Unveiling the interplay between leadership behavior and leader well-being: a person-centered approach

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Abstract

Purpose – Drawing on COR theory and based on a person-centered approach, this study aims to explore profiles of both leadership behavior (transformational leadership, abusive supervision) and well-being indicators (cognitive irritation, emotional exhaustion). Additionally, we consider whether certain resource-draining (work intensification) and resource-creating factors (leader autonomy, psychological contract fulfillment) from the leaders' work context are related to profile membership.

Design/methodology/approach – The profiles are built using LPA on data from 153 leaders and their 1,077 followers. The relationship between profile membership and correlates from the leaders' work context is examined using multinomial logistic regression analyses.

Findings – LPA results in an interpretable four-profile solution with the profiles named (1) Good health – constructive leading, (2) Average health – inconsistent leading, (3) Impaired health – constructive leading and (4) Impaired health – destructive leading. The two groups with the highest sample share – Profiles 1 and 3 – both show highly constructive leadership behavior but differ significantly in their well-being indicators. The regression analyses show that work intensification and psychological contract fulfillment are significantly related to profile membership.

Originality/value – The person-centered approach provides a more nuanced view of the leadership behavior – leader well-being relationship, which can address inconsistencies in previous research. In terms of practical relevance, the person-centered approach allows for the identification of risk groups among leaders for whom organizations can provide additional resources and health-promoting interventions.

Keywords Leadership, Leader well-being, Person-centered approach, LPA

Paper type Research paper

The study of leader well-being is an emerging field in leadership research. This perspective is highly relevant for several reasons. First, leaders are a key group in the organization worthy

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of attention due to their complex role demands (e.g. Fischer *et al.*, 2017). Second, leader well-being influences follower well-being through several mechanisms (e.g. emotion and mood contagion, Johnson, 2008; Sy *et al.*, 2005; crossover and role modeling, Dietz *et al.*, 2020). Finally, leadership behavior, as a decisive factor for follower and organizational outcomes (Montano *et al.*, 2017), and leader well-being are mutually related (e.g. Kaluza *et al.*, 2020).

However, in terms of the leadership behavior – leader well-being relationship, there is, to date, inconclusive evidence. In their meta-analysis, Kaluza *et al.* (2020) summarize that constructive leadership behavior (especially transformational) is mutually and positively related to leader well-being, and destructive leadership behavior (especially abusive supervision) is mutually and negatively related to leader well-being. However, the meta-analysis also discusses contradictory findings as there is empirical evidence showing opposite relationships (e.g. Liao *et al.*, 2021; Lin *et al.*, 2019; Qin *et al.*, 2018; Zwingmann *et al.*, 2016). These inconclusive findings might be explained by the excessive use of a variable-centered approach. By focusing mainly on linear relationships, it may be overlooked that there are leaders exhibiting the same leadership behavior who have different levels of well-being and vice versa. Contrary, the person-centered approach views leaders as "integrated systems" (Arnold *et al.*, 2017) in which individual differences among leaders result in a configuration, profile or pattern that is shared by a subgroup of leaders. Particularly, the unique patterns of variables in a subgroup representing a relatively small number of individuals may be missed by other approaches (Gabriel *et al.*, 2015). As firstly, the leadership behavior – leader well-being relationship is a bidirectional one (Kaluza *et al.*, 2020) and secondly, both constructive and destructive leadership behavior can create *and* cost leaders' resources, such an approach aims to capture previously unobserved heterogeneity (Gabriel *et al.*, 2015; Wang and Hanges, 2011). Drawing on Conservation of Resources Theory (COR, Hobfoll, 1989; Hobfoll *et al.*, 2018), we follow this person-centered approach to explore how far combined patterns of both leadership behavior (i.e. transformational leadership and abusive supervision) and leader well-being (i.e. cognitive irritation and emotional exhaustion) result in distinct profiles using latent profile analysis (LPA; cf. e.g. Arnold *et al.*, 2017; Gabriel *et al.*, 2015; Hancock *et al.*, 2021).

Leaders are faced with the challenge of balancing their own needs (i.e. their well-being) with the responsibility for those they lead. Against the background of limited resources, leaders may decide to allocate resources to themselves (i.e. protect their well-being while decreasing constructive leadership) or to their followers (i.e. show constructive leadership behavior while risking impaired well-being) (cf. Klug *et al.*, 2019). Our study focuses on leaders in lower and middle management. There is empirical evidence that these types of leaders face more severe health risks than leaders at upper organizational levels (e.g. top management; Korman *et al.*, 2022). They are somewhat dependent on conditions influenced by these higher levels. Taking into account COR theory's resource allocation and reciprocity assumptions (Halbesleben *et al.*, 2014), we additionally focus on how resource-draining (i.e. work intensification) as well as resource-creating factors (i.e. leader autonomy and psychological contract fulfillment) from the leaders' work context relate to the unique configurations of leadership behavior and leader well-being. Thus, we will examine correlates of leader profile membership.

In summary, our explorative quantitative study aims to contribute to the actor-centric leadership research paradigm in the following ways: first, we provide an integrated perspective on leadership behavior combined with well-being indicators among leaders. We aim to resolve the inconclusive findings regarding the leadership behavior – leader well-being relationship by using a person-centered approach. In doing so, we move beyond the linear thinking of the variable-centered approach and provide a more nuanced and holistic understanding of the mutual interplay and configuration of these constructs (e.g. Dinh *et al.*, 2014; Spurk *et al.*, 2020). Second, by including resource-draining and resource-creating factors from the leaders' work context and their correlation with profile membership, we broaden the

scope of leadership research by considering leadership behavior as a dependent rather than an independent variable. Based on the availability and reciprocity of resources as central to individuals' well-being and behavioral responses (Halbesleben and Wheeler, 2011), this perspective can help identify conditions that enable high leader well-being and high constructive leadership behavior at the same time. In doing so, we contribute to a limited but growing body of research that focuses on leaders' working conditions as a previously blind spot in leadership research (Stempel *et al.*, 2023). Third, by looking at different profiles that emerge from the configuration of leadership behavior and leader well-being, we can identify risk groups among leaders. Together with the integration of relevant contextual factors, this enables us to strengthen a health prevention perspective with respect to leaders, which can provide practical advice for organizations.

Theory

Leadership behavior and leader well-being are both matters of resources (cf. Arnold *et al.*, 2017; Byrne *et al.*, 2014; Hancock *et al.*, 2021). Psychological resources are valued because they help people deal with external demands, achieve goals or protect against resource loss (Halbesleben *et al.*, 2014). The main tenet of COR theory is that "humans are motivated to protect their current resources and to acquire new resources" (Halbesleben *et al.*, 2014, p. 1335). Both constructive and destructive leadership behavior can be resource-draining as well as resource-creating. These behaviors have an impact on leader well-being but also take place under the conditions of leader well-being, and both, in turn, are embedded in the context in which leaders operate. In this study, we aim to take account of these reciprocal and mutual relations.

Different leadership styles can be exhibited by the same leader (e.g. Arnold *et al.*, 2017; Doucet *et al.*, 2015; Hancock *et al.*, 2021). We concentrate on transformational leadership and abusive supervision, which represent the epitomes of constructive and destructive leadership, respectively (Hancock *et al.*, 2021; Harms *et al.*, 2017). Transformational leadership encompasses communicating a vision, developing and empowering followers, providing support, being innovative and charismatic and leading by example (Avolio and Bass, 1995; Carless *et al.*, 2000). These behaviors may enhance leaders' resources and thus also their well-being through the creation of organizational, personal and social resources (e.g. Arnold *et al.*, 2017; Wegge *et al.*, 2014). However, they may also weaken leaders' resources and thus impair their well-being by requiring considerable time and effort (e.g. Zwingmann *et al.*, 2016). Byrne *et al.* (2014) demonstrated that leaders with already depleted resources tend to show lower levels of transformational leadership and higher levels of abusive supervision, presumably to defend their remaining resources – which would be in line with COR theory's desperation principle (Halbesleben *et al.*, 2014). Abusive supervision refers to the extent to which leaders are seen to engage in a sustained display of hostile verbal and non-verbal behaviors (Tepper, 2000). Exhausted resources and stress can trigger aggressive behavior (Burton *et al.*, 2012; Hobfoll *et al.*, 2018; Tepper *et al.*, 2017), so abusive supervision may co-occur with impaired well-being. Due to the negative consequences for followers (e.g. reduced productivity and motivation, Fischer *et al.*, 2021), abusive supervision creates a resource-draining environment, which in turn may negatively relate to leader well-being (Arnold *et al.*, 2017). Contrary to this, Qin *et al.* (2018) were able to find short-term resource gains for abusive leaders due to a lack of need for self-control.

In light of these inconclusive findings, we move from the dominant variable-centered approach to a person-centered approach. Accordingly, it may be that all the possible outlines of the leadership behavior – leader well-being relationship are "correct", but that they are "correct" for different individuals (Gabriel *et al.*, 2015).

LPA is an exploratory and inductive approach. Instead of specific hypotheses, we do formulate research questions about the number and nature of profiles (e.g. Gabriel *et al.*, 2015).

Profiles that emerge from person-centered approaches may differ quantitatively or qualitatively regarding the considered profile indicators (i.e. constructs; Gabriel *et al.*, 2015). Quantitatively distinct profiles differ in the absolute level of the profile indicators. Qualitatively distinct profiles refer to differences in the relative standing on the profile indicators (Marsh *et al.*, 2009; Wang and Hanges, 2011). These elaborations are summarized in the following exploratory research question:

RQ1. Are there quantitatively and qualitatively distinct profiles of leadership behavior and leader well-being?

Another aspect of both leadership behavior and leader well-being is the availability of resources (e.g. Kaluza *et al.*, 2020; Lin *et al.*, 2019; Tepper *et al.*, 2017). Both leadership behavior and leader well-being do not take place in an empty space, but are embedded in a context. Leaders in lower and middle management operate under conditions that are influenced by upper organizational levels. High levels of constructive leadership behavior and leader well-being can only occur under optimal conditions, that is sufficient resources. According to COR theory, a lack of resources may cause leaders to engage in defensive attempts to conserve their remaining resources (Halbesleben and Bowler, 2007; Halbesleben and Wheeler, 2011), such as avoiding transformational leadership behaviors (Stempel *et al.*, 2023; Tafvelin *et al.*, 2019) and thereby make allocation decisions. We draw on these resource allocation assumptions as well as the reciprocity assumptions of COR theory (Halbesleben *et al.*, 2014) by including both resource-draining and resource-creating factors from the leaders' work context: work intensification, leader autonomy and psychological contract fulfillment. The common anchor of these attributes is that they reflect leaders' reciprocity with the organization, that is decisions at upper organizational levels lead to work intensification that leaders and their teams have to deal with, and leaders are given autonomy (or lack thereof) to organize their units. In addition, the feeling of psychological contract fulfillment summarizes the reciprocal relationship between leaders and upper organizational levels.

Work intensification refers to an increased work intensity reflecting a dynamic aspect of work (Franke, 2015; Kubicek *et al.*, 2015) with a high prevalence among leaders (Herttalampi *et al.*, 2023). Work intensification is a multi-faceted construct characterized by a higher workload, increased fragmentation, reduced time for breaks and the need for working in leisure time (Franke, 2015; Kubicek *et al.*, 2015; Schulz-Dadaczynski, 2020). Work intensification has been linked to impaired well-being (e.g. Franke, 2015). As a resource-draining stressor, it may hinder leaders from engaging in resource-intensive leadership behavior such as transformational leadership (Stein *et al.*, 2020; Stempel *et al.*, 2023) and instead engage in destructive leadership to defend their resources (Qin *et al.*, 2018; Tepper *et al.*, 2017).

Leader autonomy describes the extent to which leaders have sufficient freedom to fulfill their duties and requirements as leaders (e.g. delegation or staff planning; Korek *et al.*, 2015). Hence, leader autonomy has been shown to predict transformational leadership (Stempel *et al.*, 2023).

Psychological contract fulfillment describes the employee – organization exchange (Robinson and Morrison, 2000). The psychological contract contains beliefs about reciprocal obligations between the two parties (Rousseau, 1989). There is empirical evidence that psychological contract fulfillment is related to leadership behavior (e.g. Wu *et al.*, 2022). Assuming that constructive leadership behavior is a resource investment by leaders, refraining from such behavior or engaging even in destructive leadership can reflect an unwillingness to invest in resources against the background of non-experienced reciprocity (cf. Halbesleben and Wheeler, 2011).

In addition to examining the individual factors, we also want to take a closer look at the interactions between these factors. In addition to the aforementioned assumptions regarding reciprocity and allocation, we will thereby address COR theory's gain paradox principle

which states that resource gains are emphasized in the context of resource losses (Halbesleben *et al.*, 2014; Hobfoll *et al.*, 2018).

Summarized, we aim to answer the following research questions:

RQ2. Are resource-draining factors (i.e. demands or stressors) from the leaders' work context related to leader profile membership?

RQ3. Are resource-creating factors from the leaders' work context related to leader profile membership?

RQ4. Is there an interaction between resource-draining and resource-creating factors from the leaders' work context in terms of their relationship to leadership profiles?

Method

Sample and research design

This study is part of a larger research project that received ethical approval from the first author's Institutional Review Board (No. 022_2019). We recorded our research questions and analytical strategy on the AsPredicted platform (see https://aspredicted.org/S6C_271).

In total, 26 organizations from Germany agreed to participate, with teams consisting of leaders and their respective followers. To be classified as from lower and middle management, the participating leaders had to have direct personnel responsibility and interaction with their followers, and they had to have at least one organizational level above them with authority to direct them. Leaders and their teams could volunteer to participate; hence, our sample could be described as convenience sample. The majority were from the "human health and social work activities" sector (42%), and from the "public administration" sector (31%). As incentives for participation, the project team offered a feedback report and a two-day leadership training for five leaders from each organization.

We sent questionnaires to 166 team leaders and their 1,523 followers. In total, we received completed questionnaires from 153 team leaders (93%) and 1,077 employees (71%). About half of the team leaders were male (53%). They were mostly (69%) between 35 and 54 years old, and 76% had an organizational tenure of more than 10 years.

Measures

All scales were rated on a five-point Likert scale. We estimated the reliability (i.e. McDonald's Omega) from a multilevel confirmatory factor analytic model (see supplementary material). The leaders rated their cognitive irritation, emotional exhaustion, work intensification, leadership autonomy and psychological contract fulfillment. The followers rated transformational leadership and abusive supervision of their leaders. Hence, all followers in a team rated their leaders and these follower-rated constructs were aggregated to the leader level. With this procedure we wanted to counteract potential self-overestimation of leaders in order to come closer to a more realistic assessment (e.g. Lee and Carpenter, 2018). Furthermore, the aggregated follower ratings per leader allow us to eliminate observational bias and to ensure accuracy of the ratings compared to ratings from single individuals (see Antonakis and House, 2014). We calculated intraclass correlations (ICCs; Bliese, 2000) and the average degree of interrater agreement ($r_{wg(j)}$; James *et al.*, 1993) to justify the aggregation of follower ratings at the leader level.

As this study is part of a larger research project using a comprehensive questionnaire, it was important to consider test economy to reduce burden and ensure a high response rate among the participants. As a result, we felt compelled to shorten some scales, always taking into account content considerations (e.g. fit with the target group of leaders) as well as psychometric information (e.g. level of factor loadings).

Transformational leadership. Followers rated their leaders' transformational leadership behavior with seven items from the Global Transformational Leadership scale by Carless *et al.* (2000). The reliability for transformational leadership was ω = 0.91 at the follower level and ω = 0.95 at the leader level. ICC1 was 0.23 and ICC2 was 0.67. The average degree of interrater agreement was $r_{wg(j)} = 0.83$.

Abusive supervision. Followers rated abusive supervision with three items from the abusive supervision scale by Tepper (2000), short version by Mitchell and Ambrose (2007). The reliability for abusive supervision was ω = 0.82 at the follower level and ω = 0.83 at the leader level. ICC1 was 0.18 and ICC2 was 0.59. The average degree of interrater agreement was $r_{wg(j)} = 0.91$.

As well-being indicators we chose cognitive irritation and emotional exhaustion representing two facets of hedonic well-being (e.g. Sonnentag *et al.*, 2023).

Cognitive irritation. Leaders rated their cognitive irritation with three items from the irritation scale by Mohr *et al.* (2005), ω = 0.91 at the leader level.

Emotional exhaustion. Leaders rated their emotional exhaustion with three items from the Oldenburg Burnout Inventory by Demerouti *et al.* (2003), Demerouti *et al.* (2010), ω = 0.88 at the leader level.

Work intensification. Leaders rated their work intensification with four items based on an adapted scale from Kubicek *et al.* (2015) and Krause *et al.* (2015), ω = 0.84 at the leader level.

Leadership autonomy. Leaders rated their leadership autonomy with two items from the scale by Korek *et al.* (2015), ω = 0.62 at the leader level.

Psychological contract fulfillment. Leaders rated their psychological contract fulfillment with six items from the scale by Robinson and Morrison (2000), ω = 0.89 at the leader level.

Control variables. We included leaders' span of control and leadership experience as control variables in predicting profile membership. While leaders with a high span of control may need to invest more resources into leadership, leaders with a longer leadership experience may have developed routines for handling challenging situations in leadership interactions. We ran our analyses with and without these controls and compared the results (see e.g. Becker *et al.*, 2016).

Statistical analysis strategy

We relied on latent profile analysis (LPA) to identify the profiles. We ran the LPA with Mplus 8 (Muthén and Muthén, 1998-2017) via the tidyLPA package in R (version 4.1.0). Following recommendations (e.g. Foti *et al.*, 2012; Nylund *et al.*, 2007; Shipp *et al.*, 2022), we evaluated the different solutions on several criteria to determine the number of profiles. First, a good-fitting solution should have lower fit indices (AIC, BIC and SSA-BIC) in comparison to other profile solutions, as well as significant LMR and BLRT tests. Second, entropy as an indication of classification quality should be high. Third, we will only consider solutions where no less than 1% of the total sample is contained in a profile. Finally, the solution should be parsimonious and theoretically interpretable. Based on this and regarding RQ1, we decided for a four-profile solution, as this estimation had the lowest BIC, a significant BLRT and LMR tests and exhibited interpretable profiles.

Once a solution was found, we used multinomial logistic regression analysis with standardized predictors in R to predict profile membership (cf. Shipp *et al.*, 2022).

Results

We summarized the descriptive statistics in Table 1. The results from the LPA are used to answer RQ1: The model fit statistics from the different LPA solutions are displayed in Table 2 and our chosen four-profile solution is depicted in Figure 1.

Table 1. Descriptive statistics and intercorrelations at the leader level

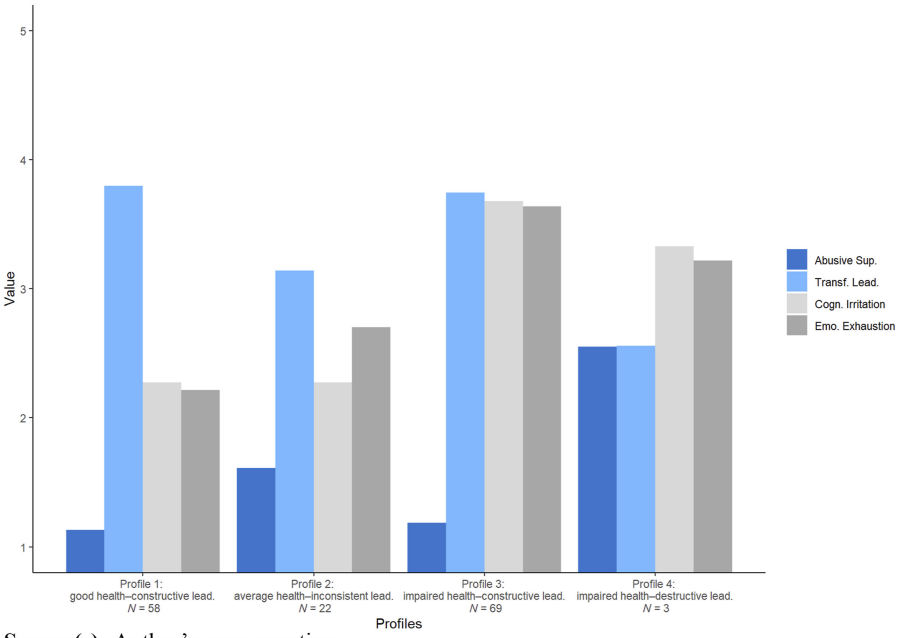
	M	*SD*	1	2	3	4	5	6	7	8
1. Transformational leadership[a]	3.65	0.55								
2. Abusive supervision[a]	1.25	0.29	−0.52**							
3. Cognitive irritation	2.92	0.99	0.16*	−0.07						
4. Emotional exhaustion	2.94	1.00	0.03	0.00	0.67**					
5. Leadership autonomy	3.85	0.75	0.08	−0.02	−0.07	−0.10				
6. Psychological contract fulfillment	4.28	0.69	−0.01	0.01	−0.19*	−0.28**	0.30**			
7. Work intensification	3.32	0.87	−0.02	−0.08	0.56**	0.55**	−0.07	−0.20*		
8. Span of control	24.53	32.68	−0.04	0.08	0.03	0.01	0.12	0.05	−0.03	
9. Leadership experience	5.06	1.14	−0.11	0.10	−0.09	−0.11	0.16*	−0.03	−0.10	0.19*

Note(s): N = 150–163 leaders, LA = leader autonomy, PCF = psychological contract fulfillment, WI = work intensification
a Transformational leadership and abusive supervision are aggregated follower ratings, N = 1,071–1,075 followers
*$p < 0.05$, **$p < 0.01$
Source(s): Author's own creation

Number of profiles	*LL*	*df*	*AIC*	*BIC*	*SSA–BIC*	*LMR (p)*	*BLRT (p)*	*Entropy*	*% n_min*	*% n_max*
1	−583.66	8	1183.31	1207.51	1182.19	–	–	1.00	1.00	1.00
2	−545.31	13	1116.63	1155.94	1114.79	<0.001	<0.001	0.97	0.05	0.95
3	−520.11	18	1076.23	1130.66	1073.69	<0.001	<0.001	0.77	0.03	0.53
4	−499.32	23	1044.64	1114.19	1041.40	<0.001	<0.001	0.80	0.02	0.45
5	−490.20	28	1036.39	1121.06	1032.44	0.004	0.050	0.81	0.02	0.39
6	−480.72	33	1027.43	1127.22	1022.78	0.003	0.600	0.81	0.02	0.45

Note(s): $N = 152$ leaders; LL = log-likelihood; df = free parameters; AIC = Akaike information criteria; BIC = Bayesian information criteria; SSA–BIC = sample-size adjusted Bayesian information criteria; LMR = Lo, Mendell, and Rubin (2001) test; BLRT = bootstrap likelihood ratio test; % n_min = minimum profile proportion; % n_max = maximum profile proportion
Source(s): Author's own creation

Table 2.
Model fit statistics for different LPA solutions



Source(s): Author's own creartion

Figure 1.
Profiles of leadership behavior and leader well-being

We labeled the first profile as *Good health – constructive leading*. It comprised 38% of the sample and was characterized by high leader well-being, high transformational leadership and low abusive supervision. The leaders in the second profile (labeled *Average health – inconsistent leading*, 14% of the sample) showed slightly lower transformational leadership and slightly higher abusive supervision. Their well-being indicators were below or close to the sample means. The third profile (labeled *Impaired health – constructive leading*) was the largest profile, as about 45% of the leaders belonged to it. The leaders in this profile had high levels of transformational leadership and low levels of abusive supervision, but also reported high levels of cognitive irritation and emotional exhaustion. Finally, the last profile (labeled *Impaired health – destructive leading*) comprised only 2% of the sample. The leaders in this profile were

characterized by low levels of transformational leadership and high (compared to the sample average) levels of abusive supervision. Furthermore, they had impaired well-being.

Given our multilevel data of leaders nested in organizations, we tested for the influence of organization membership on the likelihood of belonging into a certain profile. Chi^2-test indicated the absence of such an influence ($\chi^2 = 67.867$, $df = 75$, $p = 0.71$). Hence, profile membership was independent of organization membership.

We used multinomial logistic regression analyses to answer RQ2 to RQ4 (see Table 3). Work intensification was related to profile membership. As work intensification increases, leaders were more likely to be in Profile 3 vs Profile 1 ($B = 1.07$, $p < 0.001$, $OR = 2.94$) and in Profile 3 vs Profile 2 ($B = 0.85$, $p = 0.007$, $OR = 2.35$). Furthermore, leaders reporting high levels of psychological contract fulfillment were less likely to be in Profile 3 vs Profile 1 ($B = -0.50$, $p = 0.042$, $OR = 0.60$).

Besides these results, we could also find some interactions. The interactions refer all to the likelihood for an individual leader to be in Profile 4 compared to the other profiles, e.g. leaders with high levels of work intensification were more likely to be in Profile 4, when they had a low psychological contract fulfillment. However, as their significance partly depended on the inclusion of our control variables (see Table 3), these results have to be interpreted with caution (see Becker *et al.*, 2016).

Discussion

In this study, our explorative, person-centered approach revealed four distinct profiles of leadership behavior and states of leader well-being for leaders in lower and middle management. These profiles offer an in-depth view of the combination of these constructs. Furthermore, our results regarding correlates of profile membership indicated that leaders reporting high work intensification and low levels of psychological contract fulfillment were more likely to belong to Profile 3 (*Impaired health – constructive leading*). Additionally, we found an interaction between work intensification and psychological contract fulfillment regarding the likelihood of belonging to Profile 4 (*Impaired health – destructive leading*). In contrast to our assumptions, leader autonomy was unrelated to profile membership.

Theoretical implications

Results of our person-centered approach move beyond insights from previous research on leadership behavior and leader well-being utilizing a variable-centered approach. A more nuanced and fine-grained understanding of different constellations within individuals is especially highlighted by Profiles 1 and 3. The two groups with the highest sample share both show highly constructive leadership behavior but differ significantly in their well-being indicators. Furthermore, our work contributes to the understanding of why leadership behavior and leader well-being configure differently between individuals. High work intensification and low perceived psychological contract fulfillment relate to belonging into Profile 3 (*Impaired health – constructive leading*). Accordingly, when leaders face stressors like work intensification or are unsure whether a resource investment is reciprocated by their organization, they tend to invest their resources into their leadership behavior, which at the same time may correlate to decreased leader well-being. This underlines COR theory's assumptions about the availability and reciprocity of resources as central to individuals' well-being and behavioral responses (Halbesleben and Wheeler, 2011) and makes these assumptions applicable in the leadership context. These insights into the resource allocation strategy of leaders within our sample (i.e. investing resources into their leadership behavior rather than into their own well-being) provide a starting point for various considerations. Well-being is potentially more volatile than leadership behavior, as

Table 3.
Results of multinomial logistic regression analyses to predict profile membership

	Profile 2 vs 1				*Profile 3 vs 1*				*Profile 4 vs 1*				*Profile 3 vs 2*				*Profile 4 vs 2*				*Profile 4 vs 3*			
	B	*SE*	*p*	*OR*	*B*	*SE*	*p*	*OR*	*B*	*SE*	*p*	*OR*	*B*	*SE*	*p*	*OR*	*B*	*SE*	*p*	*OR*	*B*	*SE*	*p*	*OR*
Without control variables																								
LA	−0.13	0.29	0.65	0.88	−0.06	0.22	0.77	0.94	−1.13	0.80	0.16	0.32	0.07	0.28	0.81	1.07	−1.00	0.82	0.22	0.37	−1.06	0.80	0.18	0.34
PCF	−0.36	0.30	0.24	0.70	*−0.48*†	*0.24*	*0.05*	*0.62*	0.73	1.34	0.59	2.08	−0.12	0.28	0.68	0.89	1.09	1.35	0.42	2.98	1.21	1.34	0.37	3.35
WI	0.22	0.30	0.47	1.24	*1.08**	*0.25*	*0.00*	*2.94*	0.42	1.06	0.69	1.52	*0.86**	*0.31*	*0.01*	*2.37*	0.20	1.07	0.85	1.22	−0.66	1.06	0.54	0.52
Interaction: LA × WI	−0.31	0.29	0.28	0.73	0.07	0.25	0.78	1.07	0.06	0.58	0.92	1.06	0.38	0.30	0.21	1.47	0.38	0.61	0.53	1.46	−0.01	0.59	0.99	0.99
Interaction: PCF × WI	−0.05	0.40	0.91	0.95	0.04	0.33	0.91	1.04	*−2.00**	*0.96*	*0.04*	*0.14*	0.08	0.38	0.83	1.09	*−1.95**	*0.98*	*0.05*	*0.14*	*−2.03**	*0.94*	*0.03*	*0.13*
With control variables																								
LA	−0.13	0.30	0.67	0.88	−0.02	0.23	0.92	0.98	−1.10	0.79	0.16	0.33	0.11	0.29	0.71	1.11	−0.98	0.80	0.22	0.38	−1.08	0.78	0.17	0.34
PCF	−0.36	0.31	0.24	0.70	*−0.50**	*0.25*	*0.04*	*0.60*	0.74	1.42	0.60	2.10	−0.14	0.28	0.62	0.87	1.11	1.43	0.44	3.02	1.25	1.42	0.38	3.48
WI	0.22	0.30	0.47	1.25	*1.07**	*0.26*	*0.00*	*2.93*	0.45	1.10	0.68	1.57	*0.85**	*0.31*	*0.01*	*2.35*	0.23	1.11	0.83	1.26	−0.62	1.11	0.58	0.54
Interaction: LA × WI	−0.32	0.29	0.28	0.73	0.07	0.25	0.77	1.08	0.06	0.57	0.91	1.07	0.39	0.31	0.20	1.48	0.38	0.59	0.52	1.46	−0.01	0.58	0.99	0.99
Interaction: PCF × WI	−0.06	0.40	0.89	0.95	0.03	0.33	0.94	1.03	*−1.89*†	*0.99*	*0.06*	*0.15*	0.08	0.38	0.83	1.09	*−1.84*†	*1.00*	*0.07*	*0.16*	*−1.92**	*0.97*	*0.05*	*0.15*
CV: span of control	−0.06	0.29	0.83	0.94	0.25	0.20	0.21	1.28	0.09	0.69	0.89	1.10	0.31	0.30	0.30	1.36	0.16	0.72	0.83	1.17	−0.15	0.69	0.83	0.86
CV: leadership exp.	0.03	0.29	0.93	1.03	−0.34	0.21	0.10	0.71	0.38	1.06	0.72	1.47	−0.37	0.29	0.20	0.69	0.36	1.07	0.74	1.43	0.73	1.06	0.49	2.07

Note(s): N = 148–150 leaders, LA = leader autonomy; PCF = psychological contract fulfillment; WI = work intensification. †$p < 0.10$; *$p < 0.05$
Source(s): Author's own creation

leaders may maintain certain behaviors when facing changes in their available resources. However, with regard to followers, maintaining transformational leadership under conditions of high work intensification could also be a means to ensure team performance (cf. Diebig *et al.*, 2016). Moreover, the findings underline that leaders can be at risk in terms of self-exploitative behavior (e.g. Krause *et al.*, 2012). When demands are high, it is decisive how leaders think they have to prioritize their resources. Hence, before altering their leadership behavior, which can have far-reaching consequences for followers and organizations, they act at the expense of their own well-being. This may be reflected in implicit leadership theories (e.g. Lord *et al.*, 2020): leaders cannot deviate from internalized role expectations and prototypical patterns, otherwise, they lose their reputation within the organization.

Our results can also advance our knowledge regarding conditions under which leaders may show less constructive and more destructive leadership behavior. The interaction effects indicate that psychological contract fulfillment can act as a buffer against destructive leadership behavior when work intensification increases. These finding may underscore COR theory's gain paradox principle. Additionally, in support of COR theory's desperation principle, leaders who experience high stressors while expecting low reciprocity from their organization, may enter a defensive mode and exhibit destructive forms of leadership (see e.g. Hobfoll *et al.*, 2018). While the small size of Profile 4 reflects findings that destructive leadership is a low base-rate phenomenon, this is still of importance given the severe consequences of destructive leaders in organizations (Tepper *et al.*, 2017).

Practical implications

The points discussed so far also have important practical implications. The profiles (here, especially Profiles 3 and 4) can be used to identify risk groups that need special attention by organizations (e.g. HR departments). It is important for organizations to provide leaders with sufficient resources that enable them to both lead constructively and maintain their own well-being (cf. Klug *et al.*, 2019). Profile 3, with the largest sample share, shows a pattern that is characterized more by impaired well-being than by poor leadership. As impaired well-being is less visible than poor leadership, it can be helpful to include leaders in health surveys, risk assessments, etc. to ensure constant monitoring (cf. Stempel *et al.*, 2023) and to show changes over time. Structural prevention (designing leaders' working conditions and a resource-rich environment) should go hand in hand with behavioral prevention (e.g. training and coaching that enable constructive leadership but also raise leaders' awareness of their own health). The role of psychological contract fulfillment demonstrates the importance of regular communication with leaders about their expectations. Overall, a holistic approach to occupational health management for all employees, for both leaders and followers and at both the individual and the team level, is a fundamentally sound measure.

Limitations and future directions

Although the use of multi-source and multilevel field data from various organizations is a strength of this study, there are several limitations. First, the correlational nature of our data does not allow drawing causal inferences. Additionally, the cross-sectional design gives only a static perspective on the interplay of leadership behavior and leader well-being. Hence, our findings cannot address the question of stability or dynamics of profile membership. Accordingly, future studies may use a longitudinal design to investigate changes in profile membership over time (e.g. using latent transition analysis). This can help to disentangle the complex relationship of leadership behavior and leader well-being.

Second, we had missing data due to non-respondents, which warrants an analysis of missing data patterns and appropriate strategies to handle missing data. However, due to strict data protection regulations in Germany, we did not have any information (e.g.

demographics) from the non-respondents, refraining us to conduct such analyses. Hence, our results have to be interpreted with caution due to possible bias from missing data.

Finally, this is among the first studies investigating combined profiles of leadership behavior and leader well-being. Thus, there is a strong need for replication to examine the robustness of our findings in different samples (Köhler and Cortina, 2021). Additionally, future studies may include different levels of leadership (e.g. top management) as well as further leadership behavior and well-being indicators (e.g. somatic complaints or positive well-being indicators such as work engagement, cf. Moeller *et al.*, 2018).

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Supplementary material

Unveiling the interplay between leadership behavior and leader well-being: a person-centered approach

Factorial validity

We applied a Bayesian multilevel confirmatory factor analysis (MCFA) to test the factorial validity of our multi-item measures. We relied on recommendations of Muthén and Asparouhov (2012) for model specification (i.e. we included residual covariance among the items) and choice of weak-informative priors (i.e. normal distributed priors of $N(1, 0.1)$ for the factor loadings, an inverse-Wishart distribution of $IW(1, p+6)$ for the residual variances, where p is the number of items at each level, and a small-variance prior of $IW(0, p+6)$ for the residual covariances). We ran the estimation with 1,000,000 MCMC iterations. For the posterior distributions, we included only every 10th iteration (a technique called thinning to reduce the degree of autocorrelation; Depaoli and van de Schoot, 2017). The MCFA model had two latent factors on Level 1 (i.e. transformational leadership and abusive supervision) and seven latent factors on Level 2 (i.e. transformational leadership, abusive supervision, emotional exhaustion, cognitive irritation, work intensification, leadership autonomy and psychological contract fulfillment). This model had a satisfying Bayesian model fit (Posterior Predictive Checking using $\chi^2 = [-96.58; 88.46]$, posterior-predictive p-value = 0.538; PSR under 1.05 after about 204,000 MCMC iterations; cf. Depaoli and van de Schoot, 2017) and the trace plots indicated MCMC convergence. Summarized, the factorial validity was supported by the MCFA model.

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