INTRODUCTION

Health in the workplace is an important issue. In addition to the burden placed on the individual, lower employee well-being negatively impacts work behavior and performance (Sonnentag, 2015), and incurs large costs (Cooper & Dewe, 2008). It is, therefore, not surprising that workplace health promotion has been a subject for more than 40 years in a wide range of disciplines (Rojatz et al., 2017) and that workplace health promotion interventions are seen as an important means to increase health and prevent ill-being at work (Proper & van Oostrom, 2019). Even though the interest in and implementation of worksite health promotion has increased in recent...
years (Linnan et al., 2019), researchers have only recently begun to turn the spotlight to leaders and the question which leadership behaviors promote employee well-being and how (e.g., Harms et al., 2017; Montano et al., 2017). Examining specific health-oriented leader behaviors shows that these are particularly relevant and a stronger predictor of employee well-being than other leadership styles (e.g., Adler et al., 2017; Franke et al., 2014; Kranabetter & Niessen, 2017; Vincent-Höper & Stein, 2019). Such health-oriented leadership includes leaders’ explicit health-related support and care for employees’ well-being, for example, through direct interaction and communication or through the creation of healthy workplace conditions (e.g., Franke et al., 2014).

Despite the rising number of studies on the relevance of health-oriented leadership, many questions remain (e.g., Rudolph et al., 2020). Most importantly, the conditions under which such leader behavior is most effective are largely unknown. Yet, many health-oriented leader behaviors are not contractually stipulated. Instead, leaders provide supervision and support beyond those necessary activities to “get the work done,” such as paying attention to employees’ health signals and intervene when they notice that employees are overstrained (Pundt & Felfe, 2017). At the same time, these behaviors concern an area that is often considered a private matter, namely the employees’ health. Even though it seems intuitive that employees desire leaders who value their well-being, people differ in their health behavior (e.g., Oyserman et al., 2007), in their desire for support (Beehr et al., 2010), and also in their leader expectations (Schyns & Schilling, 2011). That is, differences may exist in the expectations about how much health support employees want from their leaders, and these differences may affect the positive impact that actual health-oriented leadership has on employees. In addition, previous work on health-oriented leadership has mainly focused on the effects of such leader behavior on the individual employees (e.g., their well-being, their self-care; e.g., Franke et al., 2014), whereas little is known about the underlying mechanisms and the effects on the relationship between employee and leader (i.e., LMX; Graen & Uhl-Bien, 1995). To address these issues, this paper aims to advance health-oriented leadership theory by integrating implicit leadership theories (ILTs; van Gils et al., 2010; Junker & van Dick, 2014) as an overarching theoretical framework. In doing so, we make two contributions.

First, by drawing on ILTs (i.e., expectations about how leaders should be; Shondrick & Lord, 2010), we argue that employees’ ideals of health-oriented leadership serve as an important contextual factor in explaining the consequences of such leader behavior. According to ILTs, employees hold implicit assumptions about which attributes leaders should ideally possess and these influence their attitudinal and behavioral responses toward a leader (e.g., Junker & van Dick, 2014). Research suggests that these expectations affect, among others, the leader-member relationship (LMX), how liked and influential the leaders are (Epitropaki et al., 2013; Junker & van Dick, 2014). Following Barsalou (1985), we argue that employees not only have performance-oriented leader prototypes, but also health-oriented leader prototypes, whereby they differ in the degree of health-oriented leadership that they expect. On this basis, we propose that the extent to which employees desire such health oriented leader behavior moderates the relationship between actual health-oriented leader behavior and employee responses.

Second, Franke et al. (2014) proposed that health-oriented leadership improves employees’ health and well-being through the employees’ own self-care behavior, namely their concern for their own health, how they handle demands and resources at work and how they take care of their own well-being (e.g., ensure an appropriate work-life balance; Franke et al., 2014; see also Klug et al., 2019). Drawing from social exchange theory (e.g., Emerson, 1976), we argue that health-oriented leader behavior should not only have personal consequences for the individual employee, but should also have an impact on the relationship quality between employee and leader (i.e., LMX; Graen & Uhl-Bien, 1995). Based on the assumption that health-oriented leadership goes beyond the actual management task and—in contrast to other leadership styles—puts the well-being of the employee first, we argue that such leader behavior should also affect the employees’ perception of the relationship with the leader, since the development of a positive relationship depends on the perception of what the other person contributes to the relationship (e.g., Liden et al., 1993; Maslyn & Uhl-Bien, 2001). High-quality LMX-relationships and employees’ own self-care behavior, in turn, have been found to positively relate to employees’ well-being (e.g., Franke et al., 2014; Gutermann et al., 2017; Medler-Liraz & Seger-Gutmann, 2018). Therefore, we propose that the association between health-oriented leadership and well-being is mediated by self-care behavior and LMX. As positive and negative forms of well-being reflect independent dimensions showing diverging relations (e.g., Diener & Diener, 1996; Howell et al., 2014), we examine employees’ exhaustion and work engagement as separate indicators of well-being. Exhaustion reflects an individual’s feelings of being overextended and having depleted resources (Halbesleben & Demerouti, 2005), whereas work engagement is defined as a “positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p. 74).

Taken together, by applying ILTs into the research on health-oriented leadership, we consider employees’ expectations of health-oriented leader behavior as well as the relationship aspect, and hence, aim to gain a deeper understanding of when and how health-oriented leadership improves follower well-being (see Figure 1 for the conceptual model).

2 | THEORY AND HYPOTHESIS DEVELOPMENT

Leaders are expected to define tasks and set goals for their employees (e.g., Judge et al., 2004), to understand and support them (e.g., Schriesheim et al., 2011), to motivate and inspire them (e.g., Bass, 1999), to behave authentically and ethically (e.g., Avolio et al., 2004; Brown et al., 2005), and, if possible, to also take care of their employees’ well-being. In recent years, the focus has shifted...
toward leadership behavior, which explicitly aims at fostering employees' well-being, namely health-oriented leadership (e.g., Franke et al., 2014). Health-oriented leadership is defined as behaviors, values and attitudes of leaders that are geared toward health at the workplace (e.g., Franke et al., 2014; Rudolph et al., 2020). According to Franke and colleagues’ (2014) Health-oriented Leadership model (HoL), health-oriented leaders should be aware of health issues at work, attach importance to health compared to other relevant (work) aspects and display concrete health-oriented behavior, for example addressing health in communications and direct interactions with followers or designing healthy working processes.

Although a common assumption is that "good" leadership equals health-oriented leadership (Eriksson et al., 2011), recent research has shown that leaders’ explicit engagement in and consideration of employees’ well-being has a meaningful impact on employees’ psychological and physical well-being and above other forms of such positive leadership behaviors (Adler et al., 2017; Franke et al., 2014; Kranabetter & Niessen, 2017; Vincent-Höper & Stein, 2019). As an example, health-oriented leadership explains unique variance in employees’ well-being outcomes (e.g., irritation, health complaints) above and beyond transformational leadership (Franke et al., 2014).

Franke et al. (2014) argued that one primary driver through which health-oriented leadership affects employees’ health and well-being is employees’ self-care (see also Horstmann, 2018; Pundt & Felfe, 2017; Santa Maria et al., 2019). In addition, leaders’ behaviors also shape norms and practices within a team, and thus, also affect their employees’ behavior (Carlson et al., 2010). Furthermore, based on social cognitive learning theories (e.g., Bandura, 1977), leaders serve as role models through their own behavior (Gächter & Renner, 2018). Therefore, leaders who take care of their own health, for instance by taking breaks, encourage similar behavior among their employees. Indeed, Klug et al. (2019) showed that how leaders address their employees’ health and how they manage their own health, that is, their own self-care, are closely related with employees’ self-care. In line with theory and existing empirical evidence, we predict the following.

Hypothesis 1 Health-oriented leader behavior is positively related to employees’ self-care behavior.

We further propose that health-oriented leadership is positively associated with the relationship quality between leader and employee. Leadership is a dynamic and reciprocal process and leader behavior not only affects individual employee outcomes (e.g., their well-being), but also the quality of the relationship between employee and leader (e.g., Dulebohn et al., 2012). Drawing from LMX theory, the perceived contribution of another party to a (dyadic) relationship largely influences the development of a positive LMX quality (e.g., Liden et al., 1993; Maslyn & Uhl-Bien, 2001). Yukl et al. (2009) found that particularly relationship-oriented behaviors, such as providing support, recognizing, and consulting, benefitted the leader-member relationship. Rather than building on economic exchange, health-oriented leadership is people-oriented and social in nature and explicitly comprises health-oriented support, such as reducing demands by optimizing employees’ work-life-balance, and being aware of the individuals’ specific health-oriented needs (Franke et al., 2014). Employees should perceive such behavior as a positive contribution to the relationship, thus, fostering high-LMX relationships (e.g., Graen & Uhl-Bien, 1995). By prioritizing and actively promoting the employees’ well-being, leaders show behavior that goes beyond contractually defined obligations, and thus, contributes to the creation of interpersonal bonds. Therefore, we predict the following.

Hypothesis 2 Health-oriented leader behavior is positively related to employees’ ratings of the leader-member relationship quality (LMX).

2.1 | Employees’ expectations regarding health-oriented leader behavior

However, employees differ in their ideal leader prototypes, that is, their expectations of leaders, and they have different ideal conceptions regarding expected and desired leader behavior (Schyns & Schilling, 2011; Shondrick & Lord, 2010). Employees’ expectations could be of particular importance when it comes to health-promoting leader behavior, as health-oriented leadership does not

**FIGURE 1** Theoretical model
directly affect work tasks or outcomes, such as task-related guidelines and instructions, but rather addresses employees’ private issues, their health. As the assumption exists that “healthy choices are personal choices” (Oyserman et al., 2014, p. 206), health-oriented leadership requires employees to accept their leaders’ involvement. However, individuals significantly differ in their engagement in health-promoting behavior, in general (e.g., Oyserman et al., 2007), and at the workplace, in particular. Consequently, it seems reasonable to assume that employees differ in how much they desire and value their supervisors’ support in promoting their own health.

Based on ILTs, expectations about the ideal attributes that leaders should possess serve as implicit benchmarks to which leaders are compared (e.g., Lord et al., 1984; Shondrick & Lord, 2010). Employees use this benchmarking process to judge the quality and legitimacy of their supervisor (Van Quaquebeke, van Knippenberg, & Eckloff, 2011). Employees like leaders more who match their ideal leader prototypes; they identify more with such leaders, they show more respect for these leaders and these leaders are perceived as more collegial (e.g., Epitropaki & Martin, 2005; Nye & Forsyth, 1991; Van Quaquebeke, van Knippenberg, & Brodbeck, 2011; Van Quaquebeke, van Knippenberg, & Eckloff, 2011). In other words, the better the match between employees’ expectations and their supervisor’s actual behavior, the more employees are open toward this leader’s influence (Junker & van Dick, 2014). Applying this reasoning to health-oriented leadership suggests that the more employees expect health-oriented leader behavior, the more effective should their leader’s actual behavior be in promoting the employees’ self-care behavior. Health-oriented leader behavior might not be valued equally by every employee. Instead, particularly those employees with high expectations should be open to such leader behavior and adopt health-promoting habits at work because of their greater value alignment. This is also in line with findings that individuals are more likely to adopt a role model’s behavior if both agree on essential factors, for example their attitudes (e.g., Bandura, 1977; Hilmer et al., 2006). On this basis, we suggest that health-oriented leader behavior will increase employee self-care behavior, particularly if employees value and desire their leaders’ health-oriented behavior and consider this an ideal leader behavior.

By contrast, individuals with low expectations may not expect and wish to receive such leader behavior and are less likely to appreciate a health-oriented leader. That means, their way of handling their own health, that is, their self-care behavior, should be independent of the leaders’ health-oriented leadership. For those employees, more health-oriented leader behavior should not lead to an increase in employee self-care. Indeed, empirical evidence supports the assumption that people who seek or need less support are also less likely to benefit from the support that they receive (e.g., Beehr et al., 2010; Deelstra et al., 2003). For example, receiving undesired health-oriented support might create pressure for employees to pursue healthy behavior, even though they do not desire to, which might provoke reactance (see Brehm et al., 1966; Dillard & Shen, 2005) and cause them to not engage in more self-care behavior themselves. At the same time, these employees should take care of their own health even if their leader does not, as they do not expect health-oriented support from the leader. Hence, we hypothesize that employees’ ideals regarding health-oriented leader behavior moderate the relationship between actual health-oriented leadership and employee self-care behavior.

**Hypothesis 3** Employees’ ideal health-oriented leader behavior moderates the (positive) relationship between actual health-oriented leader behavior and employees’ self-care behavior such that this relationship is strengthened when employees’ ideal health-oriented leader behavior is higher rather than lower.

We further assume that expectations about health-oriented leader behavior moderate the association between actual health-oriented leader behavior and LMX. According to LMX theory, high LMX-quality is based on the perceptions of mutual contributions to the (dyadic) relationship (e.g., Liden et al., 1993; Maslyn & Uhl-Bien, 2001). Thereby, the evaluation of the contribution depends on the other partner’s expectations for the particular role (van Gils et al., 2010). Van Gils et al. (2010) proposed that employees assess their leaders’ contribution by taking into consideration their implicit expectations about leaders. Indeed, Epitropaki and Martin (2005) showed in a longitudinal study that the more the leaders’ actual characteristics were perceived to be congruent with the employees’ expectations, the better the LMX quality. Likewise, an alignment between employees’ expectations and actual leader behavior positively relates to employees’ liking of the leader (Nye & Forsyth, 1991).

Applying this reasoning to health-oriented leadership, the better the match between ideal and actual health-oriented leader behavior, the more the leader is likely perceived to contribute to the leader-follower relationship. That means, when an employee who highly appreciates leaders’ health support teams up with a leader who strongly supports healthy behavior, their common understanding of how important health (support) in the workplace is may not only lead employees to show more self-care behavior, but will likely also result in a better relationship between supervisor and subordinate. Indeed, addressing subordinates’ individual needs is a key component for establishing a high-quality LMX (Graen & Uhl-Bien, 1995). Conversely, if employees expect more health-oriented leader support (i.e., health-oriented leadership is part of their leader prototype) than they actually receive, their needs are not satisfied, which may negatively influence the LMX quality.

By contrast, the provision of health-oriented leader behavior should be unrelated to the LMX quality among employees who do not consider health-oriented support to be prototypical for a leader. For these employees, more health-oriented leadership should not contribute to an improvement in the quality of the relationship with the leader as these behaviors are not interpreted in terms of desired leader behaviors (cf., van Gils et al., 2010). Moreover, health-related exchanges are not the only ways how leaders and followers interact, so that both dyadic partners might establish a high (or low) LMX-relationship based on exchanges and reciprocity in other fields (e.g.,
goal attainment). Hence, we hypothesize that employees’ ideals regarding health-oriented leadership moderate the relationship between actual health-oriented leader behavior and employees’ perception of the LMX quality.

**Hypothesis 4** Employees’ ideal health-oriented leader behavior moderates the (positive) relationship between actual health-oriented leader behavior and employees’ ratings of the LMX quality such that this relationship is strengthened when employees’ ideal health-oriented leader behavior is higher rather than lower.

### 2.2 The indirect effect on employee exhaustion and work engagement

Based on the HoL model, it can be assumed that employees’ health-promoting behavior increases their health (Franke et al., 2014). Previous research confirms that employees’ own self-care behavior relates to more well-being, for example less irritation and a better self-rated health (e.g., Franke et al., 2014; Klug et al., 2019; Santa Maria et al., 2019). Self-care behavior includes positive health behavior, for example reducing stressors, ensuring sufficient relaxation or establishing health-oriented working conditions and participating in health promotion programs in the workplace (Franke et al., 2014). These behaviors can be interpreted as internal resources (Hobfoll, 2001), which prevent individuals, for example, from feeling exhausted and could also foster their engagement and motivation at work. Exhaustion is defined as a lack of emotional and physical resources when individuals are exposed to prolonged strain, having no time for recovery (e.g., Maslach et al., 2001). If, however, breaks and recovery times are consciously maintained, a state of being overextended and depleted is less likely to occur. At the same time, this should result in individuals having the strength and resources to establish an “energetic and effective connection with their work activities” (Schaufeli et al., 2008: p. 176), an important component of work engagement. Therefore, we expect that employees’ self-care behavior fosters their work engagement and reduces their exhaustion. Hence, we propose that self-care behavior serves as mediating mechanism of the leadership-well-being relationship. We predict the following.

**Hypothesis 5** Employees’ self-care behavior mediates the relationship between actual health-oriented leader behavior and employee well-being in the form of (a) exhaustion and (b) work engagement.

Likewise, LMX relates to less exhaustion and more work engagement. LMX theory proposes that supervisors have a unique relationship with each employee, which is established by daily interactions and social exchange processes (Graen & Uhl-Bien, 1995). Employees in high-quality relationships have greater access to more desired resources than employees in a low-quality relationship (see e.g., Probst et al., 2016). Such resources comprise, for example, more justice, more empowerment, and less role ambiguity and role conflict (e.g., Dulebohn et al., 2012). Similar to the resources provided through self-care behavior, these resources help individuals in reducing stress and promoting their engagement at work (cf., Hobfoll, 1989). Indeed, research shows that individuals having high-quality relationships with their supervisors report less exhaustion, less job-related depression and reduced health complaints (Gregersen et al., 2016; Martin et al., 2005; Probst et al., 2016; Spar & Sonnentag, 2008). Moreover, the relationship quality (partly) mediates the positive effect of ILT fit on employees’ job satisfaction and organizational commitment (Epitropaki & Martin, 2005; see also Epitropaki et al., 2013). Hence, employees in high-quality relationships are more willing to invest effort in their work, being an integral part of work engagement (Schaufeli et al., 2008). Therefore, we propose that LMX quality mediates the relationship between health-oriented leader behavior and employee exhaustion and work engagement.

**Hypothesis 6** LMX quality mediates the relationship between actual health-oriented leader behavior and employee well-being in the form of (a) exhaustion and (b) work engagement.

### 3 Overview of Studies

Prior to testing our research hypotheses, we deemed it important to test whether health-oriented leadership uniquely predicts employee exhaustion and work engagement (our studies’ health outcomes) beyond transformational leadership. Establishing evidence of the incremental validity of health-oriented leadership beyond closely aligned measures of recognized forms of leadership, such as individual consideration as one aspect of transformational leadership, is important to tease out other leadership influences (e.g., Rudolph et al., 2020).

Next, we tested our hypotheses in three studies. First, we conducted a field study (Study 1) to explore our research questions (Spector, 2019). By examining how employee ideals moderate the indirect relation of actual health-oriented leadership with follower well-being (exhaustion, work engagement) via self-care behavior and LMX, Study 1 assessed the validity of our model in an organizational context. Second, to address issues related to method bias, we collected data in two waves with a one-week time lag, with independent variables measured at Time 1, and moderator and dependent variables measured at Time 2 (Study 2). Third, to shed light on the causal processes underlying this phenomenon, we conducted an experimental study (Study 3). In Study 3, we focused on the first path of our model and examined the effect of actual health-oriented leader behavior on self-care behavior and LMX moderated by employee ideals as the influence of self-care and LMX on employees’ well-being has been shown in previous research (e.g., Gregersen et al., 2016; Krokstad et al., 2017; Loprinzi, 2016). In doing so, we used experimental vignette methodology and presented participants with a realistic scenario, in which we manipulated the health-oriented leader behavior they received and subsequently assessed their reactions (Aguinis &
Bradley, 2014). This approach enhances the experimental realism and allows to control and manipulate the independent variables, which increases both internal and external validity and allows us to draw conclusions about the causal relationships (Aguinis & Bradley, 2014). Hence, the different methods used in these three studies complement one another through their different strengths and weaknesses (Dipboye, 1990), and such an approach was applied successfully in previous leadership research (e.g., Giessner & van Knippenberg, 2008).

4 | PRE-STUDY

4.1 | Method

4.1.1 | Participants

We recruited 151 participants online via social networks (Facebook, Xing, etc.). The majority of the participants were women (69%) with an average age of 32.22 years (SD = 10.30). Participants worked on average 31.41 hr per week (SD = 12.76) and the average time in their current company was 4.70 years (SD = 5.73). Participants had worked together with their current supervisor for 2.78 years on average (SD = 3.02).

4.1.2 | Measures

Health-oriented leader behavior was assessed with seven items of the Health-oriented Leadership (HoL) instrument (Franke et al., 2014; Pundt & Felfe, 2017). Sample items were “My supervisor regularly keeps us informed about safety rules and activities of the worksite health promotion” and “My supervisor tries to reduce my demands by optimizing my work-life-balance (e.g., take regular breaks, avoid overtime, avoid the expiry of vacation).” Participants rated their direct leaders’ health-oriented behavior on a 5-point scale (from 1 = not at all true to 5 = completely true; α = 0.87).

The Multifactor Leadership Questionnaire (MLQ; Avolio & Bass, 1999; Felfe, 2006) was used to measure transformational leadership. A sample item was “My leader talks optimistically about the future.” All items were rated on a 5-point scale (from 1 = never to 5 = almost always). Besides the overall scale (20 items, α = 0.95), we examined the subscales idealized influence (8 items; α = 0.90), inspirational motivation (4 items; α = 0.80), intellectual stimulation (4 items; α = 0.84), and individual consideration (4 items; α = 0.90).

Emotional exhaustion was assessed with the subscale of the Maslach Burnout Inventory (MBI-GS; Maslach et al., 1996). A sample item was “I feel burned out from work.” These five items were rated on a 6-point scale (from 1 = never to 6 = very often; α = 0.85).

Work engagement was measured using the nine items of the Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006). A sample item was “At work, I feel bursting with energy.” All items were rated on a 7-point scale (from 1 = never to 7 = every day; α = 0.95).

4.2 | Results

We performed hierarchical regression analyses to examine the incremental contributions of health-oriented leadership to health-related outcomes. In Step 1, we entered the respective transformational leader behavior to predict emotional exhaustion and work engagement. In Step 2, we entered health-oriented leader behavior. As displayed in Table 1, health-oriented leader behavior explained significantly more variance in emotional exhaustion and work engagement compared to all transformational subscales, except for individual consideration and emotional exhaustion as dependent variable. Examining, the overall scale of transformational leadership revealed that health-oriented leader behavior was a marginally significant stronger predictor of both health outcomes compared to transformational leadership.

4.3 | Discussion of the pre-study

Taken together, the results of the pre-study show that health-oriented leader behavior is a significantly stronger predictor of emotional exhaustion and work engagement compared to the transformational leadership subscales. Thus, the results provide evidence of the incremental validity for the health-oriented leadership measure in comparison with leadership approaches with a similar person-oriented focus, which have been theoretically considered to overlap with health-oriented leadership (Rudolph et al., 2020). The results, therefore, provide an important basis for our following studies and the use of the health-oriented leadership measure. Given these results and previous findings (e.g., Franke et al., 2014) and because there was no strong theory for why the proposed associations should be influenced by other leader behaviors, we did not assess other leadership measures as control variables in our studies (following recommendations by Bernerth & Aguinis, 2016; Bernerth et al., 2018).

5 | STUDY 1

5.1 | Method

5.1.1 | Participants

We collected data from employees working in various organizations and sectors in Germany via different online networks. Requirements for participation were that the respondents were employed and had a direct supervisor. Participation was voluntary and participants were assured of data confidentiality. For each questionnaire that was completely filled out, we donated 0.30 Euro to a charity organization as an incentive for participation. At the end of the survey, participants were debriefed about the aim of the study and contact information for further questions was given. In total, 338 participants completed the survey. We excluded 31
participants because they either did not meet the requirements (they were self-employed and/or did not have a direct supervisor) or they finished the questionnaire in less than 50% of the median time needed for completing the questionnaire. This second criterion was included, as we suppose that it is hardly enough time to seriously answer all questions. Hence, our final sample consisted of 307 employees, of which 73% were women. Their average age was 33.18 years \((SD = 10.95)\). They indicated to work on average 29.82 hr per week \((SD = 12.09)\). They had been working in their current organization for 4.98 years on average \((SD = 6.64)\) and the average time spent working with their current supervisor was 3.04 years \((SD = 3.78)\). The participants worked in various industries (e.g., social and health care sector, engineering or industrial sector or education, training and science sector).

5.1.2 | Measures and procedure

Actual health-oriented leader behavior was assessed with the seven items of the HoL instrument as in the pre-study (Franke et al., 2014; Pundt & Felfe, 2017; \(\alpha = 0.91\)). To assess employees’ ideal health-oriented leader behavior, the seven items of the HoL were rephrased to ask for the health-oriented behavior of an “ideal” supervisor. For example, the item “My supervisor makes sure that the topic health is not missed out in our team” was changed to “My ideal supervisor should make sure that the topic health is not missed out in our team.” All items were rated on a 5-point scale (from 1 = not at all true to 5 = completely true; \(\alpha = 0.83\)).

Employees’ own self-care behavior was assessed with five items of the self-care behavior subscale of the HoL instrument (Franke et al., 2014; Pundt & Felfe, 2017). A sample item was “I try to reduce my demands by optimizing my personal work-life balance, for example, take regular breaks, avoid overtime” \((\alpha = 0.78)\). All items were rated on a 5-point scale (from 1 = not at all true to 5 = completely true). We measured the relationship quality with the seven-item Leader-Member Exchange scale (LMX-7) by Graen and Uhl-Bien (1995). Responses were obtained on a 5-point scale. A sample item was “How well does your supervisor understand your work-related issues and needs?” \((\alpha = 0.93)\).

We used the exhaustion subscale of the Oldenburg Burnout Inventory (OLBI; Demerouti et al., 2003; Halbesleben & Demerouti, 2005) to measure employees’ exhaustion with eight items. The items were rated on a 4-point scale (from 1 = totally disagree to 4 = totally agree). A sample item was “After work, I tend to need more time than in the past in order to relax and feel better” \((\alpha = 0.86)\). Employees’ work engagement was measured with the nine items of the UWES as in in the pre-study (Schaufeli et al., 2006; \(\alpha = 0.95\)).

Control variables. Following recommendations for control variables (Bernerth & Aguinis, 2016), we inspected those variables

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Hierarchical regression analyses to examine the incremental variance explained by health-oriented leader behavior (Pre-study)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional exhaustion</td>
<td>Work engagement</td>
</tr>
<tr>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>b (SE)</td>
<td>b (SE)</td>
</tr>
<tr>
<td>Idealized influence</td>
<td>(-0.30 (0.09))**</td>
</tr>
<tr>
<td>HoL behavior</td>
<td>(-0.25 (0.12))*</td>
</tr>
<tr>
<td>(\Delta R^2)</td>
<td>(0.03)*</td>
</tr>
<tr>
<td>Inspirational motivation</td>
<td>(-0.44 (0.10))**</td>
</tr>
<tr>
<td>HoL behavior</td>
<td>(-0.21 (0.10))*</td>
</tr>
<tr>
<td>(\Delta R^2)</td>
<td>(0.02)*</td>
</tr>
<tr>
<td>Intellectual stimulation</td>
<td>(-0.25 (0.10))*</td>
</tr>
<tr>
<td>HoL behavior</td>
<td>(-0.29 (0.11))**</td>
</tr>
<tr>
<td>(\Delta R^2)</td>
<td>(0.04)**</td>
</tr>
<tr>
<td>Individual consideration</td>
<td>(-0.31 (0.08))**</td>
</tr>
<tr>
<td>HoL behavior</td>
<td>(-0.20 (0.12))**</td>
</tr>
<tr>
<td>(\Delta R^2)</td>
<td>(0.02)**</td>
</tr>
<tr>
<td>Transformational leadership (overall scale)</td>
<td>(-0.38 (0.10))**</td>
</tr>
<tr>
<td>HoL behavior</td>
<td>(-0.20 (0.12))**</td>
</tr>
<tr>
<td>(\Delta R^2)</td>
<td>(0.02)**</td>
</tr>
</tbody>
</table>

Notes: Unstandardized coefficients reported. Abbreviations: HoL behavior = health-oriented leader behavior; \(\Delta R^2\) = additional variance explained through the inclusion of health-oriented leader behavior.

\(\dagger p < .10, \ \dagger \dagger p < .05, \ \dagger \dagger \dagger p < .01, \ \dagger \dagger \dagger \dagger p < .001.\)
as potential controls which seemed theoretically meaningful and which related to the variables and relationships under investigation in previous research. We included gender as control variable because research shows that women perform more positive health behavior than men (e.g., Liang et al., 1999). At the same time, the leadership behavior of female leaders is considered more health-promoting and female and male employees tend to respond differently to health-promoting leadership behavior (Vincent, 2012). In addition, leader distance can influence leadership processes such that leaders who are socially close to their followers have more opportunities to support and care for their employees (e.g., Antonakis & Atwater, 2002; Shamir, 1995). The frequency and nature of contact between employee and leader may be particularly important for health-oriented leadership as such behavior requires leaders to know their employees well, which could be influenced by the closeness and intensity of the contact (i.e., the social distance, Antonakis & Atwater, 2002). Therefore, we examined contact intensity between employee and leader with one item “How intense would you describe your contact with your supervisor?” (from 1 = not intensive at all to 5 = very intensive) and tested whether it significantly relates to the focal variables.

We conducted confirmatory factor analyses (CFAs) to determine the distinctiveness of all study variables. The CFAs revealed a satisfactory fit for the proposed six-factor model ($\chi^2=845, p<.001$; RMSEA = 0.06, CFI = 0.99) and a better fit than for a single factor model ($\chi^2=632, p<.001$). Supporting H1 and H2, actual health-oriented leader behavior significantly predicted employees’ self-care behavior ($b=0.22, SE=0.05, p<.001$) and LMX perceived by the employees ($b=0.54, SE=0.04, p<.001$).

The moderation analyses revealed that employees’ ideal health-oriented leader behavior significantly moderated the relationship between actual health-oriented leader behavior and self-care behavior ($b=0.13, SE=0.06, p=.045$). Supporting H3, simple slope analysis (see Figure 2) revealed that employees with higher ideals showed a stronger relationship between actual health-oriented leader behavior and self-care behavior ($b=0.35, SE=0.07, p<.001$) than employees with lower ideals ($b=0.09, SE=0.09, p=.271$).

The moderation for LMX as dependent variable was marginally significant ($b=0.09, SE=0.05, p=.097$). In line with H4, higher ideals strengthened the relationship between actual health-oriented leader behavior and LMX ($b=0.63, SE=0.06, p<.001$) and lower ideals weakened this association ($b=0.45, SE=0.07, p<.001$; see Figure 3).

As expected, self-care behavior as well as LMX were negatively related to exhaustion—but only LMX significantly predicted work engagement (see Table 3). The analysis of the indirect relationships showed that, supporting H5a, self-care mediated the association between actual health-oriented leader behavior and exhaustion ($b_{ind}=-0.05, SE=0.01, p<.001$). However, H5b was not support as the indirect effect for work engagement was not significant ($b_{ind}=-0.01, SE=0.02, p=.751$). We found full support for H6. LMX mediated the association between actual health-oriented leader behavior and exhaustion ($b_{ind}=-0.09, SE=0.03, p<.001$) as well as work engagement ($b_{ind}=0.31, SE=0.06, p<.001$).

5.3 | Discussion of Study 1

Study 1 offers initial support for our hypotheses that the association between actual health-oriented leader behavior and employee self-care behavior and LMX is contingent on employees’ ideals regarding such leader behavior. LMX and self-care behavior, in turn, were associated with less exhaustion and more work engagement for LMX, whereby most indirect paths could be supported. To confirm these initial results and to address issues related to common-method bias (Podsakoff et al., 2003), we conducted a follow-up study. In Study 2, we collected data at two measurement points with a one-week time lag.
Participants were recruited via the online platform Clickworker. In total, 222 employees answered the online questionnaire at Time 1. After excluding 24 participants because they did not meet the requirements or showed insufficient accuracy in filling out the questionnaire (e.g., they did not have a direct supervisor or they finished the questionnaire in less than 50% of the median time needed for completing the questionnaire), the final Time 1 sample consisted of 198 participants. Of these 198, 164 employees completed the second questionnaire one week later. After the exclusion of those who did not carefully complete the second questionnaire (see criteria above), we could match 144 individuals to their Time 1 responses. The majority of these 144 were men (60%), the average age was 39.37 years (SD = 11.33). On average, the participants worked 33.02 hr per week (SD = 9.41) and had worked with their leader for 4.68 years (SD = 4.76). The participants came from different industries, the most frequently mentioned were health and social services (13%), IT (11%), and wholesale and retail (9%).

We analyzed if there were differences in demographic characteristics between respondents and nonrespondents at Time 2. Because of multiple testing, Bonferroni correction was applied, and we used 0.0125 as critical level of significance. The attrition analyses revealed no significant differences in participants’ gender (χ² [1, n = 198] = 1.75, p = .187), participants’ age (t(196) = 2.14, p = .033), their leaders’ gender (χ² [1, n = 198] = 0.16, p = .692), or their contact intensity (t(196) = –1.26, p = .211). Hence, we assume that the final sample is representative for the overall sample in demographic characteristics.

### Measures and procedure

We used the same measures and analytic strategy as in Study 1. At Time 1, participants reported their perception of their leader’s health-oriented leader behavior as well as their expectations regarding health-oriented leader behavior. At Time 2, participants rated their own self-care behavior, the perceived LMX quality with their leader, their exhaustion and work engagement. As in Study 1, we controlled for employee gender, leader gender, and contact intensity between leader and follower.

Consistent with Study 1, CFAs revealed that a model with six separate factors fitted the data well (χ² [845] = 1,419.69, RMSEA = 0.07, CFI = 0.85). This yielded a better fit to the data than a one-factor model (χ² [860] = 2,774.03, RMSEA = 0.12, CFI = 0.50; Δχ² [15] = 1,354.34, p < .001).

### Results

Descriptive statistics, reliabilities, and correlations between the observed variables are presented in Table 4. All variables showed good...
internal consistencies. All correlations were similar to those in Study 1, only self-care behavior at Time 2 was not correlated with actual health-oriented leader behavior at Time 1, but with ideal health-oriented leader behavior at Time 1.

Table 5 presents the results of the moderated mediation model. The overall model revealed a satisfactory fit: $\chi^2(4) = 2.05$, RMSEA = 0.00, CFI = 1.00. Inconsistent with H1 and Study 1, actual health-oriented leader behavior was not related to self-care behavior ($b = -0.001$, $SE = 0.06$, $p = .985$). Supporting H2 and consistent with Study 1, actual health-oriented leader behavior was positively associated with LMX ($b = 0.37$, $SE = 0.05$, $p < .001$).

Not supporting H3 and inconsistent with Study 1, the moderation for self-care behavior as dependent variable was not significant ($b = -0.08$, $SE = 0.09$, $p = .415$). However, employees' ideal health-oriented leader behavior moderated the relationship between actual health-oriented leader behavior and LMX ($b = 0.22$, $SE = 0.07$, $p = .002$). In line with H4 and Study 1, the simple slope analysis (see Figure 4) showed that the relationship between actual health-oriented leader behavior and LMX was stronger for employees with high ideals ($b = 0.59$, $SE = 0.07$, $p < .001$) compared to employees with low ideals ($b = 0.15$, $SE = 0.10$, $p = .132$).

Consistent with Study 1, employees' self-care behavior predicted exhaustion, but not work engagement, whereas LMX was related to

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**TABLE 3** Moderated mediation model in Study 1

<table>
<thead>
<tr>
<th></th>
<th>Self-care behavior $b$ ($SE$)</th>
<th>LMX $b$ ($SE$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>3.48 (0.23)**</td>
<td>2.35 (0.19)**</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.08 (0.10)</td>
<td>0.02 (0.08)</td>
</tr>
<tr>
<td>Leader gender</td>
<td>0.09 (0.09)</td>
<td>0.22 (0.08)**</td>
</tr>
<tr>
<td>Contact intensity</td>
<td>0.00 (0.04)</td>
<td>0.19 (0.03)**</td>
</tr>
<tr>
<td>Actual HoL behavior</td>
<td>0.22 (0.05)**</td>
<td>0.54 (0.04)**</td>
</tr>
<tr>
<td>Ideal HoL behavior</td>
<td>0.00 (0.06)</td>
<td>-0.25 (0.05)**</td>
</tr>
<tr>
<td>Actual X Ideal HoL behavior</td>
<td>0.13 (0.06)*</td>
<td>0.09 (0.05)†</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.11**</td>
<td>.55***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Exhaustion $b$ ($SE$)</th>
<th>Work engagement $b$ ($SE$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>3.97 (0.23)**</td>
<td>1.91 (0.55)**</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.06 (0.07)</td>
<td>0.10 (0.17)</td>
</tr>
<tr>
<td>Leader gender</td>
<td>-0.09 (0.06)</td>
<td>0.22 (0.15)</td>
</tr>
<tr>
<td>Contact intensity</td>
<td>-0.02 (0.03)</td>
<td>0.13 (0.07)†</td>
</tr>
<tr>
<td>Actual HoL behavior</td>
<td>-0.16 (0.04)**</td>
<td>0.12 (0.10)</td>
</tr>
<tr>
<td>Self-care behavior</td>
<td>-0.21 (0.04)**</td>
<td>-0.03 (0.09)</td>
</tr>
<tr>
<td>LMX</td>
<td>-0.16 (0.05)**</td>
<td>0.58 (0.11)**</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.35***</td>
<td>.24***</td>
</tr>
</tbody>
</table>

Notes.: Unstandardized coefficients reported.
Abbreviations: HoL behavior = health-oriented leader behavior; LMX = leader-member exchange. Gender: 1 = female, 2 = male.
†$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.  

**FIGURE 2** Illustration of simple slopes with self-care behavior as dependent variable in Study 1
both well-being variables (see Table 5). Not supporting H5; the analyses of the indirect effects revealed that employees’ self-care behavior did not mediate the association between actual health-oriented leader behavior and exhaustion ($b_{ind} = 0.00, SE = 0.02, p = .985$) nor work engagement ($b_{ind} = 0.00, SE = 0.01, p = .985$). However, in line with H6 and Study 1, LMX served as mediating mechanism for exhaustion ($b_{ind} = -0.10, SE = 0.03, p < .001$) as well as work engagement ($b_{ind} = 0.28, SE = 0.07, p < .001$).

### 6.3 | Discussion of Study 2

Study 2 replicated the moderated mediation model with LMX as mediator. However, the hypotheses for self-care behavior were not supported. Although this study addressed some methodological problems of the first study (e.g., common method bias), it also comes with its own limitations. In particular, neither Study 1 nor Study 2 allowed causal inferences. To overcome this limitation, we conducted an experimental follow-up study. As the causal relation of health behavior and LMX with health indicators has already been established (e.g., Gregersen et al., 2016; Loprinzi, 2016), we focused on the first part of our model, namely whether the effect of actual health-oriented leader behavior on participants’ LMX judgment and on their self-care behavior is contingent on their expectations regarding health-oriented leadership. In order to test these hypotheses, we experimentally manipulated the health-oriented leadership that participants received.

### 7 | STUDY 3

#### 7.1 | Method

##### 7.1.1 | Participants

Data were collected via an online questionnaire. Participation was voluntary and the participants were assured that their responses would be treated confidentially. To encourage participation,
participants could be entered into a lottery at the end of the survey. In total, 195 participants completed the questionnaire. Twenty-two participants were excluded, because they failed at least two out of three attention checks or finished the questionnaire in less than 50% of the median time needed for completing the questionnaire, which indicated that they did not seriously answer the questionnaire. Hence, the final sample consisted of 173 employees, of whom 78% were women (1% indicated “diverse” as gender). Participants were on average 35.09 years old (SD = 11.82). Almost all participants in our sample were working (95%). The majority were employed full-time or almost full-time (59% reported working 80%–100%). A quarter of the participants (24%) reported working part-time and 12% were marginally employed (less than 50% working hours). The majority of participants were employed in the health and social services sector (41%), while the other participants came from various other sectors (e.g., IT, training and education, advertising, and marketing).

7.1.2 | Measures and procedure

Participants were told that they would participate in two short studies about “behavior at work” as a cover story. At the end of the

| TABLE 5 | Moderated mediation model in Study 2 |
| --- | --- | --- |
|  | T2 Self-care behavior | T2 LMX |
| Intercept | 3.49 (0.31)** | 2.85 (0.24)** |
| Gender | −0.02 (0.11) | −0.34 (0.08)** |
| Leader gender | −0.03 (0.11) | 0.05 (0.08) |
| Contact intensity | 0.05 (0.07) | 0.30 (0.05)**|
| T1 Actual HoL behavior | −0.00 (0.06) | 0.37 (0.05)** |
| T1 Ideal HoL behavior | 0.34 (0.10)** | −0.19 (0.07)* |
| Actual X Ideal HoL behavior | −0.08 (0.09) | 0.22 (0.07)** |
| R² | .11* | .60*** |

<table>
<thead>
<tr>
<th></th>
<th>T2 Exhaustion</th>
<th>T2 Work engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>4.19 (0.37)**</td>
<td>1.43 (0.84)**</td>
</tr>
<tr>
<td>Gender</td>
<td>−0.16 (0.08)*</td>
<td>−0.16 (0.18)</td>
</tr>
<tr>
<td>Leader gender</td>
<td>0.11 (0.08)</td>
<td>−0.01 (0.18)</td>
</tr>
<tr>
<td>Contact intensity</td>
<td>−0.00 (0.05)</td>
<td>0.10 (0.12)</td>
</tr>
<tr>
<td>T1 Actual HoL behavior</td>
<td>−0.06 (0.05)</td>
<td>0.26 (0.12)*</td>
</tr>
<tr>
<td>T2 Self-care behavior</td>
<td>−0.25 (0.06)**</td>
<td>0.16 (0.13)</td>
</tr>
<tr>
<td>T2 LMX</td>
<td>−0.26 (0.08)**</td>
<td>0.75 (0.17)**</td>
</tr>
<tr>
<td>R²</td>
<td>.31***</td>
<td>.39***</td>
</tr>
</tbody>
</table>

Notes.: Unstandardized coefficients reported. Abbreviations: HoL behavior = health-oriented leader behavior; LMX = leader-member exchange. Gender: 1 = female; 2 = male. 
†p < .10, *p < .05, **p < .01, ***p < .001.

FIGURE 4 | Illustration of simple slopes with LMX as dependent variable in Study 2
survey, they were fully debriefed about this cover and the true nature of the study (including a short information about the aim of the study and contact information for further questions). The first part of the study assessed demographic and control variables as well as participants’ expectations regarding health-oriented leader behavior. In the second part, participants were randomly assigned to one of the three leader conditions in which they were asked to imagine working for a leader (1) who actively cares about their health (high-health-oriented leadership, HoL, condition), (2) who hardly cares about their health (low-HoL condition), or (3) about whom no information was given regarding his/her health-oriented leader behavior (i.e., the control condition). All leaders were described as transformational to rule out any differences that the positive description might trigger regarding the proposed effects (with three items of the Global Transformational Leadership scale [GTL], Carless et al., 2000; for example, “...gives encouragement and recognition to staff”).

For the description of the health-oriented leader behavior, we used three items of the HoL (Franke et al., 2014) in Scenario 1 (e.g., “...regularly informs about activities of the worksite health promotion.”). In Scenario 2, we rewrote these items so that they describe a low level of health-oriented leadership (e.g., “...rarely informs about activities of the worksite health promotion.”). In the control condition (Scenario 3), the leader was merely described as transformational (see the Supplemental Materials for the full vignettes). We assessed participants’ perception of health-oriented leader behavior after reading the scenario. Subsequently, participants were asked to rate the relationship quality (LMX) that they would expect to experience with this leader if they worked together and their own self-care behavior at this fictitious workplace.

We used the same measures for those variables that were assessed in Study 1. As a manipulation check, participants rated their perception of the health-oriented leadership of the leader described in the scenario. As in Study 1 and Study 2, we assessed those variables as potential controls which seemed theoretically and empirically relevant. As participants’ stress level could affect their responses in the scenario, we assessed their current stress level with four items of the Perceived Stress Scale (Cohen et al., 1983; α = .83). In addition, reading the scenario might influence participants’ mood. Therefore, participants’ mood was assessed directly after the presentation of the vignette with one item of the Self-Assessment Manikin (Bradley & Lang, 1994). We tested whether participants in the three conditions differed on these potential control variables. If so, we conducted the analyses with and without them as covariates. Furthermore, participants’ perceptions of the fictional leaders’ transformational leadership behaviors was assessed with seven items of the GTL scale (Carless et al., 2000; α = .90). Finally, as the data were collected within a broader research project, we added at the end of the survey additional measures. A full description of all measures can be found in the Supplemental Materials.

Consistent with Studies 1 and 2, CFAs provided support for the construct validity of the proposed variables: The proposed four-factor model yielded a good data approximation ($\chi^2[299] = 640.05$, RMSEA = 0.08, CFI = 0.87), and fitted the data better than a single factor model ($\chi^2[299] = 1602.49$, RMSEA = 0.16, CFI = 0.51; $\Delta\chi^2[6] = 962.44$, $p < .001$).

### 7.2 Results

#### 7.2.1 Manipulation check and preliminary analyses

Table 6 summarizes the descriptive statistics, reliabilities, and correlations among the observed variables. As intended, participants in the high-HoL condition perceived more health-oriented

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Condition</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2. Gender</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3. Age</td>
<td>35.09</td>
<td>11.82</td>
<td>0.01</td>
<td>0.18*</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>4. Stress</td>
<td>2.25</td>
<td>0.86</td>
<td>–0.06</td>
<td>0.04</td>
<td>–0.17*</td>
<td>(0.83)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>5. Mood</td>
<td>3.68</td>
<td>0.91</td>
<td>0.24**</td>
<td>0.05</td>
<td>–0.02</td>
<td>–0.21**</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>6. TL</td>
<td>4.07</td>
<td>0.77</td>
<td>0.19*</td>
<td>–0.09</td>
<td>0.00</td>
<td>–0.16*</td>
<td>0.40*** (0.90)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>7. Actual HoL behavior</td>
<td>3.11</td>
<td>1.15</td>
<td>0.72***</td>
<td>–0.07</td>
<td>0.04</td>
<td>–0.09</td>
<td>0.39*** 0.44*** (0.94)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>8. Ideal HoL behavior</td>
<td>4.01</td>
<td>0.64</td>
<td>0.12</td>
<td>–0.06</td>
<td>–0.02</td>
<td>0.02</td>
<td>–0.04</td>
<td>–0.04</td>
<td>–0.01</td>
<td>(0.79)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>9. Self-care behavior</td>
<td>3.97</td>
<td>0.73</td>
<td>–0.05</td>
<td>0.03</td>
<td>–0.11</td>
<td>–0.19*</td>
<td>0.14†</td>
<td>0.24**</td>
<td>0.16*</td>
<td>0.09</td>
<td>(0.82)</td>
<td>–</td>
</tr>
<tr>
<td>10. LMX</td>
<td>3.52</td>
<td>0.71</td>
<td>0.39***</td>
<td>0.04</td>
<td>–0.09</td>
<td>–0.21**</td>
<td>0.41*** 0.67*** 0.53*** –0.14† 0.30*** (0.90)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Notes: $N = 173$. Reliability coefficients are reported along the diagonal.

Abbreviations: HoL behavior = health-oriented leader behavior; LMX = leader-member exchange; TL = transformational leadership. Gender: 1 = female, 2 = male, 3 = diverse. Condition: –1 = low-health-oriented leadership condition, 0 = control condition, 1 = high-health-oriented leadership condition.

†$p < .10$; ‡$p < .05$; ‡†$p < .01$; ***$p < .001$. 

---

TABLE 6 Means, standard deviations, reliabilities, and correlations among the study variables in Study 3
leader behavior ($M_{\text{high-HoL}} = 3.93, SD = 0.88$) than in the low-HoL condition ($M_{\text{low-HoL}} = 1.90, SD = 0.70$) or in the control condition ($M_{\text{control}} = 3.39, SD = 0.72; F[2, 170] = 105.39, p < .001$). A post hoc Tukey test showed that all differences between groups were significant ($p < .001$), demonstrating the effectiveness of our manipulation.

Participants in all three conditions did not significantly differ in gender ($\chi^2 [4, n = 173] = 9.08, p = .059$), age ($F[2, 170] = 0.02, p = .977$), or their current stress level ($F[2, 170] = 1.17, p = .314$). However, the study condition affected participants’ mood ($F[2, 170] = 9.24, p < .001$) such that participants in the low-HoL condition significantly differed from the other two conditions ($p < .05$). They reported significantly worse mood ($M_{\text{low-HoL}} = 3.27, SD = 0.89$) than participants in the high-HoL condition ($M_{\text{high-HoL}} = 3.82, SD = 0.94$) or in the control condition ($M_{\text{control}} = 3.93, SD = 0.75$). Therefore, we conducted the analyses with and without mood as control variable. In addition, we examined if the manipulation of health-oriented leader behavior also affects the general perception of the leader described in the scenario. Participants in the low-HoL condition reported lower transformational leadership ratings ($M_{\text{low-HoL}} = 3.78, SD = 0.93$) than in the high-HoL condition ($M_{\text{high-HoL}} = 4.15, SD = 0.75$) or in the control condition ($M_{\text{control}} = 4.28, SD = 0.52$; Welch’s $F[2, 106.35] = 5.94, p = .004$). Post hoc analyses revealed significant differences between the low-HoL condition and the control condition ($p < .05$).

This means that leaders who were described as less health-oriented were also perceived as less transformational leaders.

### 7.2.2 | Hypothesis testing

Table 7 presents the results of the moderated regression analyses. As the model is just-identified, no overall test of model fit was available. Not supporting H1 and inconsistent with Study 1 but in line with Study 2, the experimental condition did not influence participants’ intention to show self-care behavior ($b = -0.04, SE = 0.07, p = .558$). However, consistent with Studies 1 and 2 and with H2, the condition significantly affected participants’ rating of the LMX quality with the fictitious leader ($b = 0.32, SE = 0.06, p < .001$).

Not supporting H3 and consistent with Study 2, the interaction of actual and ideal health-oriented leader behavior did not predict self-care behavior ($b = 0.01, SE = 0.10, p = .935$). Consistent with Studies 1 and 2, the interaction of actual and ideal health-oriented leader behavior predicted LMX ($b = 0.20, SE = 0.09, p = .029$). To further examine the nature of this interaction, we conducted a simple slope analysis (Figure 5). Supporting H4, health-oriented leader behavior (i.e., the experimental condition) only positively predicted LMX if the expectations were high ($b = 0.52, SE = 0.11, p < .001$), but not if the expectations were low ($b = 0.13, SE = 0.11, p = .238$).

Since participants’ mood in the three groups significantly differed after reading the vignette, we also conducted moderated regression analyses with mood as covariate. The results for self-care behavior as dependent variable did not change in their significance after including mood as control variable. Controlling for the effect of mood, the interaction term for LMX as dependent variable was marginally significant ($b = 0.15, SE = 0.09; p = .072$). The results indicated a similar pattern for the interaction (full results for these additional analyses can be found in the Supplemental Materials).

### 7.3 | Discussion of Study 3

Results of Study 3 corroborated our findings for LMX in Study 1 and Study 2 that health-oriented leader behavior is particularly positively
8 | GENERAL DISCUSSION

Based on implicit leadership theories and the health-oriented leadership literature, this study examined when and how health-oriented leader behavior influences follower well-being. In two studies, we found consistent support for the proposed moderated mediation model with LMX as mediator, whereby the association between actual health-oriented leader behavior and exhaustion as well as work engagement was mediated by LMX and the relationship between actual health-oriented leader behavior and LMX was moderated by ideal health-oriented leader behavior. The proposed moderation was further supported in the experimental Study 3. However, the results for employees’ self-care behavior as a mediating mechanism were mixed, whereby the proposed model was fully supported for exhaustion in Study 1, but it was never supported for work engagement nor in any of the other studies. Overall, our results suggest that employee expectations regarding their leaders’ health-supportive behavior might matter, and also point to the need for future research regarding this important topic. In the following, we discuss implications for theory and research and outline practical implications.

8.1 | Theoretical and research implications

By drawing on ILTs, we extended previous research on health-oriented leadership and explicitly incorporated employees’ expectations regarding such behavior from their supervisors. Although previous studies have highlighted the beneficial effects of health-oriented leadership (e.g., Franke et al., 2014; Gurt et al., 2011), our results suggest that the real picture is more complex and that the effectiveness of health-oriented leader behavior depends partly on employees’ expectations. Even though the original HoL model by Franke et al. (2014) has emphasized the role of employees by considering their own self-care, health-oriented leadership research has largely been lacking an emphasis on employees’ expectations. This is consistent with a hitherto very leader-centric focus on leadership processes (Shamir, 2007). Our work suggests that bringing a follower-centered perspective to the study of health-oriented leadership provides important information on how leaders can provide effective health-promoting support to their employees.

Although health-oriented leader behavior positively related to LMX (and also to self-care behavior in Study 1), this association was stronger the more such behavior was expected. This underscores the strongly beneficial effects of such leader behavior and the relevance of considering health-oriented leadership in future research and also in practice. It is also in line with previous research demonstrating that employees’ responses to the joint effects of desired and received leadership depend on the kind of leadership. For example, whereas excess initiating structure was related to more negative outcomes, a surplus of consideration was mostly associated with more favorable outcomes (Schurer Lambert et al., 2012).

Our study also enriches ILT research by examining health-oriented behavior of leaders as part of the leader prototype. Although ideal prototypes are always only ideal with regard to one specific goal, such as performance (e.g., House et al., 1999), other goal-directed prototypes have rarely been considered in the literature to date. As advanced by Barsalou (1985), ideal prototypes can be quite extreme and might be ideal with regard to one goal, but not with regard to another. The present study builds the case for a stronger consideration of other types of ideal prototypes, such as health-oriented leader expectations. Future research might build on our findings by considering other forms of ideal prototypes, such as cohesion-oriented prototypes, and by simultaneously studying various such forms. In particular, the present study cannot yet tell whether individuals with stronger health-oriented expectations have similar, more, or less effectiveness-oriented expectations. Furthermore, images of ideal and typical leaders can differ as can expectations regarding positive and negative leader attributes, that is how leaders should not be (e.g., Junker et al., 2011; Van Quaquebeke et al., 2014; Schyns & Schilling, 2011). We focused on positive behaviors that are ideal in promoting employees’ health and well-being in the present study. However, future research could investigate the effects of negative health-oriented leader prototypes as well as the differences between typical and ideal health-oriented leader expectations.

Another contribution lies in unveiling an important mechanism to explain the positive association between health-oriented leadership and employee well-being by integrating the perceived relationship quality as a mediator. These findings build upon extant ILT research and previous leadership studies by showing that leaders who align with their employees’ expectations develop better relationships with their employees and that the relationship quality between leader and subordinates may serve as mediating mechanism to explain how such leadership behavior influences employee well-being (e.g., Epitropaki et al., 2013; Junker & van Dick, 2014). By showing that the leader-member relationship plays a crucial role in employees’ responses to the joint effect of actual and ideal health-oriented leader behavior, our study may provide an answer to the important question of how leaders can influence the health of their employees (Inceoglu et al., 2018).

Surprisingly, the effects for self-care behavior were less clear. Even though these results are not in line with our assumptions, they correspond with findings in the field of person-environment fit, which show that a fit is related more to attitudes and less to behavioral variables (van Vianen, 2018). It may be that an alignment or misalignment of employees’ ideals and actual health-oriented leadership influences employees’ awareness of health issues rather than their concrete health behavior. Another potential explanation for the lack of confirmation for our self-care hypotheses may be that individual and contextual factors may influence the exhibition of self-care behavior. For example, individuals’ medical condition might...
impact how much they care about their own health. People who are in perfect health could see no reason to care about their well-being, while those with chronic health issues may no longer be able to look after their own health. In addition, employee self-care behavior could also be affected by the organizational health climate, that means how much emphasis the organization puts on employee well-being and to what extent the organization values and promotes it (Zwerbe et al., 2016). Likewise, and as leader prototypes vary based on national culture (e.g., Brodbeck et al., 2000) and organizational context (Lord et al., 1984), organizational health climate might also shape employees’ expectations regarding health-promoting leadership, thus, enhancing or even suppressing the positive influence of health-oriented leadership. Future research may examine such moderating factors, such as the organizational health climate or national ideals regarding health-oriented leadership.

In addition, it is plausible that individuals differ with regard to their reasons why they indicated low expectations regarding health-oriented leader support. For instance, some employees might find it desirable for their leaders to show health-oriented behavior, but do not consider this to be part of an ideal leader. Other employees may prefer not to be supported by their leader, and therefore, regard it as nonideal leader behavior. In both cases, they would indicate low expectations regarding health-oriented leader behavior but might act differently if leaders show such behavior. Considering these different reasons behind leader prototypes should be examined in future research.

The positive zero-order relationship between health-oriented leader behavior and employee self-care behavior in Study 1 and Study 3 supports the theoretical assumption that health-oriented leadership can foster employee self-care and is in line with previous research (e.g., Franke et al., 2014). However, this association was not significant when temporally separating the assessment of health-oriented leadership and employee self-care (in Study 2). This supports our assumption above that employees’ own self-care is only influenced to a small extent by health-oriented leadership, but that other factors significantly contribute to the performance of self-care. Even though we could only find support for the mediating function of self-care for exhaustion in Study 1, we also found support for the association between self-care behavior and exhaustion in Study 2, but again not for work engagement. This is an important finding as it underlines that self-care is more health-specific than more general LMX. However, the existence of partial mediations suggests that other linking mechanisms may be present. For example, health-oriented leadership could foster employees’ identification with their leader, team, or organization, which, in turn, can enhance their well-being (e.g., Steffens et al., 2017). Previous research has highlighted identification with the leader “as a conduit through which leadership has many of its effects” (Ashforth et al., 2016, p. 28). It is conceivable that leadership concerning individuals’ well-being and a positive match between ideal and actual leader support for employees’ well-being might evoke a strong sense of oneness with the leader (Ashforth et al., 2016), and future research could investigate this in more detail.

### 8.2 Practical implications

Our study also has important implications for practitioners. First, our research provides evidence for the benefits of health-oriented leadership. Indeed, our results suggest that health-oriented leader behavior benefits the leader-follower-relationship quality and might also foster employees’ own self-care behavior for employees who desire such behavior and those who do not see such behavior as ideal for leaders—although, as expected, employees’ ideals influence the strength of the relationship. Therefore, leaders should be supported and trained in such leadership behavior. Special training programs should help leaders to learn how to lead their employees in a health-oriented manner. Thereby, it is essential that leaders learn specific health behaviors they can adopt, for example when they perceive signs of exhaustion among employees. Scientifically based training and intervention concepts can be used to train leaders in health-oriented leadership (e.g., Elprana et al., 2016; Rigotti et al., 2014). In implementing such training, Eriksson et al. (2010) emphasize the importance of organizational embedding and that both lower and higher level managers are involved. When leaders perceive that health promotion is an important topic in their organization, they also develop an awareness of health issues in the workplace and, as a result, lead their employees in a more health-oriented manner (Kaluza et al., 2020). As particularly those employees who see such behavior as belonging to the leadership role benefit from such behavior, organizations should emphasize that such leadership behavior is an explicit part of the leadership role—both for leaders and especially for employees.

Second, our findings highlight the need for leaders to take employees’ expectations into account regarding general traits or behaviors (e.g., Epitropaki & Martin, 2005) as well as with regard to the health support that leaders (could) provide. Organizations thus should raise leaders’ awareness of and provide information on implicit assumptions regarding leadership (e.g., Schyns et al., 2011), for instance within leadership development programs. Moreover, fostering communication about role expectations between leaders and employees can help to assess employees’ specific expectations regarding health-oriented leadership. Open communication allows leaders and employees to exchange their expectations, wishes, and needs so that they can adjust their behavior accordingly, which stands to positively influence their relationship quality (cf. van Gils et al., 2010) and employees’ well-being, as our study shows.

### 8.3 Limitations

Although we used complementary methods (field study, time-lagged data, and vignette study), where disadvantages of one approach may be compensated by the other’s advantages (Dipboye, 1990), the present research indeed has limitations. One limitation of Study 1 is its cross-sectional design, which constrains conclusions about causality. For Study 2, although we collected data at two measurement points, the time lag between the two measurement points was
Despite the increasing interest in health-oriented leadership, previous studies have largely ignored employees' expectations regarding such leader behavior and the mechanisms through which health-oriented leadership impacts employees' well-being. By introducing ILTs to the study of health-oriented leadership, this study helps us gain a deeper understanding of when and how health-oriented leader behavior improves follower well-being. The results suggest that health-oriented leader behavior is related to a better relationship quality between leader and employee, especially among those employees who consider such behavior ideal. In addition, such employees are more likely to show health-promoting behavior themselves, the more the leader leads in a health-oriented way (in Study 1). LMX and employees' own self-care behavior, in turn, were related to employee exhaustion and work engagement (only LMX). These findings offer important extensions to the growing literature on health-oriented leadership and help design practical interventions with regard to leader health promotion.

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