2010) found that promotion and prevention focused individuals performed better when leaders' expressed visions focused on attaining desirable end-states and avoiding undesirable end-states, respectively. Our trickle down effects suggest that leaders can strategically manage the foci of

their followers in order to *create* fit. For example, knowing that task demands require a vigilance strategy, leaders can create fit by priming a matching prevention focus in followers via contingent reward or management by exception behaviors. Paralleling this idea, Venus et al. (2013) showed that leaders can leverage their emotional displays to prime regulatory foci in followers that better fit with the end-states communicated in leaders' visions. Rather than passively hoping for regulatory fit to occur, it is therefore possible for leaders to actively prime followers' regulatory foci to create fit.

### 9.1. Limitations and suggestions for future research

Although each of the five studies has its own limitations, the limitations of one study are offset by the strengths of another. For example, the artificial nature of the experiments in Studies 2 (Sample B) and 3 raises concerns about external validity, but those concerns are offset by the field settings in Studies 1, 4, and 5. Although we only tested portions of the trickle down model in Studies 1–3, doing so enabled us to show that leader foci predict change in follower foci after organizational entry (Study 1), leader foci predict behavior (Study 2), and leadership messages prime follower foci (Study 3). Studies 4 and 5 were valuable in that the full model was tested using multisource and multiwave data. Although a limitation is that only correlational data were obtained, the regulatory focus and leader behavior data were collected at different points in time, and the results of our two experiments support the direction of these effects. Studies 4 and 5 are also limited in that the supervisor–subordinate dyads had worked together, on average, for over a year, introducing the possibility that contextual factors may explain some of the similarity in leader and follower foci. However, this concern is somewhat offset in that the observed findings remained after controlling for company values (Study 4), and that supervisor foci predicted change in new hires' foci during the first three months on the job (Study 1).

There are opportunities for future research to redress these limitations and build upon our findings. Although we focused on transformational and transactional leadership, the ways in which these behaviors are conceptualized and measured has been criticized (van Knippenberg & Sitkin, 2013; Yukl, 1999). For example, some dimensions that comprise transformational leadership are confounded with its effects (e.g., inspirational motivation), and inter-correlations within and among transformational and transactional leadership scales often lack discriminant validity (e.g., contingent reward is indistinguishable from transformational

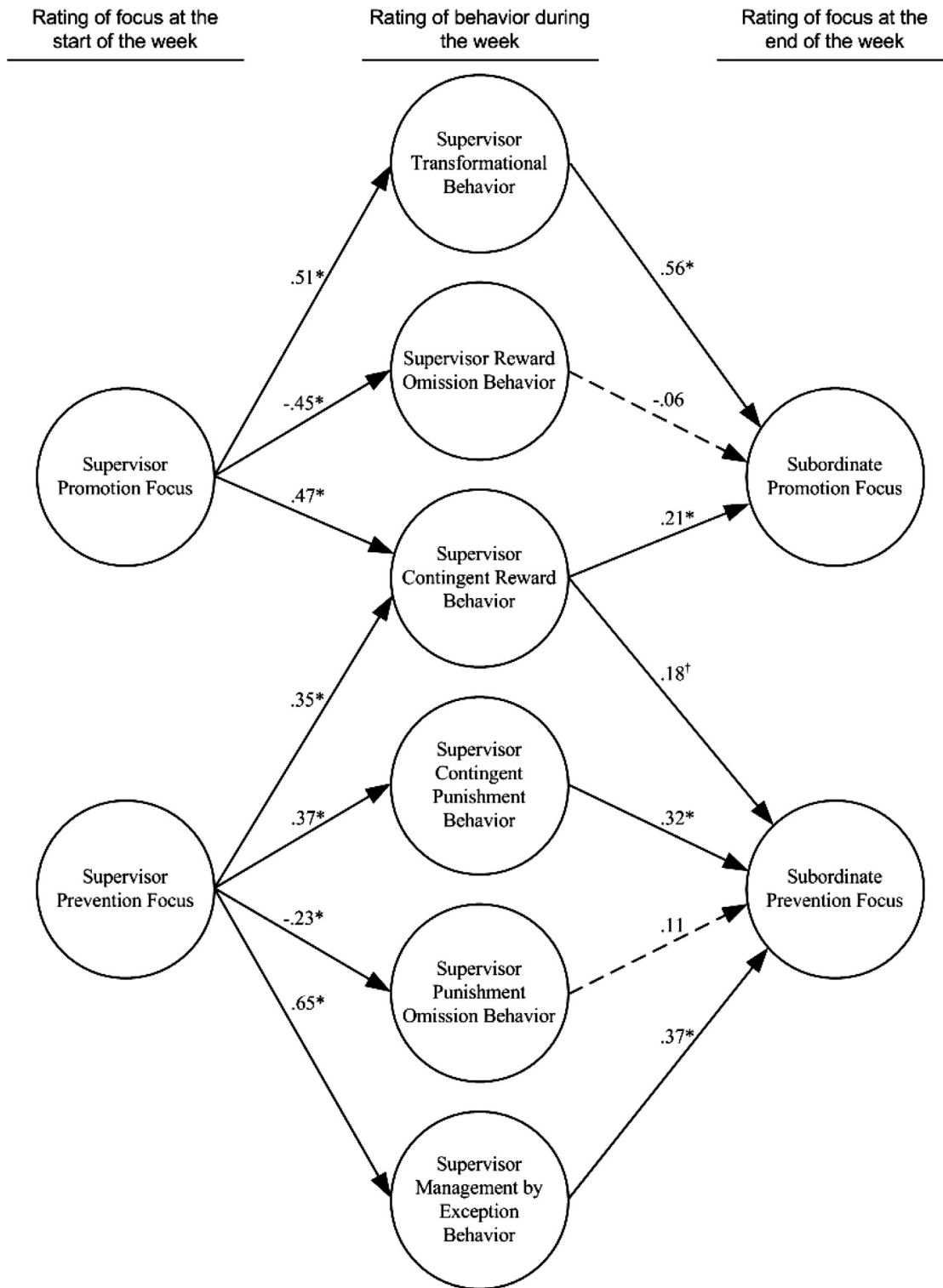


Fig. 3. Structural Model of Regulatory Focus Trickle Down in Study 5. Note: Standardized path estimates are reported in the figure. \* $p < 0.05$ , † $p < 0.10$ .

behavior). Although some of these criticisms apply to our research, some do not (e.g., we observed unique effects for contingent reward and transformational behaviors). Nonetheless, heeding the advice of van Knippenberg and Sitkin (2013), future research ought to identify the specific leader behaviors (e.g., vision communication, emphasizing collective goals) linked to regulatory focus.

Future research could also dig deeper into the mechanisms that explain regulatory focus trickle-down effects. One possible mechanism is leaders' emotions (e.g., Venus et al., 2013). It has been suggested, for example, that leaders with a strong promotion focus are more likely to express enthusiasm whereas those with a strong prevention focus are more likely to express anxiety (Brockner & Higgins, 2001). Such emotions can be "caught" by followers through an emotional contagion process in which targets automatically mimic the emotional display and then, through internal feedback, come to feel what the actor (in this case, the leader) is

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displaying (Barsade, 2002). Thus, leader displays of enthusiasm and anxiety may prime follower promotion and prevention foci, respectively, through contagion processes. Consistent with this idea, leaders are indeed capable of transmitting their emotions to followers (Sy, Côté, & Saavedra, 2005) and displays of enthusiasm prime a promotion focus in followers (Venus et al., 2013). Although emotional displays are relevant for leader behaviors (Bono & Ilies, 2006) and regulatory foci (Higgins et al., 1997), we did not directly measure such displays. It would be informative to isolate and examine specific emotional contagion mechanisms as well as situational framing and social learning mechanisms that are believed to underlie the trickle-down effects we observed.

Finally, future research might examine other interpersonal influences besides leaders on employee regulatory focus. For example, coworkers play an important role in influencing employees' affective and behavioral outcomes (e.g., Barsade, 2002). On the one hand, because employees frequently interact with their coworkers, often more than with leaders, it may be that coworkers have a stronger influence on employees' regulatory focus than leaders. On the other hand, because leaders occupy more salient positions of interpersonal influence, coworkers may have weaker effects on employee regulatory focus. The extent to which regulatory focus-based effects owing to coworkers and leaders (and even clients or customers) are congruent may also impact the emergence of specific regulatory foci in employees.

## 10. Conclusion

Regulatory focus is an important variable to consider in organizational settings (Brockner & Higgins, 2001; Johnson, Chang, & Yang, 2010; Lanaj et al., 2012), especially as it pertains to interactions between leaders and followers (Kark & Van Dijk, 2007; Stam et al., 2010; Venus et al., 2013). Across five studies, we demonstrated how leader regulatory focus is capable of trickling down and triggering a comparable regulatory focus in followers. We provided empirical support for Kark and Van Dijk's (2007) untested conceptual propositions that transformational and management by exception behaviors mediate leader-follower relations. We also broadened theory by demonstrating that contingent reward, contingent punishment, and laissez-faire behaviors also play a role in regulatory focus processes involving leaders and followers. In the course of examining these processes, we verified that the effects of regulatory focus are independent of other individual differences (e.g., personality traits, goal orientation) and situational factors (e.g., company values) and that these effects do not necessarily extend to other prominent leader behaviors (e.g., initiating structure and consideration). Overall, our findings suggest that the implications of regulatory focus for leadership in general, and full-range leadership theory (Bass & Avolio, 1997) in particular, are broader and more nuanced than what is currently recognized, and we encourage further work in this area.

## Authors note

Data collection was financed in part by the Donald and Marilyn Hibbert Faculty Excellence Research Grant awarded to Russell E. Johnson by the Broad College of Business at Michigan State University. We thank Oscar Shatner and Deiter Tick for their managerial and administrative support.

## Appendix A

### A.1. Leadership manipulation via speech content in CEO Memo (Study 3)

The beginning of the memo read as follows (all three conditions):

"My name is Pat Gardner, and I'm the CEO of Magazines Inc. I want to take this opportunity to welcome you on board and present you with some information about our company and management team. At Magazines, Inc. we present our readers with interesting and up-to-date information on a variety of topics, including fashion, sports, travel, and home design. Our mission is to inform readers and ignite and nourish their passion for various aspects of life. In each of our magazines our team is passionate about sharing their passions and experiences with readers. Magazines Inc. is one of the largest magazine publishers in the United States. We distribute millions of issues nationwide, and many of our brands continue to gain larger audiences. In 2009, several of our brands were on the Gold Design Awards' Hot List. Over the past decade, we have expanded our business to include online versions of many of our magazines and have since become a leader in the online magazine industry."

Transformational condition:

"Our management philosophy at Magazines Inc. is to lead by upholding ethical standards and providing employees with meaningful goals for the future of Magazines Inc. We strive to treat our employees as individuals and encourage them to seek alternative solutions when problem solving. Our management team strongly believes that together we can be successful through our shared values and mission. Our managers consider the moral and ethical consequences of their decisions and go beyond their self-interest to serve the good of their work group and the company as a whole.

"At Magazines Inc. we are enthusiastic about our growth potential. We have seen a great deal of recent growth and are confident that we will achieve our future goal of expanding our distribution by 300,000 readers over the next year to bring us to the forefront of the magazine publishing industry, and we are excited to achieve this goal. We believe in treating our employees as individuals. Managers at Magazines Inc. spend much of their time teaching and coaching employees in order to help each employee develop his or her strengths. We have developed an individually tailored training system because we understand that each employee has unique needs, abilities, and aspirations.

"We believe in looking at problems from many different angles to generate solutions. Managers consult employees from different areas in order to get several perspectives when making decisions. They encourage employees to re-examine critical assumptions and suggest new ways of completing assignments."

Contingent reward condition:

"Our management philosophy at Magazines Inc. is to reward based on performance. We believe in distributing rewards contingent on employee performance. To that end, we the management team have set the company policies to reward employee performance. First-rate employees are what make the company successful, and high levels of performance are well-compensated. At Magazines Inc. our management team believes in providing assistance in exchange for efforts. For employees who put forth effort and display a strong work ethic in their jobs, managers are committed to providing high levels of assistance and support.

"We believe in being specific about who is responsible for achieving performance targets. Each employee's responsibilities are well-documented in our job descriptions, and each employee receives a quarterly list of performance goals to be achieved individually or with his or her work group. Each

employee and/or work group is held accountable for achieving their quarterly performance targets. We also believe in making it clear what employees can expect to receive when performance goals are achieved. Each quarter, along with performance targets, management specifies corresponding rewards for meeting or exceeding performance targets.

“Finally, we believe in expressing our satisfaction when expectations are met. On a day-to-day basis, managers at Magazines Inc. acknowledge and recognize satisfactory performance. Employee achievements are regularly recognized informally and in staff meetings. Each department also recognizes an employee of the month, who is acknowledged within the department and in the company newsletter.”

Management by exception condition:

“Our management philosophy at Magazines Inc. is to look for deviations from standards and take corrective action when necessary. Our mission at Magazines Inc. is to ensure that every deadline is met and that no mistakes are made. Therefore, we make every effort to find mistakes and correct them. We believe that it is necessary to focus our primary attention on irregularities, mistakes, and deviations from standards. On a day-to-day basis, managers at Magazines Inc. monitor employees' work for problems and ensure that they are properly resolved. Closer to quarterly deadlines managers inspect each employee's work even more closely to ensure that each issue is free of errors.

“Management at Magazines Inc. believes in concentrating our full attention on dealing with mistakes, complaints, and failures. We take customer and co-worker complaints very seriously, and we expend great effort to ensure that every complaint is resolved.

We believe that it is important to keep track of all mistakes in order to determine where errors are likely to occur and prevent them in the future. Managers keep logs of errors, and memos are periodically sent out to employees advising them of common mistakes to avoid.

“Finally, we believe in directing employees' attention toward failures to meet standards in order to improve performance. At staff meetings managers focus on unmet standards and missed deadlines, and in annual performance reviews managers discuss with employees their shortcomings and present them with areas for improvement.”

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