Every light has its shadow:
A longitudinal study of transformational leadership and leaders' emotional exhaustion

Abstract for the
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Abstract

This study investigated the effects of transformational and laissez-faire leadership on leaders' own emotional exhaustion over time. Participants were 2,324 subordinates and 76 supervisors of a services company in Germany. Regression analysis revealed direct longitudinal health-hampering effects of transformational and laissez-faire leadership on leaders' emotional exhaustion. Building on Hobfoll's Conservation of Resources theory (1989), our results showed that the longitudinal health-hampering effects of transformational leadership would be particularly pronounced for leaders with high levels of organization-based self-esteem. Our findings extend the research on potential dark sides of transformational and laissez-faire leadership as well as organization-based self-esteem by focusing on leader-centered outcomes.

Keywords: transformational leadership, laissez-faire, emotional exhaustion, longitudinal, organization-based self-esteem

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Over the past decades, scientists glorified transformational leadership to be the pride of creation. Accordingly, leaders continually strive to behave in a transformational manner, including components of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. However, what happens when the bright and shiny transformational leadership style, which requires a substantial amount of time and energetic resources, increases the stress and strain of leaders themselves over time? In this case, leaders engaging in demanding transformational leadership behaviors may overstrain themselves over time and may burn out in the long run. However, do all transformational leaders in organizations run the risk of overstrain themselves over a longer period?

Originally introduced by Burns (1978) and further developed by Bass (1985), transformational leadership has fundamentally shaped the last decades in management research and practice. However, previous research has mainly uncritically spread the myth of health-promoting transformational leadership without investigating the long-term effects on leaders themselves. This shortage is surprising given the number and range of complex tasks, behaviors, and resources required for enacting transformational leadership. Without clear conceptualization and empirical long-term investigation about the health-related effects of transformational leadership on leaders' own health and well-being, we run the risk of ignoring potential health-hampering effects and inferences about the strength, order, and direction of these relationships. Thus, organizations may draw misleading conclusions about the health-related effectiveness of interventions based on transformational leadership. The primary purpose of our study was, therefore, to further our understanding of the effect transformational leadership has on leaders' own emotional exhaustion over time. Despite severe criticisms regarding the quality of the conceptualization and underlying measurements of transformational and laissez-faire leadership (van Knippenberg & Sitkin, 2013), we focused on the transformational-laissez-faire leadership approach because the prevalence of these leadership styles in contemporary working life remains strikingly high (Skogstad, Hetland, Glasø, & Einarsen, 2014). Thus, we examined the direct effects of transformational and laissez-faire leadership on leaders' own emotional exhaustion over time by conducting two surveys with a time lag of 24 months. Furthermore, we investigated the moderating role of leaders' organization-based self-esteem in the longitudinal relation between transformational leadership and leaders' emotional exhaustion.

Theoretical background

The role of transformational and laissez-faire leadership on health and well-being

Over the last decades, there has been growing interest in the effects of leadership behaviors on subordinates' health and well-being (Skakon, Nielsen, Borg, & Guzman, 2010), whereby little attention has been paid to the consequences on leaders' own health and well-being (Byrne et al., 2014). However, research on work-related stress and related mental health problems suggests that supervisors play an important role in developing a health-promoting environment for their subordinates and themselves (Breevaart, Bakker, Hetland, & Hetland, 2014). In particular, transformational and laissez-faire leadership has attracted more research attention than all other leadership theories combined (Barling, Christie, & Hoption, 2011).

Transformational leadership was empirically found to be a health-promoting leadership style for subordinates (for a review see Nyberg, Bernin, & Theorell, 2005; Skakon et al., 2010), and is composed of four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Avolio & Bass, 1991). *Idealized influence* occurs when the leader acts as a role model and is respected by followers. *Inspirational motivation* refers to leadership behaviour such as providing meaning to followers' work, formulating a clear vision, and holding high expectations toward their followers. *Intellectual stimulation* involves encouraging followers to challenge existing assumptions, reframe problems, and to find new ways of working in a creative and innovative manner. Finally, *individualized consideration* of leaders subsumes coaching and mentoring behavior that considers followers' unique needs and abilities for their development and achievements (Bass, 1985). Considering the status of transformational leadership within the leadership literature, it is surprising that little is known about the impact of transformational leadership on leaders' own stress and burnout (Byrne et al., 2014). However, previous studies indicated that transformational leaders influence both followers' and their own self-concept by enhancing self-efficacy, confidence, self-esteem (Wegge, Shemla, & Haslam, 2014), positive affect (Walter & Bruch, 2007), optimism, hope, and resiliency (Peterson, Walumbwa, Byron, & Myrowitz, 2009). As far as social and organizational resources are concerned, several studies showed that transformational leadership is related to higher levels of perceived procedural and interpersonal justice (Cho & Dansereau, 2010), a shared sense of social identity and group climate (Haslam, Reicher, & Platow, 2011), and health-enhancing work designs (Wegge et. al, 2014). Whereas cross-sectional health-enhancing effects of transformational leadership on leaders' health and well-being may occur through the creation of various organizational, personal, and social resources in the short term, future research on

longitudinal health-related effects of transformational leadership is urgently needed (Schilling & Schyns, 2014).

In contrast to transformational leadership, laissez-faire leadership, also called passive-avoidant or non-leadership, was empirically found to be a predominantly health-hampering leadership style for subordinates (for a review see Nyberg et al., 2005; Skakon et al., 2010). Laissez-faire leaders are characterized by not taking responsibility, avoiding involvement with their followers or even being completely absent as a leader. Originally, Avolio and Bass (1991) conceptualized laissez-faire leadership as the least effective type of leadership. Recent studies suggest that the opposite may be true; laissez-faire leadership is highly effective in creating a stressful working environment (Skogstad et al, 2014). Thus, laissez-faire leadership is not a zero-type of leadership, but rather a (passive) destructive form of leadership, particularly in the long run (Schilling & Schyns, 2014). Specifically, it has been shown that laissez-faire leadership is a root cause of particular workplace stressors such as role conflict, role ambiguity, and the perceptions of low-quality interpersonal treatment by the leader with subsequent consequences in the form of followers' stress reactions and strains (Skogstad et al., 2014). A lack of adequate leadership accumulates these frustrations and stress within the workgroup, which may also result in interpersonal tensions and escalated conflicts in superior-subordinate dyads and teams (Skogstad et al., 2014). Accordingly, laissez-faire leaders may experience strain and stress as a result of increased role conflicts, interpersonal tensions, and missing resources in their work environments. In sum, we assume that when leaders ignore legitimate expectations from subordinates by lack of presence, involvement, feedback, and rewards, such behaviors may be cross-sectionally related to their own emotional exhaustion.

In general, the cross-sectional and longitudinal effects of transformational and laissez-faire leadership on leaders' emotional exhaustion may be explained by work characteristics. Especially, job and team characteristics such as work pressure, decision latitude, and team support are well-known factors affecting leaders' health and wellbeing (see Bakker & Demerouti, 2014). By controlling for several job resources and job demands of leaders and their teams, we wanted to ensure whether transformational and laissez-faire leadership still influence leaders' emotional exhaustion when job and team characteristics have been taken into account. This seems especially important with respect to transformational leadership, a construct that seems to be familiar with job characteristics like leaders' and teams' decision latitude and social support. On the basis of exploratory analysis of services companies on relevant aspects of work design, we investigated specific job demands and job resources of

both leaders and teams to rule out the third variable explanation in all our analyses. In sum, we assume that transformational leadership is related to lower emotional exhaustion in leaders themselves, when measured at the same time. On the contrary, we postulate that laissez-faire leadership is cross-sectionally positively related to leaders' own emotional exhaustion. Thus, we hypothesized the following:

Hypothesis 1: Leaders' level of emotional exhaustion is cross-sectionally a) negatively related to transformational leadership and b) positively related to laissez-faire leadership, even after controlling for job demands and job resources of leaders and teams.

The longitudinal health-hampering effects of transformational and laissez-faire leadership

Even though the cross-sectional health-enhancing effects of transformational leadership on leaders' health and well-being may occur through the creation of various organizational, personal, and social resources in the short term (e.g., Wegge et al., 2014), it remains unclear how transformational leadership influences leaders' own resource reservoir as well as their health and well-being over time. A few longitudinal studies (e.g., Skogstad, Aasland, Nielsen, Hetland, Matthiesen, & Einarsen, 2014) indicate that transformational leadership may have a positive effect on subordinates' health and well-being within relatively short time lags but the health-promoting effects may fade out over time (i.e., may come within a few weeks and last at least 6 months before starting to wane). In his theoretical paper, Shamir (2011) discussed the implications of neglecting time in transformational leadership theory and proposed that leadership outcomes may increase in the short term, then subside, and finally may demonstrate entropy- a possibility that is not considered in transformational leadership research. Given the demanding characteristics of transformational leadership, could the short-term health-enhancing effects of this leadership style turn longitudinally in the opposite direction and have detrimental effects on leaders' emotional exhaustion in the long term?

Although there is no doubt that the presence of demanding job characteristics combined with the absence of resources or motivational job characteristics trigger emotional exhaustion, it is interesting from both a theoretical and practical point of view to examine whether transformational leadership style is longitudinally a demanding job characteristic that may increase leaders' emotional exhaustion. We suggest that the demanding components of transformational leadership as proposed by Bass and Avolio (1995) are relevant to leaders' own emotional exhaustion. Specifically, transformational leadership includes several

behaviors that require considerable amounts of time and resources of the leaders (Byrne et al., 2014). For example, intellectual stimulation and individualized consideration require high levels of an internal locus of control, whereas inspirational motivation and idealized influence are related to leaders' emotional intelligence (Barling et al., 2011). One model that may explain an accumulative health-hampering effect of transformational leadership in the long run is the Conservation of Resources theory (COR, Hobfoll, 1989), where this leadership style may be associated with a perceived net loss of valuable resources that cannot be replenished. Enacting transformational leadership requires an amount of resources and thus, may lead to leaders' resource depletion over time. Consequently, the demanding transformational leadership behaviors may increase leaders' emotional exhaustion in the long run. In this context, Hobfoll (1989) described so-called loss spirals, in which initial losses result in a depletion of resources, which will over time result in more losses. Accordingly, leaders who have already invested a substantial amount of time and energetic resources in their (transformational) leadership behavior may not be able to gain new resources that would help them manage the demands of their leadership efforts and maintain optimal functioning in the long run. As resources are themselves the primary defense against resource loss (Hobfoll, 2001), leaders who are experiencing resource depletion from demanding transformational leadership behaviors are increasingly vulnerable to the experience of further depletion. Specifically, the strain experienced by leaders as a result of demanding leadership behavior weakens psychological reserves, and thus, increases the vulnerability of further resource loss. In the case of continuous resource depletion, the negative effect will be exacerbated among transformational leaders experiencing emotional exhaustion. Thus, leaders in a state of resource depletion may be hesitant or unable to expend the considerable resources required for enacting transformational leadership. Instead, such leaders may experience increased emotional exhaustion or prefer a defensive resource posture (Hobfoll, 2001). With regard to a more resource defensive route, Byrne and colleagues (2014) showed that leaders' resource depletion predicts lower levels of transformational leadership and higher levels of abusive supervision.

As already mentioned, the longitudinal effects of transformational leadership on leaders' emotional exhaustion may be explained by work characteristics. Thus, a rigorous test of longitudinal effects of transformational leadership on leaders' emotional exhaustion also involves controlling for work conditions such as job resources and job demands of leaders and teams. To get a more complete picture, the examination of longitudinal effects of transformational leadership has to consider the empirical relationships between leadership

behavior, its antecedents, and consequences for those concerned, including leaders and their teams. Thus, we assume:

Hypothesis 2: *Transformational leadership at time 1 will positively predict leaders' emotional exhaustion at time 2, even after controlling for job demands and job resources of leaders and teams.*

In contrast to potential health-hampering effects of transformational leadership, the notion that low-quality leadership (i.e., ineffective laissez-faire leadership) has negative effects on followers' health and well-being is well-established (for a review see Nyberg at al., 2005; Skakon et al., 2010). Over the last decades, there has been growing interest in the potential dark sides of leadership (Schilling & Schyns, 2014). Understanding the negative effects leaders have on followers' and their own stress and well-being is important not only to prevent individual suffering but also to design appropriate organizational interventions. The research on potential dark sides of leadership is evolving along two supposedly distinguishable lines of research, i.e., leaders' (in)effectiveness and destructive leadership. Krasikova, Green, and LeBreton (2013) distinguish between destructive leadership, which is intended to harm the organization or a leader's follower, and *ineffective* leadership, that represents a leader's inability to achieve goals valued by the organization or mobilize followers to achieve such goals. On the contrary, recent studies (Schilling & Schyns, 2014; Skogstad et al., 2014) subsumed that destructive leadership can take both active/direct as well as passive/indirect forms. They emphasized that both direct forms of supervisor hostility and indirect forms of lacking initiative can have negative effects on subordinates' and leaders' health and well-being. Overall, a distinct boundary between these two forms of leadership has not been clearly drawn due to the rather scattered landscape of different terms and concepts.

However, one model that may explain an accumulative health-hampering effect of laissez-faire leadership on leaders' emotional exhaustion in the long run is the above-mentioned COR theory (Hobfoll, 1989), where this leadership style may be associated with a perceived net loss of valuable resources that cannot be replenished. Specifically, research has shown that laissez-faire leadership contributes to workplace stressors such as role conflict, role ambiguity, interpersonal tensions, and escalated conflicts within teams (see Skogstad et al., 2014). Accordingly, laissez-faire leadership may influence leaders' emotional exhaustion indirectly by creating role stress and interpersonal conflicts in the work group (Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007). Moreover, as laissez-faire leaders may not be present when needed, subordinates may interpret such behavior as a type of social exclusion,

and thus, may reduce their social support and resources given to their leaders. Especially in situations in which laissez-faire leaders are in need for their followers' assistance, leaders might experience a lack of social resources that would have been required in order to cope with those stressful situations. As resources are themselves the primary defense against resource loss (Hobfoll, 2001), laissez-faire leaders who are experiencing resource depletion are increasingly vulnerable to the experience of further depletion. Moreover, previous studies investigated that resource loss is often experienced in multiple ways or areas simultaneously (e.g., Byrne et al., 2014), and can ultimately result in damaging and powerful loss spirals (Hobfoll, 2001). In sum, according to COR theory (Hobfoll, 1989) workplace stressors and depleted resources caused by laissez-faire leadership may increase the emotional exhaustion of leaders themselves over time.

As stated previously, the longitudinal effects of laissez-faire leadership on leaders' emotional exhaustion may be explained by work characteristics. Thus, a rigorous test of longitudinal effects of laissez-faire leadership on leaders' emotional exhaustion involves controlling for work conditions such as job resources and job demands of leaders and teams. In sum, we contribute to the leadership research by focusing on the longitudinal effects of laissez-faire leadership in real work settings and assume that exercised laissez-faire leadership still makes an independent contribution to explaining variance in leaders' emotional exhaustion over time, even after controlling for the impact of several job demands and job resources of leaders and teams.

Hypothesis 3: *Laissez-faire leadership at time 1 will positively predict leaders' emotional exhaustion at time 2, even after controlling for job demands and job resources of leaders and teams*.

Too much of a good thing: The relation between transformational leadership and organization-based self-esteem

The effects of transformational leadership on organization-based self-esteem (OBSE) were originally conceptionalized by Shamir, House, and Arthur (1993), who assumed that the empowering characteristics of transformational leadership might raise followers' self-esteem beliefs by having high expectations and beliefs in followers' abilities. The relation between transformational leadership and OBSE was empirically investigated by Kark and Shamir (2002) who found positive relationships between transformational leadership dimensions and followers' OBSE. In general, OBSE reflects the self-perceived value that individuals have of themselves as organization members acting within an organizational context (Pierce, Gardner,

Cummings, & Dunham, 1989). People with high OBSE perceive themselves as important, meaningful, and worthwhile members of their employing organization, and consequently, show a deep-seated belief that "I count around here" and "I am an important part of this place" (Pierce et al., 1989). Previous studies have shown that OBSE is more strongly related to work-related criteria than it is to global self-esteem (Pierce et al., 1989). With regard to health and well-being, previous research found that OBSE was negatively related to subordinates' and leaders' stress, frustration, depression, and physical strain (Bowling, Eschlerman, Wang, Kirkendall, & Alarcon, 2010; Pierce & Gardner, 2004). Accordingly, we assume that OBSE will yield negative relationships with leaders' own emotional exhaustion. One reason for our assumption is that OBSE serves as a personal resource that protects leaders from the negative effects of work stressors. Referring to the Job Demands-Resources model (JD-R model; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), personal resources may function either as moderators or as mediators in the relationship between job demands and health-related outcomes. Thus, personal resources may determine the way people comprehend the environment, formulate it, and react to it. In line with JD-R model (Demerouti et al., 2001), leaders with high levels of OBSE should have greater mastery that helps them to deal more effectively with the demanding transformational leadership behavior, and in turn prevent them from negative outcomes (i.e., emotional exhaustion). A few studies have examined the buffering role of OBSE in the relationship between job demands and negative health-related outcomes. For example, Pierce and Gardner (2004) found that OBSE offsets the effects of demanding conditions (e.g., organizational changes, role ambiguity) on employees' depression, physical strain, and job dissatisfaction. However, the findings of Xanthopoulou, Bakker, Demerouti, and Schaufeli (2007) did not support the buffering role of personal resources (i.e., optimism and self-efficiacy) in the relationship between adverse work characteristics and employees' emotional exhaustion. Given the demanding characteristics of transformational leadership behavior, could leaders' OBSE actually buffer the health-hampering effects of transformational leadership in the long run or should we take other mechanisms into account?

To answer this question, we re-examine hypothesis 3 and add OBSE to our analytical framework because leaders' feelings of self-worth may be an important motivational link between transformational leadership and emotional exhaustion. According to self-consistency theory (Korman, 1970) and self-enhancement theory (Dipboye, 1977), leaders with high OBSE will behave productively because such attitudes and behaviors are consistent with their feeling of competency, need satisfaction, and being valued within their employing

organizations (Pierce et al., 1989). Consequently, leaders with high OBSE strive to increase their efforts in transformational leadership behavior because they want to be consistent with or enhance their positive self-views as being competent and valued leaders in their organizations. Even though previous studies indicated that transformational leaders influence their own self-concept by enhancing self-efficacy, confidence, and self-esteem (Wegge et al., 2014), and these personal resources (i.e., OBSE) are positively associated with health and well-being in the short run, there is also a potential downside of OBSE for leaders enacting in demanding transformational leadership behaviors in the long run. We assume that personal ressources such as OBSE may exacerbate the longitudinal depletion of resources that occurs from enacting effortful transformational leadership behaviours and thus, ultimately contribute to increased leaders' emotional exhaustion in the long run. In other words, although OBSE leads to lower levels of leaders' emotional exhaustion in the short term, this effect may turn into the opposite direction especially for leaders enacting longitudinally in demanding transformational leadership behaviors. Thus, emotional exhaustion may be the result of high levels of OBSE by a transformational leader in the long run. In line with COR theory (Hobfoll, 1989), leaders with high OBSE and transformational leadership behavior might overstrain themselves over time and thus, have a higher risk of experiencing job strain more frequently and more intensely than leaders with high OBSE and low transformational leadership behavior. Accordingly, Pundt (2014) noted in his theoretical paper that transformational leaders may be too ambitious and set themselves exceedingly high goals which may cause strain and a depletion of resources (i.e., overambitious). Specifically, transformational leaders with high OBSE set themselves under pressure in a way that their ambitions and goals require extraordinary resources. In pursuing their exceedingly high goals, transformational leaders with high levels of OBSE will deplete their own resources, which in turn may lead to a self-made breakdown of selfregulatory capacities (Mawritz, Folger, & Latham, 2014). A rigorous test of longitudinal effects on leaders' emotional exhaustion involves controlling for work conditions such as job resources and job demands of leaders and their teams. In sum, OBSE may strengthen the health-hampering effects of transformational leadership on leaders' emotional exhaustion over time.

Hypothesis 4: *Leaders' organization-based self-esteem will moderate the relationship between transformational leadership at time 1 and leaders' perceived emotional exhaustion at time 2, such that leaders' organization-based self-esteem will enhance the health-hampering effect of transformational leadership on leaders' perceived emotional exhaustion in the long run.*

Method

Procedure and Sample

This study was part of a survey on work conditions and occupational health among employees of a services company in Germany. We used a survey approach for gathering our data, and questionnaires were administered and filled out during working hours. A total number of 2,594 subordinates and 76 leaders received questionnaires at time 1 and time 2. Specifically, 2,348 employees (90.52 %) returned the questionnaire at time 1 and 2,324 employees (89.59 %) returned the questionnaire at time 2. To ensure consistency across our samples, we selected solely teams which evaluate their *direct* supervisor, had at least response rates of 60 percent at both occasions, and teams of which leaders completed the questionnaire at both occasions. Addressing limitations of previous longitudinal studies regarding single source bias (e.g., Tafvelin, Armelius, & Westerberg, 2011), transformational leadership was assessed by team members and emotional exhaustion of leaders was assessed by leaders themselves. In general, participants worked in teams with an average team size of 34 team members. Demographic characteristics for leaders and teams are shown in table 1.

Insert Table 1 here

Data were collected on two occasions in 2010 and 2012 through anonymous online questionnaires that were distributed by the organization. Our design comprised two measurement points with a 24-months interval between the assessments. Due to changes of German working conditions act and internal company change processes, we measured certain things only at time 1 or at time 2. Addressing limitations of previous longitudinal studies (e.g., Tafvelin et al., 2011), we aimed to provide a relatively strict test of the direction of influence between leaders' emotional exhaustion and team ratings of transformational leadership by using a longitudinal design with several control variables. Furthermore, Skogstad and colleagues (2014) investigated optimal time intervals in longitudinal research on leadership and noted that the time interval should correspond with the expected causal link. Referring to short-time lags, leadership behaviors may have not yet influenced leaders' own health and well-being. In contrast, if the time-lag is too long, the effect of a leader's behavior may already have disappeared. Results of previous studies (Skogstad et al., 2014) indicate that the positive effects of transformational leadership on subordinates' health-related outcomes may come quick and wane as quickly, while the negative effects of laissez-faire take a rather long time and seem to last longer. While such longitudinal effects of positive versus negative effects of leadership have seldom been discussed, we assume that transformational and laissez-faire leadership may have an accumulative health-hampering effect over a relatively

long time period (i.e., 24-month). Regarding health-related outcomes, we chose a 24-month time lag to be able to assess variations in leaders' emotional exhaustion but also to hold seasonal effects on business activities constant. Furthermore, the typical stabilities for emotional exhaustion and depersonalization across a 1-year and 2-year time interval were .60 and .50 (see Houkes, Winants, & Twellar, 2008; Taris, Le Blanc, Schaufeli, & Schreurs, 2005). Even after 8 years, a stability coefficient of .62 was observed for emotional exhaustion (Toppinnen-Tanner, Kalimo, & Mutanen, 2002). Accordingly, the results of a 10-year follow-up study of Dutch primary care physicians indicated that between 23% and 28% of the variance of physicians' burnout levels may be attributed to a stable component (Schaufeli, Maassen, Bakker, & Sixma, 2011). Furthermore, stability of burnout scores is to be expected based on the conceptualization of burnout as a chronic rather than a transient condition (Leiter, Bakker, & Maslach, 2014). In sum, analyses of stability scores of emotional exhaustion show that this construct is moderately stable.

Measures

Transformational leadership was assessed at time 1 (2010) with five selected items of the German adapted version of the Multifactor Leadership Questionnaire (MLQ 5x; Bass & Avolio, 1995; Felfe & Goihl, 2002). Team members rated their direct supervisor on a 5-point scale (1 = "strongly disagree" to 5 = "strongly agree"). These items were selected based on the results of a factor analysis (Wolf, 2012), and internal consistency was excellent (α = .92). A sample item is: "My supervisor articulates a compelling vision of the future".

Laissez-faire leadership was measured at time 1 (2010) with one item (MLQ 5x; Bass & Avolio, 1995; Felfe & Goihl, 2002). Team members rated their direct supervisor on a 5-point scale (1 = "strongly disagree" to 5 = "strongly agree"). The item is: "My supervisor takes care of important/pressing questions/issues immediately (recoded)". Referring to Bass and Avolio (2004), the MLQ operationalizes laissez-faire leadership in four items as a need for leadership, which refers to situations where followers are in need of some sort of assistance from their superiors that is not given (i.e., quasi-needs originating from situational demands and pressures). Accordingly, we focused on the main experienced destructive component in the operational definition of laissez-faire leadership in the MLQ (Bass & Avolio, 2004). This leadership style is operationalized as leader behaviors characterized by systematically not assisting followers who are in a situation where they need assistance (Skogstad et al., 2014). Being in a situation where followers are in critical need of help, and not receiving adequate help, will probably strengthen the negative impact of this leadership

style (Bass & Avolio, 2004). In sum, it is reasonable to believe that the selected item represents the criticality and urgency component of laissez-faire leadership, which is related to role ambiguity, role conflicts, and the subsequent increase in stress (Skogstad et al., 2014).

Emotional exhaustion was assessed with three items (e.g., "I feel burned out from my work") at time 1 (2010) and time 2 (2012) by leaders completing the Maslach Burnout Inventory-General Survey (MBI-GS; Schaufeli, Leiter, Maslach, & Jackson, 1996). Leaders rated their own emotional exhaustion on a 7-point scale (1 = "never" to 7 = "every day"). Internal consistencies were satisfactory, ranging from α = .89 (time 1) to α = .87 (time 2).

Organization-based self-esteem (OBSE) was assessed by leaders at time 2 (2012) with three items, using Pierce's and colleagues' (1989) organization-based self-esteem scale (e.g., "I am taken seriously"). Leaders responded on a 5-point scale anchored "strongly disagree" to "strongly agree". Internal consistency was satisfactory (α = .77).

Several *control variables* were measured at the same time that the leadership variables were measured (i.e., time 1 in 2010). Leaders and teams rated separately their job demands and job resources on a 5-point scale, ranging from 1 ''strongly disagree'' to 5 ''strongly agree''.

Three *job demands* of both leaders and their teams were included in the questionnaire, namely work pressure, interruptions, and job insecurity. *Work pressure* was measured with the questionnaire of perceived work pressure and job autonomy (FIT; Richter, Hemmann, Merboth, Fritz, Hänsgen, & Rudolf, 2000), which is based on Karasek's job demand-control model (Karasek, 1979). The scale includes three items that refer to quantitative, demanding aspects of the job (e.g., time pressure). A sample item is as follows: "I have to work very fast". Internal consistency was satisfactory (α = .79). *Job insecurity* and *interruptions* were measured with a scale developed by Siegrist et al. (2004) based on the model of effort-reward imbalance model (Siegrist, 1996). Job insecurity was assessed with 2 items, including "My job security is poor". Cronbach's α coefficient was satisfactory (α = .79). Interruptions were measured with two items, e.g., "I have many interruptions and disturbances while performing my job". Internal consistency was acceptable (α = .63).

Two *job resources* of both leaders and their teams were included in the questionnaire. *Decision latitude* was assessed with the questionnaire of perceived work pressure and job autonomy (FIT; Richter et al., 2000), based on Karasek's Job Demand-Control model (Karasek, 1979). A sample item is "My job allows me to make a lot of decisions on my own", and internal consistency was satisfactory (α = .79). *Social support* was measured with the questionnaire of subjective work analysis (SALSA; Rimann & Udris, 1997) that is based on

Antonovski's concept of salutogenesis (Antonovski, 1987). A sample item is "My colleagues support me in a way that facilitates my work". Internal consistency was satisfactory (α = .84).

We also controlled for the *simple demographic profile* of leaders (i.e., leaders' age, gender, and tenure).

Results

First, we calculated means, standard deviation, and correlations among all the variables of the study. As can be seen in table 2, the pattern of correlations was in the expected direction. Specifically, leaders' emotional exhaustion at time 1 was negatively related to team ratings of transformational leadership at time 1 (r = -.32, p = .010), whereas leaders' emotional exhaustion at time 1 was positively related to team ratings of laissez-faire leadership at time 1 (r = .31, p < .011). Moreover, leaders' emotional exhaustion at time 2 was positively related to team ratings of transformational (r = .21, p = .036) and laissez-faire leadership at time 1 (r = .19, p = .039), i.e., longitudinally. In addition, leaders' emotional exhaustion was cross-sectionally and longitudinally related to leaders' job insecurity (r_{T1} = .40, p = .001; r_{T2} = .31, p = .014), leaders' decision latitude (r_{T1} = -.37, p = .003; r_{T2} = -.26, p = .043), and leaders' organization-based self-esteem (OBSE; r_{T1} = -.26, p = .040; r_{T2} = -.59, p = .001). In line with previous studies, transformational leadership was cross-sectionally positively related to teams' decision latitude (r = .55, p = .001) and teams' social support (r = .40, p = .001) as well as negatively related to teams' interruptions (r = -.33, p = .004) and teams' job insecurity (r = -.36, p = .001).

Insert Table 2 here

In order to test hypotheses H1a and b subsuming that leaders' emotional exhaustion is cross-sectionally negatively related to transformational leadership (H1a) and positively related to laissez-faire leadership (H1b), hierarchical regression analyses were conducted. Table 3 illustrates full-equation standardized regression coefficients (βs) for all independent and control variables as well as the unique variance explained by each step (ΔR^2). In the first step, we entered the control variables (i.e., job demands and job resources of leaders and teams, demographic characteristics of leaders) and in the second step, we entered team ratings of transformational and laissez-faire leadership.

Insert Table 3 here

In line with hypothesis H1a, team ratings of transformational leadership at time 1 (β = -.19, p = .045) were negatively related to leaders' emotional exhaustion at time 1, even after controlling for job demands and job resources of both leaders and teams as well as leaders' demographic characteristics. As postulated in hypothesis H1b, team ratings of laissez-faire

leadership at time 1 (β = .36, p = .032) were negatively related to leaders' emotional exhaustion at time 1, even after controlling for job demands and job resources of both leaders and teams as well as leaders' demographic characteristics. When entering the independent variables transformational and laissez-faire leadership, it explained unique variance over and above the control variables of teams and leaders and thus, caused significant change in the regression (ΔR^2 = .06, p = .042).

In order to test hypotheses H2, H3, and H4 that postulate specific longitudinal effects of transformational and laissez-faire leadership on leaders' perceived emotional exhaustion, hierarchical regression analyses were conducted. Table 4 illustrates the results of hierarchical regression analyses on leaders' emotional exhaustion 24 months later. More specifically, table 4 reports full-equation standardized regression coefficients (βs) for all independent, control, and moderator variables and the unique variance explained by each step (ΔR^2). In the first step, we entered the control variables followed by team ratings of transformational leadership, team ratings of laissez-faire leadership, and leaders' OBSE. The moderator analysis reported in table 4 was conducted with the interaction term entered last. Following Aiken and West (1991), all variables were standardized prior to analysis and the interaction terms were calculated based on the standardized scores.

Insert Table 4 here

As postulated with hypothesis H2, laissez-faire leadership at time 1 predicted perceived emotional exhaustion of leaders 24 months later (β = .38, p = .046), even after controlling for job demands and job resources of leaders and teams as well as leaders' demographic characteristics. In line with hypothesis H3, transformational leadership at time 1 predicted perceived emotional exhaustion of leaders 24 months later (β = .57, p = .014), even after controlling for job demands and job resources of leaders and teams as well as leaders' demographic characteristics. When entering the independent variables transformational leadership, laissez-faire leadership, and OBSE, it explained unique variance over and above the control variables of teams and leaders and thus, caused significant change in the regression (ΔR^2 = .21, p = .001).

In order to test whether or not leaders' OBSE moderates the longitudinal effect of transformational leadership on leaders' emotional exhaustion (hypothesis 4), moderated regression analyses were conducted (Aiken & West, 1991). As can be seen in table 4, the main effects of both transformational leadership on leaders' emotional exhaustion (β = .57, p = .014) and leaders' OBSE on leaders' emotional exhaustion (β = -.43, p = .002) were significant. The significant interaction effect (β = .39, p = .001) in figure 1 was plotted for one

standard deviation above and below the mean of the within group regression equations for transformational leadership, OBSE, and leaders' emotional exhaustion 24 months later (Cohen, Cohen, West, & Aiken, 2003).

Insert Figure 1 here

The results of simple slope analysis (Aiken & West, 1991) revealed a significant difference in the slopes of those leaders with high levels of OBSE (t = -2,66, p = 0.10) and those leaders with low OBSE. As expected the longitudinal relationship between transformational leadership and leader's perceived emotional exhaustion was stronger when leaders' OBSE was high (see figure 1). Our findings suggest that whilst leaders' OBSE alone has a negative relationship with leaders' emotional exhaustion, for those leaders with high transformational leadership, there is a positive relationship between OBSE and emotional exhaustion, consistent with hypothesis 4. Thus, whilst leaders' OBSE buffers against exhaustion when transformational leadership is low, leaders' OBSE is not able to buffer against the health hampering effects of high transformational leadership, but instead strengthens this relationship. When entering the interaction effect in the last step, it explained unique variance over and above the control variables of teams and leaders as well as the independent variables and thus, caused significant change in the regression (ΔR^2 = .11, p < .001). Moreover, Cohen's f^2 was investigated as an appropriate measure of local effect size for variables within a multivariate, mixed effects regression model (Selya, Rose, Dierker, Hedeker, & Mermelstein, 2012). The calculation of local effect sizes of the interaction term of transformational leadership and leaders' OBSE (f^2 = .28) as well as effect sizes of transformational leadership, laissez-faire leadership, and OBSE (f^2 = .42) revealed medium to large effect sizes (Cohen, 1988). Overall, the amount of explained variance of the whole regression for leaders' emotional exhaustion 24 months later was comparable high (R^2 =.61). Overall, each block caused significant change in the regression, and all hypotheses were supported.

Discussion

The purpose of the present study was to examine the effects of transformational and laissez-faire leadership on leaders' own emotional exhaustion over time. Whereas previous studies showed cross-sectionally and longitudinally health-promoting effects of transformational leadership on followers' well-being and health (see Skakon et al., 2010), our study indicates that the longitudinal effects of transformational leadership can result in increased emotional exhaustion of leaders themselves. Building on Conservation of Resources

theory (COR; Hobfoll, 2001), our results showed that the longitudinal relationship between transformational leadership and emotional exhaustion is particularly pronounced for leaders with high OBSE- given that this combination elicits strong efforts and strain among leaders. Thus our study generated an extended picture of gain and loss spirals by showing that resource gain in the short term may not always lead to a positive resource spiral in the long term, i.e., the combination of particular resources might become toxic and actually increases leaders' emotional exhaustion. Accordingly, our longitudinal study extends the research on potential dark sides of transformational and laissez-faire leadership as well as OBSE that improve our understanding in several ways.

First, whereas previous studies consistently showed health-enhancing effects of transformational leadership by creating resources for followers and themselves (e.g., Wegge et al., 2014), the opposite may also be true: Transformational leadership is highly effective in a negative sense, i.e., in depleting leaders' own resources and increasing leaders' emotional exhaustion in the long run. Our results showed that the relationships between transformational leadership and leaders' emotional exhaustion differ in cross-sectional as compared to longitudinal designs. Moreover, health-hampering effects of transformational leadership seem to have stronger influences on leaders' emotional exhaustion over time (see table 4) than health-enhancing effects of transformational leadership in the short term (see table 3). Thus, given the severe criticisms regarding the quality of the conceptualization and underlying measurements (van Knippenberg & Sitkin, 2013), our results also call transformational leadership as an effective health-promoting leadership style into question. Indeed, the pattern of our results suggests that focusing on transformational leadership while ignoring self-care and spiral resource loss may not only undermine efforts of promoting effective leadership but also result in negative consequences (i.e., emotionally exhausted leaders). In particular, our results emphasize that when examining and conceptualizing health-promoting leadership, future research might investigate not only followers and organizational health-specific outcomes, but also considering leaders' own health and well-being. Therefore, we suggest that future research should try to develop even better conceptualizations of health-specific leadership styles (see Franke, Felfe, & Pundt, 2014; Gurt, Schwennen, & Elke, 2011). Specifically, the health-oriented leadership approach (Franke et al., 2014) provides a broader model of health-specific leadership behavior that includes followers' and leaders' own health-oriented values, awareness, and behavior. Future studies should investigate the longitudinal effects of leaders' self-care that involves feeling responsible for one's own health, being aware of personal demands and stress signals, and consequently, prevent the longitudinal

potential health-hampering effects of transformational leadership on leaders' own health and well-being. In addition, our findings offer important practical implications for leaders and organizations alike. From a leadership standpoint, our findings suggest that transformational leadership behavior requires an amount of leaders' resources and may increase leaders' emotional exhaustion in the long run. While leaders are often focused on facilitating conditions that promote followers' health and well-being, they may not always consider their own resources or state of psychological health. Our results suggest that it is essential for leaders to be vigilant about their own health and well-being. Thus, supervisors may be trained to observe the early signs of their exhaustion (e.g., emotional competence training, Berking, 2010) and personnel departments may assist in periodic monitoring. From an organizational perspective, it appears crucial that organizations complement existing efforts in fostering transformational leadership with measures focusing on leaders' own conservation of resources, self-care, and health-related outcomes. Organizations would benefit from using, for example, organizational surveys to reveal the most significant early warning signs, i.e., adverse work characteristics that predict burnout (Leiter et al., 2014). Thus, our findings encourage organizations to continuously assess, prevent, and control demands and exhaustion of leaders by risk assessments and job design efforts (Semmer, 2006). Based on the results of risk assessments, we recommend to provide job resources that enhance leaders awareness, regulation, and expressiveness of their own exhaustion and to enable leaders to recover from job demands during their leisure time in order to reduce their emotional exhaustion (Binnewies & Sonnentag, 2013). Accordingly, our findings emphasize the need for organizational prevention and intervention that support leaders in their demanding leadership behaviors and to foster the conditions necessary for resource acquisition. Particular attention needs to be paid to the adequacy of behavioral (e.g., training) and condition-oriented (e.g., work design) interventions. For instance, training programs discussing the importance of self-care, long-term capacity to recover, and introducing self-protection role modeling may prove to be particularly effective. However, a new obligatory behavioral intervention for leaders (e.g., training, coaching) could be perceived as a new stressor and consequently, enhances leaders' stress without any change in the existing health-hampering work design. We suggest that organizations should strive to find the right balances between behavioral and condition-oriented interventions.

Second, laissez-faire leadership was found to significantly account for subsequent variation in leaders' emotional exhaustion in the short and long term. Furthermore, our results indicate that laissez-faire leadership is not a zero-type of leadership, but probably more of a

systematic health-hampering form of leadership for leaders' themselves. Even though we controlled for several job demands and resources of leaders and teams, the study provides strong evidence for laissez-faire leadership being a highly relevant and influential type of leadership worth studying in itself. Hence, we call for further investigation of active as well as passive destructive forms of leadership (see Schilling & Schyns, 2014), especially when studying leadership within a stressor-strain framework. Referring to practical implications, our findings suggest that leaders in general should avoid laissez-faire leadership in order to prevent themselves from health impairment processes. Furthermore, our findings encourage organizations to continuously assess, prevent, and control laissez-faire leadership behavior and its negative effects on leaders and their followers.

Finally, our findings also bear valuable insights for the relationship between transformational leadership and OBSE. In line with previous studies, OBSE was negatively related to leaders' emotional exhaustion (see Bowling et al., 2010; Pierce & Gardner, 2004). However, the interaction of OBSE with transformational leadership suggests that high levels of leaders' OBSE strengthened the relationship between transformational leadership and leaders' emotional exhaustion. In line with self-consistency theory (Korman, 1970) and self-enhancement theory (Dipboye, 1977), leaders with high levels of OBSE strive to increase their efforts in transformational leadership behavior to be consistent with or enhance their positive self-views as being competent and valued leaders in their organization. Thus, transformational leaders with high levels of OBSE who already invest their resources in demanding leadership behaviors feel more capable to overstrain themselves, and as a result, it is likely that they will become emotional exhausted. Previous studies in the context of the Job Demands-Resources model (JD-R model; Demerouti et al., 2001) that concerned the role of personal resources in the prevention of exhaustion mainly emphasized their buffering potential in the model's health impairment process (see Bakker & Demerouti, 2014). However, our findings suggest that personal resources like OBSE are, at a certain point, susceptible to leaders' self-exploitation and overstrain and thus, play a more active role in health impairment processes by strengthening the health-hampering effects of job demands (i.e., transformational leadership). Our findings highlight the fact that the unrestricted mobilization of job and personal resources maybe detrimental to leaders' health and well-being. Thus, future studies should investigate potential nonmonotonic inverted-U-shaped effects, whereby job and personal resources (e.g., transformational leadership, OBSE, or their combination) reach inflection points at which their effects turn negative- simply „too much of a good thing" (Grant & Schwartz, 2011). Moreover, our results provide empirical evidence

for the notion that transformational leaders with high levels of OBSE may be too ambitious and set themselves exceedingly high goals which may cause strain and a depletion of resources. Referring to the multiple pathway model of Pundt (2014), ambition may be one root of transformational leaders with high levels of OBSE falling into emotional exhaustion. Future studies should investigate the underlying mechanism in the relationship between transformational leadership, OBSE, and emotional exhaustion over time (e.g., overambitious). Support for the strengthening effect of OBSE in health-impairment processes is of practical value, because it suggests that personal resources may enhance the role of job demands on leaders' emotional exhaustion. This is especially important for leaders who, due to the unique demands of their job, are expected to be susceptible to burnout. Obviously, the initial merit of organizations should still be the avoidance of overwhelming job demands and the providing of job resources. However, the empowerment of leaders' personal resources may be detrimental in light of the demanding transformational leadership style. Organizations should pay special attention to leaders' high levels of OBSE and transformational leadership, which appear to be a trigger of leaders' resource depletion and self-exploitation. Whereas previous research has mainly suggested that organizations should promote transformational leadership, our findings add yet another consideration: It appears to be equally important to implement practices targeted at enhancing self-care leadership behaviors while reducing overstrain and the depletion of one's own resources (i.e., spiral resource loss). To conclude, the present study is of importance for the development of job interventions that aim at preventing leaders' emotional exhaustion, contributing to the role of leaders' self-care and self-awareness.

Limitations and future research

Like all emerging fields, the field of health-related leadership opens many avenues for future research and has particular implications for understanding the leadership-health-relationship. In light of our findings and their implications, we offer several additional suggestions for further research.

First, while we extended findings on the potential longitudinal effects between transformational and laissez-faire leadership on leaders' emotional exhaustion, future research will benefit from a wider focus on possible moderators and mediators. In the present study, we focused on team ratings of leaders' behaviors and leaders ratings of their own emotional exhaustion and OBSE, as well as several job demands and job resources of leaders and teams. Referring to Padilla, Hogan, and Kaiser (2007), future studies should investigate the toxic triangle in the health-leadership relations, including characteristics of leaders, followers, and

the environmental context. For instance, future research could explore the effects of internal (e.g., resilience, optimism) and external resources (e.g., family, organizational support) on the relationship between leadership styles and leaders' own health and well-being.

Another limitation to this work is the use of questionnaires. Self-report data, even if collected at different time points and from different sources (i.e., team ratings and ratings of leaders), could lead to problems with common method bias. Alternative observations of leader behavior, for example from the focal leader's superior or human resources representatives, may have strengthened the validity. Moreover, the current study focused on transformational and laissez-faire leadership measured by selected items of the MLQ, even though further types of leadership and reliable measurement may be relevant in the present study (see Tejeda, Scadura, & Pillai, 2001; Van Knippenberg & Sitkin, 2013). Specifically, the use of one item in order to capture laissez-faire leadership probably represents an incomplete picture of this leadership style and thus, causes several limitations. Although we provided some arguments why it is reasonable to believe that the selected item represents the criticality and urgency component of laissez-faire leadership, it will also be highly relevant to employ reliable measures or even alternative approaches of leadership behavior.

A third limitation relates to the small sample size and the characteristics of the sample. A larger sample would have strengthened our study and allowed us to draw more concrete conclusions. Moreover, the study was conducted in a German services company. We do not know whether our results would generalize to other work settings or to other types of organizations. Generalizability of the present findings should therefore be examined in future research for other types of organizations, or more representative samples.

Furthermore, our study only investigated one time lag of 24-months, and thus, it remains difficult to determine the actually form of change over time (Ployhart & Vandenberg, 2010). To conclude on the causal relationship, more waves should be included, shorter time lags should be explored, and more intervening variables should be investigated. Accordingly, a variety of factors might influence leaders' emotional exhaustion and the relationship between leadership styles and leaders' health-related outcomes over time, and such influences increase with longer time lags. Among such factors are coping strategies, team processes, and leader distance variables such as power distance, physical distance, and span of management. By focusing on a leader-centric approach, our study undermines followers as an integral element in the process of destructive leadership (May, Wesche, Heinitz, & Kerschreiter, 2014), and thus, future studies should try to capture how followers' particular responses may serve as antecendents of future leader behaviors and outcomes.

Finally, following the call for more studies on self-concept and self-regulatory moderators of leadership effects (e.g., Kelloway, Turner, Barling, & Loughlin, 2012; Van Knippenberg & Sitkin, 2013), we modelled leaders' OBSE and their propensity to influence leaders' emotional exhaustion. However, our results indicate that transformational leadership in combination with high OBSE increased leaders' emotional exhaustion over time. Considering the statistical difficulties of detecting significant interactions in longitudinal field studies and the fact that previous studies consider even a 1% to 2% increase in explained variance as meaningful (see McClelland & Judd, 1993; Shieh, 2009), the effect sizes associated with our significant interaction terms were substantial (increments in R^2 of 11%). Future research, however, should examine whether there may be additional dark sides of leaders' OBSE, particularly in combination with demanding leaderhip styles. Referring to Gardner and Pierce (2011), the presence of false self-esteem or narcissism may have negative organizational implications and thus, refining and replicating our findings in subsequent research opens many avenues for future research and is certainly warranted.

Conclusion

The results of our longitudinal study make several important theoretical and practical contributions. First, they replicate and extend findings demonstrating the cross-sectional relationship between transformational leadership, laissez-faire leadership, and emotional exhaustion, thereby advancing our understanding of leader-centered outcomes of transformational leadership. Second, our study goes further by showing longitudinal health-hampering effects of both transformational and laissez-faire leadership on leaders' emotional exhaustion, enabling us to identify similar and unique longitudinal effects of each. Moreover, plausible confounds (e.g., job demands and resources of leaders and teams) were excluded. Finally, our study shows that high levels of leaders' OBSE strengthened the longitudinal health-hampering effects of transformational leadership on leaders' emotional exhaustion. In sum, every light has its shadow- especially when transformational leadership and leaders' own health are at stake. Refining and replicating these findings in subsequent research holds promise for extending the transformational leadership approach by focusing on self-protecting and self-awareness aimed at reducing leaders' emotional exhaustion.

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APPENDIX

Table 1

Leaders' and subordinates' characteristics (N = 76 teams)

Characteristic	Leaders (N = 76) %	Subordinates (N = 2324) %
Response rate	100.00	89.59
Gender		
Male	80.3	61.8
Female	19.7	39.2
Age		
16 – 25	-	4.6
26 – 35	3.9	14.7
36 – 45	50.0	40.4
46 – 55	44.8	34.9
> 56	1.3	5.4
Tenure		
Up to 2 years	-	3.4
2 – 7 years	3.9	10.6
8 – 15 years	48.7	26.0
> 15 years	47.4	60.0

Table 2

Means, standard deviations, and correlations among the study variables (N = 76 teams)

	Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Transformational leadership T_1	3.97	0.49	-														
2	Laissez-faire leadership T_1	1.89	0.51	-.77**	-													
3	Leaders' emotional exhaustion T_1	2.55	1.20	-.32**	.31*	-												
4	Leaders' emotional exhaustion T_2	2.72	0.96	.21*	.19*	.16	-											
5	Work pressure of leaders T_1	3.98	0.65	-.14	-.02	.20	.14	-										
6	Interruptions of leaders T_1	2.54	0.96	-.11	.04	.09	.10	.30*	-									
7	Job insecurity of leaders T_1	2.14	0.70	.08	-.17	.40**	.31*	.34**	.30*	-								
8	Work pressure of teams T_1	3.67	0.52	.05	-.08	-.31*	-.03	.16	-.02	-.08	-							
9	Interruptions of teams T_1	2.86	0.48	-.33**	.39**	.08	-.11	.08	.02	.15	.05	-						
10	Job insecurity of teams T_1	2.45	0.75	-.36**	.21	.16	.06	.05	.15	.14	-.09	.04	-					
11	Decision latitude of teams T_1	4.23	0.38	.55**	-.31**	-.39**	-.03	.09	-.05	-.02	.34**	-.13	-.21	-				
12	Social support of teams T_1	3.97	0.45	.40**	-.31**	-.23	-.11	.11	.04	-.04	.20	-.29*	-.18	.40**	-			
13	Decision latitude of leaders T_1	4.65	0.39	-.07	.08	-.37**	-.26*	-.20	-.12	-.36**	.11	.10	-.14	.15	-.03	-		
14	Social support of leaders T_1	4.27	0.57	-.19	.22	-.11	-.07	-.26*	-.15	-.48**	-.10	.03	-.17	-.14	-.15	.42**	-	
15	Organization-based self-esteem of leaders T_2	4.47	0.42	-.12	.09	-.26*	-.59**	-.04	.05	-.26**	.12	.07	.09	.03	.09	.32*	.11	-

Note. $N = 76$ teams. * $p < .05$. ** $p < .01$.

Table 3

Cross-sectional regression results of leaders' emotional exhaustion

	Leaders' emotional exhaustion Time 1	
Predictor	ΔR^2	β
Step 1: Control variables	.46*	
Work pressure of leaders T_1		.15*
Interruptions of leaders T_1		.13
Job insecurity of leaders T_1		.31*
Work pressure of teams T_1		-.06
Interruptions of teams T_1		-.08
Job insecurity of teams T_1		.01
Decision latitude of teams T_1		-.28
Social support of teams T_1		.03
Decision latitude of leaders T_1		-.30*
Social support of leaders T_1		-.05
Leaders' sex T_1		.05
Leaders' age T_1		.11
Leaders' tenure T_1		.36
Step 2: Independent variables	.06*	
Transformational leadership T_1		-.19*
Laissez-faire leadership T_1		.36*
Total R^2	.52	
n	76	

Note. $N = 76$ teams. * $p < .05$. ** $p < .01$.

Table 4

Longitudinal regression results of leaders' emotional exhaustion 24 months later

	Leaders' emotional exhaustion Time 2	
Predictor	ΔR^2	β
Step 1: Control variables	.29*	
Work pressure of leaders T_1		.11
Interruptions of leaders T_1		.04
Job insecurity of leaders T_1		.36*
Work pressure of teams T_1		-.02
Interruptions of teams T_1		-.10
Job insecurity of teams T_1		.15
Decision latitude of teams T_1		.03
Social support of teams T_1		-.23
Decision latitude of leaders T_1		-.20
Social support of leaders T_1		.29
Leaders' sex T_1		.16
Leaders' age T_1		.15
Leaders' tenure T_1		-.28
Step 2: Independent variables	.21**	
Transformational leadership T_1		.57*
Laissez-faire leadership T_1		.38*
Organization-based self-esteem of leaders T_2		-.43*
Step 3: Interaction effect	.11**	
Transformational leadership T_1 x leaders' organization-based self-esteem T_2		.39*
Total R^2	.61	
n	76	

Note. $N = 76$ teams. * $p < .05$. ** $p < .01$.

Figure 1. Interaction effect of transformational leadership and leaders' organization-based self-esteem

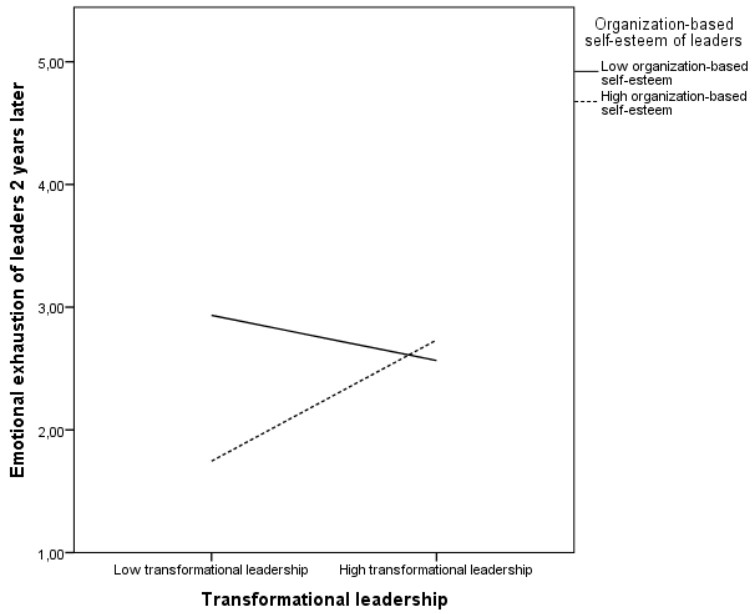

Figure 1. The relationship between team ratings of transformational leadership and leaders' emotional exhaustion for high and low levels of leaders' organization-based self-esteem.

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