

Who takes the lead? A multi-source diary study on leadership, work engagement, and job performance

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Summary

Transformational leadership is associated with a range of positive outcomes. Yet, according to substitutes for leadership theory, there may be circumstances under which it is difficult, if not impossible, for leaders to inspire and challenge their employees. Therefore, we hypothesize that transformational leadership behaviors as well as employee self-leadership strategies contribute to employee work engagement and job performance. Furthermore, we hypothesize that transformational leadership behaviors are more effective when employees have a high need for leadership, whereas self-leadership strategies are more effective when employees have a low need for leadership. A sample of 57 unique leader–employee dyads filled out a quantitative diary survey at the end of each week, for a period of five weeks. The results of multilevel structural equation modeling showed that employees were more engaged in their work and received higher performance ratings from their leader when leaders used more transformational leadership behaviors, and when employees used more self-leadership strategies. Furthermore, we showed that transformational leadership behaviors were more effective when employees had a high (vs. low) need for leadership and that the opposite was true for employee self-leadership. These findings contribute to our understanding of the role of employees in the transformational leadership process. Copyright © 2015 John Wiley & Sons, Ltd.

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It is well known that transformational leadership behaviors, such as inspiring employees with an optimistic vision of the future and stimulating employees to challenge the status quo, positively affect how well employees perform their work (for a meta-analysis, see, e.g., Wang, Oh, Courtright, & Colbert, 2011). Yet, due to recent changes in ways of working, such as a higher flexibility in work hours and work spaces (e.g., working from home; Baarne, Houtkamp, & Knotter, 2010), it is becoming increasingly common for employees to no longer work under direct supervision all the time. Research on inconsistent leadership suggests that under these circumstances, the generally positive effects of transformational leadership behaviors are reduced (e.g., Mullen, Kelloway, & Teed, 2011). It is therefore important to focus not only on how leaders motivate their employees to perform their work but also on how employees motivate themselves. Are employees always in need of their leader to guide and motivate them or can they do it themselves? In the present study, we examine how both transformational leadership behaviors and employee self-leadership are related to employee engagement and work performance (as rated by the leader). Furthermore, we focus

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on employees' need for leadership as a contextual variable to examine under which conditions (low vs. high need for leadership) either type of leadership is best used.

The present study is unique in that it uses a within-person approach to leadership. Whereas most scholars adopt a between-person view of leadership, highlighting individual differences in leadership "styles" or leader behaviors on average, we adopt the view that leadership behaviors may fluctuate within individuals from day to day (and, hence, from week to week). Even though extraverted individuals are by definition talkative and like to interact with others, extraverts also have days on which they are not able or do not want to be in the center of the attention. Similarly, a leader high on "trait" transformational leadership is likely to inspire employees on any given day and likely to have an eye for employees' individual needs on this day. Yet, even such transformational leaders show different behaviors on different days (Breevaart et al., 2014c; Tims, Bakker, & Xanthopoulou, 2011). For one thing, leaders cannot give individual attention to employees when they do not interact with these employees. In a similar vein, when transformational leaders are in a bad mood, they may not be willing to help individual employees. It is particularly when leaders do inspire and do have individual consideration for employees' needs that these employees may get energized to achieve group goals. Studying leadership as behaviors that may vary over time and situations also has important implications for leadership training and development, complementary to the implications for personnel selection following from the mainstream leadership literature. In the present study, we examine whether changes in leader behavior can explain why even generally engaged and well-performing employees are sometimes less engaged in their work and, as a consequence, do not perform to the best of their abilities.

Our second contribution lies in furthering our understanding of leadership by studying leadership from both a top-down (i.e., transformational leadership) and a bottom-up (i.e., employee self-leadership) perspective. Studying both types of leadership simultaneously is important for several reasons. For example, considering the increased complexity of work and the changing work environment, leaders are required to provide their employees with more decision latitude to decide how and when to perform their work. Also, employees nowadays expect to receive more autonomy from their leader, because they not only work to make a living but also value the quality of working life (Ryan & Deci, 2000; Sirgy, Efraty, Siegel, & Lee, 2001). Furthermore, according to substitutes for leadership theory (Jermier & Kerr, 1997; Kerr & Jermier, 1978), it is important to study characteristics of employees, because they may substitute for effective leadership when, for example, the leader is not around or otherwise unable to guide and motivate employees. We propose that by using self-leadership strategies, employees may substitute for their leaders' personal attention and inspiration.

Finally, most research on transformational leadership and self-leadership focuses on the favorable influence of these types of leadership on employees and/or the organization. Although different contingency theories (e.g., Hersey & Blanchard, 1982; House, 1971) have tried to explain in which situations certain aspects of leadership are more or less effective, characteristics of the employee "seem to have been forgotten as a fruitful area of leadership contingency research" (Yun, Cox, & Sims, 2006, p. 376). Our design enables us to examine how weekly changes in employees' need for leadership are related to the effectiveness of transformational leadership behaviors as well as employees' use of self-leadership strategies. Employees with a high need for leadership rely on their leader to motivate them and to show them how to reach their goals (De Vries, 1997), which is elicited in situations where, for example, employees do not have the confidence to perform a task on their own. Accordingly, it seems likely that employees' use of self-leadership strategies is especially an important substitute for leadership when employees work independently and without their leaders' intervention (i.e., have a low need for leadership).

Theoretical Background

Engaged employees have high levels of energy, are enthusiastic about their work, are able to bounce back from adversity, and feel like time flies when they are working (Schaufeli & Bakker, 2004). The

extent to which employees are engaged in their work fluctuates within persons over a short period of time (e.g., Xanthopoulou & Bakker, 2013), automatically implying that even generally very engaged employees sometimes have an off day. It is important to study these within-person fluctuations in work engagement, because when employees are engaged in their work they are able to direct all their effort and energy into their work, which enables them to perform their work really well. For example, in a sample of Dutch teachers, Bakker and Bal (2010) showed that in the weeks that teachers were more engaged in their work, they showed higher levels of in-role and extra-role performance. In a similar vein, Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009), in a sample of Greek employees working in the fast-food industry, showed that objective financial returns were higher on the days that employees were more engaged in their work. One of the main aims of the current study is to examine what employees, as well as their leaders, can do to increase their daily engagement in their work and, consequently, their job performance.

Transformational leadership

Transformational leaders provide inspiration to their employees, increase the meaningfulness of work, enhance group cohesion, and instill trust in their employees (e.g., Arnold, Turner, Barling, Kelloway, & McKee, 2007; Dirks & Ferrin, 2002; Jung & Sosik, 2002). Bass (1985; 1999) argues that transformational leaders are role models to their employees, communicate an optimistic and desired vision of the future toward their employees, are attentive to the needs and abilities of their employees, and stimulate their employees to think out of the box and to be innovative within a safe environment. Several meta-analyses on trait transformational leadership provide support for the positive effects of transformational leadership on how satisfied employees are with their work (see Judge & Piccolo, 2004) and how well employees perform their work (Dumdum, Lowe, & Avolio, 2002; Wang et al., 2011). Only recently, using diary studies, have researchers shown that transformational leadership behaviors fluctuate within short-term periods (e.g., Breevaart et al., 2014c; Tims et al., 2011). For example, Tims et al. (2011) showed that most of the variance in transformational leadership was attributable to within-leader fluctuations and that employees were more engaged in their work on the days that their leaders used more transformational leadership behaviors. Thus, in addition to the focus on long-term changes in leader behavior, it seems fruitful to study changes in leader behaviors in a shorter time period.

It is likely that employees become more engaged in their work in the weeks that their leaders use more transformational leader behaviors, because in these weeks, employees are inspired by their leaders' optimistic vision of the future, which provides a meaningful rationale for the work that employees perform (Avolio & Yammarino, 2002). This sense of purpose, combined with leaders' reassurance that every employee contributes to the realization of this vision (Seibert, Wang, & Courtright, 2011), makes it likely that employees are more enthusiastic about their work and willing to fully concentrate on their work tasks in these weeks. Furthermore, when leaders use more transformational leadership behaviors, they create a more resourceful work environment (e.g., Breevaart et al., 2014c; Nielsen, Randall, Yarker, & Brenner, 2008; Piccolo & Colquitt, 2006), which is an important requisite for employees to become more engaged in their work (Bakker & Demerouti, 2014; Crawford, LePine, & Rich, 2010; Halbesleben, 2010). Indeed, several studies have shown that employees feel more vigorous, dedicated, and absorbed (i.e., engaged) on the days they are inspired and intellectually stimulated by their leader (e.g., Breevaart et al., 2014c; Tims et al., 2011). On the days and in the weeks that employees are engaged in their work, they are able to direct all their energy toward work, allowing them to perform to the best of their abilities (Bakker & Bal, 2010; Xanthopoulou et al., 2009a, 2009b). Our first hypothesis is novel because it is the first attempt to examine how fluctuations in transformational leadership are related to fluctuations in employee job performance:

Hypothesis 1: Transformational leadership is positively related to employees' leader-rated job performance, through employees' work engagement (all at the week level).

Employee self-leadership

Self-leadership is a self-influence process that people use to guide and motivate themselves to behave and perform in desirable ways (Manz, 1986; Manz & Neck, 2004). Self-leadership stems from the larger theoretical framework of self-regulation (Carver & Scheier, 1981; 1998). Whereas self-regulation theory tries to explain why people behave the way they do and acknowledges possible dysfunctions in self-regulation, self-leadership theory specifies behavioral and cognitive strategies that people may use to enhance their self-regulatory effectiveness. These strategies can be divided into three categories. First, behavior-focused strategies are used to stimulate desirable behaviors and at the same time suppress undesirable behaviors, in order to achieve successful job performance (e.g., rewarding or correcting oneself when performing well or poorly). Next, natural reward strategies are aimed at increasing motivation by the inherently rewarding aspects of a task. This can be achieved by either/or including more enjoyable aspects in a certain activity or redirecting attention toward the more enjoyable aspects of a certain activity. For example, a postwoman may listen to her favorite music while delivering the mail or focus her attention on being outside. Finally, constructive thought pattern strategies refer to strategies that create and maintain constructive thought patterns, including positive self-talk, mental imagery of successful performance, and awareness and substitution of dysfunctional beliefs and assumptions.

Self-leaders are said to experience more self-determination, purpose, and a sense of ownership over their work, which may be linked to positive outcomes such as self-efficacy, job satisfaction, and productivity (for reviews, see Neck & Houghton, 2006; Stewart, Courtright, & Manz, 2011). For example, research shows that self-management (i.e., behavioral-focused strategies) training is related to better subjective and objective job performances in insurance salespeople (Frayne & Geringer, 2000) and higher job attendance (Latham & Frayne, 1989). Furthermore, in a sample of undergraduate students, Prussia, Anderson, and Manz (1998) showed that self-leadership increased performance (i.e., exam, written assignment, and oral presentation) because it enhanced students' self-efficacy.

Originally, Manz and Sims (1980) proposed self-leadership as a substitute for formal leadership. However, most research has focused exclusively on employee self-leadership and has not examined the role of external leadership. A notable exception is the study by Yun et al. (2006), which showed that employees' use of self-leadership is influenced by their leaders' behavior. Using a two-wave panel design, Yun and colleagues showed that empowering and directive leadership influenced employees' self-leadership in a positive and negative way, respectively. Furthermore, empowering leadership had a stronger positive effect and directive leadership had a stronger negative effect, when employees were high on the need for autonomy. In the present study, we try to detangle transformational leadership behaviors by the external leader from employees' self-leadership and investigate the unique contribution of each type of leadership to explain variance in engagement and performance.

Self-leadership strategies are known to vary within persons over short time periods. In a sample of 72 maternity nurses, who filled out an online diary for five workdays, Breevaart, Bakker, and Demerouti (2014a) found that employees were more engaged in their work on the days that they monitored their own behavior, worked with self-set goals, and used reminders to help them focus on what they wanted to achieve. We know that people use self-leadership strategies to enhance their self-regulatory effectiveness. When on a diet, strategies such as rewarding oneself when doing well and telling oneself "I can do this" may help to stick with the diet, yet having a bad day or going to a birthday celebration of a loved one may cause temporary self-regulatory failure. In a similar vein, it seems likely that employees may sometimes use more or less self-leadership strategies, for example when workload is high or when employees have a conflict with one of their colleagues.

At the core of self-leadership is the feeling of self-control and self-determination (Manz, 1986; Neck & Houghton, 2006), and we know from the literature that employees become more engaged in their work on the days that they have more control over how and when to perform their work (see Breevaart et al., 2014c; Xanthopoulou et al., 2009). Furthermore, feelings of control and self-determination are requisites for employees to make changes in their job and consequently become more engaged in their work (Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012;

Tims, Bakker, & Derks, 2013). Also, self-leadership is about creating positive thoughts about work, focusing on the intrinsically rewarding aspects of the job and extrinsically rewarding oneself when performing the job well, which gives meaning to the job. It is therefore likely that employees become more vigorous, dedicated, and immersed in their work in the weeks that they use more self-leadership (Wrzesniewski & Dutton, 2001). As mentioned previously, we know that employees receive higher job performance ratings during days and weeks they are more engaged in their work (Bakker & Bal, 2010; Xanthopoulou et al., 2009). To our knowledge, we are the first to examine whether changes in the use of self-leadership strategies are related to changes in both feelings of engagement and leader ratings of job performance.

Hypothesis 2: Self-leadership is positively related to employees' leader-rated job performance, through employees' work engagement (all at the week level).

Need for leadership

Hitherto, we argued that both weekly transformational leadership behaviors and employees' weekly self-leadership strategies are positively associated with how engaged employees are in their work and how well they perform their work. An important question that we try to answer is when, under which circumstances, either one of these types of leadership is more or less effective. We propose that transformational leadership behaviors may be more effective in those weeks that employees have a high need for leadership, whereas self-leadership may be more effective in those weeks that employees have a low need for leadership. Need for leadership is an employee characteristic that refers to the extent to which employees wish for guidance toward individual, group, and/or organizational goal achievement by their leader (De Vries, 1997). Need for leadership is not a basic need, but rather a need that is evoked by circumstances (i.e., a contextual need; De Vries, 1997). For example, employees may have a higher need for leadership when they feel insecure or lack a needed competence to perform a certain task. In these situations, employees may wish their leader to intervene and help them to achieve their work goals.

When employees have a low need for leadership, for example in the weeks that they work on routine tasks or have a high sense of self-efficacy because of the successful completion of a difficult task, they act more independently and do not respond to interventions by their leaders (De Vries, Roe, & Taillieu, 1998). Employees rely more heavily on interventions by their leader when they are high in their need for leadership, for example, in the weeks that they work toward an important deadline or start working on something new. Accordingly, it seems likely that self-leadership strategies are less motivating to employees in the weeks that they are high in their need for leadership. In these weeks, employees need their leader to guide them toward goal achievement, which makes it likely that self-leadership strategies are less effective. Rather, transformational leadership behaviors may be more effective, because when employees are high (vs. low) in need for leadership they rely more heavily on their leader and are therefore more receptive to their leaders' behaviors. On the other hand, in the weeks that employees have a low need for leadership, transformational leadership behaviors may be less motivating, because under these circumstances, employees do not respond to interventions by their leader. Thus, in the weeks that employees are low in their need for leadership, self-leadership strategies may be more effective, because in these weeks, employees are able to work more independently.

Need for leadership has not often been studied as a contingency of leadership. A notable exception is the survey study by De Vries et al. (1998), in which they showed that charismatic leadership had stronger effects on employees' job satisfaction and organizational commitment when employees were high in their need for leadership. Another exception is the survey study by Breevaart, Bakker, Demerouti, Sleebos, and Maduro (2014b), showing that transformational leadership was positively related to employees' basic need fulfillment (i.e., autonomy, competence, and relatedness), especially when employees had a high need for leadership. In

line with our arguments, we formulate our final two hypotheses (see Figure 1 for the proposed overall model):

Hypothesis 3a: The relationship between transformational leadership and employee work engagement is moderated by employees' need for leadership, such that the relationship is stronger when employees are high (vs. low) in their need for leadership (all at the week level).

Hypothesis 3b: The relationship between self-leadership and employee work engagement is moderated by employees' need for leadership, such that the relationship is stronger when employees are low (vs. high) in their need for leadership (all at the week level).

Method

Participants and procedure

Dyads consisting of one leader and one employee were asked to fill out a short questionnaire at the end of each working week, for a period of five weeks. They received an e-mail at the end of every week with an invitation to go to the online questionnaire. The participants were recruited by two employed research assistants, who had just finished their psychology master's, and by the first author of this paper. The quality of the data collected by the research assistants was guarded by providing them with texts that were prescribed by the authors, explaining the aims of the study and the registration procedure, and by explaining and acknowledging the difficulty of the data collection (Demerouti & Rispens, 2014). Participants were approached through the human resources departments of different companies and through the research assistants' personal contacts, which likely increased the heterogeneity of our sample and, consequently, the generalizability of our results (Demerouti & Rispens, 2014). Dyads that were willing to participate could register in two ways: (1) by sending an e-mail to the first author or (2) by filling out an online questionnaire requesting only the e-mail addresses of the leader and the employee. In this way, dyads could be given a unique code that allowed us to identify the leader and employee belonging to the same dyad and to identify the different questionnaires filled out over several weeks by the same individual. All questionnaires were filled out by the employees, except for the questionnaire regarding employees' job performance, which was filled out by the leaders every week. All participants had a chance of 1 in 25 to win a tablet computer if both employee and leader filled out the questionnaires.

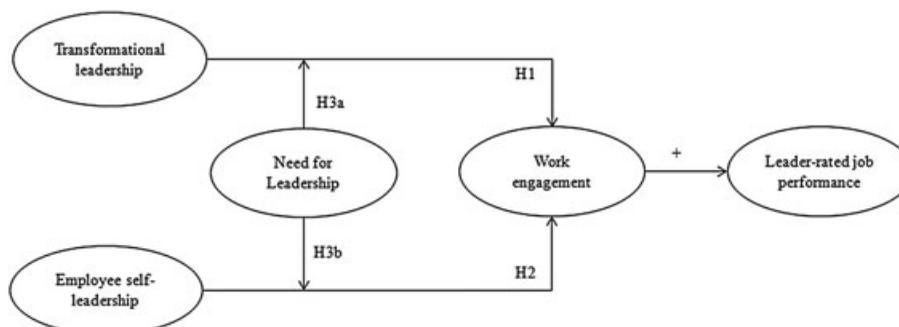


Figure 1. Hypothesized weekly leadership model

Our final sample consisted of 57 unique employee–leader dyads. We discarded 34 dyads from our original sample ($N=91$ dyads), because either one person or both persons within the dyad did not fill out the questionnaires or filled out the questionnaire only once. The employee sample consisted of 24 men and 33 women with a mean age of 38.47 (ranging from 19 to 60; $SD=11.19$). About half of the employees (54.4 percent) were highly educated, and most employees were either married or cohabiting (73.7 percent). On average, employees had 17.33 years ($SD=11.26$) of work experience, of which they worked 8.31 years ($SD=7.18$) in the current organization. About half of the leaders who participated in our study were men (52.63 percent). Leaders' mean age was 35.41, ranging from 21 to 59 ($SD=10.65$). Most of the leaders were highly educated (75.1 percent) and either married or cohabiting (85.7 percent). The dyads in our study were working together for 4.40 years on average ($SD=4.45$), and most worked in the business service or the healthcare sector (56.1 percent).

Measures

All questionnaires are adapted versions of existing questionnaires. Specifically, we adapted the time frames of the questions, so that they referred to the week and could be used to measure our study variables on a weekly basis (cf. Ohly, Sonnentag, Niessen, & Zapf, 2010). All questions could be answered on a 7-point scale, ranging from 1 (*totally disagree*) to 7 (*totally agree*).

Week-level perceptions of transformational leadership were measured using the 15 items from the Dutch version of the Multifactor Leadership Questionnaire (Bass & Avolio, 1990; Stuart, 2005). Example items are “This week, my leader served as my role model” and “This week, my leader stimulated me to solve my own problems.”

Week-level self-leadership was measured with the six-item self-leadership questionnaire developed by Yun et al. (2006). Example items are “This week, I assumed responsibilities on my own” and “This week, I took initiatives on my own.”

Week-level need for leadership was measured with the 17-item need for leadership scale by De Vries, Roe, and Taillieu (2002). Some example items are “This week, I needed my supervisor to set goals” and “This week, I needed my supervisor to help solve problems.”

Week-level work engagement was measured using the nine-item version of the Utrecht Work Engagement Scale (Schaufeli, Bakker, & Salanova, 2006). Example items are “This week, I felt bursting with energy” (vigor), “This week, I was inspired by my job” (dedication), and “This week, I was immersed in my work” (absorption).

Week-level leader-rated job performance was measured using the seven items developed by Williams and Anderson (1991) to measure task performance. Example items are “This week, my employee adequately completed assigned duties” and “This week, my employee performed tasks that were expected of him/her.”

Strategy of analysis

We used MPLUS software to test our multilevel, structural equation models (Muthén & Muthén, 1998–2010). Since we repeatedly measured our study variables within the same individuals, we have a two-level design, with weeks ($N=285$) nested within individuals ($N=57$). The intraclass correlations (ICCs) showed that most variance in our predictor variables was explained at the week level, ranging from 50.3 percent in need for leadership to 57.4 percent in transformational leadership (Table 1). The variance explained at the week level in our outcome variable, job performance, was 38.5 percent. We used the MPLUS “TYPE = COMPLEX” option to partial out the variance attributable to between-person differences (i.e., baseline levels of all state variables across five weeks) and analyzed our data on the within-person (i.e., week) level. Finally, we used the software developed by Dawson and Richter (2006) to plot our moderation effects.

Table 1. Means, standard deviations, intraclass correlations, inter-correlations, and internal consistencies (Cronbach's alphas on the diagonal) between the study variables ($N=57$ dyads, $N=285$ weeks).

	<i>M</i>	<i>SD</i>	ICC (%)	1.	2.	3.	4.	5.
1. Weekly transformational leadership	4.47	0.98	57.4	(.79–.99)	-.03	.36***	.51***	.09
2. Weekly self-leadership	5.81	0.85	57.2	-.02	(.84–.99)	-.58***	.25**	.21*
3. Weekly need for leadership	3.19	1.32	50.3	.36***	-.47***	(.83–.89)	-.07	-.29**
4. Weekly work engagement	4.86	0.96	55.9	.41***	.19***	-.03	(.81–.86)	.12
5. Weekly job performance	5.78	.76	38.5	.13*	.16***	-.13	.06	(.73–.93)

Note: Correlations below the diagonal are correlations on the between (person) level, and correlations above the diagonal are correlations on the within (week) level.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Results

Descriptive statistics

Table 1 shows the within-person and between-person correlations, means, standard deviations, and internal consistencies of our study variables averaged over five weeks, as well as the ICCs. Person means (i.e., averaged over five weeks) in transformational leadership behaviors ranged from 2.64 to 5.69 and from 4.40 to 6.97 in self-leadership strategies.

Measurement model

First, we tested our measurement model to examine the construct validity of our study variables. This model consisted of five latent variables and their indicators: transformational leadership (five dimensions: attributed charisma, idealized influence, inspirational motivation, intellectual stimulation, and individual consideration; three items each), self-leadership (two indicators using item parceling, three items each), need for leadership (five items), work engagement (three dimensions, three items each), and job performance (seven items). Although this model fitted well to our data, two of the seven job performance measures did not load significantly on the intended factor. Examining these items revealed that these were the reversed-formulated job performance items. Dalal and Carter (2014) have recently argued and shown that negatively worded items often have another meaning than positively worded items and therefore have a negative impact on the validity of measurement instruments. We therefore decided to test an alternative measurement model, whereby we removed the two reversed job performance indicators. The new five-factor model showed a satisfactory fit to the data ($\chi^2(160)=293.82$; CFI=0.93; RMSEA=0.05; SRMR=0.08), and all indicators loaded significantly on the intended factor ($p < .001$). The internal consistencies of our study variables range from acceptable to good across the weeks (Table 1).

Mediation hypotheses

We continued by testing Hypotheses 1 and 2. Hypothesis 1 states that weekly transformational leadership is positively related to employees' weekly job performance through employees' weekly work engagement. Results from our multilevel structural equation modeling showed that weekly transformational leadership was indeed positively related to employees' weekly work engagement ($b^*=0.52$, $SE=0.08$, $p < .001$, 95 percent CI

[0.40, 0.65]) and employees' weekly work engagement was positively related to employees' weekly leader-rated job performance ($b^* = 0.21$, $SE = 0.09$, $p < .01$, 95 percent CI [0.06, 0.35]). Finally, there was a significant indirect effect; weekly transformational leadership was positively related to employees' weekly job performance, through employees' weekly work engagement ($b^* = 0.11$, $SE = 0.05$, $p < .05$, 95 percent CI [0.03, 0.19]), thereby supporting Hypothesis 1.

Hypothesis 2 states that weekly self-leadership is positively related to employees' weekly job performance through employees' weekly work engagement. Weekly self-leadership was positively related to employees' weekly work engagement ($b^* = 0.27$, $SE = 0.09$, $p < .01$, 95 percent CI [0.12, 0.43]), and employees' weekly work engagement was positively related to employees' weekly job performance ($b^* = 0.21$, $SE = 0.09$, $p < .01$, 95 percent CI [0.06, 0.35]). Thus, during the weeks that employees used more self-leadership strategies, they were more engaged in their work, and during the weeks that employees were more engaged in their work, they performed their work better (b^* indirect effect = 0.06, $SE = 0.05$, $p < .05$, 95 percent CI [0.01, 0.11]). These results offer support for Hypothesis 2. Our structural mediation model shows a good fit to the data ($\chi^2(86) = 135.04$; CFI = 0.97; RMSEA = 0.05; SRMR = 0.07). Together, both types of leadership explain 33.5 percent of the variance in employees' weekly work engagement and consequently, 4.3 percent in employees' weekly job performance.

Moderation hypotheses

Hypotheses 3a and 3b state that the relationship between weekly transformational leadership (H3a) and weekly self-leadership (H3b) on the one hand and employees' weekly work engagement on the other hand is moderated by employees' weekly need for leadership. The results were in line with Hypothesis 3a, showing that the relationship between weekly transformational leadership and employees' weekly work engagement was stronger when employees' need for leadership was higher (interaction effect: $b = 0.17$, $SE = 0.07$, $p < .01$, 95 percent CI [0.05, 0.29]). As can be seen in Figure 2, transformational leadership is positively related to employees' work engagement during the weeks in which employees have a high need for leadership. Moreover, consistent with Hypothesis 3b, the positive relationship between weekly self-leadership and employees' weekly work engagement was stronger when employees' need for leadership was lower (interaction effect: $b = -0.13$, $SE = 0.06$, $p < .05$, 95 percent CI [-0.23, -0.03]; Figure 3). Self-leadership is mainly positively associated with employees' work engagement in those weeks that employees have a low need for leadership. Finally, we compared the model with the interaction terms to the model without the interaction terms. Because the fit indices regularly used to assess the fit of structural equation models

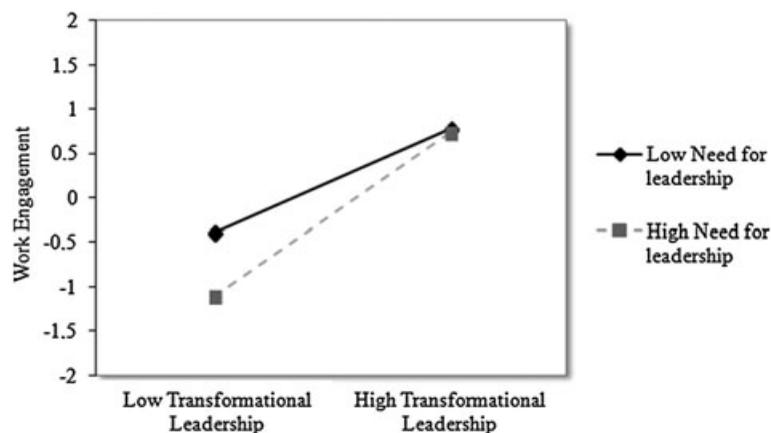


Figure 2. Weekly need for leadership as a moderator of the relationship between weekly transformational leadership behavior and weekly work engagement

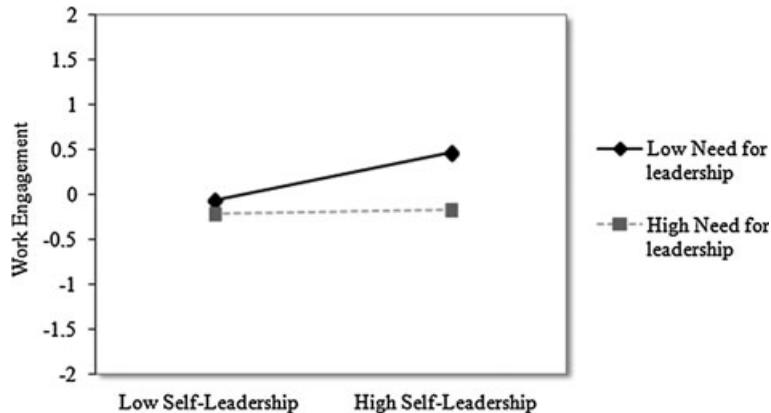


Figure 3. Weekly need for leadership as a moderator of the relationship between weekly self-leadership and weekly work engagement

(e.g., CFI, RMSEA) are not yet available for latent moderated structural equations, we used the $-2\log$ -likelihood difference test to examine whether the model without the interactions (Model 0) represents a loss in fit compared to the model including the interactions (Model 1). We found that the null model represents a significant loss in fit compared to the alternative model ($\Delta-2\log$ -likelihood(2) = 11.99; $p < .001$), indicating that the model including the interactions fits our data best.

Discussion

Research on transformational leadership behaviors is very much leader centered, and the role of employees remains underexplored. Furthermore, transformational leadership behaviors are often considered as rather stable, while there is evidence suggesting that dynamic leadership behaviors and dynamic relationships with outcomes are a fruitful research area (e.g., Bledow et al., 2011; Tims et al., 2011). In response to these concerns, we focused on the dynamic part of leadership from both top-down (i.e., transformational leadership) and bottom-up (i.e., self-leadership) perspectives and examined employees' need for leadership as a contingency of both types of leadership.

Transformational leadership and employee self-leadership

Our study shows that employees are not just passive recipients of leadership but are active agents in the leadership process. That is, employees can take the lead by using strategies such as consciously focusing on the rewarding aspects of a task and correcting themselves when performing poorly (i.e., self-leadership). In those weeks that employees take the lead, they are more likely to become engaged in their work, and when employees are more engaged in their work, they perform their work better. Originally, Manz and Sims (1980) proposed self-leadership as a substitute for leadership. In line with this reasoning, we show that employees may use several self-leadership strategies to become motivated when their leader is not around or does not optimally use transformational leadership behaviors.

Although the concept of self-leadership stems from the late 1980s (Manz, 1983, 1986), empirical evidence for the effectiveness of self-leadership is slowly building. According to the most recent review on self-leadership (Stewart et al., 2011), over the last three decades, only 10 studies have examined how self-leadership is related to individual-

level outcomes. These studies show, for example, that self-leadership strategies are positively related to employees' self-efficacy (e.g., self-management; Latham & Frayne, 1989) and job satisfaction (e.g., though self-leadership; Neck & Manz, 1996) and negatively related to employees' absenteeism (e.g., self-management; Frayne, & Latham, 1987). In a similar vein, clearly illustrating the effectiveness of self-leadership, we showed that employees are more engaged in their work in the weeks that they use more self-leadership strategies. These results are interesting not only from a theoretical point of view but also from a practical point of view. Due to the changing work environment, employees are increasingly required to work independently, for example, when working from home or when working in an autonomous team. Under these circumstances, where a leader is not always around, employees may especially benefit from the use of self-leadership strategies.

Need for leadership as a contingency of leadership

We showed that transformational leadership behaviors and employee self-leadership are beneficial to both employees (i.e., higher work engagement) and organizations (i.e., higher job performance). Yet, we showed that either one of these two types of leadership may be more effective, depending on the week. Specifically, transformational leadership behaviors seem to be more effective in those weeks that employees have a high need for leadership—that is, when they need their leader to guide them toward goal achievement—whereas the opposite is true for self-leadership. That is, self-leadership seems to be more effective in those weeks that employees do not need guidance and inspiration from their leader (i.e., have a low need for leadership). These results are meaningful for the leadership literature, because characteristics of the employee remain an underexplored area of leadership contingency research (Yun et al., 2006). Even more so, transformational leadership is generally considered to be an effective way to lead. However, it seems that transformational leaders' inspirational and challenging behaviors are less likely to affect employees when employees have a low need for leadership, for example, when they work on a routine task or feel very competent.

Dynamic part of leadership

It is well known that transformational leaders are valuable to organizations, because they are successful in stimulating their employees to perform their work well (Wang et al., 2011). Although it is generally agreed that leaders use different types of behaviors to lead their employees, dynamic leadership behaviors and their impact are very rarely empirically studied. Transformational leadership behaviors are most often studied at one single point in time or at multiple points in time with a significant time lag (see meta-analyses by Dum Dum et al., 2002; Judge & Piccolo, 2004; Wang et al., 2011). The underlying assumption in these between-person studies is that leaders generally and consistently show certain stable levels of transformational leadership behaviors and they neglect to focus on differences within the same leader over time (within-person differences). Thus, a daily, within-person approach of life in general and of organizational behavior in particular is much more realistic than a between-person approach that lumps all the behaviors shown on different days together and looks at the averages. One could even argue that daily transformational leadership may be more powerful in engaging employees for leaders who are generally low on transformational leadership, because such leaders would suddenly offer inspirational resources that employees can use to become enthusiastic.

We argue that the dynamic part of leadership deserves more research attention. By looking at the temporal patterns of leadership behaviors, important questions such as “When do individuals use transformational and/or self-leadership,” “How do fluctuations in leadership influence employee outcomes,” and “Under which circumstances (e.g., high versus low need for leadership) are certain leadership behaviors more or less effective” can be answered. Whereas other diary studies on leadership (e.g., Breevaart et al., 2014c; Tims et al., 2011) were focused on daily fluctuations in leadership behaviors, in our study, we looked at weekly fluctuations. Why look at weeks and not

days? Having performed several daily diary studies on leadership, we often ran into difficulties with the analyses because of the frequently missing data. That is, many employees do not get into contact with their leader every day for different reasons (e.g., employee or leader working part-time, leader working at multiple locations, and increased flexibility in work hours and work spaces), which has also stimulated us to examine what employees can do themselves when their leader is not around (i.e., self-management). In order to be able to examine states as accurately as possible, we therefore decided to perform a weekly diary study instead of a daily diary study.

In the present study, we show that both transformational leadership behaviors and employees' use of self-leadership strategies fluctuate from week to week, indicating that the extent to which people use these types of leadership varies within the same person. In fact, most of the variance in both types of leadership was explained at the week level: 57.4 percent in transformational leadership and 57.2 percent in employee self-leadership. Moreover, both types of leadership have different effects, depending on the week. Put differently, employees are more engaged in their work and consequently perform their work better in those weeks that they use more (compared to less) self-leadership and their leaders use more transformational leadership behaviors. Interestingly, our weekly approach of leadership is different from but consistent with situational leadership theories: leaders show lower or higher levels of transformational leadership depending on the situation or the employee—which is also suggested by our interaction effects with need for leadership and self-leadership.

Practical implications

Comparing the relative contribution of transformational leadership and employee self-leadership shows that behaviors by the leader are more strongly related to how employees feel and behave at work than employees' use of self-leadership strategies. Yet, we argue that it is important to invest not only in leadership training for the formal leaders within an organization but also in (self-)leadership training for employees. On the one hand, employees are challenged to become more proactive and to motivate themselves to do their job in a different work environment, for example, when they work from home without the possibility to talk to colleagues or their leader face-to-face. Leaders, on the other hand, are also faced with new challenges, because they are responsible for the work that their employees perform, but they are not always around to make sure that employees are motivated to do their job and perform their work well. Training employees how to use different self-leadership strategies provides them with tools to become more engaged in their work, which they may use for example, in those weeks that they do not frequently interact with their leader. That is, even though formal leaders are best suited to motivate and guide their employees and can influence many employees, by training employees how to motivate themselves, organizations maximize their chances of having an engaged and well-performing workforce, because employees can arrange for themselves what they need to excel in a given situation.

Research has shown that transformational leadership, as well as self-leadership, can be learned. For example, Barling, Weber, and Kelloway (1996) showed that leaders receiving transformational leadership training were considered to be more intellectually stimulating, charismatic, and individually considerate by their employees at T2 compared to T1 and compared to the no-training group. Neck and Manz (1996) showed that, compared to the control group, the self-leadership training group scored higher on opportunity thinking, job satisfaction, and positive affect and lower on negative affect. However, when offering employees the opportunity to engage in a self-leadership training, it is important to stress why they need this training, because Steward, Carson, and Cardy (1996) showed that employees who believe they need self-leadership training are more motivated and therefore benefit more from the training.

Our results imply that the use of transformational leadership behaviors may be more effective when employees have a high need for leadership, whereas employees' self-leadership is more beneficial when employees have a low need for leadership. De Vries et al. (2002) argue that certain contexts, such as those with a low degree of competence, limited autonomy, and little feedback, may evoke a high need for leadership. Thus, to optimize employees' work engagement and job performance, it may be best when leaders use more transformational leadership behaviors

under circumstances that evoke a high need for leadership. For example, leaders should use transformational leadership behaviors especially in the weeks that employees are working on a new task (i.e., low feeling of competence) or have a strict deadline (i.e., restricted autonomy). On the contrary, in those weeks that employees feel competent, have high levels of autonomy, and/or receive a sufficient amount of feedback from their tasks, employees may use self-leadership strategies to stay engaged in their work.

Limitations and implications for future research

As with every study, the present study is not without limitations. Despite the strength of our weekly diary design, we cannot rule out reversed causality. It is possible, for example, that engaged employees use more self-leadership strategies, because engaged employees show more proactive behaviors (e.g., Sonnentag, 2003). However, we consciously chose this particular design, because we were interested in weekly fluctuations in transformational leadership and self-leadership and their relationship with fluctuations in employees' work engagement and job performance. It would be interesting for future research to examine gain cycles of self-leadership and work engagement, for example, by looking at how self-leadership in one week influences work engagement in the next week, how work engagement influences self-leadership in the next week, and so on.

We showed that both employees and leaders are able to contribute to employees' feelings of work engagement. Yet, more research is needed to shed light on the interplay between transformational leadership behaviors and employee self-leadership. While Yun et al. (2006) showed that empowering and directive leadership respectively enhanced or reduced employees' use of self-leadership, we found a small and non-significant correlation between transformational leadership and employee self-leadership (i.e., -0.03). This is not surprising, considering that although transformational leaders are known to empower their followers by increasing employees' identification with the work group, they are also known to increase dependence on the leader by increasing followers' identification with the leader (Kark & Shamir, 2003). Therefore, transformational leaders do not necessarily stimulate followers to use self-leadership strategies. This means that both types of leadership behaviors occur independently and are shown by different people (i.e., the leader and the employee). In addition to constructive leadership behaviors, future research should also look at the interplay between destructive leadership behaviors and employee self-leadership. Destructive leadership behaviors, such as passive-avoidant leadership, are known to be detrimental to employees' well-being (for a meta-analysis, see Heiman, Vincent-Höper, Gregersen, & Nienhaus, 2014), and it would be interesting to see whether self-leadership can buffer the negative impact of destructive leadership on employees' work engagement.

In our study, we focused specifically on transformational leadership behaviors. Yet, it is likely that leaders also use other behaviors (e.g., more task-oriented behaviors) besides transformational leadership behaviors. For example, research on inconsistent leadership shows that the positive outcomes of transformational leadership are diminished when alternated with passive leadership (e.g., Mullen et al., 2011). Could employee self-leadership buffer these negative effect of inconsistent leadership on employee outcomes? Regarding need for leadership, De Vries et al. (1998) showed that task-oriented leadership contributes to employees' job stress, especially for employees who have a low need for supervision. The work stress of employees with a high need for leadership was not affected by their leaders' task-oriented behaviors. So it seems that when high in their need for leadership, employees benefit from their leaders' people-oriented behaviors (e.g., transformational leadership) and are unaffected by their leaders' task-oriented behaviors. On the other hand, it seem that employees are unaffected by their leaders' people-oriented behaviors and even negatively affected by their leaders' task-oriented behaviors when they are low in their need for leadership. Following this reasoning, it seems likely that inconsistent leadership is especially detrimental to employees when they have a low need for leadership.

Despite its limitations, our study has several strengths. First, we used both self-ratings and other-ratings, reducing the impact of common method variance on our results. Specifically, we asked employees to rate their use of self-leadership behaviors and feelings of engagement, because these are private experiences that are best assessed by employees themselves, and we asked leaders to rate their followers' job performance. Furthermore, we focused on

follower perceptions of their leaders' transformational leadership behaviors, because it is highly unlikely that these transformational leadership behaviors have an impact on followers' feelings and behavior at work when they are not perceived as such.

Furthermore, rather than targeting one or two specific organizations, we mainly recruited participants through personal contacts. Doing so increases the likelihood of a heterogeneous sample, which may raise questions about the generalizability of our findings. We therefore compared our sample to the Dutch working population on characteristics such as gender, age, and education and found that the characteristics of our sample generally match those of the Dutch working population (Centraal Bureau voor de Statistiek, 2014). Given our interest in the Dutch working population, a population with diverse characteristics (e.g., variety of jobs), the heterogeneity of our sample may be considered a strength rather than a limitation (Demerouti & Rispens, 2014).

Conclusion

Who takes the lead? The present study shows that transformational leadership and self-leadership both have a positive relationship with employee work engagement and performance, on a weekly basis. This means that both leaders and employees can take the lead. During weeks that leaders inspire their employees and stimulate them intellectually, employees are more dedicated to their work and perform better. During weeks that leaders are not available, employees can use self-leadership strategies to motivate themselves and perform well. Need for leadership qualifies these relationships: during weeks that employees are challenged and really need their leaders, transformational leadership is most effective. During other weeks, in which employees are less dependent on their leader, employees may take the lead themselves.

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