AFFECTIVE MECHANISMS FOR A TRICKLE DOWN EFFECT OF TRANSFORMATIONAL LEADERSHIP: THE ROLE OF JUSTICE

ABSTRACT

This study examines antecedents of transformational leadership behavior among middle managers. It proposes a trickle-down model in which higher-level superiors’ transformational leadership shapes middle managers’ respective behavior. Moreover, the study examines a key mechanism and contingency factor within this cascading relationship. First, considering the inherently affective nature of transformational leadership, middle managers’ positive affect is cast as a mediating mechanism. Second, drawing on attribution theory, this mediated relationship is proposed to be contingent on middle managers’ personalized (i.e., interpersonal and informational) justice perceptions. The study thus suggests that superiors’ transformational behavior cascades down the hierarchy by promoting middle managers’ positive affect, but that this relationship will be more pronounced when these managers also perceive high personalized justice. The results from a sample of 443 middle managers and 2,949 direct subordinates largely support this model, although only informational (and not interpersonal) justice acted as boundary condition in the indirect linkage between superiors’ and middle managers’ transformational behavior. Hence, this study extends the knowledge on the trickle-down effect of transformational leadership and addresses calls for more research on both underlying mechanisms and boundary conditions.

Middle managers occupy a crucial position within organizations, as they are tasked with effectively translating organizational strategies into operational plans (Floyd & Wooldridge, 1997; Ren & Guo, 2011; Rouleau & Balogun, 2011; Shi et al., 2009; Wooldridge et al., 2008), motivating lower-level leaders and employees to work towards organizational goals, and facilitating change efforts (Huy, 2002). As such, middle managers’ leadership behavior can critically contribute to an organization’s success (Shi et al., 2009; Wooldridge et al., 2008). In particular, recent research has emphasized that beyond mere operational behaviors (e.g., performance monitoring, process execution), middle managers’ transformational leadership (i.e., charismatic, visionary, individually supportive, and intellectually stimulating leadership behavior; Bass, 1985; Koene et al., 2002; Spreitzer & Quinn, 1996) is crucial to their effectiveness. In general, this type of leadership has been linked to increased follower satisfaction, motivation, and leader effectiveness (Judge & Piccolo, 2004). Moreover, research has shown that middle managers’ transformational leadership has the potential to markedly increase lower-level employees’ job performance (Yang et al., 2010). Importantly, however, there is less clarity about the antecedents of this leadership behavior among middle managers (Nielsen & Cleal, 2011). It is therefore important to determine how transformational leadership arises among them and how organizations can promote such behavior within this pivotal group of leaders.

Compared to top managers and frontline employees, middle managers are in a unique organizational position, because they are both leaders and followers at the same time (Caughron & Mumford, 2011; Osterman, 2008). Consequently, it seems plausible that their superiors’ behavior can have an important influence on their own leadership behavior (Caughron & Mumford, 2011; Uk Chun, Yammarino, Dionne, Sosik, & Koo, 2009). Theorists have suggested, in particular, that top managers’ role modeling of charismatic and transformational leadership may cascade down into the lower hierarchical echelons (Waldman & Yammarino, 1999; Yukl, 2013). Nevertheless, as Yukl (2013) has observed, empirical research on this issue remains scarce; only a small number of studies provide initial evidence of such cascading effects of transformational
leadership (Bass et al., 1987; Yang et al., 2010). Moreover, it is important to note that the existing research has largely overlooked underlying mechanisms and contingency factors of this trickle-down effect. Hence, further investigation is needed to corroborate the idea that superiors’ transformational leadership may cascade down the hierarchy and, more specifically, to understand why and under what conditions middle managers may mirror their superiors’ transformational behavior.

The present study addresses these questions. It focuses on a central aspect of transformational leadership—namely its inherently affective nature (Ashkanasy & Tse, 2000)—to better explicate its trickle-down process. Theory suggests that transformational leadership can emotionally arouse followers and harness their positive feelings for the pursuit of common goals (Ashforth & Humphrey, 1995; Ashkanasy & Dasborough, 2003). Empirical studies have indeed linked such leadership behavior to followers’ positive moods and emotions (McColl-Kennedy & Anderson, 2002; Menges et al., 2011). Moreover, transformational leadership is at least partially based on leaders’ expression of strong positive feelings (e.g., enthusiasm, excitement; Ashforth & Humphrey, 1995; Bono & Ilies, 2006), and research has shown that leaders who experience more positive affect themselves are more likely to exhibit such behavior (Erez et al., 2008; Walter & Bruch, 2009). Building on this line of research, it is expected here that middle managers’ positive affect (i.e., a mid-range affective experience that entails pleasant feelings and falls between momentary, short-term moods and emotions and stable affective traits; Forgas & George, 2001; George & Zhou, 2002) will act as a key mediating mechanism that enables transformational leadership’s trickle-down effect, such that superiors’ transformational behavior will relate to middle managers’ positive affect which, in turn, will be associated with middle managers’ own transformational behavior.

Furthermore, it is proposed in this study that the cascading role of superiors’ transformational leadership is contingent upon contextual factors (Pawar & Eastman, 1997). Scholars have postulated that followers frequently try to determine the intentions underlying their leaders’ actions to ensure favorable personal outcomes (Balkundi,
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Kilduff, & Harrison, 2011; Dasborough & Ashkanasy, 2002; Martinko et al., 2007). Hence, it seems likely that followers will assess a transformational leader’s intentions before engaging emotionally with him or her, such that followers’ affective reactions may hinge on their specific interpretations of a leader’s transformational acts (Dasborough & Ashkanasy, 2002). Furthermore, research in the fields of organizational justice (Colquitt & Rodell, 2011) and attribution theory (Martinko et al., 2007) suggests that followers’ justice perceptions may play an important role in these interpretations. Organizational justice is defined as “the degree to which individuals believe the outcomes they receive and the ways they are treated within organizations are fair, equitable, and in line with expected moral and ethical standards” (Cole, Bernerth, Walter, & Holt, 2010, p. 387). Scholars have emphasized a “natural connection” (Colquitt & Greenberg, 2003, p. 196) between leadership and organizational justice, arguing that leaders’ effectiveness is strongly determined by followers’ justice perceptions.

The present study therefore incorporates organizational justice as a key contingency factor, postulating that middle managers’ affective responses towards their superiors’ transformational leadership behavior will critically hinge on their justice perceptions. In line with the notion that informational and interpersonal justice in particular reflect personalized fairness dimensions used to assess the actions of leaders as agents of the organization (Bies, 2005; Cropanzano, Prehar, & Chen, 2002; Masterson, Lewis, Goldman, & Taylor, 2000), it is proposed here that these two justice dimensions critically shape the trickle-down process of transformational leadership through followers’ positive affect. Informational justice reflects communication-related fairness, including the degree to which individuals perceive that they receive adequate, timely, and open information from organizational authorities (Colquitt, 2001; Greenberg, 1990b), whereas interpersonal justice refers to perceptions of fair treatment (e.g., respect, consideration) by organizational authorities (Bies & Moag, 1984).

These considerations lead to an overall conceptual model (see Figure 2.1) proposing that (a) superiors’ transformational behavior cascades down the hierarchy
by promoting middle managers’ positive affect, and that (b) this indirect relationship depends on middle managers’ perceptions of informational and interpersonal justice. In the present study, this mediated moderation model is empirically examined using a sample of 443 middle managers and 2,949 direct subordinates from a large retail company. In doing so, the aim is to contribute to the leadership literature in various ways. First, this study addresses calls for empirical evidence to strengthen confidence in the proposed trickle-down effect of transformational leadership (Bass et al., 1987; Yukl, 2013). In particular, the objective is to promote a better understanding of this cascading relationship by examining positive affect as a potential mediating mechanism (cf. Yang et al., 2010). Moreover, by integrating justice perceptions, the proposed model adds an important contextual component, explicating when the trickle-down effect of transformational leadership is more or less pronounced. By doing so, this study also addresses recent calls to more clearly integrate the fields of justice and (transformational) leadership (Ambrose & Schminke, 2009; De Cremer, 2006; Van Knippenberg, De Cremer, & Van Knippenberg, 2007; Wo et al., 2015).

FIGURE 2.1
The Proposed Conceptual Model
THEORY AND HYPOTHESES DEVELOPMENT

Transformational Leadership and Positive Affect

Theorists have argued that transformational leadership is an inherently emotional leadership style that may arouse followers’ positive affect (Ashkanasy & Tse, 2000; Bass, 1985, 1986, 1999). Using this leadership style, leaders aim to inspire followers by acting as charismatic role models, communicating a compelling vision, addressing followers’ individual needs, and intellectually stimulating followers (Bass, 1985; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). In particular, transformational leaders’ educational motivation is based on articulating an optimistic, positive vision for the future of their work unit, which may instill optimism and inspiration among followers and foster the acceptance and pursuit of shared goals (Podsakoff et al., 1990). Hence, this type of behavior may align work tasks with followers’ personal interests and values, thereby nurturing followers’ positive feelings about their work (Bono & Judge, 2003).

Similarly, transformational leaders’ idealized influence or charisma is based on the communication of strong positive emotionality (e.g., enthusiasm and excitement; Bono & Ilies, 2006). This emotionality is likely to be transferred to followers, for instance through processes of emotional contagion (Sy, Côté, & Saavedra, 2005). In this vein, empirical research has shown that displaying positive, charismatic behavior arouses more positive affect among followers (Bono & Ilies, 2006).

Finally, by showing individualized consideration for each follower, transformational leaders enable followers’ personal growth and show their respect for these followers, inducing a sense of security that fosters belonging, trust, collective identity, and meaningfulness (Bass & Avolio, 1997; Bass, 1985; Shamir, House, & Arthur, 1993; Podsakoff et al., 1990). This is likely to promote followers’ feelings of content, optimism, and enthusiasm about the future (McColl-Kennedy & Anderson, 2002). Accordingly, a broad body of literature has linked considerate types of leadership behaviors with followers’ positive attitudes and feelings at work (e.g., Gooty, Connelly, Griffith, & Gupta, 2010).
Consistent with this logic, an increasing amount of empirical research has emerged that demonstrates positive linkages between transformational leadership and followers’ positive moods and emotions (Bono, Foldes, Vinson, & Muros, 2007; Erez et al., 2008; McColl-Kennedy & Anderson, 2002; Menges et al., 2011; Tsai, Chen, & Cheng, 2009). Hence, a similar association is anticipated here between superiors’ transformational leadership behavior and middle managers’ positive affect at work.

**Hypothesis 1: Superiors’ transformational leadership behavior will positively relate to middle managers’ positive affect.**

Besides theory and research on the role of transformational leadership in followers’ positive affect, theorists have argued that leaders’ own positive affect can function as an important antecedent of transformational leadership behavior (Ashkanasy & Tse, 2000; Erez et al., 2008; Joseph, Dhanani, Shen, McHugh, & McCord, 2015; Walter & Bruch, 2009). This argumentation is based, for example, on the affect infusion model (AIM; Forgas, 2000), which suggests that affectively loaded information can enter individuals’ cognitive processes and consequently shape behavioral outcomes in a mood-congruent direction. As such, affective states may critically influence different kinds of organizational behavior, including leadership behaviors (Forgas & George, 2001).

Specifically, studies show that positive affective experiences promote individuals’ recall of positive information (Bower, 1991; Bower & Forgas, 2001) and lead individuals to think about the future in a more idealized and optimistic manner (Blascovich & Mendes, 2000; George, 1995). It seems plausible, then, that leaders experiencing positive affect at work are likely to think and act accordingly. In other words, they are particularly likely to formulate and communicate a positive, optimistic, and inspirational vision, which is an important characteristic of transformational leadership (Awamleh & Gardner, 1999; Jin et al., 2016). Similarly, research has linked positive affect with greater interest in others (Jones & George, 1998) and with increases
in helpful and pro-social acts (George & Brief, 1992; Spector & Fox, 2002; Tsai, Chen, & Liu, 2007). These tendencies may enable leaders who experience positive affect to more frequently and convincingly demonstrate individually considerate behaviors—one of the dimensions of transformational leadership—towards followers (cf. Bass, 1985).

Moreover, scholars have shown that positive affect facilitates individuals’ proactive attitudes and assertiveness (Fritz & Sonnentag, 2007), promotes greater risk-taking (Yuen & Lee, 2003), and strengthens individuals’ creativity (Lyubomirsky, King, & Diener, 2005; Madjar, Oldham, & Pratt, 2002). As such, leaders experiencing positive affect at work are more likely to engage in the bold, charismatic, and intellectually stimulating behaviors that also form defining elements of transformational leadership (Conger & Kanungo, 1987, 1998; Podsakoff et al., 1990).

In this vein, empirical studies have linked leaders’ experiences of positive affect in the workplace with enhanced transformational leadership behavior (Bono & Ilies, 2006; Chi et al., 2011; Walter & Bruch, 2007). Hence, taking the aforementioned theoretical and empirical points into consideration, the following hypothesis is proposed:

**Hypothesis 2:** Middle managers’ positive affect will positively relate to their transformational leadership behavior.

As outlined before, Hypothesis 1 predicts a positive relationship between superiors’ transformational leadership behavior and middle managers’ positive affect. Hypothesis 2, in turn, predicts a positive relationship between middle managers’ positive affect and their own transformational leadership. Taken together, these notions specify a mediation model in which superiors’ transformational leadership may cascade down the organizational hierarchy by promoting middle managers’ positive affective experiences. Importantly, this proposed pattern of mediation integrates previous research that has treated positive affect either as an outcome (e.g., Erez et al., 2008; McColl-Kennedy & Anderson, 2002) or as an antecedent of transformational leadership (e.g. Walter &
Bruch, 2007, 2009), casting middle managers’ positive affective experiences in the workplace as a key generative mechanism for transformational leadership’s trickle-down effect (cf. Bass et al., 1987; Yang et al., 2010). Hence, the following is proposed:

Hypothesis 3: Middle managers’ positive affect will mediate the relationship between superiors’ and middle managers’ transformational leadership behaviors.

The Moderating Role of Organizational Justice Perceptions

Attributions play a key role when studying leadership behavior (Balkundi et al., 2011; Martinko, Harvey, Sikora, & Douglas, 2011; Pastor, Meindl, & Mayo, 2002; Popper, 2011). In general, attribution theory proposes that people strive to reduce uncertainty and make sense of others’ actions by developing hypotheses on their underlying intentions. In doing so, individuals act as “naïve psychologists, trying to ascertain the causes of positive and negative outcomes” (Martinko et al., 2007, p. 562). Scholars have drawn on this theoretical lens to explicate how followers interpret the causes of their leaders’ actions (Bauman, 2013; Martinko, Harvey, & Douglas, 2007; Heider, 1958).

Specifically, followers may make attributions regarding their leaders’ goals and intentions because leaders play an important role in determining followers’ outcomes (Martinko et al., 2007). It has been proposed that due to a lack of elaborate, tangible information, followers often rely on general justice perceptions to arrive at these attributions (Colquitt et al., 2011; Van den Bos, Wilke, & Lind, 1998). Followers use these perceptions to interpret their leader’s past actions and develop expectations regarding his or her future behavior, thus shaping their reactions towards specific leadership styles (Van den Bos et al., 1998). Dasborough and Ashkanasy (2002) suggest that followers’ attributions of transformational leaders’ intentions in particular can critically shape the effects of this leadership style.

Drawing from this theoretical background, it is suggested here that middle
managers will rely on organizational justice perceptions to interpret their transformational leaders’ intentions. These perceptions should therefore moderate transformational leadership’s affective consequences for middle managers. In line with contemporary research, this study distinguishes between different dimensions of organizational justice (Colquitt, 2001; Colquitt & Shaw, 2005; Judge & Colquitt, 2004). First, informational justice reflects communication-related fairness, including the degree to which individuals perceive that they receive adequate, timely, and open information from organizational authorities (Colquitt, 2001; Greenberg, 1990b). Second, interpersonal justice refers to perceptions of fair treatment (e.g., respect, consideration) by organizational authorities (Bies & Moag, 1984). Thirdly, distributive justice assesses the perceived fairness of decision-making outcomes (Adams, 1965). Finally, procedural justice focuses on individuals’ perceptions of fairness in the processes that lead to decisions (Leventhal, 1980). Scholars have described informational and interpersonal justice perceptions in particular as leader-directed or personalized, depicting the degree of fairness inherent in a follower’s specific interactions with his or her leader as an agent of the organization (Cropanzano & Ambrose, 2001; Karriker & Williams, 2007; Olkkonen & Lipponen, 2006). In contrast, distributive and procedural justice have been described as systemic, such that they are typically attributed to the organization as a whole instead of to a specific, individual leader (Beugre & Baron, 2001; Colquitt & Rodell, 2011).

Empirical research shows that personalized justice perceptions are particularly important in shaping followers’ views of their leaders’ consistency, integrity, benevolence, and trustworthiness (Colquitt & Rodell, 2011; Lance Frazier, Johnson, Gavin, Gooty, & Bradley Snow, 2010). Therefore, Colquitt et al.’s (2011) suggestions are followed here and it is postulated that for followers, informational and interpersonal justice perceptions are especially valuable as indicators of a leader’s intentions, and thus may be highly relevant as moderators of transformational leadership. Hence, the following sections elaborate on the moderating role of informational and interpersonal justice in the linkage between superiors’ transformational leadership and middle managers’ positive affect.
The Role of Informational Justice

Informational justice is based on leaders communicating in a timely, candid, and thorough way with followers (Colquitt, 2001; Colquitt & Rodell, 2015), and these justice perceptions are believed here to be a vital element for the functioning of many of the key behaviors associated with transformational leadership. For example, transformational leaders inspire followers by proclaiming a compelling vision (i.e., inspirational motivation; Bass 1985). However, followers’ attributions of this vision’s credibility are likely to hinge on the extent to which it is conveyed in an open, truthful, and timely manner (Baum, Locke, & Kirkpatrick, 1998; Kouzes & Posner, 1993). Thus, followers may find it difficult to fully understand, accept, and trust their leader’s espoused vision if these basic communicative requirements are not sufficiently met (Baum et al., 1998). As such, a lack of informational justice could diminish the positive relation of this key element of superiors’ transformational leadership with middle managers’ positive affect. In contrast, middle managers may develop more positive attributions of superiors’ intentions when a transformational leader shares his or her vision in a particularly open, timely, and truthful manner.

In a similar vein, it is probable that the positive relation between superiors’ individually considerate behavior and middle managers’ positive affect hinges on the degree of informational justice. Cho and Dansereau (2010, p. 411) have argued, for instance, that leaders’ supportive behavior will only have positive effects “when the follower perceives the support as legitimate.” Specifically, transformational superiors who demonstrate personal attention but fail to explain key decisions in an open and timely way may be perceived as acting inconsistently, thus diminishing their potential benefits for middle managers’ positive affect (cf. El Akremi et al., 2010). In contrast, if individually considerate superiors do inform their middle managers in a timely and open manner, this consistency could further induce trust and thus positive affect among middle managers.

Finally, the idealized influence of a transformational leader has been argued to depend on the leader acting as a role model with high moral standards (cf. Zhu, Riggio,}
Avolio, & Sosik, 2011). Thus, it again appears critical that a leader’s respective behavior be perceived as consistent with his or her espoused values (Bacha & Walker, 2013; Kouzes & Posner, 1993; Simons, 1999, 2002; Simons, Palanski, & Treviño, 2013). It therefore seems logical that followers respond more positively to transformational leaders’ idealized influence when they also perceive these leaders as providing honest and thorough information. Indeed, scholars have found that leaders’ informational justice can instigate followers’ trust in them, supposedly due to stronger affective ties (Colquitt & Rodell, 2011).

Following this logic, it is suggested here that the positive relationship between superiors’ transformational leadership and middle managers’ positive affect may hinge on superiors’ ability to provide informational justice. It is therefore postulated that this relationship depends on middle managers’ attributions of informational justice, with informational justice perceptions thus serving as a key moderator of the relationship between superiors’ transformational leadership and middle managers’ positive affect:

**Hypothesis 4a:** Middle managers’ informational justice perceptions will moderate the positive relationship between superiors’ transformational leadership behavior and middle managers’ positive affect. This relationship will be stronger when middle managers perceive higher rather than lower informational justice.

**The Role of Interpersonal Justice**

Interpersonal justice is characterized by treating others with respect and propriety (Colquitt, 2001; Colquitt & Rodell, 2015), with truth and human dignity at its core (Bies, 1987, 2015). Scholars have suggested that leaders showing interpersonal justice signal that they genuinely care about the welfare of their followers (i.e., benevolence; Colquitt & Rodell, 2011; Lance Frazier et al., 2010). It is therefore argued in this study that interpersonal justice is crucial to fully yield the benefits of transformational leadership.

First, transformational leaders’ *individually considerate* behavior entails
treating followers in a developmental, sensitive, and supportive manner (Bass, 1985; Podsakoff et al., 1990). Such behavior is likely to have little credibility if, at the same time, a lack of interpersonal justice makes it evident that a leader does not truly respect or empathize with his or her followers (Bies & Moag, 1984; Greenberg, 1990a, 1990b, 1993a, 1993b). Middle managers might interpret this discrepancy as egoistic and insincere and, as a result, they may feel that they are being used instrumentally and deceived (cf. Dasborough & Ashkanasy, 2002).

In a similar vein, transformational leaders’ charismatic role modeling (i.e. *idealized influence*) entails acting in ways that followers would like to emulate and with which they would want to identify (Walumbwa & Hartnell, 2011). However, to ensure that such leadership is trustworthy and sincere, followers are likely to look for additional behavioral cues (cf. Colquitt & Rodell, 2011; Krasikova et al., 2013; Van den Bos et al., 1998). Thus, when middle managers perceive their superiors to be charismatic and inspirational, yet these managers themselves are treated without respect and propriety at the same time, this lack of interpersonal injustice could limit the positive effects of supervisors’ transformational leadership. In this case, it is likely that middle managers will perceive their superiors’ overall behavior to be incongruent with their own personal treatment. All in all, it is therefore proposed that the potentially positive affective consequences of a transformational superior’s behavior are unlikely to be realized under conditions of low interpersonal justice. When interpersonal justice is higher, by contrast, the relationship between superiors’ transformational leadership and middle managers’ positive affect may materialize more fully:

*Hypothesis 4b: Middle managers’ interpersonal justice perceptions will moderate the positive relationship between superiors’ transformational leadership behavior and middle managers’ positive affect. This relationship will be stronger when middle managers perceive higher rather than lower interpersonal justice.*
Assuming that informational and interpersonal justice moderate the relationship between superiors’ transformational leadership and middle managers’ positive affect (i.e., Hypotheses 4a and 4b), it is argued here that these justice dimensions will also conditionally influence the trickle-down relationship between superiors’ and middle managers’ transformational leadership through middle managers’ positive affect (i.e., Hypothesis 3). A pattern of moderated mediation is therefore anticipated, as depicted in Figure 2.1. Because a stronger relationship is expected between transformational leadership and positive affect under conditions of higher rather than lower informational and interpersonal justice, it is also expected that the conditional indirect linkage between superiors’ and middle managers’ transformational leadership will be more pronounced under conditions of higher informational and interpersonal justice.

**Hypothesis 5:** Middle managers’ informational (H5a) and interpersonal (H5b) justice perceptions will moderate the positive, indirect relationship between superiors’ and middle managers’ transformational leadership behaviors (through middle managers’ positive affect). This indirect relation will be more pronounced under conditions of higher rather than lower informational and interpersonal justice.

**METHOD**

**Participants**

This study’s sample consisted of middle managers and their direct reports from an international retail company. This company operates a large number of retail stores in Europe and the US through various subsidiaries. The middle managers in the sample were store managers responsible for operating food retail stores located throughout the Netherlands. Their responsibilities included making assortment adjustments, local promotions and sponsorships, and human resource tasks such as recruitment, training, and retention. As such, the middle managers in our sample had frequent (typically daily) face-to-face contact with their direct reports. The latter were generally first-line
supervisors who led different store departments as well as senior employees. Middle managers reported to one district manager (i.e., superior). On average, geographical districts consisted of around 25 stores per superior. As such, superiors were tasked with the operational responsibility for each district, ranging from staffing stores with middle managers, to incident management and regional strategy.

**Procedures**

Data for this study were gathered near the end of 2011, as part of a larger multi-wave investigation. First, all managers were informed about the data collection through company emails and general meetings. Next, middle managers received an email with further explanation, a specific invitation to participate (e.g. with details on how to contact the researchers in case of technical problems, and frequently asked questions), and a link to an online survey. In this survey, middle managers rated their superiors’ transformational leadership behavior as well as their own affect and justice perceptions. Subsequently, between 7 and 12 (based on store size) direct subordinates were randomly selected. These subordinates received an email with an invitation to participate and a link to the subordinate survey, measuring middle managers’ transformational leadership. All participants were guaranteed confidentiality and were ensured that their responses would only be reported in an aggregated format. Middle managers’ and subordinates’ surveys were matched based on the participants’ store numbers.

To be included in the study, a middle manager had to satisfy three criteria (cf. Rubin et al., 2005): (a) he or she had to have worked for his or her superior for at least six months; (b) at least two subordinates had to provide ratings for his or her leadership behavior; and (c) he or she had to complete his or her own survey. Of the targeted participants, 443 middle managers (response rate = 76%) met these criteria. On average, these middle managers were 43 years old ($SD = 9.15$). Their organizational tenure was 18 years ($SD = 11.73$), and 87% were male. Moreover, a total of 2,949 subordinates (out of 4,190 subordinates invited to participate for these middle managers; response rate = 70%) provided responses, for an average of 6.66 respondents per middle manager ($SD =$
1.66). The subordinates’ average age was 32 years ($SD = 11.53$), and 56.8% were male. Their average organizational tenure was 12.16 years ($SD = 9.10$), and their average tenure with their current middle manager was 2.40 ($SD = 1.85$) years.

**Measures**

The present study was conducted in the Netherlands, and respondents varied in their ability to comprehend English. Hence, all survey items were translated to Dutch using a back-translation procedure.

**Superiors’ transformational leadership.** Middle managers rated their superiors’ transformational leadership using Podsakoff et al.’s (1990) 23-item measure, which has been used widely in previous research (Rubin et al., 2005; Van der Kam, Janssen, Van der Vegt, & Stoker, 2014; Walter & Bruch, 2010; Wang, Law, Hackett, & Chen, 2005). All items were collapsed into an overall transformational leadership score following prior studies (e.g., Bommer et al., 2004; Rubin et al., 2005; Yang et al., 2010). Middle managers rated their direct superior on respective behaviors on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree); sample items include “leads by example” and “encourages employees to be team players.” Cronbach’s alpha was .92.

**Middle managers’ positive affect.** Middle managers’ positive affect was measured using nine items from the Job-Related Affective Well-Being Scale (JAWS; Van Katwyk, Fox, Spector, & Kelloway, 2000). Middle managers rated the extent to which they generally experienced nine positive feelings at work (e.g., enthusiasm, relaxation, calmness, satisfaction). Ratings were given on a 5-point Likert scale (1 = never, 5 = extremely often or always). Cronbach’s alpha was .85.

**Organizational justice.** Middle managers’ organizational justice perceptions were captured using Colquitt’s (2001) four-dimensional measure using a 5-point Likert scale (1 = to a small extent, 5 = to a large extent). Both informational and interpersonal justice were measured using three items, with a prefix stating that the following questions addressed decision-making and resource allocation procedures, and additionally that “the following questions are about your direct superior, applying the aforementioned
processes” (sample item for informational justice: “Were explanations regarding these procedures reasonable?”; sample item for interpersonal justice: “Has he/she treated you with dignity?”). Reliability estimates were $\alpha = .81$ for informational justice, and $\alpha = .91$ for interpersonal justice.

For the sake of completeness, this study followed suggestions to include all four justice dimensions in the data gathering process (Colquitt & Rodell, 2015; De Cremer et al., 2007). Procedural justice was measured using four items, with a prefix explicating that the items referred to procedures and policies of the organization as applied by the respective middle manager’s direct superior in making decisions about wages, promotions, and rewards (Cole et al., 2010). An example item is, “Are these procedures being applied consistently?” Distributive justice perceptions were measured using three items, with a prefix indicating that the respective items referred to the outcomes of organizational procedures (sample item: “Is the outcome justified, given your performance?”). Reliability estimates were $\alpha = .72$ for procedural justice, and $\alpha = .93$ for distributive justice.

Middle managers’ transformational leadership. Subordinates provided ratings of their direct supervisor’s (i.e., middle manager’s) transformational leadership, again using Podsakoff et al.’s (1990) 23-item measure with a 5-point response scale (1 = strongly disagree, 5 = strongly agree). Again, all items were collapsed into an overall transformational leadership score following prior studies (e.g., Bommer et al., 2004; Rubin et al., 2005; Yang et al., 2010). Cronbach’s alpha was .96. In line with previous research (e.g., Peterson, Walumbwa, Byron, & Myrowitz, 2008), multiple subordinate ratings referring to the same middle manager were aggregated. The appropriateness of this aggregation was assessed by calculating interrater agreement ($r_{wg(j)}$) and interrater reliability (ICC) statistics (Bliese, 2000). These values surpassed common standards, with median $r_{wg(j)} = .98$, ICC1 = .26 ($p < .01$), and ICC2 = .60.

Control variables. Middle managers’ gender was controlled for (1 = male, 2 = female), because previous research has demonstrated reliable (albeit moderate) gender differences in transformational leadership behavior (Eagly, Johannesen-Schmidt, & van
Engen, 2003). Since age might influence both transformational leadership (Barbuto & Burbach, 2006) and positive affect (Reed & Carstensen, 2012; Scheibe & Carstensen, 2010), middle managers’ age was also included as a control variable. Moreover, the number of employees per store was used as proxy to control for store size and complexity (Koene et al., 2002). Finally, as previously noted, procedural and distributive justice perceptions were controlled for as well (cf. Colquitt & Rodell, 2011, 2015; De Cremer et al., 2007).

Data Analyses

Given that the middle manager data are nested within those of superiors (on average, 15 middle managers reported to the same superior), it is possible that the middle managers’ responses belonging to the same superior are non-independent. To examine this possibility, one-way analyses of variance on the dependent variables (i.e., middle managers’ positive affect and transformational leadership behavior) were computed. Non-significant F values suggested that no clustering effects were present at the superior level (Chen, Mathieu, & Bliese, 2004), so there was no need to employ multilevel methods (Hofmann, Griffin, & Gavin, 2000; Kenny, Kashy, & Bolger, 1998). OLS regression was therefore used to test Hypotheses 1, 2, and 4. Nonetheless, the hypotheses were also explored using multilevel methods. As expected, multilevel results closely mirrored OLS regression results (the results can be obtained by contacting the first author).

Hypothesis 3 suggests an indirect relationship between superior and middle manager transformational leadership through positive affect, and Hypothesis 5 suggests that this indirect relationship is conditional on middle managers’ informational and interpersonal justice perceptions (Preacher, Rucker, & Hayes, 2007; Preacher & Hayes, 2004). The bootstrapping methods described by Hayes (2012) were used to test these hypotheses, therewith avoiding conceptual and mathematical limitations associated with traditional (moderated) mediation approaches (Preacher, Curran, & Bauer, 2006; Preacher et al., 2007; Preacher & Hayes, 2004b). This procedure estimates bootstrap 95%-confidence intervals around a conditional indirect relationship (at high [+1 SD],
RESULTS

Descriptive Statistics, Correlations, and Confirmatory Factor Analysis

Table 2.1 presents the means, standard deviations, and intercorrelations between all study variables. Providing initial support for Hypotheses 1 to 3, positive correlations were found between superiors’ transformational leadership and middle managers’ positive affect ($r = .33, p < .01$), and between middle managers’ positive affect and their transformational leadership ($r = .17, p < .01$). Following Becker (2005), the hypotheses tests did not include controls that are uncorrelated with the dependent variable. Hence, given the results presented in Table 2.1, only gender and number of employees were included as controls.

Further, confirmatory factor analyses were used to assess the factor structure and discriminant validity of the focal study variables. Given that middle managers rated their superiors’ transformational leadership behavior as well as their own justice perceptions and positive affect, a model was estimated that depicted these variables as six correlated, first-order factors (i.e., one transformational leadership factor, four justice factors, and one positive affect factor).\(^1\) This model yielded acceptable fit to the data ($\chi^2 = 1030.75, df = 335, p < .001; CFI = .893; RMSEA = .068, 90\% CI = .064$ to .073). The factor loading for each item on its corresponding factor was significant at $p < .001$, indicating convergent validity (Anderson & Gerbing, 1988). The fit of all possible five-factor models was also examined by restricting the respective latent factor correlations between any two constructs to unity, as was the fit of a one-factor model. All of these models fit the data significantly worse than the hypothesized six-factor model ($p < .001$), suggesting discriminant validity.

\(^1\) Individual items were used as manifest indicators of the four justice dimensions and positive affect. Further, to improve the parameter-to-observation ratio, item parcels were used (cf. Hall, Snell, & Foust, 1999) based on the subdimensions of transformational leadership specified by Podsakoff and colleagues (1990) as manifest indicators of transformational leadership.
Hypotheses Testing

Supporting Hypothesis 1, Table 2.2 reveals a positive association between superiors’ transformational leadership behavior and middle managers’ positive affect, even after considering control variables and all four organizational justice dimensions ($B = .15, p < .05$). Moreover, consistent with Hypothesis 2, Table 2.3 shows that middle managers’ positive affect and middle managers’ transformational leadership behavior were positively related ($B = .16, p < .01$). The bootstrap results (Preacher & Hayes, 2004a) corroborated the indirect relationship indicated by this pattern of linkages, with middle managers’ positive affect mediating the association between superiors’ and middle managers’ transformational leadership behavior (indirect relationship = .022). In line with Hypothesis 3, the bootstrap 95% confidence interval around this indirect relationship did not contain zero (CI = .007, .044).

Hypotheses 4a and 4b suggested that informational and interpersonal justice moderate the relationship between superiors’ transformational leadership behavior and middle managers’ positive affect. To test these hypotheses, the interaction terms between superiors’ transformational leadership and middle managers’ informational and interpersonal justice perceptions were entered in the regression equation predicting middle managers’ positive affect, along with control variables and main effects. The interaction term for informational justice was found to be significant ($B = .18, p < .01$; see Table 2.3). As shown in Figure 2.2 (cf. Aiken & West, 1991), the positive relationship between transformational leadership and positive affect was more pronounced under conditions of higher rather than lower informational justice. Hence, Hypothesis 4a was supported. In contrast, the interaction term for interpersonal justice was not statistically significant ($B = .02, p = ns$; see Table 2.3), so Hypothesis 4b was rejected.
<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Middle Manager Age</td>
<td>43.23</td>
<td>9.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Middle Manager Gender</td>
<td>1.13</td>
<td>0.34</td>
<td>.27**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Number of Employees</td>
<td>142.62</td>
<td>57.88</td>
<td>.14**</td>
<td>-.12*</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4. Superior TFL</td>
<td>3.63</td>
<td>0.57</td>
<td>-.14**</td>
<td>.01</td>
<td>-.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Middle Manager Positive Affect</td>
<td>3.85</td>
<td>0.55</td>
<td>.00</td>
<td>.05</td>
<td>.03</td>
<td>.33**</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. Informational Justice</td>
<td>3.95</td>
<td>0.75</td>
<td>-.05</td>
<td>-.01</td>
<td>-.04</td>
<td>.60**</td>
<td>.32**</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7. Interpersonal Justice</td>
<td>4.47</td>
<td>0.70</td>
<td>-.11*</td>
<td>.05</td>
<td>-.08</td>
<td>.52**</td>
<td>.28**</td>
<td>.59**</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8. Procedural Justice</td>
<td>3.30</td>
<td>0.75</td>
<td>-.03</td>
<td>-.02</td>
<td>.00</td>
<td>.45**</td>
<td>.36**</td>
<td>.45**</td>
<td>.39**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Distributive Justice</td>
<td>3.41</td>
<td>0.97</td>
<td>.03</td>
<td>.04</td>
<td>.06</td>
<td>.27**</td>
<td>.22**</td>
<td>.27**</td>
<td>.23**</td>
<td>.37**</td>
<td></td>
</tr>
<tr>
<td>8. Middle Manager TFL</td>
<td>3.61</td>
<td>0.36</td>
<td>-.07</td>
<td>.14**</td>
<td>.15**</td>
<td>.08</td>
<td>.17**</td>
<td>.07</td>
<td>.02</td>
<td>.06</td>
<td>.01</td>
</tr>
</tbody>
</table>

*Note. N = 443.*

* p < .05, ** p < .01. TFL = transformational leadership behavior.
### TABLE 2.2
Hierarchical Regression Analysis on Middle Manager Positive Affect

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Manager Gender</td>
<td>.05 (.05)</td>
<td>.06 (.05)</td>
<td>.06 (.04)</td>
<td>.06 (.04)</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>.04 (.05)</td>
<td>.07 (.05)</td>
<td>.06 (.04)</td>
<td>.06 (.04)</td>
</tr>
<tr>
<td>Superior TFL</td>
<td>.34 (.05)**</td>
<td>.13 (.06)**</td>
<td>.15 (.06)*</td>
<td></td>
</tr>
<tr>
<td>Informational Justice</td>
<td>.09 (.06)</td>
<td>.13 (.06)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal Justice</td>
<td>.06 (.05)</td>
<td>.09 (.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural Justice</td>
<td>.21 (.05)**</td>
<td>.20 (.05)**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distributive Justice</td>
<td>.06 (.05)</td>
<td>.07 (.05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superior TFL * Informational Justice</td>
<td></td>
<td></td>
<td></td>
<td>.18 (.05)**</td>
</tr>
<tr>
<td>Superior TFL * Interpersonal Justice</td>
<td></td>
<td></td>
<td></td>
<td>-.02 (.05)</td>
</tr>
</tbody>
</table>

**Note.** $N = 443$. Unstandardized parameter estimates are reported, standard errors in brackets. TFL = transformational leadership behavior. * $p < .05$, ** $p < .01$. 

$\Delta R^2$: 

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\Delta R^2$</td>
<td>.00</td>
<td>.11**</td>
<td>.07**</td>
<td>.04**</td>
</tr>
</tbody>
</table>

$R^2$ (adjusted $R^2$): 

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2$ (adjusted $R^2$)</td>
<td>.00 (.00)</td>
<td>.11 (.11)**</td>
<td>.18 (.17)**</td>
<td>.22 (.21)**</td>
</tr>
</tbody>
</table>
### TABLE 2.3
Hierarchical Regression Analysis on Middle Manager Transformational Leadership Behavior

<table>
<thead>
<tr>
<th></th>
<th>Middle Manager TFL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>Middle Manager Gender</td>
<td>.16 (.05)**</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>.17 (.05)**</td>
</tr>
<tr>
<td>Superior TFL</td>
<td>.09 (.06)</td>
</tr>
<tr>
<td>Informational Justice</td>
<td>.08 (.07)</td>
</tr>
<tr>
<td>Interpersonal Justice</td>
<td>-.11 (.07)</td>
</tr>
<tr>
<td>Procedural Justice</td>
<td>.04 (.06)</td>
</tr>
<tr>
<td>Distributive Justice</td>
<td>-.04 (.05)</td>
</tr>
<tr>
<td>Superior TFL x Informational Justice</td>
<td>.10 (.06)</td>
</tr>
<tr>
<td>Superior TFL x Interpersonal Justice</td>
<td>-.10 (.06)</td>
</tr>
<tr>
<td>Positive Affect</td>
<td></td>
</tr>
<tr>
<td>ΔR²</td>
<td>.05**</td>
</tr>
<tr>
<td>R² (adjusted R²)</td>
<td>.05 (.04)**</td>
</tr>
</tbody>
</table>

*Note. N = 443. Unstandardized parameter estimates are reported, standard errors in brackets. TFL = transformational leadership behavior. * p < .05, ** p < .01.*
Hypothesis 5 predicted that informational and interpersonal justice moderate the indirect relationship between superiors’ and middle managers’ transformational leadership behavior through middle managers’ positive affect. As shown in Table 2.4, the findings indicated a significant, conditional indirect relationship between superiors’ and middle managers’ transformational leadership behavior through positive affect at higher values of informational justice (i.e., 1 SD above the mean; conditional indirect effect = .058, 95% CI = .019, .116). Under conditions of lower informational justice, this indirect relationship did not reach statistical significance, as illustrated by the bootstrap confidence interval containing zero (estimate = .015, 95% CI= -.002, .053). This pattern of findings supports Hypothesis 5a. By contrast, given that Hypothesis 4b—which predicted a moderating role of interpersonal justice between superiors’ transformational leadership and positive affect—was not supported, interpersonal justice did not moderate the indirect linkage between superiors’ and middle managers’ transformational leadership through positive affect. Therefore, Hypothesis 5b was rejected.²

² The roles of the systemic justice components (i.e. procedural and distributive justice) were also examined for exploratory purposes (cf. Colquitt & Rodell, 2011, 2015; De Cremer et al., 2007). Procedural justice related positively to middle managers’ positive affect, as shown in Table 2.2. However, no further relationships of the systemic justice perceptions with middle managers’ positive affect or transformational leadership were found. In addition, the study explored sequential mediation patterns of the relationship of superior transformational leadership, via informational justice, with middle managers’ transformational leadership through middle managers’ positive affect. No indication of such relationships was found. Yet, future longitudinal research could further investigate these causal patterns.
TABLE 2.4
Conditional Indirect Relationship of Superior Transformational Leadership with Middle Manager Transformational Leadership Through Positive Affect

<table>
<thead>
<tr>
<th>Informational Justice</th>
<th>Indirect Relationship</th>
<th>Boot SE</th>
<th>Boot LLCI</th>
<th>Boot ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1SD</td>
<td>.015</td>
<td>.013</td>
<td>-.002</td>
<td>.053</td>
</tr>
<tr>
<td>Median</td>
<td>.037</td>
<td>.018</td>
<td>.010</td>
<td>.080</td>
</tr>
<tr>
<td>+1SD</td>
<td>.058</td>
<td>.024</td>
<td>.019</td>
<td>.116</td>
</tr>
</tbody>
</table>

Note. N = 443. Unstandardized coefficients are reported. Bootstrap sample size = 5,000. SE = standard error. LL = lower limit. CI = confidence interval. UL = upper limit. Covariates included: Middle Manager Gender and Number of Employees

FIGURE 2.2
Middle Manager Positive Affect Predicted by Superior Transformational Leadership, Moderated by Informational Justice

![Graph showing the relationship between Superior Transformational Leadership and Positive Affect, moderated by Informational Justice](image)
DISCUSSION

The purpose of this study was to investigate the trickle-down effect of transformational leadership from superiors onto middle managers and to examine its underlying mechanisms and boundary conditions. The results indicated that transformational leadership can cascade down the organizational hierarchy by arousing middle managers’ positive affect. Moreover, the findings identified middle managers’ informational justice perceptions as a key boundary condition for this indirect relation. Transformational leadership’s trickle-down effect through middle managers’ experiences of positive affect only materialized when middle managers held relatively strong perceptions of informational justice, and not when they had lower such perceptions. These findings make several theoretical contributions.

Theoretical Implications

First, this study adds to the limited body of research on transformational leadership’s trickle-down effect by providing empirical evidence that such leadership can indeed cascade down the organizational hierarchy from higher to middle management. Although this relationship has been a core notion in transformational leadership theory (e.g. Waldman & Yammarino, 1999), to date only a small number of studies have empirically tested it (Bass et al., 1987; Caughron & Mumford, 2011; Yang et al., 2010). The present results indicate that superiors’ transformational leadership is as a key tool to promote similar behavior among middle managers. This also suggests that the effects of transformational leadership at higher hierarchical echelons may extend beyond leaders’ direct reports and spread more widely throughout the organization. However, further research is needed to investigate this relationship.

Second, this study has identified positive affect as an important, previously untested mechanism for transformational leadership’s trickle-down effect. In doing so, the study illustrates a unique, affective route through which transformational leadership behavior may cascade through an organization. Thereby, this study is
among the first to open the “black box” of this cascading relationship (Uk Chun et al., 2009). Moreover, the findings contribute to integrating two separate streams of research that have examined positive affect either as an antecedent (Ashforth & Humphrey, 1995; Walter & Bruch, 2009) or as a consequence of transformational leadership (Ashkanasy & Tse, 2000; Erez et al., 2008). For middle managers who serve as leaders and followers at the same time, positive affect appears to be a critical linking pin that is not only triggered by higher-level leaders’ transformational behavior, but also promotes such behavior among these managers themselves.

Furthermore, this study addresses scholars’ repeated calls to better integrate theories of leadership and organizational justice (Colquitt & Greenberg, 2003; De Cremer et al., 2007; Judge & Colquitt, 2004; Van Dijke & De Cremer, 2012). In particular, the present findings promote a nuanced picture of leadership-justice relations and highlights the value of considering organizational justice as a multi-dimensional phenomenon (cf. Wo et al., 2015). In line with expectations, informational justice (i.e., a personalized type of justice perception that directly refers to one’s superior’s actions) was found to act as an important boundary condition for the effectiveness of superiors’ transformational leadership behavior. This result corroborates the findings of Colquitt and Rodell (2011), who conclude that especially informational justice “stands out” with regard to positive leadership perceptions over time.

Along these lines, scholars have argued that a lack of informational justice creates serious ambiguity about how organizational resources are allocated (Cropanzano, Bowen, & Gilliland, 2007). Hence, the relevance of transformational leadership for organizational outcomes notwithstanding (Judge & Piccolo, 2004; Koene et al., 2002), the functioning of such leadership appears to be more complex than previously believed. In particular, the benefits of this leadership behavior seem to be contingent on leaders’ informational fairness, such that higher-level leaders’ transformational behaviors may only trickle down the hierarchy (by promoting middle managers’ positive affect) if these leaders provide adequate, timely, truthful, and honest information about organizational processes and procedures.
On the other hand, contrary to expectations, interpersonal justice was not found to moderate the consequences of superiors’ transformational leadership. This unexpected result illustrates once more that justice is a multi-faceted construct, such that consideration of distinct justice dimensions is vital to adequately understand the consequences of organizational justice (Bies, 2015; Colquitt & Rodell, 2015). In particular, Colquitt and Rodell (2015), Bies, (2001, 2015) and Greenberg (1993b) urge scholars to distinguish between informational and interpersonal justice, instead of grouping them together in a dimension labeled “interactional justice.” The present results underline the relevance of this recommendation, as examination of a broader “interactional justice” construct might have blurred the role of informational justice observed in this study.

Limitations and Future Research

Some methodological strengths notwithstanding (e.g., the use of a large field sample, multiple raters of transformational leadership, independent measurement sources for key variables), the present results should be interpreted in light of their limitations. First, the cross-sectional and correlational structure of the data prohibits causal inference. However, it is noted that the hypotheses were founded on a strong theoretical background and that the key findings are consistent with previous work. As such, the present author has confidence in the proposed pattern of relationships. Ultimately, however, longitudinal or experimental research is needed to warrant claims of causality.

Moreover, the study sample was drawn from a single retail organization situated in one Western-European country. Hence, replication of the results within other cultural and industry contexts is needed to increase generalizability. Furthermore, although an attempt was made to minimize common method concerns by using an independent measurement source for the outcome variable, the independent, moderator, and mediator variables were self-rated. Importantly, however, a pattern of moderation was found for these variables, and previous work
has shown that it is virtually impossible to explain such interactive relations through percept-percept inflation (Evans, 1985). Moreover, the confirmatory factor analyses reported above attest to the discriminant validity of the focal study variables.

Besides addressing these limitations, future research could build on this study’s findings in various ways. First, it could be interesting to examine additional mediators and boundary conditions related to the trickle-down effect of transformational leadership. Identification processes in particular have been suggested to play an important role in the functioning of this type of leadership (Kark, Shamir, & Chen, 2003; Shamir, House, & Arthur, 1993). As such, middle managers’ identification with their superiors might serve as an additional mechanism that helps transformational leadership cascade from higher to lower hierarchical echelons. Closely related to this identification process, group prototypicality could act as a boundary condition for transformational leadership’s trickle-down effect. Prototypical individuals are perceived as closely resembling the features of an “ideal” member of a specific group. Scholars have shown that group prototypicality positively relates to leaders’ influence and effectiveness (Fielding & Hogg, 1997; Pierro, Cicero, Bonaiuto, Van Knippenberg, & Kruglanski, 2005; Steffens, 2012; Van Knippenberg, 2011). Hence, cascading effects of transformational leadership might be particularly pronounced for highly prototypical leaders.

Moreover, it would be worthwhile to more closely examine the trickle-down effect of other leadership styles. Previous research has demonstrated cascading relationships for ethical leadership (Mayer et al., 2009) and abusive supervision (Aryee & Chen, 2007; Mawritz et al., 2012; Park, 2012). Affective mechanisms, as illustrated in the present study for transformational leadership, might also play a role with regard to these leadership styles (cf. Hoobler & Brass, 2006). Empirical research examining this may be able to highlight important similarities and differences between different types of leadership behavior, and may thus contribute to a more comprehensive depiction of the cascading impacts of higher-level leaders’ behaviors.
Practical Implications

The present findings have several practical implications for organizations. By considering middle managers not only as leaders but also as followers (Caughron & Mumford, 2011), this study has identified a trickle-down effect of transformational leadership. Since this leadership has been linked to employee satisfaction and performance (Judge & Piccolo, 2004; Yang et al., 2010), the role of middle managers’ own superiors in stimulating transformational leadership seems to be crucial for organizations. Therefore, HR professionals could focus on measures to promote transformational leadership among higher-level (or even top) managers, for example when designing recruiting processes and leadership development programs. Based on the present findings, such measures might contribute to the dispersion of transformational leadership behaviors throughout an organization.

Furthermore, while research and practice have traditionally emphasized issues of distributive, procedural, and sometimes interpersonal justice (for example in compensation and benefit structures; Colquitt & Rodell, 2015), this study shows that communicating in a candid, timely, and truthful way (i.e., informational justice) can substantially contribute to the effects of transformational leadership. Hence, this study’s findings urge organizations to stimulate superiors to adequately inform their middle managers about procedures and policies applied in the organization. For example, it might be wise for organizations to combine knowledge from their HR (i.e. Compensation and Benefits) and Communication departments in crafting adequate informational processes to inform their middle managers. In addition, organizations could train senior and top management’s ability to transfer this information in an honest, truthful, and timely way.

Altogether, these findings are believed to contribute important new knowledge on the trickle-down effect of higher-level leaders’ transformational behaviors towards middle managers. In doing so, it is the hope that this study serves as a foundation for further research on important issues in this regard and, at the same time, helps organizations striving to promote their middle managers’ transformational behaviors.