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#### **ORIGINAL PAPER**



# What Does Leadership Do to the Leader? Using a Pattern-Oriented Approach to Investigate the Association between Daily Leadership Profiles and Daily Leader Well-Being

Lennart Poetz<sup>1</sup> · Judith Volmer ·

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#### **Abstract**

Leader behavior can vary daily, and leaders face multiple demands and problems in one day. Therefore, studying how leader behaviors interplay on the day-level (i.e., daily leadership profiles) is essential. Building on conservation of resources theory as a meta-theory, we investigated which daily leadership profiles exist and whether profile membership changes across one week. Additionally, we examined whether the leadership profiles are differentially related to leaders' daily well-being (i.e., emotional exhaustion, positive and negative affect), mediated by their daily experienced thriving and time pressure. In a diary study over five workdays (N=289 leaders), we found three qualitatively different daily leadership profiles: one dominated by passive behaviors (*passive*), one dominated by transformational and contingent reward behaviors (*transformational-rewarding*), and one with elevated transformational and all transactional behaviors (*comprehensive*). The *transformational-rewarding* and the *comprehensive profile* showed greater stability across the week than the *passive profile*. Days in the *transformational-rewarding profile* were most beneficial for leaders' well-being. In contrast, days in the *comprehensive profile* seemed to be a double-edged sword for leaders, as indicated by higher experienced thriving and positive affect and simultaneously enhanced experienced time pressure, emotional exhaustion, and negative affect. Taken together, we illuminate the interplay of leadership behaviors on the day-level and the differential associations with leaders' well-being.

Keywords Leadership · Well-being · Time pressure · Thriving · Latent profile analysis · Daily diary study

Leadership behavior can vary from day to day (Kelemen et al., 2020), as leaders complete different tasks every day and followers ask for varying daily requirements. Research has shown that leadership profiles (i.e., the combination of different leadership behaviors within one leader) exist and differ between persons (e.g., Arnold et al., 2017; Doucet et al., 2015). Additionally, these leadership profiles are differentially related to leaders' well-being (Arnold et al., 2017). However, the nature of within-person leadership profiles

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and their association with leader well-being remains unclear. This gap overlooks the complexity of this relationship from both a theoretical and a practical perspective.

Theoretically, it is not taken into account that both leadership (Kelemen et al., 2020) and well-being (Podsakoff et al., 2019; Sonnentag, 2015) vary substantially within persons (e.g., from day to day). This lack of within-person research is concerning because between- and within-person effects tap into different research questions and do not always yield the same findings (McCormick et al., 2020). Therefore, a within-person approach considering short-term processes of leadership and well-being can help expand our understanding of how leaders behave at work on a daily basis and how this affects the leaders themselves. Practically, our study provides implications for the design of leadership interventions to address leaders' everyday leadership routines.

With our day-level and pattern-oriented approach, we offer a new perspective on leadership based on recent



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research on the daily variability of leadership (Kelemen et al., 2020). We assume that leaders will likely exhibit different leadership *profiles* on different days. By leadership profiles, we mean a combination and interplay of different leadership behaviors present within one leader. Our day-level approach complements a stable between-person perspective that focuses on the particular cluster of behaviors leaders show most of the time (i.e., more general and persistent leadership profiles). In contrast to the between-person approach, we are interested in the within-person perspective, comparing a leader's behavior on one day with the same leader's behavior on another day.

For example, there might be a day when a leader primarily demonstrates transformational and contingent reward behaviors. On this day, the leader would belong to Profile A (e.g., a profile called *transformational-rewarding*). On another day, the same leader might show only low to medium levels of transformational and transactional behaviors but also medium levels of laissez faire behaviors. On this day, the leader would belong to Profile B (e.g., a profile called *passive*). Therefore, we do not aim to draw conclusions on, for example, transformational-rewarding versus passive leaders per se (as this would imply a stable perspective on leadership). Instead, we compare days a leader belongs to one profile with days the same leader belongs to another profile.

We contribute to existing research by combining three recent streams in the field of leadership: a pattern-oriented approach, a day-level approach, and one focusing on leadercentered outcomes. First, we move beyond existing leadership research by focusing on multiple leadership behaviors in conjunction within one person and one day. In this way, we can compare between-person profiles found previously (e.g., Arnold et al., 2017) to the within-person profiles of our study. This comparison helps to extend our knowledge of leadership as we can show either that the between-person profiles are comparable to the within-person profiles (i.e., homology across levels) or that the within- and betweenperson level profiles differ from each other – both of which would be central new insights. Additionally, by investigating whether profile membership is dynamic (i.e., shows day-today variation) or relatively stable across the week, we gain deeper insight into the number and variability of profiles for leaders across the week. Such a research question gives further insight into leaders' daily leadership behaviors and cannot be answered with between-person designs (Arnold et al., 2017).

Second, we investigate whether the daily leadership profiles are differentially associated with work-related leader outcomes. Previous day-level leader-centered research has shown that leadership is related to leader well-being (Lanaj et al., 2016; Liao et al., 2020). However, these studies

focused only on single leadership behaviors in isolation and thus did not consider that leaders may use several leadership behaviors within one day. In our study, we add an important aspect to the studies mentioned above: we acknowledge that the associations of certain leadership behaviors with leaders' well-being can differ depending on the co-occurrence with other leadership behaviors on the same day. This approach allows us to address the question of whether a leader reports greater well-being on a day they belong to Profile A compared to a day they belong to Profile B. Answering this question is also crucial as it can help clarify on the day-level how the leadership pattern that was argued to be most beneficial for followers (i.e., the combination of transformational and transactional elements; Avolio, 2011) is related to daily leader well-being.

The associations between leadership profiles and wellbeing are not necessarily the same on the between-person and within-person level (McCormick et al., 2020). For example, the short-term processes might look different than the long-term processes. Based on conservation of resources theory (COR theory, Hobfoll, 1989), individuals need to invest resources to keep existing or gain additional resources. Specifically, leaders who generally belong to a profile dominated by transformational behaviors are likely to profit from these leadership behaviors in the long run, as transformational leadership is associated with multiple beneficial outcomes (Wang et al., 2011). At the same time, transformational behaviors are resource-intensive (Lin et al., 2019). Therefore, leaders need to invest resources in their behavior first, which makes a short-term resource loss likely. This example shows that even though the relationship with leader well-being might be positive on the betweenperson level, it still can be negative on the within-person level. Therefore, our focus on the within-person association of daily leadership profiles and daily leader well-being is a crucial extension of existing between-person research.

Third, we examine affect and emotional exhaustion as indicators of leader well-being. These indicators of well-being are important to study as both affectivity (e.g., Joseph et al., 2015) and the depletion of energy resources (i.e., emotional exhaustion; Arnold et al., 2015, 2017; Byrne et al., 2014) have been argued to be relevant in the context of leadership and leaders' well-being. Investigating affective (i.e., positive and negative affect) and strain-based (i.e., emotional exhaustion) well-being allows us to better understand the fine-grained associations of leadership and leader well-being. Specifically, it helps to account for the potential double-edged nature of the same leadership behaviors for leaders' well-being, depending on the well-being indicator.

In line with COR theory and previous studies (Arnold et al., 2017; Kaluza et al., 2020; Lin et al., 2019; Zwingmann et al., 2016), we argue that certain daily leadership profiles are



associated with more or fewer resources for leaders. In contrast to previous studies (e.g., Kaluza et al., 2020; Lanaj et al., 2016; Zwingmann et al., 2016), we challenge the understanding of certain leadership behaviors to be exclusively positive or negative for leaders. Instead, we assume leadership can be a double-edged sword for leaders depending on the well-being indicator under investigation. For example, previous studies found positive within-person associations of transformational leadership with positive affect (Lanaj et al., 2016) but also with emotional exhaustion (Lin et al., 2019). Thus, certain resource-intensive leadership profiles may drain leaders' energy resources (as indicated by higher emotional exhaustion) due to the investment of time, energy, or effort. At the same time, they could also benefit leaders' affective resources (as indicated by higher positive and lower negative affect) due to the resource-enhancing elements of these leadership behaviors (such as strength use or positive follower feedback).

Last, we contribute to the "black-box" discussion, that is, why leadership behavior is related to leaders' well-being. We examine thriving (i.e., a psychological state represented by vitality and learning at work; Spreitzer et al., 2005) and time pressure (i.e., a state with too much to do in too little time; Fay & Sonnentag, 2002) as potential mediating mechanisms between daily leadership profiles and daily leader well-being. Building on current research (Kleine et al., 2019) that conceptualizes thriving as a mediator between relational resources and well-being, we propose that leadership can also be a relational resource for leaders and, hence, associated with more thriving. Time pressure, in turn, is a crucial variable when studying leadership and well-being as leaders are confronted with multiple tasks and challenges that can be associated with increased time pressure (Dóci et al., 2020; Harms et al., 2017), and time pressure can be related to several negative outcomes (e.g., Debus et al., 2019; Hoppe et al., 2023; Muehlenmeier et al., 2022). We assume these two mediators can also help explain the proposed two-sided nature of certain leadership profiles. For example, resource-intensive follower-oriented leadership profiles can be related to increased affective well-being, given an association with higher thriving. At the same time,

**Fig. 1** Model of study variables and hypothesized effects. *Note* TFL=Transformational leadership, CR=Contingent reward, MBE-A=Management-by-exception active, MBE-P=Management-by-exception passive, LF=Laissez-faire

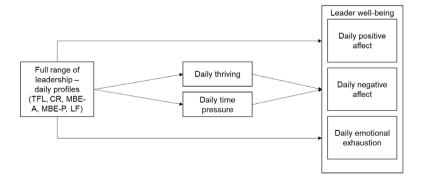
they can be associated with decreased energetic well-being due to higher time pressure on that day. Our research model is depicted in Fig. 1.

# **Theoretical Background and Hypotheses**

# A Conservation of Resources Perspective on Leadership and Leader Well-Being

We draw on COR theory (Hobfoll, 1989), which states that individuals aim to keep, protect, and foster their resources. Resources can be understood "as those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies" (Hobfoll, 1989, p. 516). Resources are thus important and valuable for individuals, not only in their own right but also because they allow individuals to invest resources to protect against resource loss or gain new resources (Hobfoll et al., 2018). Those individuals who possess resources and can invest them to gain new resources are more likely to enter a gain cycle. In contrast, resource loss cycles are more likely for individuals with fewer resources: As they can less protect against resource loss or gain new resources, further resource loss is more likely (Hobfoll et al., 2018).

We build upon the COR principles as the leadership behaviors under investigation differ (a) in the extent to which resource investment is necessary and (b) in their potential to initiate resource gains. For example, as outlined in more detail below, transformational leader behaviors are resource-intensive (e.g., requiring time, energy, or effort; Lin et al., 2019), so leaders need to invest more resources when acting in a transformational manner compared to when they withdraw from their leadership responsibilities and act passively. This resource investment can be associated with resource losses (e.g., higher emotional exhaustion). At the same time, transformational leadership incorporates many elements that benefit leaders (e.g., goal progress, meaningful follower interactions, strength use; Lanaj et al., 2016) and have a greater potential to initiate





resource gain processes (e.g., higher positive affect) than passive behaviors. Therefore, the association between leadership and well-being reflects the central COR principles of resource investment and gain.

Furthermore, COR theory is particularly relevant to studying the interplay of different leadership behaviors and their link with leaders' well-being. Resources interact and often appear together, reflected in *resource caravans* (Hobfoll et al., 2018), and resources in combination can be related to psychological outcomes differently than single resources (Arnold et al., 2017; Hobfoll et al., 2018). Thus, we propose that specific combinations of leadership behaviors (i.e., leadership profiles) might be differentially related to leader well-being compared to single leadership behaviors.

# **Full-Range Leadership Behaviors**

We draw on the full-range leadership theory (Avolio, 2011), one of the most frequently investigated leadership theories (Dinh et al., 2014), to investigate daily leadership profiles. In our study, leadership profiles indicate a combination and interplay of transformational, transactional, and laissez-faire behaviors that can coexist within one leader. Transformational leader behaviors (TFL) incorporate stimulating and inspiring followers, communicating a motivating vision for the team and the organization, challenging the status quo, acting charismatically, being a role model for followers, or dealing with each follower's needs. Transactional leadership, in turn, incorporates clarifying roles, tasks, objectives, and rewards (contingent reward, CR), actively searching for followers' mistakes and deviances from rules and standards (management-by-exception active, MBE-A), and dealing with followers' errors and deviances without actively searching for those (management-by-exception passive, MBE-P). Last, laissez-faire (LF) behaviors are reflected by "non-leadership," which means avoidance of decisionmaking and withdrawal of leadership responsibilities (Bass & Riggio, 2006).

# **Latent Profiles of Daily Leadership Behaviors**

A pattern-oriented approach (i.e., latent profile approach; LPA) tries to identify unobserved (i.e., latent) subgroups in a population whose members share specific personal attributes (Spurk et al., 2020). Applied to leadership research, the aim is to identify subgroups of leaders who share a similar combination of different leadership behaviors (Arnold et al., 2017). Previous research lent support to Bass' (1985) theorizing by demonstrating that different leadership behaviors coexist to a varying degree within one individual and that these patterns differ between persons (Arnold et al., 2017; Doucet et al., 2015; Gavan O'Shea et al., 2009). However,

as leadership fluctuates daily (Kelemen et al., 2020) and the interplay between multiple leadership behaviors can be different on a within-person compared to a between-person level (McCormick et al., 2020), our day-level and within-person perspective is an important extension of previous research.

Based on previous between-person findings (Arnold et al., 2017; Doucet et al., 2015) and theories about optimal patterns of leadership (Avolio, 2011), we can theorize about plausible within-person profiles of daily leadership. On the one hand, in line with previous between-person patterns found (Arnold et al., 2017; Doucet et al., 2015), there might be days on which leaders demonstrate high levels of TFL and CR behaviors and low levels of MBE and LF behaviors (e.g., when a leader communicates a vision for a significant change and the goals and rewards associated with it). On the other hand, there might be days on which leaders primarily clarify goals, expectations, and rewards (i.e., high levels of CR behaviors; Doucet et al., 2015).

Furthermore, other days might be characterized by multiple different tasks that make it important for leaders to show high levels of TFL, CR, and MBE behaviors altogether, such as in Arnold et al.'s (2017) comprehensive profile. Again, on other days, leaders might primarily deal with their own tasks that prevent them from active interactions with their followers, therefore implying a highly passive profile (i.e., low levels of TFL, CR, MBE-A, and MBE-P behaviors, high levels of LF behaviors; Arnold et al., 2017). Due to our day-level approach, we might also find different profiles than those from previous between-person studies because leaders only report on their behavior on the respective day and not on their leadership in general in a summative judgment (Gabriel et al., 2019). Some days might be characterized by the same demands or tasks throughout the day. Therefore, we are more likely to detect profiles with elevated levels of only one leadership behavior (i.e., either TFL, CR, MBE-A, MBE-P, or LF).

Within-person or daily associations can look different than between-person associations (McCormick et al., 2020), and daily studies can challenge how we view leadership by producing results that would not align with theory on the between-person level (Kelemen et al., 2020). As specific hypotheses would not only include the number but also the shape of profiles, there are many possible combinations. Furthermore, inductive and exploratory approaches are adequate when there is only scarce theoretical or empirical guidance, which is often the case with person-centered studies due to a different focus than variable-centered studies (Chawla et al., 2020; Gabriel et al., 2018; Morin et al., 2011; Wang & Hanges, 2011). Therefore, even though existing between-person studies help us theorize about possible daily leadership profiles, no research provides clear



guidance on the number and shape of daily leadership behaviors assessed at the within-person level. Thus, we state the following research question:

Research Question 1 Which daily leadership profiles exist for leaders?

#### **Stability of Membership in Daily Leadership Profiles**

We also examine whether leadership profile membership is dynamic throughout the week, fluctuating from day to day. We can assess this stability by determining whether leaders belong to the same or different profiles from one day to the next (i.e., is a leader who is a member of Profile A on one day also a member of Profile A on the next day). From a theoretical perspective, Bass (1999) suggested that "every leader displays a frequency of both the transactional and transformational behaviors as part of their unique style, but each leader's profile involves more of one and less of the other" (p.11). The theory supports the assumption that every leader incorporates transactional and transformational elements in their daily leadership routine.

However, we propose that the degree and frequency to which certain behaviors are demonstrated can vary not only between but also within leaders (Kelemen et al., 2020). As leaders are confronted with different tasks, problems, and follower issues daily, they also need to alter their behavior to deal effectively with their challenges. For example, a leader who generally acts very transformational and clear about expectations and rewards (i.e., high on TFL and CR behaviors) might still act passively on a day when they primarily need to deal with their own tasks. Similarly, also leaders who mostly withdraw themselves from their leadership responsibilities (i.e., leaders high on passive behaviors) might see the necessity to demonstrate active behaviors (e.g., communicating a vision, motivating their employees, or clarifying expectations and rewards) on other days because their team is confronted with a new challenge or a significant change. These examples underscore that a change in profile membership from day to day is likely, and they are in line with research on the fluctuating nature of daily leadership behavior (Breevaart et al., 2014), finding substantial within-person variance of full-range leadership behaviors. In sum, we aim to answer the following open research question:

Research Question 2 Is membership in daily leadership profiles stable across one week?

#### **Outcomes of Profiles of Daily Leadership Behaviors**

Leadership behavior is related to leader well-being (Kaluza et al., 2020) and is associated with costs and benefits for leaders (Lanaj et al., 2016; Lin et al., 2019). However, it is less clear how daily leadership profiles are related to daily leader well-being. We suggest that some leadership profiles are simultaneously associated with more or less resource acquisition (e.g., positive affect) and resource depletion (e.g., emotional exhaustion). Based on COR theory (Hobfoll, 1989), we assume that a dual-pathway model can best explain the link between leadership behaviors and leader well-being. This assumption aligns with recent research on leadership as a double-edged sword for leaders by showing simultaneous positive associations between leadership resources (e.g., role occupancy and job control) and job demands (e.g., time pressure; Li et al., 2018). With the present study, we can break down this macro-level perspective to a rather micro-level perspective by investigating whether specific daily leadership behaviors are related to enhanced or reduced leaders' time pressure and thriving, and, in turn, their well-being.

For example, take a day on which leaders demonstrate primarily TFL and CR behaviors but low levels of MBE and LF. On such a day, leaders use more time than on other days to communicate visions and ideals to followers and contemplate ways to persuade them effectively. Additionally, leaders challenge existing assumptions and encourage themselves and their followers to break old routines and find new solutions for existing problems. Thinking about possible new routines and acting accordingly takes more time than persisting in the old ones, for example, because the new approaches are not yet automated. Furthermore, leaders deal with each follower's needs and concerns on such a day. This behavior further taxes leaders' time resources, for example, because they cannot refer to one-size-fits-all approaches but must deal with each follower individually. Moreover, leaders spend time in intensive contact with their followers to clarify goals and expectations, distribute tasks, or reward them for successful task completion (Avolio, 2011).

All these behaviors are time-intensive and drain leaders' resources (Lin et al., 2019). Given that time pressure indicates a situation with much to do in too little time (Fay & Sonnentag, 2002), the described behaviors are likely to be associated with increased time pressure. Higher time pressure and the lower resource pool associated with it, in turn, is expected to be related to lower well-being at the end of the working day (e.g., greater emotional exhaustion – a state indicative of depleted resources; Arnold et al., 2017).

At the same time, the described combination of high TFL and CR and low MBE and LF can also be associated with a higher amount of resources. The behaviors outlined above



include, for example, helping followers with personal problems, initiating new solutions for existing problems, and making use of their own strengths, which was found to be very effective in terms of follower outcomes on a between-person level (Doucet et al., 2015). Thus, the combination of these behaviors is likely associated with perceptions of thriving at work on that day (Kleine et al., 2019; Niessen et al., 2012), for instance, because it gives leaders the chance to acquire or apply knowledge and skills at work (Porath et al., 2012). Thriving is an essential resource for individuals and can be related to a greater resource pool. It can be associated with greater well-being, such as increased positive affect, decreased negative affect, and lower emotional exhaustion (Kleine et al., 2019).

In contrast, both beneficial and detrimental associations could be attenuated when assuming a different profile low on TFL, CR, MBE-A, MBE-P, and high on LF. On days leaders show more passive leadership behaviors, they do not invest that many resources (e.g., time or effort) into follower-directed behavior. For example, leaders might withdraw from interactions with their followers, not make decisions, or not deal with urgent problems or concerns. This (lack of) behavior can be associated with reduced time pressure, thus helping to preserve the leaders' resources (Dawson et al., 2016) and, therefore, linked to reduced negative affect or emotional exhaustion (Crawford et al., 2010). At the same time, on days leaders belong to such a profile, they might also experience less thriving because such days might be reflected by fewer opportunities for learning and strength use. Therefore, membership in the passive profile might be associated with less positive affect. Considering these exemplary profiles, we state the following questions:

Research Question 3 Are daily leadership profiles differentially related to daily thriving, time pressure, and leader evening well-being (i.e., emotional exhaustion, positive affect, and negative affect)?

Research Question 4 Is the association between daily leadership profiles and daily leader evening well-being mediated by daily thriving and time pressure?

#### Method

# **Procedure and Participants**

The present study received ethical approval from the ethical committee of our institution. We conducted a daily diary study over five consecutive workdays with two daily measurement points. To this end, we recruited German working Participants were surveyed twice a day (i.e., in the afternoon at the end of the workday, to be filled out between 3 pm and 7 pm, and in the evening before bedtime, to be filled out between 8 pm and 12 am). The afternoon survey assessed leaders' ratings of their leadership behavior on the respective day, characteristics of their working day (i.e., working hours, thriving, time pressure, and job control, as well as frequency and duration of interaction with followers), and the previous night's sleep quality. The evening survey assessed leaders' ratings of their daily level of emotional exhaustion and positive and negative affectivity, as well as pleasurable evening experiences and work-family conflict as control variables. Before the daily surveys, participants completed a baseline survey including screen-out criteria (i.e., employment, leadership responsibility, no shift work, no irregular work hours) and demographic variables.

In total, 678 participants registered for the study and answered the baseline survey. Of these, 289 participants completed both the afternoon and the evening survey for at least three days, constituting our final sample. Participants generated 1279 responses in the afternoon (4.43 surveys per person) and 1170 responses in the evening (4.05 surveys per person) of a possible number of 1445 responses (response rate of 89% and 81%, respectively). Our sample size aligns with current recommendations for experience sampling studies to ensure sufficient power (Gabriel et al., 2019). On average, the participants of our sample (30.4% female) were 45.56 years old (SD = 11.09), worked in their current job for 15.66 (SD = 10.22) years, and in their current organization for 12.88 (SD = 10.24) years. Participants came from a wide range of industries (e.g., finance, education and health, IT, or public administration) and were in a low (31.1%), medium (54.3%), or high leadership position (14.5%). On average, leaders held a leadership position for 9.73 years (SD = 8.26) and worked 42.25 (SD = 7.64) hours per week.



#### Measures

All items were administered in German. If German items of the instruments were unavailable (i.e., for *thriving* and *work-family conflict*), we used the translation and backtranslation method to translate the items (Brislin, 1970).

#### **Leadership Behaviors**

Transformational leadership was assessed with six items of the Transformational Leadership Inventory (Heinitz & Rowold, 2007; Podsakoff et al., 1990, 1996) as used and validated for the day-level investigation by Diebig et al. (2017). A sample item was "Today, I challenged my followers to think about old problems in new ways." We decided on this scale for two reasons: First, with six items, the measure is much shorter than the 19 items of the Multifactor Leadership Questionnaire (MLQ Form 5x Short; Felfe, 2006) and is therefore more appropriate for the daily assessments. Second, compared to the items used in other studies (e.g., Lanaj et al., 2016), the items are validated in German and for the day-level.

The other leadership behaviors were assessed with the respective subscales contingent reward (3 items, e.g., "Today, I showed satisfaction when others met expectations"), management-by-exception active (4 items, e.g., "Today, I primarily dealt with errors and complaints"), management-by-exception passive (4 items, e.g., "Today, I was firmly convinced that nothing should be changed without necessity"), and laissez-faire (3 items, e.g., "Today, I clarified important questions immediately") of the Multifactor Leadership Questionnaire (Felfe, 2006). The item formulation was adapted to the day-level investigation. Ratings were made on a 5-point scale (1 = totally disagree, 5 = totallyagree). Cronbach's alpha averaged across the week was 0.82 for transformational leadership (range: 0.75–0.86), 0.78 for contingent reward (range: 0.67-0.82), 0.87 for management-by-exception active (range: 0.85-0.91), 0.86 for management-by-exception passive (range: 0.80–0.88), and 0.80 for laissez-faire (range: 0.74-0.86).

#### **Emotional Exhaustion**

Emotional exhaustion was measured with the corresponding 8-item subscale of the Oldenburg Burnout Inventory (OLBI; Demerouti et al., 2003) and adapted to day-level investigation (e.g., Volmer & Fritsche, 2016). A sample item was "Today after my work, I feel worn out and weary." The items were rated on a 5-point scale (1=not true at all, 5=completely true). Cronbach's alpha averaged across the week was 0.90 (range: 0.89–0.90).

#### **Positive and Negative Affect**

Following Sonnentag et al. (2008), daily positive and negative affect was rated using the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988) with six items for positive affect and negative affect, respectively. A sample item for positive affect was "active," and for negative affect, "anxious." The items were rated on a 5-point scale (1 = not at all, 5 = very much). Cronbach's alpha averaged across the week was 0.86 (range: 0.84–0.88) and 0.90 (range: 0.88–0.92) for positive and negative affect, respectively.

#### **Thriving**

We assessed daily thriving at work with the 10-item measure developed by Porath et al. (2012), which captures learning and vitality with five items each. We adapted the wording to fit our daily assessment. Sample items were "Today at work, I have developed a lot as a person" (*learning*) and "Today at work, I felt alert and awake" (*vitality*). The items were rated on a 5-point scale (1=strongly disagree, 5=strongly agree). Cronbach's alpha averaged across the week was 0.82 (range: 0.81–0.83).

#### **Time Pressure**

Time pressure was assessed using the corresponding 5-item subscale of the Instrument for Stress-Related Job Analysis (ISTA; Semmer et al., 1999), adapted for day-level investigation (Ohly & Fritz, 2010). A sample item was "Today, I was under time pressure." Ratings were made on a 5-point scale (1=totally disagree, 5=totally agree). Cronbach's alpha averaged across the week was 0.92 (range: 0.90–0.94).

#### **Control Variables**

We included several control variables in our analyses as studies showed strong associations of these variables with well-being. Specifically, we controlled for job control as a central job-related predictor of well-being (e.g., Crawford et al., 2010), previous night's sleep quality as a physiological variable with strong associations with exhaustion and affect (e.g., Litwiller et al., 2017), and for pleasurable evening activities (e.g., Steed et al., 2021) and work-family conflict (e.g., French & Allen, 2020) as two factors that can be associated with evening well-being. Job control was measured using the corresponding 5-item subscale of the ISTA (Semmer et al., 1999), adapted for day-level investigation (Ohly & Fritz, 2010). Leaders' sleep quality was assessed using the following item of the Pittsburgh Sleep Quality Index (PSQI; Buysse et al., 1989): "How would you evaluate your sleep quality last night?". We measured pleasurable



evening experiences with four items taken from Sonnentag et al. (2014) and adapted them to the daily assessment. We assessed work-family conflict with the corresponding 5-item scale from Netemeyer et al. (1996) and adapted it to the daily assessment and to a focus on the broader aspect of private life instead of the original emphasis on family life (e.g., Peters et al., 2014).

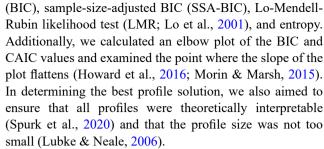
#### **Demographic Data**

We assessed age, gender, profession, working hours, job tenure, organizational tenure, leadership responsibility, leadership tenure, number of direct reports, and frequency and duration of leader—follower interactions.

#### **Analytic Strategy**

We first conducted multilevel confirmatory factor analysis (CFA) to model the factor structure at Level 1 with the respective leadership behaviors (TFL, CR, MBE-A, MBE-P, LF), the mediators (thriving and time pressure), and the well-being indicators (emotional exhaustion, positive affect, negative affect) as distinct factors<sup>1</sup>. Items were within-person centered (Chawla et al., 2020; Scott et al., 2010). Following recent recommendations (Mäkikangas et al., 2018), we used raw scores for the multilevel latent profile analysis (MLPA), as group-mean centering can change model interpretation. Due to non-convergence of our models in the case of freely estimated variances (Asparouhov & Muthén, 2008), we only allowed the means of the profile indicators (i.e., leadership behaviors) to be freely estimated (Diallo et al., 2016).

We investigated the number of profiles to answer Research Question 1 using Mplus Version 8.7 (Muthén & Muthén, 2017). To this end, we started by specifying a two-profile solution and increased the number of profiles until the model fit did not improve further (Nylund et al., 2007). The full information maximum likelihood estimator with robust standard error estimation was used (Asparouhov & Muthén, 2008). To check the model fit and to decide on the optimal number of profiles, we relied on several fit indices: Log Likelihood (LL), Akaike Information Criterion (AIC), consistent AIC (CAIC), Bayesian Information Criterion



To answer our Research Question 2 on the stability of profile membership, we investigated if leaders belonged to the same leadership profiles throughout the week or were members of different profiles from day to day. For this, we followed the approach of Chawla et al. (2020) and calculated the number of different profile types for each leader across the week. Thereby, for every profile, we received the percentage of leaders who belonged to the respective profile every day of the week. Additionally, we investigated the change of profile membership from day to day. For every profile we found, we calculated the percentage of leaders who were members of the target profile on Day t and were also members of the same target profile on Day t+1 versus those who were members of a different profile on Day t+1.

To answer Research Question 3, we used BCH analysis (Asparouhov & Muthén, 2014) to examine whether the associations with the mediators and the well-being outcomes differed between profiles. We conducted separate analyses for each mediator and outcome. To test for the indirect effects of profile membership on well-being via thriving and time pressure, we used bias-corrected bootstrapped standard errors and confidence intervals based on 10,000 bootstrap samples (Hayes & Preacher, 2014). We conducted pairwise comparisons between the profiles and set the *passive profile* as the reference category.

#### Results

#### **Preliminary Analyses**

Descriptive data and correlations of our study variables are shown in Table 1. We calculated intraclass correlation coefficients (ICC) to check the appropriateness of a multilevel approach (Bliese et al., 2018). The ICCs for our study variables ranged between 0.42 (contingent reward) and 0.73 (negative affect). Therefore, the portion of within-person variance between 27% and 58% justified using a multilevel approach.

In the next step, we conducted multilevel CFAs. The proposed ten-factor model on Level 1 and Level 2 did not converge. Hence, as our main focus was on the within-person level, we modeled the ten-factor model on Level 1 and a



We also compared the ten-factor solution with alternative models: a four-factor solution (combining all leadership behaviors into one single factor and combining all well-being measures into one single factor), a seven-factor solution (combining CR, MBE-A, and MBE-P into one single factor and combining positive affect and negative affect into a single factor), two eight-factor solutions (combining a) CR, MBE-A, and MBE-P into a single factor, and b) positive affect, negative affect, and emotional exhaustion into one single factor), and a nine-factor solution (combining positive affect and negative affect into one single factor)

Table 1 Means, standard deviations, and correlations of study variables

	Variables	M	SD	1	2	3	4	5		
1	Transformational leadership	3.47	0.74							
2	Contingent reward	3.60	0.87	.528**						
3	Management-by-exception active	2.52	1.09	.104**	.117**					
4	Management-by-exception passive	2.01	0.98	$097^{**}$	.057**	.208**				
5	Laissez-faire	1.87	0.76	$242^{**}$	211**	124**	010			
6	Time pressure	2.66	1.15	.170**	.148**	.180**	.158**	$084^{**}$		
7	Thriving	3.47	0.67	.352**	.203**	.063*	018	181**		
8	Emotional exhaustion	2.26	0.86	009	.013	.086**	$.062^{*}$	$.060^{*}$		
9	Negative affect	1.61	0.79	013	013	.076**	.150**	.077**		
10	Positive affect	3.37	0.79	.117**	.075*	044	$059^{*}$	124**		
11	Evening activities	3.91	0.90	.042	.033	$057^{*}$	$067^{*}$	015		
12	Work-family conflict	2.11	1.11	.011	012	.093**	.088**	.065*		
13	Job control	3.98	0.81	.075**	.083**	010	.054	158***		
14	Sleep	3.68	1.04	.075**	.035	034	.056*	.000		
	Variables	6	7	8	9	10	11	12	13	14
6	Time pressure									
7	Thriving	.018								
8	Emotional exhaustion	.329**	251**							
9	Negative affect	.164**	169**	.375**						
10	Positive affect	101**	.251**	$439^{**}$	167**					
11	Evening activities	$197^{**}$	.120**	$409^{**}$	245**	.291**				
12	Work-family conflict	.352**	136**	.505**	.381**	$245^{**}$	$417^{**}$			
13	Job control	153***	.147***	160***	$089^{**}$	.087**	.088**	120***		
14	Sleep	$058^{*}$	.191***	164***	071*	.202***	.109***	168***	.074**	

Note Correlations among the Level 1 variables are within-person centered correlations

saturated model on Level 2, meaning that only the items' covariances were modeled on Level 2. This model demonstrated a good fit to the data ( $\chi^2_{(1385)}$ =3697.71, p<.001, CFI=0.92, RMSEA=0.04, SRMR<sub>within</sub> = 0.05) and showed a better fit than the competing four-, seven-, eight-, or nine-factor models ( $\Delta\chi^2$ =597.31–3257.80, df=9–39, all p's<0.001)<sup>2</sup>.

#### **Research Question 1: Daily Leadership Profiles**

The fit statistics for the different profile solutions are displayed in Table 2. The models with freely estimated variances did not converge when modeling more than three profiles. Therefore, we based our results on a model with equal variances across profiles (e.g., Chawla et al., 2020; Gabriel et al., 2018; Morin et al., 2016). Results showed that entropy was slightly larger for the two-profile solution than for the three-profile solution, but the slope of the elbow plot flattened after the three-profile solution (see Fig. 2). Like the two-profile solution, the three-profile solution had a significant LMR statistic and produced theoretically interpretable profiles. The four- or five-profile solutions produced profiles that differed quantitatively rather than qualitatively from each other, and they had lower entropy values than the three-profile solution. Thus, we decided on the latter. Figure 3 shows a graphical representation of the profiles, and Table 3 summarizes the profile values.

The profile with the largest membership (65.05%) reflected days on which leaders reported high levels of TFL (M=3.66) and CR (M=3.84), medium levels of MBE-A (M=2.36), and low levels of MBE-P (M=1.54) and LF

<sup>\*</sup> p < .05. \*\* p < .01. \*\*\* p < .001

To model the hypothesized structure on Level 1 and Level 2, we tested whether the five leadership constructs are best modeled by a five-factor structure compared with a solution in which all leadership constructs are collapsed into one single factor and a three-factor solution in which CR, MBE-A, and MBE-P are collapsed into one factor. The hypothesized five-factor model showed a good fit to the data ( $\chi^2_{(320)} = 1307.17$ , p < .001, CFI = .90, RMSEA = .05, SRMR<sub>within</sub> =.05), and the model was superior to the one-factor ( $\chi^2_{(340)}$  = 5139.84, p < .001, CFI = .51, RMSEA = .11, SRMR<sub>within</sub> = .16;  $\Delta \chi^2$  = 3832.67, df=20, p<.001) and the three-factor solution ( $\chi^2_{(334)}$ =3950.84, p < .001, CFI=.63, RMSEA=.09, SRMR<sub>within</sub> =.14;  $\Delta \chi^2 = 2643.67$ , df=14, p<.001). Furthermore, we tested if the hypothesized threefactor solution on Level 1 and Level 2 for the well-being outcomes (i.e., emotional exhaustion, positive affect, negative affect) showed a better fit to the data than a model in which all well-being variables loaded on one factor or a two-factor model in which the positive and negative affect items were collapsed into one factor. Again, the hypothesized three-factor model ( $\chi^2_{(334)} = 1692.83, p < .001, CFI = .86,$ RMSEA=.06, SRMR<sub>within</sub> =.05), was superior to the one-factor  $(\chi^2_{(340)}=3416.99,\ p<.001,\ CFI=.67,\ RMSEA=.09,\ SRMR_{within}$ =.20;  $\Delta \chi^2 = 1724.16$ , df = 6, p < .001) and two-factor solution

 $<sup>(\</sup>chi^2_{(338)} = 2808.62, p < .001, CFI = .74, RMSEA = .08, SRMR_{within} = .19; \Delta\chi^2 = 1115.79, df = 4, p < .001).$ 

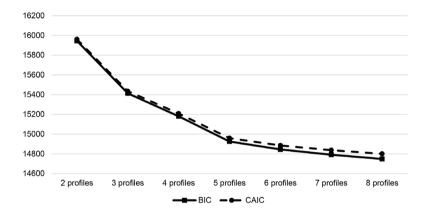
Table 2 Latent profile enumeration fit statistics (research question 1)

Number of profiles	LL	FP	AIC	BIC	SSA-BIC	CAIC	LMR (p)	Entropy
2	-7915.443	16	15862.886	15945.347	15894.523	15961.347	0.0012	0.897
3	-7627.883	22	15299.765	15413.150	15343.267	15435.150	0.0000	0.867
4	-7490.238	28	15036.477	15180.784	15091.842	15208.784	0.0004	0.786
5	-7341.010	34	14750.020	14925.250	14817.249	14959.250	0.0000	0.806
6	-7279.494	40	14638.987	14845.141	14718.081	14885.141	0.0355	0.817
7	-7231.275	46	14554.549	14791.626	14645.507	14837.626	0.0033	0.808
8	-7188.461	52	14480.923	14748.922	14583.745	14800.922	0.2337	0.818

Note LL = log-likelihood; FP = free parameters; AIC = Akaike information criteria; BIC = Bayesian information criteria; SSA-BIC = sample-size adjusted BIC; CAIC = consistent AIC; LMR = Lo et al. (2001) test. CAIC is calculated by adding the number of free parameters to the BIC value

5

**Fig. 2** Elbow plot for BIC and CAIC in determining profile solution. *Note* BIC = Bayesian information criterion; CAIC = consistent Akaike information criterion (calculated as the BIC value plus the number of free parameters)



**Fig. 3** Latent profiles of daily leadership behaviors. *Note* The y-axis refers to leaders' level of each leadership behavior (1 = totally disagree, 5 = totally agree). TFL = Transformational leadership, CR = Contingent reward, MBE-A = Management-by-exception active, MBE-P = Management-by-exception passive, LF = Laissez-faire

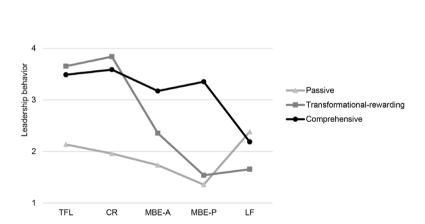


Table 3 Descriptive information for within-person latent leadership profiles (research question 1)

	TFL		CR		MBE-	MBE-A		MBE-P		LF	
Profile	Percentage of days	M	95% CI	M	95% CI	$\overline{M}$	95% CI	M	95% CI	$\overline{M}$	95% CI
Passive	8.44	2.14	[1.60, 2.67]	1.96	[1.49, 2.43]	1.74	[1.48, 1.99]	1.36	[1.17, 1.54]	2.38	[1.94, 2.83]
Transformational-rewarding	65.05	3.66	[3.56, 3.75]	3.84	[3.71, 3.97]	2.34	[2.23, 2.48]	1.54	[1.47, 1.61]	1.66	[1.59, 1.72]
Comprehensive	26.51	3.49	[3.39, 3.59]	3.59	[3.49, 3.69]	3.17	[3.01, 3.33]	3.35	[3.23, 3.45]	2.19	[2.07, 2.30]

Note TFL=Transformational leadership; CR=Contingent reward; MBE-A=Management-by-exception active; MBE-P=Management-by-exception passive; LF=Laissez-faire; CI=confidence interval. All variables rated on a 5-point scale



(*M*=1.66). Therefore, we called this profile *transformational-rewarding*. On days leaders belonged to this profile, they engaged a lot in meaningful interactions with their followers. For example, they dealt with each follower's needs, encouraged followers to find new solutions for existing problems, communicated expectations, or rewarded followers for task completion. To a smaller extent, leaders proactively dealt with errors and complaints that day. The low levels of passive behaviors indicate that leaders did not withdraw from their leadership responsibilities, such as supporting followers or making decisions.

The profile with the second largest membership (26.51%) was reflected by days with high levels of TFL (M=3.49), CR (M=3.59), MBE-A (M=3.17), and MBE-P (M=3.35), and medium levels of LF (M=2.19). Thus, we called this profile *comprehensive*. On days leaders belonged to this profile, they showed multiple different behaviors to a great extent. In addition to the meaningful transformational-rewarding behaviors outlined above, they led through proactive and reactive control. For example, they proactively searched for errors, made the followers aware of them, and pursued the errors. In addition, leaders reacted to other problems and concerns that became serious, or they waited for problems to occur multiple times before reacting.

The third profile was the one with the smallest membership (8.44%) and was characterized by higher LF values (M=2.38) compared to TFL (M=2.14), CR (M=1.96), MBE-A (M=1.74), and MBE-P (M=1.36). Even though the mean levels for LF and TFL were similar, the level of TFL in this profile was much lower than the TFL levels in the other two profiles. This profile was characterized by low levels of transformational and transactional behaviors and, compared to the other profiles, by the presence of LF behaviors. Therefore, we called this profile *passive*. On days leaders belonged to this profile, they primarily acted

passively in their leadership role, mostly withdrawing from their leadership responsibilities. They engaged only to a very low extent in transformational rewarding behaviors or the proactive or reactive handling of errors and complaints. Consequently, they were, for example, not available to their followers when needed or did not make decisions in time.

# Research Question 2: Stability of Daily Leadership Profiles

Regarding our second research question, we calculated the percentage of leaders who belonged to the same profile throughout the week. We found that 34.60% of the leaders belonged to the *transformational-rewarding profile* every day, whereas 16.60% belonged to the *comprehensive profile* and 5.88% belonged to the *passive profile* throughout the week. In summary, more than half of our sample (57.08%) belonged to the same profile across the week, with the *transformational-rewarding profile* showing the highest stability.

In the second step, we examined changes in profile membership from one day to the next. Results are shown in Table 4. We found that 87% of the leaders who belonged to the transformational-rewarding profile on Day 1 also belonged to the transformational-rewarding profile on Day 2. Similarly, 86% of the leaders who belonged to the comprehensive profile on Day 1 also belonged to the same profile on Day 2. For the *passive profile*, the stability of membership from Day 1 to Day 2 was lower (68%). Across the week, results were similar to the results of Day 1 to Day 2 for the transformational-rewarding and the comprehensive profile, with stability ranging from 87 to 97%. The variation of profile membership in the passive profile was much higher. Stability was lowest from Day 3 to Day 4, with only 32% of leaders belonging to the passive profile on both days, and it was highest from Day 2 to Day 3, with 91% of the leaders

 Table 4 Day-to-day changes in profile membership (research question 2)

Profile membership on former day	Profile membership on consecutive day	Day 1 ◊ Day 2 (n=216)	Day 2 ◊ Day 3 (n=249)	Day 3 ◊ Day 4 (n=241)	Day 4 ◊ Day 5 (n=221)	Average
Passive	Passive	68%	91%	32%	60%	63% (24%)
	Transformational-rewarding	22%	9%	63%	14%	27% (25%)
	Comprehensive	11%	0%	5%	26%	11% (10%)
Transformational-rewarding	Passive	0%	10%	3%	4%	4% (4%)
	Transformational-rewarding	87%	87%	97%	90%	90% (5%)
	Comprehensive	13%	3%	0%	6%	6% (6%)
Comprehensive	Passive	3%	2%	5%	0%	3% (2%)
	Transformational-rewarding	11%	4%	9%	7%	8% (3%)
	Comprehensive	86%	94%	87%	93%	90% (4%)

*Note* Sample size varied across days due to missing data (n = 216-249). Standard deviations of the average values across the week are reported in parentheses



belonging to the *passive profile* on both days. The findings regarding the stability were also reflected in the average stabilities across the week, which were lower for the *passive profile* (63%) than for the *transformational-rewarding* and the *comprehensive profile* (90%, respectively). The numbers in brackets in Table 4 indicate the standard deviation of the average stability, which was highest for the *passive profile* (24%), underlining a greater variability across the week. We also observed that changes in membership from all three profiles to every other profile existed.

Overall, the *transformational-rewarding profile* seemed to be the most stable one in our study, as indicated by the highest stability in profile membership across the week compared to the other two profiles and a high stability in profile membership from one day to the next. In contrast, the *passive profile* was the least stable across our multiple stability indicators.

# Research Questions 3 and 4: Outcomes of Daily Leadership Profiles

In the last step, we examined whether our daily leadership profiles were differentially related to thriving, time pressure, emotional exhaustion, and positive and negative affect. The results are shown in Table 5. On days leaders belonged to the passive (M=2.15) or the transformationalrewarding profile (M=2.09); difference between the values

**Table 5** Three-step results for leader outcomes (BCH; research question 3)

uon 5)				
	Passive	Transformational-rewarding	Com- prehen- sive	Chi- square $(\chi^2)$
After-				
noon				
Time pressure	1.90	2.59	3.06	60.02***
Thriv- ing Evening	2.86	3.61	3.35	56.49***
Posi- tive affect	2.91	3.48	3.25	25.62***
Nega- tive affect	1.55	1.34	2.28	89.47***
Emo- tional exhaus- tion	2.15	2.09	2.69	70.59***

Note The BCH procedure uses full information maximum likelihood estimation. The chi-squared value reflects the significance of the omnibus difference test. All pairwise comparisons are significant (at least p < .05), except passive vs. transformational-rewarding for emotional exhaustion

<sup>\*\*\*</sup>p < .001



non-significant, p=.637), they reported lower emotional exhaustion compared to days they were in the *comprehensive profile* (M=2.69; these and the following pairwise comparisons are all significant, at least p<.05). On days leaders were in the *transformational-rewarding profile*, negative affect was lower (M=1.34) than on days they were in the *passive* (M=1.55) or the *comprehensive profile* (M=2.28). Negative affect was also lower in the *passive* compared to the *comprehensive profile*. Days in the *transformational-rewarding profile* were characterized by higher values of positive affect (M=3.48) than days in the *comprehensive profile* (M=3.25); these, in turn, were characterized by higher values of positive affect than days in the *passive profile* (M=2.91).

Regarding the afternoon outcomes, all profiles differed significantly in time pressure and thriving. Time pressure was highest in the *comprehensive profile* (M=3.06), followed by the *transformational-rewarding profile* (M=2.59), followed by the *passive profile* (M=1.90). Thriving was highest in the *transformational-rewarding profile* (M=3.61), followed by the *comprehensive profile* (M=3.35), followed by the *passive profile* (M=2.86).

Taken together, compared to the other profiles, days in the *transformational-rewarding profile* were associated with the second-highest value for time pressure, the highest value for thriving and positive affect, and the lowest value for negative affect and (together with the *passive profile*) emotional exhaustion. Days in the *passive profile* were associated with the lowest value for time pressure, thriving, positive affect, and (together with the *transformational-rewarding profile*) emotional exhaustion, and the second-highest value for negative affect. Days in the *comprehensive profile* were associated with the highest value for time pressure, negative affect, and emotional exhaustion and the second-highest level for thriving and positive affect.

Therefore, there seems to be a pattern of the associations of the profiles with the leader-related outcomes. We observed high levels of positive (i.e., thriving, positive affect) outcomes and low to medium levels of negative (i.e., time pressure, negative affect, emotional exhaustion) outcomes for the *transformational-rewarding profile*. For the *passive profile*, we found low levels of positive outcomes but also low to medium levels of negative outcomes. The *comprehensive profile* was reflected by medium levels of positive but also high levels of negative outcomes.

Results from linear regression analyses (see Table 6, results without control variables) showed that afternoon thriving was positively related to positive affect (B = 0.66) and negatively related to negative affect (B = -0.26) and emotional exhaustion (B = -0.49). Time pressure during the work day, in turn, showed a positive link with negative affect (B = 0.23) and emotional exhaustion (B = 0.41) and a

Table 6 Regression of leader well-being on time pressure and thriving

	Emotional ex	exhaustion Positive aff			ct		Negative affe	Negative affect	
	В	SE	$R^2$	$\overline{B}$	SE	$R^2$	$\overline{B}$	SE	$R^2$
Model	,		0.46	'	'	0.33			0.17
Constant	2.89***	0.11		1.30***	0.11		1.90***	0.12	
Time pressure	0.41***	0.02		$-0.08^{***}$	0.02		0.23***	0.02	
Thriving	-0.49***	0.03		0.66***	0.03		-0.26***	0.03	

<sup>\*\*\*</sup>*p* < .001.

negative link with positive affect (B = -0.08). All coefficients were significant at p < .001. Taken together, thriving was positively related to the positive indicator of well-being and negatively to the negative indicators of well-being, whereas time pressure was negatively related to the positive indicator of well-being and positively to the negative indicators of well-being.

The results of our analyses with control variables are shown in Table 7. Time pressure and thriving explained additional variance in emotional exhaustion, and both stayed significant predictors of emotional exhaustion. However, for positive and negative affect as outcomes, only thriving explained additional variance in both outcomes and stayed a significant predictor.

For our mediation analyses, we first compared the transformational-rewarding profile with the passive profile (i.e., our reference profile). We found a significant relative indirect effect of profile membership on emotional exhaustion via thriving (negative) and time pressure (positive), a significant positive relative total effect, and a significant relative indirect effect on positive affect via thriving (positive) and time pressure (negative), and a significant negative relative total and a significant relative indirect effect on negative affect via thriving (negative) and time pressure (positive). Next, we compared the comprehensive profile with the passive profile. We found a significant positive relative total and a significant relative indirect effect of profile membership on emotional exhaustion via thriving (negative) and time pressure (positive), a significant positive relative total and a significant positive relative indirect effect on positive affect via thriving, a significant negative relative total effect on positive affect via time pressure, and a significant positive relative total and a significant relative indirect effect on negative affect via thriving (negative) and time pressure (positive) (see Table 8 for the exact coefficients).

In sum, the pattern for the mediation analyses was relatively similar for the *transformational-rewarding* and the *comprehensive profile*. We found support for the mediation assumption for most of the associations and could show that the relative indirect effects via thriving were negative for the negative well-being indicators, whereas they were positive for the positive well-being indicator. In turn, the relative indirect effects via time pressure were positive for the

negative well-being indicators and negative for the positive well-being indicator.

#### **Discussion**

The present study builds upon previous daily diary studies on leadership and leader well-being, which adopted a variable-centered approach examining the distinct effects of leadership behaviors (Lanaj et al., 2016; Liao et al., 2020) and upon previous person-centered studies that investigated the association of leadership profiles and leader well-being on a between-person level (Arnold et al., 2017; Doucet et al., 2015). We combined the within-person and person-centered approaches, accounting for the fact that leadership fluctuates daily and that leaders can draw on different combinations of leadership behaviors from day-to-day. Based on COR theory, we examined how leader behaviors interplay on the day-level and how they are associated with leader well-being.

In our daily diary study across one work week, three daily leadership profiles emerged: a *transformational-rewarding profile* dominated by TFL and CR behaviors, present on around two-third of the days (based on the total number of completed days across the entire sample); a *comprehensive profile* with elevated levels of transformational and all transactional behaviors, present on around a quarter of the days; and a *passive profile* with low levels of transformational and transactional behaviors and higher levels of LF behaviors, present on less than 10% of the days.

We also investigated the stability of our daily profiles across the week. We found that the stability of profile membership was rather high across the week (around half of the leaders stayed in the same profile each day of the week) but differed across profiles. The stability was higher for the *transformational-rewarding* and the *comprehensive profile* than for the *passive profile*.

Last, the profiles were differentially related to central leader-related variables, indicating that the profiles have important implications for leaders' daily well-being. Specifically, days in the *transformational-rewarding profile* seemed to be most beneficial for leaders, as indicated by higher values for thriving and positive affect and lower



 Table 7
 Regression of leader well-being on time pressure and thriving with control variables

with control variables			-2	2
Variable	В	SE	R <sup>2</sup>	$\Delta R^2$
Emotional exhaustion			0.60	0 <0***
Step 1	2.00	0.14	0.60	0.60***
Constant	3.00	0.14		
Sleep	-0.15***	0.02		
Job control	-0.12***	0.02		
Evening activities	-0.15***	0.02		
WFC	0.42***	0.02		***
Step 2	***		0.66	0.06***
Constant	3.15***	0.13		
Sleep	$-0.11^{***}$	0.02		
Job control	$-0.07^{***}$	0.02		
Evening activities	-0.11***	0.02		
WFC	0.33***	0.02		
Time pressure	0.17***	0.02		
Thriving	$-0.26^{***}$	0.02		
Positive affect				
Step 1			0.27	0.27***
Constant	1.19***	0.17		
Sleep	0.23***	0.02		
Job control	0.11***	0.03		
Evening activities	0.24***	0.03		
WFC	-0.01	0.02		
Step 2			0.41	0.14***
Constant	0.43**	0.16		
Sleep	0.15***	0.02		
Job control	0.04	0.02		
Evening activities	0.16***	0.02		
WFC	-0.02	0.02		
Time pressure	-0.01	0.02		
Thriving	0.49***	0.03		
Negative affect				
Step 1			0.36	0.36***
Constant	1.62***	0.16		
Sleep	-0.02	0.02		
Job control	-0.14***	0.02		
Evening activities	-0.04	0.02		
WFC	0.37***	0.02		
Step 2			0.37	0.01**
Constant	1.79***	0.17		
Sleep	-0.00	0.02		
Job control	-0.13***	0.02		
Evening activities	-0.02	0.02		
WFC	0.37***	0.02		
Time pressure	0.01	0.02		
Thriving	$-0.09^{**}$	0.02		
W. WEG. W. 1.C	-0.03	0.03		

Note WFC = Work-family conflict

values for negative affect and emotional exhaustion. In contrast, days in the *passive* and the *comprehensive profile* partly reflected a double-edged sword for leaders' wellbeing. Specifically, the *passive profile* was associated with

lower levels for rather negative but also rather positive outcomes, whereas the *comprehensive profile* was related to *higher* levels for rather positive but also rather negative outcomes. We also showed that leaders' experience of time pressure and thriving are relevant factors for leader well-being. For example, days in the *passive profile* were reflected by low time pressure and low thriving, which was associated with lower emotional exhaustion and negative affect but also lower levels of positive affect in the evening. In contrast, time pressure and thriving were higher on days in the *comprehensive profile*, which was related to higher levels of emotional exhaustion, negative affect, and positive affect in the evening.

# **Theoretical Implications**

# **Daily Leadership Profiles**

We can discuss our daily leadership profiles by comparing them with those in Arnold et al.'s (2017) between-person study. Regarding similarities, we also did not find a daily profile in which TFL behaviors occurred without other leadership behaviors (i.e., TFL was only present in combination with other leader behaviors). Thus, the sole consideration of TFL, as done in previous (day-level) studies, might miss essential nuances of daily leadership behaviors. Furthermore, two of Arnold et al.'s (2017) profiles are very similar to our *transformational-rewarding* and *passive profile*, indicating that these profiles cannot only be found when comparing leaders with each other (i.e., between-person level) but also when comparing days with each other (i.e., within-person level).

Regarding differences, our comprehensive profile had a different shape. Compared to the other leadership behaviors, it included lower levels of LF behaviors than Arnold et al.'s (2017) profile. Furthermore, we did not detect a profile with low levels of all behaviors. Taking these differences together, it seems as if leaders, on a daily-basis, always show some behaviors of the full-range leadership model and either act more actively (as in the transformationalrewarding and comprehensive profile) or withdraw from interactions with their followers (as in the passive profile). In contrast, a combination of acting actively and passively at the same time seems to be observable at the betweenperson level when leaders draw on a greater repertoire of behaviors "matching their behavioral approach to the needs of situation" (Arnold et al., 2017, p. 1048) but not on the day-level. This assumption also aligns with the idea that individuals make summary evaluations (i.e., they aggregate their experiences) when asked to provide information over a longer period, which is likely to differ from reports of daily experiences (Gabriel et al., 2019).



<sup>\*\*</sup>p < .01. \*\*\*p < .001

Table 8 analyse

<b>Table 8</b> Results of mediation analyses (research question 4)	Paths	Thriving	Time pressure	Emotional exhaustion	Positive affect	Negative affect
	Individual paths		,			
	Profile 2 (vs. Profile 1)	$a = 0.66^{***}$	$a = 0.64^{***}$	$c^{\prime a} = 0.30^{**}$ $c^{\prime b} = -0.29^{**}$	$c'^a = 0.08$ $c'^b = 0.58^{***}$	$c'^{a} = -0.04$ $c'^{b} = -0.25^{***}$
	Profile 3 (vs. Profile 1)	$a = 0.21^{***}$	$a = 0.55^{***}$	$c^{a} = 0.36^{***}$ $c^{b} = 0.04$	$c^{\text{'a}} = 0.01$ $c^{\text{'b}} = 0.18^{***}$	$c'^{a} = 0.41^{***}$ $c'^{b} = 0.17^{**}$
	Thriving			$b^{c} = -0.51^{***}$ $b^{d} = -0.50^{***}$	$b^{c} = 0.64^{***}$ $b^{d} = 0.67^{***}$	$b^{c} = -0.18^{***}$ $b^{d} = -0.29^{***}$
	Time pressure			$b^{c} = 0.40^{***}$ $b^{d} = 0.38^{***}$	$b^{c} = -0.13^{***}$ $b^{d} = -0.05$	$b^{c} = 0.14^{***}$ $b^{d} = 0.31^{***}$
	Relative indi- rect effect (via thriving)					
	Profile 2 (vs. Profile 1)			ab = -0.34, SE = 0.05 95% CI [-0.45, -0.24]	ab = 0.42, SE = 0.06 95% CI [0.31, 0.54]	ab = -0.12, SE = 0.03 95% CI [-0.18, -0.07]
Notes in dispersely much form	Profile 3 (vs. Profile 1)			ab = -0.11, SE = 0.03 95% CI [-0.16, -0.06]	ab = 0.14, SE = 0.03 95% CI [0.08, 0.21]	ab = -0.06, SE = 0.02 95% CI [-0.11, -0.02]
Notesa indicates the path from predictor to mediator, b indicates the path from mediator to outcome variable, c' indicates	Relative indi- rect effect (via time pressure)					
the direct effect of predictor on outcome variable after controlling for the effect of mediator, ab indicates the indirect effect	Profile 2 (vs. Profile 1)			ab = 0.26, SE = 0.05 95% CI [0.16, 0.35]	ab = -0.08, SE = 0.02 95% CI [-0.13, -0.05]	
of predictor on outcome variable through mediator, <i>c</i> indicates the direct effect of predictor on outcome variable. CI = confidence	Profile 3 (vs. Profile 1)			ab = 0.21, SE = 0.03 95% CI [0.16, 0.27]	ab = -0.03, SE = 0.02 95% CI [-0.07, 0.02]	ab = 0.17, SE = 0.03 95% CI [0.12, 0.24]
interval Profile 1 = Passive profile;	Relative total effect					
Profile 2 = Transformational- rewarding profile; Profile 3 = Comprehensive profile	Profile 2 (vs. Profile 1)			c = -0.04, SE = 0.09 95% CI [-0.22, 0.14]	-	$c = -0.16^*,$ SE = 0.06 95% CI
<sup>a</sup> With thriving as mediator. <sup>b</sup> With time pressure as mediator. <sup>c</sup> Profile 2 vs. Profile 1. <sup>d</sup> Profile 3 vs. Profile 1 $p < .05$ . ** $p < .01$ . *** $p < .001$	Profile 3 (vs. Profile 1)			c = 0.25***, SE = 0.05 95% CI [0.16, 0.34]		[-0.28, -0.05] $c = 0.34^{***},$ SE = 0.06 95% CI [0.24, 0.45]

## **Stability of Daily Leadership Profiles**

Our dynamic approach that considers day-to-day changes in leadership behavior builds on previous studies that showed that leadership varies daily within leaders (Kelemen et al., 2020). In the same line, we found changes in profile membership from one day to the next, and almost half of our sample belonged to more than one profile across the week. Similarly, we observed changes from all three profiles on one day to all others on the consecutive day. These findings demonstrate that leaders, to a certain degree, can draw on different leadership behaviors of the full-range model of leadership from day to day, for example, as an adaptation to day-specific tasks and challenges.

The finding of high variability of different leadership behaviors within one leader across one week contrasts more traditional perspectives on leadership. These perspectives assume that leadership behaviors represent leaders' stable behavioral tendencies over time that are driven by stable leader characteristics (e.g., personality, Judge et al., 2002, 2009; Judge & Bono, 2000). With our study, we do not neglect that this stable perspective has its true parts, as indicated by extant research showing between-person differences in leaders' behaviors (e.g., Bass et al., 2003; Lord et al., 2017). At the same time, with our day-level approach, we



add a complementary perspective on leadership, acknowledging that leadership behaviors can also differ within one leader, that is, on the within-person level (McClean et al., 2019). This finding aligns well with recent research on the daily variability of leadership (Kelemen et al., 2020). Even though leaders might have a stable behavioral tendency over time, their daily behavior can still deviate from this stable tendency from time to time. In the present study, we were not able to investigate (daily) causes for leaders' daily leadership behaviors (compare also the limitations section). However, based on recent research, it is reasonable to assume that daily situational requirements, such as daily job demands and tasks (Nielsen & Cleal, 2011; Rosen et al., 2019; Sherf et al., 2019), can shape leaders' daily leadership behaviors.

When comparing the passive with the transformationalrewarding and comprehensive profile, we note two crucial differences in the membership stability across one week. First, the stability was lower in the passive profile than in the other two. Only a small part of our sample stayed in the passive profile every day of the week. Second, the variability of the percentage of leaders who belonged to the passive profile on two consecutive days was higher than in the other two profiles. For some days, we observed that almost all leaders who belonged to the passive profile on one day stayed in the passive profile the next day. In contrast, on other days, we observed that around two-third of the leaders belonging to the passive profile on one day changed to the transformational-rewarding or comprehensive profile on the next day. These findings show that it is rather unlikely that leaders act passively all the time but that they can change their behavior according to day-specific demands. Therefore, they are not passive leaders per se but can also draw on more active behaviors when necessary.

In contrast, leaders belonging to the *transformational-rewarding* or the *comprehensive profile* at the beginning of the week were likely to stay in the respective profile for the rest of the week. This low probability of change was also reflected in the fact that only a few leaders (maximum 10%) changed from the *transformational-rewarding* or the *comprehensive profile* to the *passive* one. We assume that the benefits for leaders associated with these two profiles (e.g., higher positive affect, cf., Research Question 3) might motivate leaders to show the same combinations of behaviors daily.

# **Daily Leadership Profiles and Emotional Exhaustion**

Our study builds on prior research on leadership behaviors and leader well-being (Kaluza et al., 2020; Lanaj et al., 2016; Lin et al., 2019). We extend previous findings by investigating the association of a *combination* of leadership

behaviors with important daily leader experiences and well-being. Previous findings showed a dark side of TFL for leaders' emotional exhaustion (Lin et al., 2019; Zwingmann et al., 2016). The results of our study indicate that TFL per se is not automatically related to higher emotional exhaustion but that the relationship depends on other leadership behaviors that leaders demonstrate on the same day. The level of emotional exhaustion on days leaders belonged to the *transformational-rewarding profile* was comparably low as on days leaders belonged to the *passive profile* (which is reflected by lower levels of TFL). This finding is interesting because TFL comprises resource-intensive behaviors that make resource investment necessary (Lin et al., 2019) and that could have been associated with reduced resources for leaders (i.e., higher emotional exhaustion).

However, we could only detect elevated levels of emotional exhaustion on days leaders belonged to the comprehensive profile. These days, leaders showed not only TFL and CR but also MBE-A and MBE-P behaviors. Based on COR theory, it could be that leaders need to invest a higher amount of resources (e.g., time, energy, cognitive resources) in their behavior when belonging to that profile compared to days they primarily show TFL and CR behaviors. On days in the comprehensive profile, leaders have to cover various behaviors (e.g., dealing with individual followers' needs, clarifying goals and expectations, proactively and reactively dealing with errors), leaving them with fewer energy resources at the end of the day. Another reason could be that leaders show different conflicting leadership behaviors on that day (e.g., TFL behaviors focusing on empowering and trusting the followers vs. MBE-A behaviors reflecting micromanagement focusing on controlling followers and searching for errors). Demonstrating conflicting behaviors could be associated with a drain of leaders' resources (Arnold et al., 2017), as indicated by higher emotional exhaustion.

Our findings on the passive profile contrast previous metaanalytic evidence (Kaluza et al., 2020), which showed that passive leadership was associated with lower well-being. They also contrast previous between-person pattern-oriented research showing that a profile dominated by passive behaviors poses a risk to leaders' well-being (Arnold et al., 2017). The results of our daily approach suggest that daily passive behaviors can also benefit leaders, as indicated by lower levels of emotional exhaustion. One reason for this association might be that leaders withdraw from leadership responsibilities these days. Therefore, they may invest fewer resources (e.g., time, energy) in follower-oriented behaviors on days they belong to the passive profile, which is related to more resources at the end of the day (i.e., lower emotional exhaustion). Taking our results and the ones of previous research together, it seems that belonging to the



passive profile might have short-term positive associations with leaders' well-being due to lower resource expenditure. However, given that individuals need to invest resources to gain new ones (Hobfoll et al., 2018), the long-term associations with leaders' well-being seem to be negative (Arnold et al., 2017).

#### **Daily Leadership Profiles and Affectivity**

We showed that the profile discussed as most beneficial for followers (i.e., the *transformational-rewarding profile*) was associated with the highest levels of positive affect and the lowest levels of negative affect. It is noticeable that leaders reported only slightly lower levels of positive affect on days they belonged to the *comprehensive profile* compared to the *transformational-rewarding profile*. At the same time, the *comprehensive profile* was associated with considerably higher values of negative affect than days in the *transformational-rewarding profile*. Hence, it seems as if this comprehensive daily profile includes beneficial aspects for leaders (e.g., meaningful and inspiring interactions with followers) but also detrimental ones (e.g., dealing with followers' mistakes and deriving consequences).

The passive profile seemed to be the least beneficial one for leaders' affect, as days in the passive profile were associated with the lowest value on positive affect compared to the other two profiles, and negative affect was the second highest after days in the comprehensive profile. Therefore, we assume that days dominated by acting passively towards followers do not include many events or interactions that leaders can benefit from and, at the same time, might even be connected to fewer resources, as indicated by increased negative affect. Nevertheless, we note that the passive profile's absolute level of negative affect was still relatively low (M=1.55).

# Daily Leadership Profiles, Time Pressure, and Thriving

We found time pressure and thriving to be variables that can help explain the profile differences in leaders' well-being. However, even though we found support for the mediating role of the two variables between leadership and leader well-being, we cannot rule out the possibility that situational characteristics of the working day (and associated experiences of a certain amount of time pressure and thriving) shape leaders' behavior on that day, which is then associated with their evening well-being. Therefore, the high levels of time pressure in the *comprehensive profile* might, on the one hand, reflect the situation in which leaders are actively involved in all kinds of different behaviors throughout the day. These multiple behaviors, in turn, can be associated with increased time pressure as leaders need to invest time

in their leadership behaviors (e.g., interactions with their followers, searching for errors, etc.). On the other hand, days in the *comprehensive profile* might be characterized by high demands, deadlines, and workload (i.e., high time pressure), connected with the need to draw on a greater behavioral repertoire to deal with the demands. Our results support the assumption that on days leaders belong to the *comprehensive profile*, they have to deal with a greater amount of time pressure (i.e., either due to the leadership behavior or due to other characteristics of the working day) that might be associated with resource expenditure, reflected in higher levels of emotional exhaustion and negative affect.

The finding that time pressure is higher on days in the transformational-rewarding compared to days in the passive profile is not surprising. On the one hand, being actively involved in transformational and rewarding interactions with followers requires time and effort for leaders. It requires investing resources in leadership behavior (Lin et al., 2019), which can be associated with increased time pressure (Arnold et al., 2017). On the other hand, it could also be that days in the passive profile reflected a "slow day" (i.e., low time pressure) with a lack of opportunities for leaders to engage in activity with their followers. Interestingly, the higher level of time pressure for the transformational-rewarding versus the passive profile was not reflected in the level of emotional exhaustion or positive and negative affect. Thus, there seem to be aspects of the transformational-rewarding profile that can compensate for the reduced resources associated with higher time pressure and buffer negative associations with well-being.

Thriving was highest on days in the *transformational-rewarding profile* and could thus be a compensatory factor. Again, different directions of the associations are conceivable. On the one hand, engaging in combined TFL and CR behaviors seemed to be beneficial for leaders as it could be an opportunity for them to experience greater vitality and learning. Hence, for example, parts of these transformational-rewarding behaviors, such as encouraging oneself and the followers to try new approaches to tackle problems, can help enrich the leader's resource pool and acquire new knowledge and competencies for oneself. Although to a slightly lower extent, these higher resources could also be observed on days in the *comprehensive profile*. We suppose that the level of thriving was particularly associated with the transformational-rewarding behaviors.

In contrast, the lowest levels for thriving on days in the passive profile might reflect that the lack of active constructive behaviors reduces the opportunities for the outlined resource gains for leaders. However, on the other hand it could also be that on days leaders (due to whatever situational characteristics) experienced greater thriving, they engaged more strongly in transformational-rewarding



behaviors, given the higher levels of vitality and learning they felt. In contrast, on days with lower vitality levels and lower learning focus, leaders might did not want or were not able to engage in active exchange with their followers, and therefore belonged to the *passive profile*.

# **Implications for COR Theory**

Overall, the present study has important implications for COR theory (Hobfoll et al., 2018). We showed that daily leadership behavior is a factor that is relevant for leaders' daily resource pool. Additionally, leaders' daily experience of time pressure and thriving are relevant daily factors associated with leaders' resources. Comparing our findings with previous variable-centered studies (e.g., on transformational leadership; Lanaj et al., 2016; Lin et al., 2019), we additionally demonstrated that the specific combinations of daily leadership behaviors make a difference in leaders' well-being compared to when considered alone. For example, leaders reported different levels of well-being on days they demonstrated elevated levels of TFL and CR (i.e., the transformational-rewarding profile) compared to days they additionally showed high levels of MBE-A and MBE-P (i.e., the comprehensive profile). This finding aligns with the assumption that combined resources can relate differently to psychological outcomes than single resources (Halbesleben et al., 2014).

We also showed that our daily leadership profiles differed in their resource-draining and resource-gaining potential and that these processes occurred simultaneously. For example, we found a profile associated with low resource investment but also low resource gains (*passive profile*) and a profile with high resource investment but also medium to high resource gains (*comprehensive profile*), as indicated by different levels of affect and emotional exhaustion. Therefore, leadership is not necessarily exclusively beneficial or detrimental to leaders' resource pool but depends on the specific resources (e.g., indicators of well-being) under investigation.

One aspect we did not examine in the present study that could help enrich the theory on the association of leadership and leader well-being is the possibility of lagged effects from one day to the next or across multiple days. This aspect tackles the question of the timing of effects. However, previous research lacks a clear theory on the periods over which effects can occur or even change in directionality (Kaluza et al., 2020; Kelemen et al., 2020). For example, a study showed that daily abusive leader behaviors were associated with enhanced leader recovery at the end of the day and enhanced next-day leader work engagement. In contrast, engaging in abusive behaviors was negatively related to leaders' work engagement after several days (Qin et al.,

2018). This exemplary finding shows that resource-draining or resource-gaining effects can be short-lived and that the associations can be different when investigating them across extended periods (e.g., from one day to the next, across one week).

Individuals need to invest resources to preserve existing or gain new ones. Therefore, it could also be that the low level of daily resource investment associated with the passive profile can harm leaders' well-being on the next day or after multiple days because of a lower chance of gaining resources through the behaviors. Similarly, the profile that turned out to be the most beneficial one for leaders' daily well-being (i.e., the transformational-rewarding profile) might also have negative consequences for leaders' wellbeing after a few days because the stronger resource investment comes into effect (e.g., in case no new resources can be gained). COR theory states that resource gain increases in salience in the context of resource loss and that resource loss is more powerful than resource gain (Hobfoll et al., 2018). Therefore, an interesting question in this regard is whether (and if yes, at what time) resource gains can offset resource losses (or vice versa), which could produce a net resource gain or loss.

# **Practical Implications**

The present findings have important implications for leaders and organizations. First, leaders can be sensitized to the fact that their leadership behaviors can vary daily and that they might use different combinations of leadership behaviors from day to day. This awareness can help leaders adapt their leadership behaviors to the working day's characteristics and develop their own situational leadership repertoire based on their followers' daily needs. Connected to this, our study suggests that leadership training should not solely incorporate TFL (Arthur & Hardy, 2014; Dvir et al., 2002; Kelloway et al., 2000) but other behaviors as well, especially CR. This approach also aligns with the full-range leadership model, which proposes that a combination of TFL and CR behaviors is associated with higher leadership effectiveness (Avolio, 2011).

Second, in line with previous findings (Arnold et al., 2017; Kaluza et al., 2020), our study suggests that leadership training should also focus on leaders' well-being, as leadership behaviors are associated with the latter. Specifically, training should incorporate that certain combinations of leadership behaviors can simultaneously be beneficial and detrimental to leaders' well-being. Leaders should be aware of these relationships and potential trade-offs. This knowledge can help motivate leaders for constructive leadership even if these behaviors might be associated with resource expenditure at some point. The knowledge can also



guide leaders' self-reflection about their well-being on days characterized by resource-intensive leadership. These days, it might be even more critical for leaders to engage in effective evening recovery (Sonnentag et al., 2017).

#### **Limitations and Future Research**

We note some limitations of our study that should be considered when interpreting our results. First, we assessed leadership behaviors with leader ratings only. This approach is adequate for variables reflecting internal states that are difficult to determine from an outside perspective (i.e., time pressure, thriving, well-being). Nevertheless, the ratings on leadership behaviors can be susceptible to common-method bias (Podsakoff et al., 2003). However, especially in larger teams, in which leaders interact with multiple followers, assessing leadership behavior from the perspective of only a limited number of followers can also bias the leadership ratings. We argue that, across one work day, the leaders are the best source to rate their extensive behaviors towards all their followers on a certain day because the followers might not perceive the complete variety of their leaders' behaviors. We perceive this approach as adequate, especially as we were interested in multiple leadership behaviors simultaneously. Nevertheless, we encourage future research to include follower ratings or ratings by third-party observers of leadership behaviors to overcome the potential biases of our study.

Second, we did not investigate antecedents of profile membership. Future research could examine factors that increase the likelihood of belonging to one profile versus another, both on the person level (e.g., motivation to lead, leadership experience) and the daily level (e.g., recovery experiences, work engagement, work demands). For example, in line with the role of daily situational characteristics discussed below, passive leadership behaviors might be a response to low work demands on that day. Additionally, even though we explored the dynamics of profile membership across one week, we could not assess factors that can explain shifts in profile membership from one day to the next. Future studies should apply latent transition analysis with covariates (LTA, e.g., Kam et al., 2016) to examine variables that are associated with changes in profile membership across time. An additional interesting aspect for future research related to the dynamic of profile membership could be exploring adaptability throughout the week in more detail. For example, it could be that more adaptation (i.e., more frequent changes of profile membership) is related to more exhaustion over time, especially at the end of a week. Vice versa, reduced well-being might also affect a leader's ability to adequately adapt one's leadership behaviors to work demands.

Third, our study only covered one week. Therefore, we can only draw our conclusions based on these five days, and the results might look different when conducting the study over more than one week. However, we employed several strategies to ensure that the timing of the study did not profoundly affect the results. For example, the participants came from different organizations and different industries, therefore minimizing the risk that there are outstanding (work-related) events that affect every participant in the same way at the same time. Additionally, we informed the leaders that they should only participate in the study when the survey week is a standard working week for them. Furthermore, our within-person approach minimizes the risk of the influence of external factors as we conducted intrapersonal (vs. interpersonal) analyses.

Fourth, even though we separated the assessment of leadership behaviors (afternoon) and well-being (evening), we assessed our mediators time pressure and thriving at the same time as the leadership behaviors, which increases the risk of common-method bias (Podsakoff et al., 2003). Moreover, we cannot draw causal conclusions because we did not apply an experimental design. Therefore, for instance, we cannot rule out that time pressure and thriving had an effect on leaders' well-being, mediated through leadership behaviors. For example, we cannot say whether leaders reported lower levels of time pressure because they demonstrated more passive behaviors on that day or whether it was a "slow day" with low time pressure (i.e., time pressure as a situational characteristic of the working day) which resulted in the enactment of passive behaviors. This possibility is supported by recent research on situational antecedents of leadership (Rosen et al., 2019; Stempel et al., 2023). In sum, we can not rule out the issue of endogeneity, that is, the problem that omitted variables predict our study variables. We encourage future research to use experimental designs to make causal inferences (P. M. Podsakoff & Podsakoff, 2019) and to apply an instrumental variable approach (Schowalter & Volmer, 2023).

Fifth, choosing our well-being indicators allowed us to shed light on the double-edged nature of certain leadership profiles for leaders' well-being. However, well-being is a broad concept that can be understood in many ways (Sonnentag, 2015). Therefore, we encourage future research to examine other well-being indicators, such as job satisfaction, work engagement, or basic needs satisfaction.

Last, even though we conducted several checks to ensure data quality (e.g., regarding response patterns, response time, or inconsistency within items assessing the same construct), insufficient effort responding poses a risk to data quality, especially in online surveys. We encourage future studies to use additional approaches to ensure data quality, such as the infrequency approach (Huang et al., 2015).



#### **Conclusion**

The combination of intra-individual, pattern-oriented, and leader outcome-centered streams in leadership research allowed us to investigate daily combinations of leadership behaviors and their associations with leader well-being. Our findings highlight the need to study the interplay of daily leadership behaviors within leaders to catch the entirety of leaders' daily leadership routines. Additionally, specific combinations of leadership behaviors, such as transformational and transactional elements, can be a double-edged sword for leaders regarding their well-being. Furthermore, leadership behaviors that harm leaders' well-being in the long run can partly be positive for leaders from a daily within-person perspective. Our results underline the necessity for a within-person approach to leader well-being and a differentiated investigation of multiple well-being indicators.

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#### **Declarations**

**Conflict of Interest** We have no known conflict of interest to disclose.

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