Health-specific Leadership and Employee Health:
The Influence of Contextual and Individual Factors in Healthcare Setting

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„Nicht nur Kunst und Wissenschaft allein, Geduld will bei dem Werke sein.“

- Johann Wolfgang von Goethe

Abstract

Employee health is an important factor for individual and organizational performance. In particular the healthcare sector is characterized by high physical and mental demands that result in poor employee health and high levels of sick leave. One way to support employee health at the workplace is through leadership. By creating a healthy work environment and climate, leadership can promote employee health and well-being, in particular health-specific leadership. Health-specific leadership can be understood as managers' explicit focus on employee health. However, there has been scant insights into contextual factors that are relevant for health-specific leadership.

This dissertation aims to investigate the relevance of contextual factors for health-specific leadership and its relationship with employee health. Three studies were conducted to identify relevant individual and work-related characteristics for health-specific leadership as well as to investigate the influence of specific individual and organizational factors.

The first study is a questionnaire-based survey with 861 healthcare employees. Its findings show a positive relationship between health-specific leadership and employee health in the healthcare sector. Social demands and social resources are analysed as mediating factors. Furthermore, the affective commitment of employees is considered as an additional outcome of health-specific leadership.

The second study identifies drivers and barriers for health-specific leadership in an explorative design based on 51 interviews with healthcare managers and collates these factors with the theoretical background. The findings show various influencing factors relating to leadership, employees, and the organization.

The third study investigates the influence of individual factors on health-specific leadership and is based on a questionnaire survey among 525 healthcare employees. Managers' personal initiative and employee self-care influence the relationship between health-specific leadership and employee burnout in different ways.

In summary, this dissertation contributes to the literature by putting health-specific leadership into context and providing insights into influencing factors. The findings broaden the understanding of how health-specific leadership can influence employee health. The implications for theory and practice are discussed and directions for future research are outlined.

Zusammenfassung

Die Gesundheit von Mitarbeitern ist ein wichtiger Einflussfaktor für die individuelle und organisationale Leistungsfähigkeit. Insbesondere die Pflegebranche ist durch hohe körperliche und psychische Belastungen gekennzeichnet, die in einer schlechteren Gesundheit der Mitarbeiter sowie hohen Krankenständen münden. Eine Möglichkeit, um die Mitarbeitergesundheit am Arbeitsplatz zu unterstützen stellt die Führung dar. Indem Führungskräfte eine gesunde Arbeitsumgebung und -klima schaffen, können sie die Gesundheit und das Wohlbefinden der Mitarbeiter fördern, insbesondere bei einem gesundheitsspezifischen Führungsstil. Gesundheitsspezifische Führung kann als die explizite Absicht der Führungskraft verstanden werden, die Gesundheit der Mitarbeiter zu fördern. Bisher gibt es jedoch kaum Erkenntnisse über Kontextfaktoren, die für eine gesundheitsspezifische Führung relevant sind.

Ziel der Dissertation ist es, die Bedeutung von Kontextfaktoren für eine gesundheitsspezifische Führung zu untersuchen. Im Rahmen der Arbeit wurden drei Studien durchgeführt, um einerseits relevante Individual- und arbeitsbezogene Faktoren für eine gesundheitsspezifische Führung zu identifizieren und andererseits den Einfluss spezifischer individueller und organisationaler Faktoren zu untersuchen.

Die erste Untersuchung beschreibt eine Fragebogenstudie mit 861 Mitarbeitern in der Pflegebranche. Die Ergebnisse zeigen einen positiven Zusammenhang zwischen gesundheitsspezifischer Führung und Mitarbeitergesundheit. Soziale Belastungen und Ressourcen werden als Mediatoren betrachtet. Zudem wird das affektive Commitment der Mitarbeiter als weitere Ergebnisgröße gesundheitsspezifischer Führung berücksichtigt.

Die zweite Studie identifiziert Treiber und Barrieren für eine gesundheitsspezifische Führung in einem explorativen Forschungsdesign, basierend auf Interviews mit 51 Führungskräften der Pflegebranche und gleicht diese Faktoren mit dem theoretischen Rahmen ab. Die Ergebnisse zeigen verschiedene Einflussfaktoren auf Ebene der Führung, der Mitarbeiter und der Organisation.

Die dritte Untersuchung überprüft den Einfluss von Individualfaktoren auf eine gesundheitsspezifische Führung und basiert auf einer Fragebogenstudie mit 525 Mitarbeitern. Die Eigeninitiative der Führungskraft sowie die Selbstfürsorge der Mitarbeiter beeinflussen dabei den Zusammenhang zwischen gesundheitsspezifischer Führung und Burnout-Symptomatik der Mitarbeiter auf unterschiedliche Weise.

Die Dissertation leistet einen Forschungsbeitrag durch die Kontextualisierung gesundheitsspezifischer Führung und liefert neue Erkenntnisse über Einflussfaktoren. Die Ergebnisse liefern dadurch ein besseres Verständnis wie gesundheitsspezifische Führung die Gesundheit von Mitarbeitern beeinflussen kann. Implikationen für die Theorie und Praxis werden diskutiert und Möglichkeiten für zukünftige Forschung skizziert.

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1. General Introduction

In the organizational context, employee health and well-being have a significant impact on individual and organizational outcomes. Researchers have conducted various studies and found support for the impact of employee health on performance outcomes. For instance, a positive health status is associated with better cognitive performance (Kircanski, Joormann, & Arditte, 2012), better task performance (Demerouti, Bakker, & Leiter, 2014), better job performance and lower absenteeism (Merrill et al., 2013), and a better employment status and level of income in the long run (García-Gómez, van Kippersluis, O'Donnell, & Van Doorslaer, 2013). Health impairments also result in economic constraints. In case of sickness absence, companies not only have to compensate for direct costs, such as paying sick employees and replacement workers, but also indirect costs that include higher workloads and overtime, and lower productivity of replacement workers and costs for managing absence. Owing to sick leave, Germany lost approximately 133 billion euros in 2016 – this equals 4.2% of the gross value added (Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, 2018). Similar numbers can be assumed for other countries around the globe (Chaker et al., 2015; Trautmann, Rehm, & Wittchen, 2016). Employee health will further gain in significance. Global trends, primarily demographic changes, digitalization and cultural diversity put a new focus of action on employee health. Researchers predict that employee work-related demands will increase as work intensity, the need for flexibility, delimitation of work, and shortage of qualified staff are likely to grow (Böhm, Bourovoi, Brzykcy, Kreissner, & Breier, 2016; Bundesministerium für Arbeit und Soziales, 2017; Richter, Kliner, & Rennert, 2017).

Today, in particular the healthcare sector is characterized by high levels of job demands. Physical, mental, and social stressors are most relevant to employees in this sector (Adriaenssens, De Gucht, & Maes, 2015; Rasch, Dewitt, & Eschenbeck, 2017; Sun et al., 2017). Healthcare professionals are confronted with more atypical working hours, poorer work-life

balance, and poorer social climate than employees in other sectors (Eurofound, 2014). These high demands affect employee health and well-being negatively. Compared with other professions, healthcare employees show the highest rates of sick leave (Kordt, 2014). In particular, nurses show above average rates of sick leave and their sick leave lasts 25% longer than the average (Kliner, Rennert, & Richter, 2017). This condition is likely to intensify in the future as demographic changes affect healthcare in a twofold way: First, decreasing birth rates will lead to less supply in the labour market and therefore intensify the shortage of qualified staff. Second, aging society will increase the number of people in need for care. Scholars have estimated for the year 2030 an increase of care-dependent people by 45% since 2009. This trend will result in a gap in healthcare supply of up to 604,000 caregivers for 2030 in Germany (Rothgang, Kalwitzki, Unger, & Amsbeck, 2016; Rothgang, Müller, & Unger, 2012). Similar developments are expected for other western countries (MacLean et al., 2014; Zander et al., 2016).

To promote employee health, worksite health promotion is an effective intervention (Rongen, Robroek, van Lenthe, & Burdorf, 2013). To enhance effective health promotion, leadership is a particular important element (Dellve, Skagert, & Vilhelmsson, 2007; McLellan et al., 2015) that withal impacts employee health itself (Montano, Reeske, Franke, & Hüffmeier, 2016). While the impact of leadership on employees is well known, there is little insight into the impact of health-specific leadership, a domain-specific leadership style that focuses on the explicit engagement of leaders in employee health promotion (Gurt, Schwennen, & Elke, 2011). In particular, previous research neglected the relevance of work-related characteristics for health-specific leadership (Böhm, Baumgärtner, & Kreissner, 2016). As scholars have shown in previous studies, work-related characteristics are relevant for employee health and leadership behaviour. Workplace characteristics cannot only promote or impair employee health (Bakker & Demerouti, 2017; Humphrey, Nahrgang, & Morgeson, 2007; Theorell et al., 2015), but they

also can impact the relationship between leadership behaviour and employee health (Nielsen, Yarker, Brenner, Randall, & Borg, 2008; Read & Laschinger, 2015; Walsh, Dupré, & Arnold, 2014). However, equivalent findings are non-existent for health-specific leadership.

This dissertation aims to investigate the relevance and influence of work-related characteristics on health-specific leadership. This dissertation broadens the understanding of how health-specific leadership impacts employee health in the healthcare sector and extends previous research in three ways: First, it provides evidence of the influence of health-specific leadership on employee health in the healthcare sector. Although employee health promotion is most relevant in health care, there is no evidence of health-specific leadership in this sector so far. Second, the dissertation identifies relevant factors that influence health-specific leadership and its relationship with employee health. Hitherto, scholars neglected the relevance of influencing factors for health-specific leadership and thus there is no data available on the relevant work-related characteristics. Third, the dissertation provides evidence of specific individual and contextual factors and their influence on health-specific leadership and employee health, as evidence of the influence of specific factors on health-specific leadership remains absent.

1.1. Leadership Influence on Employee Health

Scholars have shown the influence of leadership style on employee health and well-being in various reviews (Gregersen, Kuhnert, Zimber, & Niehaus, 2011; Kuoppala, Liira, & Vainio, 2008; Montano et al., 2016; Skakon, Nielsen, Borg, & Guzman, 2010). For the healthcare sector, Cummings and her colleagues have reviewed equivalent findings on the relationship between leadership styles and employee health (Cummings et al., 2010). To describe these findings in summary, leadership styles and behaviours, which are characterized by a positive relationship between supervisor and subordinate and focus on empowering employees, show a positive effect on employee health outcomes. For instance, positive effects on employee health have been found for transformational leadership (Arnold, Turner, Barling,

Kelloway, & McKee, 2007; Zwingmann et al., 2014), leader-member exchange (Gregersen, Vincent-Höper, & Nienhaus, 2014; Thomas & Lankau, 2009), resonant leadership (Cummings, 2004; Laschinger, Wong, Cummings, & Grau, 2014), and authentic leadership (Laschinger, Wong, & Grau, 2013). In addition, leadership is an important facilitator of worksite health promotion interventions. Leadership support enhances the effectiveness and success of implementation of worksite health promotion programs (Hoert, Herd, & Hambrick, 2016; McLellan et al., 2015). On the other hand, leadership behaviour can also be negatively related to employee health. For instance, destructive leadership behaviours, such as supervisory abuse or active hostility, are related to lower employee well-being and higher work-related stress (Schyns & Schilling, 2013). Moreover, passive leadership styles, such as laissez-faire leadership and management by expectations, can lead to higher levels of employee exhaustion and chronic stress (Arnold, Connelly, Walsh, & Martin Ginis, 2015; Rowold & Schlotz, 2009).

The reported findings confirm the influence of leadership on employee health and well-being. However, most studies show only small to moderate effects of leadership on employee health outcomes (Kuoppala et al., 2008; Montano et al., 2016). The findings provide insufficient explanations for the mechanisms of how supervisors influence subordinates' health for two reasons: First, the studies relate to general leadership styles and miss specific references to health promotion; second, in the organizational context numerous additional factors, such as work-related and individual characteristics, influence leadership and employee health (Humphrey et al., 2007).

1.1.1. Leadership and Employee Health in Organizational Context

To understand the relationship between leadership and employee health in a better way, it is important to consider factors that influence leadership, employee health, and their relationship. First, the workplace is known to be a relevant factor for individual health for some time now (Beehr & Newman, 1978; Eakin, 1997). Work-related characteristics, besides leadership, including motivational, social, and work context characteristics, are related to

employee health and well-being (Humphrey et al., 2007). Based on the job demands-recourses model (Demerouti & Bakker, 2011), job characteristics can be categorized into job recourses and job demands. Job-related resources have motivational potential and refer to those work-related characteristics that reduce job demands and foster goal achievement and personal growth and development. A positive influence on employee health and well-being has been proven for numerous job resources, such as autonomy (van den Tooren & de Jong, 2014), task variety (Zaniboni, Truxillo, & Fraccaroli, 2013), social support from colleagues (Niedhammer, Chastang, Sultan-Taïeb, Vermeylen, & Parent-Thirion, 2013), and positive organizational climate (Gershon et al., 2007). On the other hand, job-related demands refer to those work-related characteristics that absorb physical and/or psychological effort and therefore lead to physiological and/or psychological exhaustion (Demerouti & Bakker, 2011). A negative influence on employee health and well-being has been proven for numerous job demands, such as high workloads (Kawada et al., 2010), emotional demands (Brotheridge & Grandey, 2002), emotional dissonance (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007), and time pressure (Hakanen, Bakker, & Schaufeli, 2006).

Job-related resources and demands influence and interact with each other. In particular, job resources can buffer the influence of job demands on employee health (Häusser, Mojzisch, Niesel, & Schulz-Hardt, 2010), while high job demands can boost resources (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007). Scholars have shown that leaders can influence such work characteristics and thereby influence employee health. Studies have found the evidence of a mediated effect of leadership on employee health. Leaders influence employee health and well-being indirectly by changing the workload and feedback (Karanika-Murray, Bartholomew, Williams, & Cox, 2015), work climate (Tafvelin, Armelius, & Westerberg, 2011), work characteristics (Nielsen et al., 2008), and job resources (Greco, Laschinger, & Wong, 2006).

Thus, work-related characteristics are promising for broadening the understanding of the relationship between leadership and employee health.

Second, leadership itself must be seen in the context as various factors influence leadership behaviour in general. Scholars have shown the relevance of leaders' intrapersonal as well as interpersonal characteristics for leadership behaviour and efficacy. Interpersonal characteristics refer to aspects that characterize the relationship between leader and employee. For instance, employees' trust in their leader is related to higher work engagement (Engelbrecht, Heine, & Mahembe, 2017), similarity and liking between leader and employee is positively related to leader-member exchange and employee job performance (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Dulebohn, Wu, & Liao, 2017). Intrapersonal characteristics refer to aspects that are situated within the individual person of the leader, such as personality traits, cognitive processes, or emotional states, and thereby influence leadership behaviour and performance. For instance, the positive mood of the manager is related to higher levels of team efficiency and cooperation (Sy, Côté, & Saavedra, 2005), while leadership experience is linked with optimism (Schilling, 2007) and performance (Avery, Tonidandel, Griffith, & Quinones, 2003). In particular, proactivity and proactive leadership behaviour is considered a significant important intrapersonal performance component (Crant, 2000). Proactivity is related to a charismatic leadership style (Crant & Bateman, 2000), higher job performance (Glaser, Stam, & Takeuchi, 2016), team performance (Crossley, Cooper, & Wernsing, 2013), and management success (Glaub, Frese, Fischer, & Hoppe, 2014). These findings underpin the relevance of leadership characteristics for leadership behaviour and performance in general. Thus, considering variables like proactivity is promising for providing a better understanding of leadership behaviour and its impact on employees.

1.1.2. Health-specific Leadership

In recent years, scholars have developed health-specific leadership concepts to distinctly describe the influence of leadership behaviour on employee health. *"[Health-specific*

leadership] can be regarded as the leaders' explicit and therefore visible consideration of and engagement in employee health" (Gurt et al., 2011, p. 110). Leaders can engage in employee health in several ways, focusing on the individual, the team, or the whole organization (Wegge, Shemla, & Haslam, 2014). For instance, they can provide health information, empower employees, or create a health-promoting workplace by job design, reducing workloads, or establishing a supportive working climate. Recently, Jiménez and his colleagues (Jiménez, Bregenzer, Kallus, Fruhwirth, & Wagner-Hartl, 2017) found an indirect effect of health-specific leadership on employee stress and emotional exhaustion mediated by job-related resources. Furthermore, supervisors can act as role models for health to promote employee health (Kranabetter & Niessen, 2016). However, leaders do not merely have to show health-promoting behaviour; they also have to prioritize employee health promotion as a topic of interest. Leaders need to feel responsible for employee health concerns (Wilde, Hinrichs, Pavez, & Schüpbach, 2009). In addition, leaders have to be aware of the specific health issues of their employees, appropriate measures of health promotion, and corresponding knowledge to take actions accordingly (Franke & Felfe, 2011).

Scholars propose different approaches to capture the essence of health-specific leadership style, such as health-oriented leadership (Franke, Felfe, & Pundt, 2014), health-focused leadership (Böhm, Baumgärtner, et al., 2016), or health-promoting leadership (Jiménez, Winkler, & Dunkl, 2017). These different approaches emphasize different aspects of leadership and its relationship to employees, but seem to be highly related (Böhm, Baumgärtner, et al., 2016; Jiménez, Winkler, et al., 2017). In all these approaches, managers intentionally focus on promoting employee health and therefore can be summoned under the previous definition of health-specific leadership. As health-specific leaders engage in the specific field of employee health, health-specific leadership is a domain-specific leadership style. Domain-specific approaches predict concurrent outcomes better than general leadership approaches

(Yukl, 2012). Empirical evidence supports this perspective: Explorative factorial analysis shows that health-specific leadership can be distinguished from a general leadership style (Gurt et al., 2011). In addition, health-specific leadership explains additional variance of employees' general health, irritation, health complaints, and work-family conflicts over transformational leadership (Franke et al., 2014). The findings underline the idea of health-specific leadership as an additive leadership style on top of general leadership behaviour. Thus, health-specific leadership style is a more insightful predictor for employee health outcomes than a general leadership style. From a contentual point of view, health-specific leadership broadens the understanding of how leaders influence employee health in general. By describing specific leadership behaviours and attitudes, the concept provides insights into specific pathways and mechanisms by which leaders influence employee health.

1.2. Aim of the Dissertation

The aim of this dissertation is to investigate the relevance of work-related and individual characteristics for health-specific leadership in the healthcare setting and thereby deepen the understanding of how health-specific leadership impacts employee health. To date there is little research in the field of health-specific leadership in general. Especially there is a lack of evidence of the influence of contextual factors on the relationship between health-specific leadership and employee health. For leadership in general, scholars have proven that leadership does not take place in a vacuum, as several influencing factors on the personal and contextual level have to be taken into account (Liden & Antonakis, 2009; Rousseau & Fried, 2001). Drawing from previous findings on contextual and individual factors, that are relevant for leadership in general and the influence of leadership on employee health, this dissertation examines the relevance of influencing factors on the relationship between health-specific leadership and employee health in the healthcare setting. The dissertation focus on the healthcare sector for two reasons. First, the relationship between health-specific leadership and employee health has been proven in other sectors, but not in the healthcare setting. Second,

employee health promotion is most relevant in the healthcare sector due to high and prospectively increasing work-related demands (Eurofound, 2014; Rothgang et al., 2012). Regarding contextual factors, previous research studies underpin the relevance of work-related demands and recourses (Bakker & Demerouti, 2007; Demerouti & Bakker, 2011). In the healthcare sector, social demands and recourses are in particular relevant (Cheng, Bartram, Karimi, & Leggat, 2013; Lim, Bogossian, & Ahern, 2010) and therefore of research interest for this dissertation. Regarding individual factors, proactivity is a prominent factor that is linked to leadership behaviour and performance (Crant & Bateman, 2000; Crossley et al., 2013; Glaub et al., 2014) and also relevant for individual health behaviour (Searle & Lee, 2015; Taris & Wielenga-Meijer, 2010). Based on the presented findings, it is not merely essential to identify relevant work-related factors for health-specific leadership to broaden understanding of how health-specific leadership impacts employee health. It is also favourable to investigate the specific influence of social demands and resources as well as proactive behaviour as definite factors. Thus, the dissertation addresses the following research questions:

(1) Which factors influence the practice of health-specific leadership in healthcare facilities?
(2) How do work-related social demands and resources influence the relationship between health-specific leadership and employee health?
(3) How does proactive behaviour influence the relationship between health-specific leadership and employee health?

By answering these questions, the dissertation contributes to previous research in several ways. First, the results enhance the empirical basis for the concept of health-specific leadership and provide initial evidence of the influence of health-specific leadership on employee health and motivation in the healthcare sector. This insight clarifies the significance of intended health-oriented leadership behaviour for employee health. Second, the dissertation

identifies influencing factors that can foster or hinder the influence of health-specific leadership on employee health. Therefore, the results put health-specific leadership into context and acknowledge specific conditions of the healthcare sector. Third, the results provide evidence of the influence of specific individual and contextual factors on health-specific leadership and its relationship with employee health. By that, this dissertation broadens the understanding of the mechanisms of health-specific leadership and how leadership behaviour influences employee health and well-being.

1.3. Outline of the Dissertation

To answer the research questions, three studies in healthcare settings were conducted. Thus, the dissertation consists of three manuscripts, which are presented throughout Chapter 2 to Chapter 4. Study 1 ("Health-specific leadership in geriatric healthcare. Relevance of social demands and resources for employee health and commitment") investigates the relationship between health-specific leadership and employee health based on a sample of 861 employees in geriatric care facilities. The results contribute to previous research by providing evidence of the relationship between health-specific leadership and employees' physical demands; they also provide insights into the mechanisms of health-specific leadership. First, this study initially examines health-specific leadership in the healthcare setting. Second, besides the physical demands of employees, their affective organizational commitment was measured as an additional outcome variable for health-specific leadership. Third, the study identifies social climate at the workplace as a mediating factor between health-specific leadership and employee health and commitment.

Study 2 ("Drivers and barriers in the practice of health-specific leadership. A qualitative study in healthcare") explores influencing factors of the practice of health-specific leadership in healthcare. Based on interviews with 51 managers from geriatric care facilities, the study identifies and systemizes drivers and barriers for health-specific leadership at the leader level, employee level, and organizational level. The identified drivers and barriers are set in relation

to the theoretical elements of the health-specific leadership concept. Thereby, the concept of health-specific leadership is evaluated from a contextual perspective for the first time. The study initially provides knowledge of individual and contextual factors that facilitate or hinder the practical implementation of health-specific leadership in the healthcare sector.

Study 3 ("Enhancing employee self-care: The moderating effect of personal initiative on health-specific leadership") examines the influence of individual factors on the relationship between health-specific leadership and employee health in geriatric care facilities. The study provides twofold evidence of the mechanisms of health-specific leadership. First, on the employee side, employee self-care is considered as a mediational factor between health-specific leadership and employee burnout symptoms. The results show that employees show more self-care if they perceive their supervisor to be health-oriented. This finding underlines the importance of the supervisor's role modelling for health behaviour. Second, on the leader side, the personal initiative taken by managers is considered as a moderator for health-specific leadership. The relationship between health-specific leadership and employee self-care is stronger if the supervisor reports a higher level of personal initiative.

Finally, the key results of the dissertation are summarized and discussed. Next, their theoretical and practical implications are outlined before discussing this dissertation's strengths and limitations.

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2. Health-specific Leadership in Geriatric Healthcare: The Relevance of Social Demands and Resources to Employee Health and Commitment[1]

Abstract

The healthcare sector is characterized by increasing demands and high turnover intentions. However, there is wide evidence that certain leadership styles have a positive influence on employee health and commitment. While other findings point out the importance of social demands and resources at the workplace, the mechanisms by which leaders influence their employee health and commitment are not well understood yet. In the present questionnaire based study the health status, organizational commitment, social demands and resources as well as supervisors leadership style of 861 employees from geriatric nursing homes were measured. The results confirm the relationship between health-specific leadership and employee health and commitment. Social demands and resources of the employees serve as semi-mediating factors. The findings support the importance of health-specific leadership for employee health and commitment. The additional knowledge about the effects of social demands and resources at the workplace indicate also useful recommendation for practice.

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2.1. Introduction

Societal changes due to demographic changes are, in particular, a challenge for the healthcare sector. Increasing life expectancy lead to a growing number of people in need of care, while decreasing birth rates lead to a decreasing number of young professionals (European Commission, 2011; Rothgang, Müller, & Unger, 2013; Statistisches Bundesamt, 2010). This leads to lack of care staff and general supply shortfall in the healthcare sector (Rothgang, Müller, & Unger, 2012). It is already known that healthcare professionals experience high levels of work-related demands (Simon et al., 2005). Compared to other professions, healthcare professionals record the highest rates of sick leave (Kordt, 2014). Nursing staff, in particular, is characterized by team work (Eurofound, 2014). This fact underpins the importance of social resources and social demands in the healthcare sector. Besides health complaints, employee affective commitment poses a major challenge in the organizational context. Owing to lack of qualified staff, healthcare facilities compete for healthcare professionals. Thus, high levels of employee affective commitment are important assets for companies in order to be competitive (Alexander, Bloom, & Nuchols, 1994). Affective commitment is related to better job performance and satisfaction as well as lower turnover intentions (Cooper-Hakim & Viswesvaran, 2005). To face the demographic changes, healthcare facilities, therefore, not only need to promote employee health but also retain qualified staff. Previous research findings underpin the relevance of leadership for health (Kanste, Kyngäs, & Nikkilä, 2007; Nielsen, Yarker, Brenner, Randall, & Borg, 2008) and organizational commitment of employees in healthcare (Chiok Foong Loke, 2001; Galletta, Portoghese, Battistelli, & Leiter, 2013; Laschinger, Finegan, & Wilk, 2009). In particular, health-specific leadership promotes employee health (Franke, Felfe, & Pundt, 2014). Additionally, job-related resources and demands are related to employee health and commitment (Bakker, Demerouti, & Euwema, 2005; Rodwell & Munro, 2013; van den Tooren & de Jong, 2014).

However, research on health-specific leadership is clearly limited. Therefore, two questions remain unanswered. First, what influence does health-specific leadership have on employee health and commitment in the healthcare sector? Second, what relevance do social resources and social demands have in this context? The present study tries to answer these questions and contributes to the literature in three ways. First, we investigate the relationship between health-specific leadership and employee health, because little research addresses this topic yet. Second, we investigate, for the first time, the relationship between health-specific leadership and employee affective organizational commitment. Hitherto, health was the only outcome measured for health-specific leadership. However, workplace health promotion and managers' care for employees can be seen as an active retention management. Therefore, the influence of health-specific leadership on employee health is also of interest. Third, the study contributes to a better understanding of the mechanisms of health-specific leadership. In particular, it is inconclusive whether health-specific leadership is also related to social resources and social demands, which are especially relevant to the healthcare sector. We build on previous studies on the job demand-resources model (Bakker & Demerouti, 2007) and take employees' social resources and demands as mediating variable into account. Thereby, we broaden the previous ambit of health-specific leadership and derive practical implications to promote employee health and commitment, in particular in the healthcare sector.

2.1.1. Leadership and Employee Health

Leadership plays an important role in employee health. Numerous studies have proven the relationship between different leadership styles and employee health outcomes (Gregersen, Kuhnert, Zimber, & Niehaus, 2011; Kuoppala, Liira, & Juha Vainio, 2008; Skakon, Nielsen, Borg, & Guzman, 2010). A positive relationship of employee health and well-being was shown for different constructive leadership styles, such as transformational leadership (Franke & Felfe, 2011b; Rowold & Heinitz, 2008; Zwingmann et al., 2014), transactional leadership (Nyberg, Bernin, & Theorell, 2005), leader-member exchange (LMX; Gregersen, Vincent-Höper, &

Nienhaus, 2014; Schyns & Wolfram, 2008), authentic leadership (Laschinger, Wong, Cummings, & Grau, 2014; Wong & Cummings, 2009) and ethic leadership (Chughtai, Byrne, & Flood, 2014; Kalshoven & Boon, 2012). But negative leadership behaviour, too, influences employee health. Schyns and Schilling (2013) showed in their meta-analysis, that destructive leadership behaviour is negatively related to employee well-being and positively related to employee stress.

While these results confirm the relationship between leadership and employee health, the studies focus only on general leadership styles without any specific health reference. In this context it remains unclear whether managers at all consider employee health promotion, how they implement health promotion, and what role health-specific leadership behaviour plays. Therefore, scholars recently discussed health-specific leadership concepts to explain the influence of leadership on employee health (Yukl, 2012). These concepts describe managers' intended influence on employee health. According to them, promoting employee health and well-being is the explicit aim of health-specific leadership and not merely a positive side effect of general leadership. Therefore, health-specific leadership can be differentiated from general leadership styles, such as transformational leadership or LMX. Gurt and his colleagues (2011) showed in their study that health-specific leadership and general leadership correlate with each other, but both load in an explorative factor analysis on different factors.

Franke and Felfe (2011a) postulate four interrelated central aspects of health-specific leadership. Concerning managers' attitude, they include the value of health and health awareness. Value of health encompasses the individual importance of and interest in health and related topics. Managers are more motivated to influence employee health, if they themselves value health highly. Health awareness concerns attention to health issues. To influence employee health, managers need to be aware of factors influencing employee health and, accordingly, adopt health promotional measures. At the behavioural level, health behaviour is

relevant to implement health-specific leadership. This refers to specific health-related leadership behaviour. For instance, managers can provide information on health promotion for employees, or change work characteristics, work flows and the social climate at the workplace. Value of health, health awareness, and health behaviour can be referred to both employee health and the individual health of the manager. Based on this relation of staff-leadership and self-leadership, the fourth aspect of health-specific leadership is derived: health-related role modelling. Managers' individual health behaviour can provide guidance to employees in taking care for their own health. Franke and her colleagues (2014) show in a longitudinal study that health-specific leadership influences employee health beyond the influence of transformational leadership. Employees who perceived their managers as health-oriented took greater care of their own health. This resulted in fewer health concerns, lower irritation, and fewer work-family conflicts. Thus, health-specific leadership influences employee health not only directly but also indirectly. By perceiving their managers as health-oriented, employee took on an active role and changed their own health behaviour.

The findings underpin the theoretical and practical relevance of the health-specific leadership concept. However, no further studies have so far examined the relationship between health-specific leadership and employee health. This is particularly relevant for the healthcare sector. Healthcare employees experience notably high levels of physical, mental, and social demands and show lower health status and higher rates of sick leave (Kordt, 2014; Simon et al., 2005). As health-specific leadership is based on intentional health promotion and influences employee health on a direct and indirect path, we assume a positive relationship between health-specific leadership and the health of healthcare employees, despite the high demands in the healthcare sector. Therefore, we derive the following hypothesis:

Hypothesis H1: Health-specific leadership is negatively related to employee health complaints.

2.1.2. Health-specific Leadership and Employee Commitment

A common measure of employee retention is organizational commitment. Three components of organizational commitment can be distinguished: affective, normative, and continuance commitment (Meyer & Allen, 1991). Different forms of commitment, besides organizational commitment, can be distinguished, such as occupational commitment or commitment to the form of employment (Felfe, Schmook, Schyns, & Six, 2008; Meyer, Allen, & Smith, 1993). In particular, affective organizational commitment is related to higher employee satisfaction and performance as well as lower turnover intentions (Cooper-Hakim & Viswesvaran, 2005; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Work characteristics are important antecedents of affective organizational commitment. They include, in particular, aspects that foster employee value concurrence and ensure need satisfaction, such as supportive leadership, organizational support, and perceived justice (Meyer & Allen, 1991; Meyer et al., 2002).

In general, leadership is related to employee affective organizational commitment (Cummings et al., 2010; Meyer et al., 2002; Rockstuhl, Dulebohn, Ang, & Shore, 2012). Transformational leadership is characterised by four aspects: idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation, and, thereby, acts as an antecedent of affective organizational commitment (Jackson, Meyer, & Wang, 2013). For health-specific leadership, we also assume a positive relationship with employee affective commitment. Promoting employee health is a central characteristic of health-specific leadership. By actively engaging in health-related issues and promoting employee health, managers take care of their employees and focus on their well-being. Managers who show health-specific leadership are aware of the employee health status and take appropriate measures (Franke & Felfe, 2011a). This employee-centric and health-specific behaviour can be perceived as an instance of concrete individual support for employees, which, in turn, fosters employee affective commitment (Rafferty & Griffin, 2006). Based on this individual concern

for employees and their health, we assume that health-specific leadership not only influences employee health, but also has a positive effect on their affective organizational commitment. Therefore, we derive the following hypothesis:

> *Hypothesis H2: Health-specific leadership is positively related to employee affective organizational commitment.*

2.1.3. The Role of Social Demands and Resources

Besides leadership, demands and resources at the workplace are particularly relevant for employee health and commitment. The job demand-resource model (JD-R; Bakker & Demerouti, 2007) tries to explain the role of work-related demands and resources. The JD-R distinguishes two different paths for job demands and job resources, to influence job stressors, on the one hand, and motivational outcomes, on the other. Job demands lead to greater efforts and result in strain, which, in turn, can lead to physical and mental complaints. Job demands include, for example, heavy workload, poor working conditions and demanding relations with colleagues or costumers (Bakker & Demerouti, 2007). Job resources, such as empowerment, social support and feedback, mainly evolve in a motivational potential and foster goal attainment, engagement, and personal growth (Bakker & Demerouti, 2007). Thus, job resources are not contrary to job demands, but function independently and impact different outcomes. While job demands can result in burnout and lower health status, job resources can foster work engagement and organizational commitment (Hakanen, Bakker, & Schaufeli, 2006).

In the healthcare sector, social demands and social resources at the workplace are especially relevant. Besides high levels of workload, social demands, such as lack of organizational support, poor relations with colleagues and aggressive work behaviour are the most taxing stressors for caregivers (Chan, Lai, Ko, & Boey, 2000; Lim, Bogossian, & Ahern, 2010; McVicar, 2003). On the other hand, social support by colleagues (Fothergill, Edwards,

& Burnard, 2004), a positive team climate (Cheng, Bartram, Karimi, & Leggat, 2013) and a social climate (Garrett & McDaniel, 2001) are important resources for healthcare employees.

Meta-analyses showed a negative relationship between social demands and employee health. For instance, scholars found significant associations between co-workers' aggression and depression (Hershcovis & Barling, 2010), low social support, Type 2 diabetes, and increased absence due to sickness (Cosgrove, Sargeant, Caleyachetty, & Griffin, 2012; Niedhammer, Chastang, Sultan-Taïeb, Vermeylen, & Parent-Thirion, 2013), workplace bullying and different forms of physical and mental strain (Nielsen & Einarsen, 2012). For the healthcare sector, Rodwell and Demir (2012) showed that, for employees in geriatric care facilities and hospitals, bullying causes depression and psychological distress. Regarding social resources, numerous studies have shown a positive relationship to organizational commitment. Meta-analyses provide evidence of social support by colleagues (Humphrey, Nahrgang, & Morgeson, 2007; Ng & Sorensen, 2008), teamwork (Kooij, Jansen, Dikkers, & De Lange, 2010) and social climate (Carr, Schmidt, Ford, & DeShon, 2003). A study on hospital nurses showed that social capital acts as a social resource and is positively related to employee organizational commitment (Hsu, Chang, Huang, & Chiang, 2011).

Work-related resources and demands also act as mediators and impact the relationship between leadership and employee health and commitment (Korek, Felfe, & Zaepernick-Rothec, 2010; Nielsen et al., 2008; Walsh, Dupré, & Arnold, 2014). Studies show that leadership influences employee well-being not only directly, but also indirectly and that social workplace characteristics mediate this influence. Nielsen and her colleagues (2009) investigated the relationship between transformational leadership and employee well-being and satisfaction. The authors confirmed a positive relationship and identified team efficacy to be a mediator. Another study identified social support as a mediator between transformational leadership and employee emotional irritation (Holstad, Korek, Rigotti, & Mohr, 2014). Regarding the

relationship between leadership and employee organizational commitment, scholars identified social resources at the workplace as mediators. Walumbwa and his colleagues (2004) showed that team efficacy mediated the relationship between transformational leadership and employee organizational commitment. At the team level, team trust mediates the influence of transformational leadership on satisfaction and commitment of the team members (Hsu & Mujtaba, 2007).

However, studies on the mediating influence of social demands and social resources on the relation of employee health and commitment are non-existent for health-specific leadership. We assume that health-specific leadership also indirectly influences employee health and commitment via social demands and resources. Managers with a health-specific leadership style are aware of the resources and demands of their employees. Therefore, they can take specific health-oriented steps by crafting working conditions and work climate in a health-promoting way. In the healthcare sector, social demands and social resources are of particular relevance. Thus, health-specific leadership should address this fact and reduce social demands and foster social resources. Based on the job demand-resources model, demands and resources influence employee health and commitment in two different ways. Job demands result in greater strain and, thereby, impair employee health status. Job resources address motivational aspects and, thus, foster employee commitment. We build on these findings and consider social demands and social resources as mediating variables between health-specific leadership and employee health, on the one hand, and affective organizational commitment, on the other. Therefore, we derive the following hypotheses:

Hypothesis H3.1: Employees' social demands at the workplace mediate the relationship between health-specific leadership and employee health complaints.

Hypothesis H3.2: Employees' social resources at the workplace mediate the relationship between health-specific leadership and employees' affective organizational commitment.

2.2. Method

2.2.1. Data Collection and Sample

Data were collected with a standardized questionnaire answered by employees of 28 geriatric care facilities in Lower-Saxony, Germany. To reach most staff members, questionnaires were distributed during a shift handover. Owing to data protection, employee data were not linked to leadership or facility data. According to reports given by the facility managers, 1,418 persons were employed at the time of data collection. In all, 861 employees participated in the survey, which was equivalent to a response rate of 60.7%. In total, 53.3% of the participants were caregivers, 12.2% physical and occupational therapists, 18.7% worked in housekeeping and cleaning, 4% in administration and 11.8% stated other occupations. The majority of the participants (88.1%) were female, which is comparable to the average gender distribution in the healthcare sector. Concerning age distribution, 1.4% were 20 years old and younger, 20% were between 20 and 30 years old, 14.7% were between 30 and 40 years old, 33.9% were between 40 and 50 years old, 26% were between 50 and 60 years old, and 4% were 60 years or older. On average, participants reported 24.2 years of professional experience, 13.2 years of it in the current company.

2.2.2. Measures

Health-specific leadership

Health-specific leadership was assessed with the employee version of the Health-oriented Leadership scale (HoL) (Franke & Felfe, 2011a). HoL measures four aspects of health-specific leadership on a 5-point Likert scale (1 = 'not true at all' to 5 = 'completely true'): health awareness (8 items, e.g. '*My supervisor immediately notices when something is wrong with my health.*'), value of health (3 items, e.g. '*My supervisor feels responsible to pay attention to my*

health.'), health behaviour (7 items, e.g. '*My supervisor invites me to inform him/her about health risks at my workplace.*'), and health-related role-modelling (3 items, e.g. '*My supervisor tries to be a role-model regarding health behaviour.*'). Internal consistencies of the subscales were good. Cronbach's alpha was α = .91 for health behaviour, α = .86 for role-modelling, and α = .85 for health awareness and value of health. The correlation coefficient between the subscales ranged from r = .52 (awareness and role-modelling) to r = .80 (behaviour and value), and were all significant on the 0.01% level. Cronbach's alpha for the aggregated HoL-value was α = .95.

Employee health

Employee health was assessed with 11 items from the German instrument 'Diagnose gesundheitsförderlicher Arbeit' (DigA) (Ducki, 2000). DigA measures the prevalence of health complaints on a 6-point scale (e.g. '*How often do you have sleeping problems (problems getting to sleep or sleeping through?*') 6 = 'always' to 1 = 'never'). At the physical level, the scale measures gastrointestinal complaints, musculoskeletal complaints, cardiovascular diseases, sleep disturbances, and headaches. At a psychological level, the scale measures irritation and exhaustion. Internal consistency was α = .74 for physical strains and α = .88 for psychological strain. Based on the recommendation of a previous evaluation of DigA (Greiner, 2004) and high inter-correlation between physical and psychological strain, the subscales were tested for aggregation. Factor analysis revealed a single factor model with all 11 items loading on one factor. Therefore, all items were aggregated to an overall score. Internal consistency for the overall score was α = .89.

Employee social demands and resources

Employee social demands and resources were assessed with 12 items from the German instrument 'Salutogenetischen Subjektiven Arbeitsanalyse' (SALSA, Udris & Rimann, 1999). Social demands were measured with six items (e.g. '*There is often tension at my workplace.*').

Internal consistency for this subscale was α = .79. Social resources were also measured with six items (e.g. '*I can rely on my colleagues, if I have any problems at work.*'). Internal consistency was α = .78. All items were rated on a 5-point Likert scale (1 = 'not true' to 5 = 'true').

Affective organizational commitment

Employee affective organizational commitment was assessed with the Commit-Scale by Franke and Felfe (2012). This instrument consists of five items, using a 5-point Likert scale (1 = 'not true' to 5 = 'true', e.g. '*I would be happy, if I spend my further career in this facility.'*). Cronbach's alpha for the Commit-Scale was α = .85.

2.2.3. Data Analysis

For hypotheses testing, we conducted structural equation modelling with a Maximum-Likelihood method. In the structural model, health-specific leadership was defined as a latent exogenous variable. Employee health and commitment was defined as latent endogenous variables. In addition, social demands and social resources were defined as latent mediating variables. HoL-subscales were used as indicators for the exogenous variable. For the endogenous variables and mediating variables, the single items were used as indicators. As employee data were not linked to specific managers or facilities, multi-level analysis was not conducted. To test for mediation effects, direct and indirect effects were analysed, using the bootstrapping technique with 2000 samples and a 95% confidence interval. This procedure is sufficient to test models with multiple mediating variables for significance (Taylor, MacKinnon, & Tein, 2008). A mediation effect can be assumed, if bootstrapping identifies significant indirect effects. The confidence interval must not exceed zero. To test the model fit of the present data, we followed the recommendation to combine Chi^2 with other indices for comparison and used different indices as cut-off criteria (Byrne, 2010). In the present study, the following fit indices were used: the Root Mean Square Error of Approximation (RMSEA) as an absolute fit-index as well as the Comparative Fit Index (CFI) und Standardized Root Mean

Square Residual (SRMR) as relative fit-indices. A good model fit can be assumed, if RMSEA is below 0.05, CFI above 0.95, and SRMR below 0.06 (Hu & Bentler, 1999). All data analysis were conducted with the software IBM SPSS Statistics Version 22, structural equation modelling was conducted with IBM SPSS AMOS Version 22 (Arbuckle, 2013).

2.3. Results

The descriptive statistics (mean, standard deviation and internal consistency) and inter-correlations are summarized in Table 2.1. All correlations are significant at the 0.01% level. Health-specific leadership correlates positively with social resources and affective organizational commitment, and negatively with social demands and health complaints. Further, social resources correlate positively with commitment and negatively with social demands and health complaints. Social demands correlate positively with health complaints and negatively with commitment. Health complaints and commitment correlate negatively.

Table 2.1. Descriptive Statistics

	M	SD	1	2	3	4	5
1. Health-specific leadership	3.01	.87	(.94)				
2. Social resources	3.67	.73	.48**	(.78)			
3. Social demands	2.50	.85	-.53**	-.46**	(.79)		
4. Health complaints	2.82	1.02	-.43**	-.29**	.42**	(.89)	
5. Commitment	3.78	.91	.53**	.40**	-.43**	-.34**	(.85)

Notes: Inter-correlations of the scales (n = 861); M = mean; SD = standard deviation; numbers in brackets = Cronbach's alpha. * = p< .05, ** = p< .01.

A comparison of the present data with the model revealed a good model fit. The fit indices RMSEA and SRMR, were below the cut-off: RMSEA = .044, SRMR = .048. The CFI value was just below the cut-off: CFI = .943. Additionally, Chi² was significant for the present model (χ^2 = 907.45, df = 339, p < .001). So, we can assume an overall good model fit. The model is illustrated in Figure 2.1.

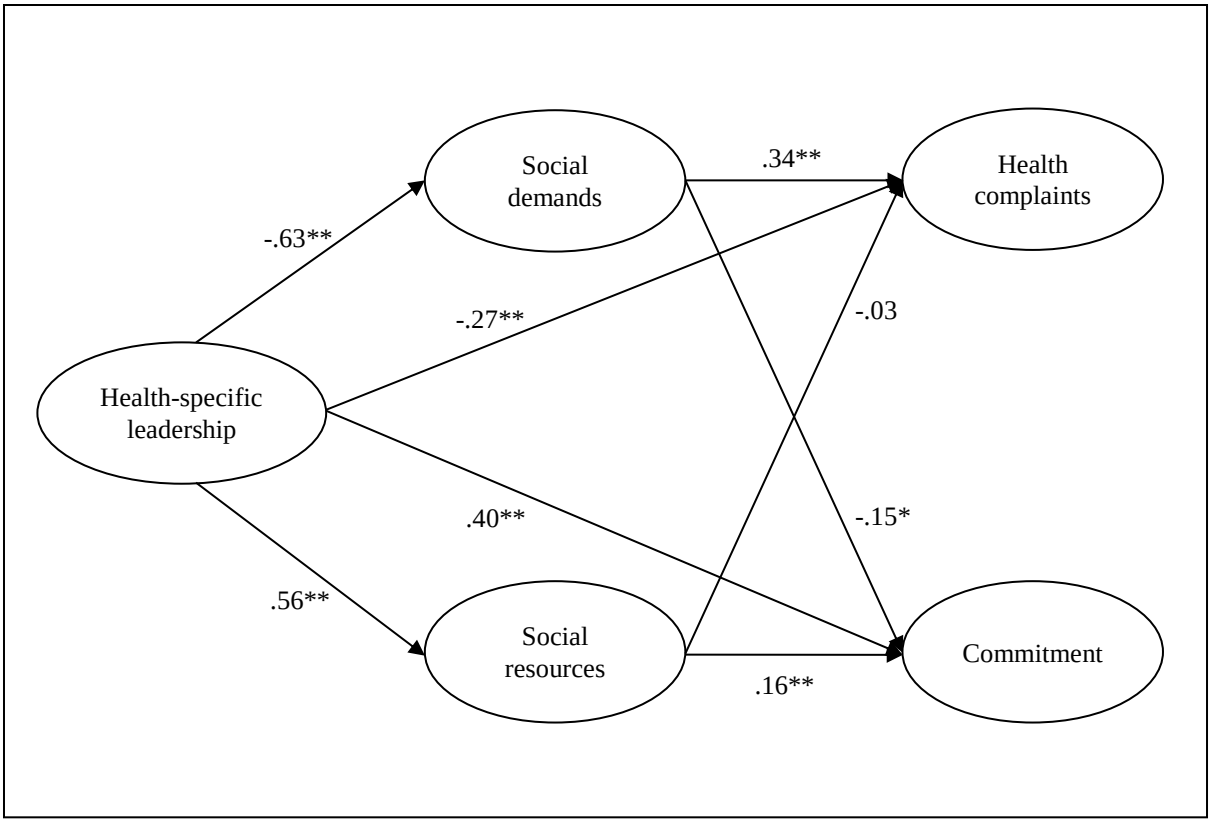

Figure 2.1. Latent Variables and Standardized Beta-values of the Tested Model; Conducted with Maximum-Likelihood-Method and Bootstrapping: 2000 Samples and 95% Confidence Interval. Model-fit: $\chi^2 = 907.45$, df = 339, $p < .001$; RMSEA = .044; SRMR = .048; CFI = .943. ** = $p < .01$, * = $p < .05$.

Hypothesis H1 assumed a negative relationship between health-specific leadership and employee health complaint. Hypothesis testing with bootstrapping revealed a significant direct negative effect of health-specific leadership on employee health complaints (β = -.27, $p < .01$, 95% CI [-.37, -.16]). Thus, hypothesis H1 can be confirmed (see Table 2.2). Hypothesis H2 assumed a positive relationship between health-specific leadership and employee affective organizational commitment. Hypothesis testing with bootstrapping showed a significant direct positive effect of health-specific leadership on employee commitment (β = .40, $p < .01$, 95% CI [.30, .49]). Thus, hypothesis H2 can also be confirmed (see Table 2.2). Hypothesis H3.1 assumed that social demands mediate the relationship between health-specific leadership and employee health complaints. Hypothesis testing revealed a significant indirect effect of health-specific leadership on employee health (β = -.30, $p < .05$, 95% CI [-.30, -.15]). Further, the

direct effect of social demands on employee health complaints was also significant (β = .34, p < .01, 95% CI [.22, .46]), whereas the direct effect of social resources on employee health complaints remained insignificant (Table 2.2). Therefore, it can be said that the relationship between health-specific leadership and employee health complaints is mediated by social demands, but not by social resources. Thus, hypothesis H3.1 can be confirmed. Considering a significant direct effect of health-specific leadership on employee health complaints, the mediation is a partial, not total.

Table 2.2. Direct and Indirect Effects of the Structural Equation Model

Effects	β	95% CI
Direct effects		
Health-specific leadership – Health complaints	-.27**	[-.37, -.16]
Health-specific leadership – Commitment	.40**	[.30, .49]
Health-specific leadership – Social demands	-.63**	[-.68, -.56]
Health-specific leadership – Social resources	.56**	[.49, .61]
Social resources – Commitment	.16**	[.07, .26]
Social demands – Health complaints	.34**	[.22, .46]
Social resources – Health complaints	-.03	[-.14, .09]
Social demands – Commitment	-.15*	[-.26, -.04]
Indirect effects		
Health-specific leadership – Health complaints	-.30**	[-.30, -.15]
Health-specific leadership – Commitment	.12**	[.12, .25]

Notes: Bootstrapping with 2000 samples and 95% confidence interval. β = standardised beta-values; CI = confidence interval. * = p< .05, ** = p< .01.

Hypothesis H3.2 assumed that social resources mediate the relationship between health-specific leadership and employees' affective organizational commitment. Hypothesis testing revealed a significant indirect effect of health-specific leadership on affective organizational commitment (β = .12, p < .01, 95% CI [.12, .25]). The direct effect of social resources on commitment was also significant (β = .16, p < .01, 95% CI [.07, .26]), as well as the direct effect of social demands on commitment (β = -.15, p < .05, 95% CI [-.26, -.04]; Table 2.2). Thus, the relationship between health-specific leadership and employees' affective organizational commitment is mediated by social resources and demands. Therefore, Hypothesis H3.2 can be confirmed. As the direct effect of health-specific leadership on commitment was also significant, the mediation can be considered to be partial.

2.4. Discussion

The aim of this study was to analyse the influence of health-specific leadership on employee health and organizational commitment. Hence, we built on the findings on the JD-R model and considered social demands and social resources as mediators between leadership behaviour and employee health and commitment. While the relevance of social demands and resources has been widely proven in previous literature, there are no studies investigating their effects in the context of health-specific leadership. Further, we broadened the perspective on health-specific leadership beyond health indicators and took affective organizational commitment, as an additional organizational outcome, into account. Therefore, the results contribute to previous literature and provide a better understanding of the relation and mechanisms of health-specific leadership. Lastly, the practical implications are outlined.

The findings confirm the postulated relationship between health-specific leadership and employee health complaints. This shows that health-specific leadership with the four components, (1) value of health, (2) health awareness, (3) health behaviour, and (4) health-related role modelling, is directly related to employee health. Thereby, the findings are in line with previous studies (Franke et al., 2014; Gurt et al., 2011) and, thereby, underpin the

relevance of health-oriented leadership behaviour and the scarcely analysed concept of health-specific leadership.

Besides employee health complaints, the findings also found support for the postulated relationship between health-specific leadership and employee affective organizational commitment. Hitherto, this relationship was only confirmed for general leadership styles, such as transformational leadership (Jackson et al., 2013). The present findings underpin the overall impact of managers' conscious health promotion. It can be assumed that health-specific leadership results in an overall impact on employee perception, beyond employee health. On an organizational level, employee value concurrence and need satisfaction are important antecedents of affective organizational commitment (Meyer & Allen, 1991). It is conceivable, that employees perceive health-specific leadership as a general organizational support, which, in turn, leads to a higher organizational commitment. This assumption would be in line with previous studies that found evidence of the relationship between supportive leadership and organizational commitment (Aarons & Sawitzky, 2006; Newman, Thanacoody, & Hui, 2011).

Besides this direct relationship between health-specific leadership and employee health and commitment, we assumed a mediating effect of social demands and social resources on this relation. Based on the assumption of the JD-R model of two separate paths for employee health and employee commitment, the study confirmed social demands as a mediator for employee health complaints and social resources as a separate mediator for employee affective organizational commitment. Thus, health-specific leadership influences employee health not merely directly, but also indirectly via social demands. Further, health-specific leadership is not only directly linked to employee affective organizational commitment, but also indirectly, via social resources. These findings underpin the relevance of work-related social contextual factors for health-specific leadership. Thus, a health-oriented leader seems also to influence social interactions and the social climate at the workplace. In case the social climate is

characterized by low demands and high resources, it influences employee health and organizational commitment positively. Studies in the field of workplace safety have already shown that managers can create a safety-focused climate, which, in turn, is related to higher levels of workplace safety (Barling, Loughlin, & Kelloway, 2002; Zohar & Tenne-Gazit, 2008). By adapting these findings to health-specific leadership, health-oriented managers could create a health-promoting climate, which, inter alia, is characterized by positive social interactions (Ribisl & Reischl, 1993).

Overall, the findings confirm the assumptions of the JD-R model having two separate paths. However, in the present study, social demands – besides social resources – also mediate the relationship between health-specific leadership and commitment. Previous studies have already identified work-related demands as predictors of organizational commitment (Jex & Bliese, 1999; Richardsen, Burke, & Leiter, 1992). In addition, job demands can also moderate the relationship between resources and motivational outcomes. Resources show a particularly high influence on the motivational path, when demands are also high (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Hakanen, Bakker, & Demerouti, 2005). Healthcare employees experience, in general, particularly high social demands (Eurofound, 2014; McVicar, 2003). These facts provide an explanation for the significant relationship between social demands and organizational commitment as a statistical artefact and indicate an interaction effect. Accordingly, social resources would, in particular, be related to organizational commitment, if employees experience high social demands. This interpretation is in line with the conservation of resources theory (COR), which theorizes that resources are activated in case they are at risk, for example, by external stressors (Hobfoll, 2002).

2.4.1. Practical Implications

Based on the study results, we can derive practical implications particularly for the healthcare sector, which is characterized by high levels of employee health complaints and competition for qualified staff. Health-specific leadership provides a basis to promote employee

health and increase employee retention. Thereby, the major challenges for the healthcare sector can be addressed. Thus, leadership forms a central element to foster employee health and commitment in the healthcare sector.

To successfully practice health-specific leadership, managers should consider contextual social factors as crucial resources and demands for employees and address them accordingly. By reducing social demands at the workplace, managers could reduce employees' health complaints. Managers could, thereby, create a social climate, which is little demanding. Employees, in turn, would experience relief and have fewer physical and mental complaints. In addition, increasing social resources results in higher employee organizational commitment. For instance, by creating trustful relationships within the team, managers can increase employees' resources, resulting in higher emotional attachment to the company. Thus, for managers, it is important to identify the specific resources and demands of their employees and to know how to influence these resources and demands.

The findings can also set an outline for leadership development measures and address managerial tasks particularly relevant to the healthcare sector (Swearingen, 2009). Specific trainings in health-specific leadership should address the theoretical and empirical needs as well as the requirements of the specific sector, company, occupation, and individual employees. Thus, managers should be sensitized to health issues, they should learn to reflect on their own health behaviour, to evolve awareness about their employees, and how to implement specific health behaviour. Regarding health behaviour, trainings should focus on changing the work climate to reduce social demands and foster social resources at the workplace.

2.4.2. Limitations and Future Research

The study provides important insight into a better understanding of health-specific leadership. However, there are some limitations to be considered in interpreting these findings. First, the cross-sectional data does not allow causal interpretation. For instance, it is conceivable

that employee mental complaints influence their perception of work-related demands and resources (de Lange, Taris, Kompier, Houtman, & Bongers, 2005). Employee well-being could also impact their ratings on leadership behaviour (van Dierendonck, Haynes, Borrill, & Stride, 2004). Therefore, future research should provide further evidence of the identified relations and assumed causality based on longitudinal data.

Second, additional variables, which were not considered in the proposed model, such as social desirability, could bias the findings (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, the general impact of social desirability is rather low (Moorman & Podsakoff, 1992). Additionally, we did not link employee data to leadership or company data and ensured anonymity for the participants to minimize a bias due to social desirability.

Third, all data were collected from a single source: employee self-ratings. Therefore, data collection could have been biased, as common data collection methods result in common method variance (Podsakoff et al., 2003). Future research should consider objective data, such as days of sick leave and physiological data. However, in the organizational context, Spector and his colleagues (1995) showed that the common method bias is limited.

Fourth, additional variables, relevant to employee health and commitment, had not been considered in this study. Employees' individual demands and resources influence the relationship between organizational characteristics and individual outcomes. For instance, employee self-efficacy influences their perception and utilization of work-related resources (Guglielmi, Simbula, Schaufeli, & Depolo, 2012; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Employees also use different coping strategies while they encounter social stressors at the workplace (Mark & Smith, 2012; van Doorn & Hulsheger, 2015). Future studies should also take these individual characteristics into account.

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3. Drivers and Barriers in the Practice of Health-specific Leadership: A Qualitative Study in Healthcare

Abstract

Managers have a significant impact on the health and well-being of employees, particularly when the managers lead in a health-specific way and intentionally foster their employees' health. However, the data on contextual and individual factors influencing the practice of health-specific leadership is at present limited. The aim of the study was to survey the experiences of healthcare managers with health-specific leadership skills and identify the drivers and barriers in the practice of health-specific leadership. Semi-structured interviews were conducted with 51 managers from 18 geriatric-care facilities in Germany, between November 2014 and February 2015. The interviews were analysed through qualitative content analysis. In their reports, managers mentioned several drivers and barriers in the practice of health-specific leadership. These drivers and barriers were found at the leader level, the employee level, and the organizational level. The factors identified relate to the theoretical aspects of health-specific leadership: health value, health awareness, health behaviour, and role modelling. Most drivers and barriers are linked to the managers' health behaviour. For successful practice of health-specific leadership, managers should promote personal initiative that benefit employee health, encourage their employees to exhibit healthy behaviour themselves, and gain competencies in change management.

3.1. Introduction

In western countries, nurses experience high levels of work-related physical, social, and mental stress (Lim, Bogossian, & Ahern, 2010; McVicar, 2003). These stressors affect the physical and mental health of employees (Ellapen & Narsigan, 2014; Khamisa, Peltzer, & Oldenburg, 2013; Letvak, Ruhm, & McCoy, 2012) and result in more health complaints and inactive periods due to sick leave (Eurofound, 2014; Kawada et al., 2010). Under these circumstances, supporting employee health and well-being is a major challenge in the healthcare sector. Leadership plays a central role in work-related stressors and occupational health in the healthcare sector (Cummings et al., 2010), especially when leaders deliberately focus on the promotion of health (Gurt, Schwennen, & Elke, 2011). As leadership does not take place in a vacuum, contextual factors influence the impact of leadership on employee health and have to be considered as influencing factors (Liden & Antonakis, 2009). The study reports qualitative findings on the factors influencing the practice of health-specific leadership in healthcare.

In the past decades, many studies have investigated the influence of leadership on employee health and well-being (Gregersen, Kuhnert, Zimber, & Niehaus, 2011; Kuoppala, Liira, & Juha Vainio, 2008; Skakon, Nielsen, Borg, & Guzman, 2010). The results show that positive leadership styles, such as transformational leadership (Zwingmann et al., 2014), transactional leadership (Nyberg, Bernin, & Theorell, 2005), leader-member exchange (Franke, Vincent, & Felfe, 2011), authentic leadership (Laschinger, Wong, & Grau, 2013), and ethical leadership (Chughtai, Byrne, & Flood, 2014) are related to better employee health status. Similar findings were reported by Cummings and her colleagues for the healthcare sector (Cummings et al., 2010). The authors identified relationally-focused leadership behaviour (e.g. transformational leadership style, supportive leadership style) to be associated with lower stress, emotional exhaustion, or job tension. Task-focused leadership behaviour (e.g. management by exception, laissez-faire leadership style) showed higher levels of emotional

exhaustion and poorer emotional health. However, negative leadership behaviour also influences employee health. A meta-analysis showed that destructive leadership behaviour is related to lower well-being and higher stress levels among subordinates (Schyns & Schilling, 2013).

In recent years the concept of health-specific leadership has become popular. Health-specific leadership is understood as the managerial intent to be more focused on employee health rather than on performance or other objectives. Leaders, who implement health promotion at the workplace, use job and workplace design to reduce work-related demands, and encourage their employees to behave healthier can create an organizational climate of health (Gurt et al., 2011). Hence a positive effect on employee health and well-being can not only be understood as a side-effect of leadership but as an intended outcome as well. Health-specific leadership can be distinguished from more general leadership styles, such as transformational leadership or leader-member exchange (Franke, Felfe, & Pundt, 2014; Gurt et al., 2011). Franke and Felfe (2011a) define four aspects of health-specific leadership: health behaviour, value of health, health awareness, and role modelling. Health behaviour refers to any health-related action by the supervisors, such as giving feedback, providing information on promoting health, changing work conditions or job design. Value of health refers to the leaders' interest in their own health and the health of their employees. Feeling responsible for someone's health motivates leaders to show health-oriented behaviour and engage in health-supporting actions at the workplace. Supervisors with a positive attitude towards health-specific leadership are more likely to apply such leadership style (Wilde, Hinrichs, Pavez, & Schüpbach, 2009). Health awareness refers to the supervisors' awareness of the health-status, job demands, and resources of their employees as well as potential interventions. Managers should also be sensitive to changes in their employees' health status. Health awareness among managers can be understood as a necessary base to show adequate health-related behaviour and interventions.

These three aspects can be related to employee health as well as the manager's own health. This relationship between staff-care and self-care indicates the relevance of the fourth aspect: health-related role modelling. By taking care of their own health, supervisors give their subordinates a direction towards healthier behaviour. If employees perceive their supervisors as role models, managers can have greater impact on their employees' behaviour and satisfaction (Ogunfowora, 2014). Recently, Franke and her colleagues (Franke et al., 2014) provided further evidence on the effects of health-specific leadership. The longitudinal study showed that employees take more care of their own health and therefore have fewer health complaints if they perceive their supervisors as health-oriented leaders (Franke et al., 2014).

Whereas these results support the concept of health-specific leadership, there is no research on the contextual factors that influence this kind of leadership. Since leadership does not take place in a vacuum, contextual factors interfere with leadership behaviour (Liden & Antonakis, 2009). Therefore, the research should also be linked to relevant factors, such as environmental, organizational or individual characteristics (Liden & Antonakis, 2009; Rousseau & Fried, 2001), in particular for the relationship between leadership and employee health (Wegge, Shemla, & Haslam, 2014). Previous studies underpin the relevance of different factors that impact the managers' influence on employee health and well-being, such as culture (Zwingmann et al., 2014), work climate (Tafvelin, Armelius, & Westerberg, 2011), organizational support (Erdogan & Enders, 2007), job characteristics (Nielsen, Yarker, Brenner, Randall, & Borg, 2008; Walsh, Dupré, & Arnold, 2014), employee personality (Perry, Witt, Penney, & Atwater, 2010), their affective commitment (Franke & Felfe, 2011b), managers' strategies and attitudes (Dellve, Skagert, & Vilhelmsson, 2007), managers' competencies (Donaldson-Feilder, Yarker, & Lewis, 2008), and managers' personalities (Robertson, Healey, Hodgkinson, Flint-Taylor, & Jones, 2014). The studies indicate various factors on the environmental, organizational and individual level that hinder or facilitate

leadership behaviour and its effects on the health outcomes of employees. However, the results are insufficient for forming a structured and comprehensive overview of the relevant contextual factors for several reasons: 1) They selectively focus on single factors or levels, 2) they disregard interrelatedness of different factors, and 3) they exclude managers' perspective on the relevance of the examined factors. Further, health-specific leadership is distinguishable from more general leadership styles (Franke et al., 2014). This might mean that different factors are relevant for health-specific leadership behaviour. There is no study known to the authors that takes managers' perspectives into account and explores systematically influencing factors on leadership in healthcare. It is unclear as to which contextual factors are relevant for health-specific leadership practice and research and how they relate to each other. Introspection and self-reflection by managers are essential for understanding the factors which influence leadership behaviour in practice, as well as for leveraging health-specific leadership in healthcare. Understanding the drivers and barriers helps in successfully practising health-specific leadership and, therefore, also in fostering employee health in healthcare.

3.2. Method

The aim of the study is to identify drivers and barriers in the successful practice of health-specific leadership in the healthcare sector and relate them to each other. The present study examines the perception put forth by managers in the practice of health-specific leadership in healthcare facilities. The results add insights on health-specific leadership based on the experience of managers, and provide valuable information on the factors that hinder and facilitate the application of health-specific leadership.

An exploratory study was conducted for this paper, whereby in-depth interviews were used to analyse the experiences of the participants in the practice of health-specific leadership. This method is adequate for deepening our understanding of complex and insufficiently explored topics (Lee, Mitchell, & Sablynski, 1999).

3.2.1. Sample

The participants were recruited from a mailing list of regional healthcare services in Lower-Saxony, Germany. The facility managers were invited to participate in the study and if interested, they were requested to further recruit staff members in managing positions within their companies. Fifty-one managers from 18 geriatric healthcare services participated in the study. The participants held different management positions: director/head of management (HM, n = 18), nursing management (NM, n = 15), sector management (SM, n = 8), deputy nursing management / deputy head of management (DM, n = 8), and residential group management (RM, n = 2). Forty-two out of 51 participants (82%) were female.

3.2.2. Data Collection

To address the research question we developed a semi-structured interview guide. This guide was further discussed with two independent researchers to consider all relevant topics. The interview method was based on the problem-centred interview by Witzel (1989). This method allows the researcher to collect qualitative data about a certain topic (‘problem’) by a semi-structured guide. The participants were asked to introspect and link each question to a certain example or situation from their experience as managers. By reflecting on these situations, the participants usually retrieve the relevant information more easily and their answers show a higher level of practical relevance and reliability (Witzel, 1989). The interview guide included the following topics:

- General understanding of leaders’ influence on employee health
- Successful practice and drivers for health-specific leadership
- Insufficient practice and barriers in health-specific leadership

The face-to-face interviews were conducted at the participants’ workplaces between November 2014 and February 2015 and ranged from 40 – 60 minutes in length. The interviews were digitally recorded and transcribed.

The approval of the research ethics committee was obtained from the university. The main ethical concern was related to the guarantee of participants' anonymity and general data security. To address the concern and to meet the requirements of national data protection law, participants signed a written agreement of data protection and assurance of anonymity. To ensure confidentiality for the participants, all data were documented anonymously and stored and processed as per the data protection principals of the university.

3.2.3. Data Analysis

The data were analysed by using qualitative content analysis, a qualitative method to systematically and comprehensibly describe the meaning of given material (Schreier, 2012). Firstly, the transcripts of the interviews were screened to get an overview and a general understanding of the data. Secondly, a preliminary coding frame was developed with an integrated approach (Bradley, Curry, & Devers, 2007). For this purpose, categories were defined and developed data-driven by subsumption (Mayring, 2010). In this step, the transcripts of the interviews were screened for meaningful passages. These passages were labelled with codes and either added to existing subcategories or new subcategories were generated. Thirdly, the coding frame was adapted based on a discussion with and review by two independent researches. The categories and subcategories were checked for consistency by comparing them to each other and to passages from the transcripts. Fourthly, the final coding frame was applied to the whole material, by coding the meaningful passages and assigning them to the sub-categories. The software MAXQDA 11 was used to analyse the data (VERBI Software, 2015).

The trustworthiness of the research was assured by implementing several strategies in the research design and process. Thereby the four criteria of credibility, transferability, dependability, and confirmability were addressed (Guba, 1981). A standardized approach for data collection and process was instructed and applied. Frequent briefing sessions within the research team were held to discuss the interpretation of the data. The interview guide, and the categories and codes were evaluated by two independent researchers. The coding-system was

checked for consistency. The meaningful passages were recoded after a duration of eight weeks. The coefficient of agreement over time was 82.3 %. To ensure credibility, participation was voluntary. The purpose of the study was explained in detail and participants' anonymity and data protection was ensured. Furthermore, the present article reports detailed information about the sample, data collection and data analysis. Meaningful excerpts of the data are presented for readers to judge the credibility of the findings.

3.3. Results

Our analysis identified drivers and barriers that are influencing factors in the practice of health-specific leadership at the leader, employee, and organizational level. The identified drivers and barriers were assigned to categories and are summarized in Table 3.1 and 3.2. Table 3.3 and 3.4 include an overview of all subcategories including definitions and example quotes. These categories were subsequently related to four aspects of health-specific leadership based on previous research: health value, health awareness, health behaviour, and role modelling.

3.3.1. Leader Level

Leader level includes any aspects within the individual leader/manager, such as knowledge, attitudes or competencies. The participants described several drivers and barriers influencing health-specific leadership at the leader level. For each of the four aspects of health-specific leadership in theory, drivers and barriers have been found. With respect to health value, an economical perspective on health promotion, a positive vision and a reminder of the meaning of healthcare work were mentioned as facilitating factors. Supporting the employee health is not only a matter of goodwill but also affects economical and performance outcomes. However, a low priority for health issues and lack of commitment were mentioned as hindering factors on the leader level.

With respect to health awareness, healthcare-specific knowledge helps managers understand employee working conditions and demands. Here, a lack of personal contact with

the employees hinders the manager's ability to understand the individual working situations and limits of his or her employees, and thereby, his own health-awareness.

With regard to health behaviour, certain proactive attitudes, including persistence, flexibility, decisiveness, pragmatism, and the willingness to take risks were mentioned as individual drivers. Participants emphasize the importance of acting in a health-supportive way, although it can be risky:

> *'Of course, we make mistakes, but at that time we were in the planning phase, and we said, we can't forecast every eventuality… Sometimes it will fall flat if you plan too long.' (HM 2)*

Besides these attitudes, creativity and innovative capacity, exchange within external networks and critical self-reflection were mentioned as drivers on leader level. Reflecting on their own behaviour and measures helps leaders to learn from their mistakes. However, some intrapersonal aspects of managers are also described as hindering factors for health behaviour. Participants mainly mentioned impatience and lack of persistence as relevant barriers. As successful outcomes can seem delayed, it is difficult for managers to hold on to health-supportive behaviour. Persistently making employee health a subject of discussion can be challenging for managers. Besides this, insufficient health-specific knowledge and difficulties in conveying the issue were mentioned as further intra-individual barriers for managers.

With regard to health-related role modelling, possibilities for stress regulation as well as serenity and personal demarcation were mentioned as drivers. Coping with stressful situations helps managers take care of their own health. However, insufficient personal demarcation was mentioned as a barrier. One participant stated that it is helpful to know their own limitations and that he/she cannot satisfy all employee needs:

'I will never make everyone happy and satisfied, but I can live with these cutbacks.' (NM 13)

3.3.2. Employee Level

Employee level includes any aspects within the individual employee, such as knowledge, attitudes or competencies. The drivers and barriers described at the employee level relate to the theoretical aspects health value and health behaviour. The self-responsibility of employees was mentioned as a driver for leaders' health value, whereas a lack of self-responsibility serves as a barrier. If employees do not take responsibility for their own health, managers are limited in their capacity to affect employee health behaviour:

'It is the lack of interest of my colleagues for their own, personal health. Uhm, then you can talk a lot, provide a lot, try a lot.' (HM 16)

With regard to health behaviour, participants mentioned employee accountability and willingness to change as individual drivers, whereas a lack of interest and habitual behaviour were mentioned as barriers. For managers, it can be difficult to support employee health if the employees are stuck to habitual behaviour, for instance, routinized workflows that are harmful to their health.

3.3.3. Organizational Level

Organizational level includes any aspects within the context of the organization, e.g. resources, structures, social interactions. Participants describe several drivers and barriers influencing health-specific leadership at this level. The influencing factors relate to health value, health awareness and health behaviour. Support within the management team is essential for maintaining the health value of the managers. A supportive head of management was particularly described as a relevant driver, as it often implies more resources, flexibility, and a larger scope of action for managers.

With regard to health awareness, the extent of interpersonal interaction was mentioned as a relevant driver. While a high level of exchange between supervisors and employees helps managers notice employee demands and health status, a lack of personal contact with the employees can hinder the managers' health-specific awareness.

In terms of health behaviour, supporting employee health often requires additional financial, personnel and time resources. Limited time resources were the most tremendous barrier mentioned in the interviews. A lack of time for instance lowers the employee's chance to participate in health activities and health promotion programmes. Due to restrictive legal provisions, healthcare facilities experience limited personnel resources and higher workloads for employees in general, which leads to increased probabilities of unhealthy work practices:

> *'Because of the lack of time they say: ok, with bedding assistant I need 10 minutes, without I need 5 minutes. So I will do it without [assistant].' (HM 8)*

Participants also mentioned a high turnover rate and a lack of planning reliability as hindering factors for health behaviour in managers, as it implies low reliability and continuity. Besides these organizational resources, work design and possibilities to change those were mentioned organizational characteristics. Designing the workplace and workflow helps mangers support employee health, for instance, by roaster arrangements or flexible job rotations. However, certain workflows and tasks are inevitable to ensure healthcare provisions and these often limit the possibilities for work design:

> *'Of course, in theory it sounds good to provide job rotation and what not. But in healthcare it is only possible to a limited extent.' (HM 13)*

Furthermore, participants mentioned exchange within the management team as well as transparency and employee participation as additional drivers. Involving employees in decisions concerning health issues and the planning process, helps managers gain acceptance

for new ideas and changes. As participants reported, multipliers within the team should be actively involved. These employees can convey the issue to their colleagues. A positive team climate was also mentioned as a driver for showing health behaviour, whereas a negative team clime was mentioned as a barrier.

Table 3.1. Drivers in the Practice of Health-specific Leadership

Categories	**Drivers**		
	Leader level	**Employee level**	**Organizational level**
Health value			
	Economical perspective	Self-responsibility	Supportive head of management
	Meaning of work		
	Positive vision		
Health awareness			
	Healthcare-specific knowledge	-[1)]	Interpersonal interaction
Role modelling			
	Personal demarcation		
	Serenity	-[2)]	-[2)]
	Stress regulation		
Health behaviour			
	Willingness to take risks	Accountability	Sufficient financial resources
	Pragmatism	Willingness to change	Sufficient time resources
	Critical self-reflection		Planning reliability
	Flexibility		Possibilities for flexible work design
	Decisiveness		Positive team climate
	Persistence		Multipliers within the team
	Creativity and innovative capacity		Exchange within the management team
	Exchange within external networks		Transparency and employee participation

Notes: 1) No drivers were found in the data analysis. 2) Role modelling refers only to the leader as an individual.

Table 3.2. Barriers in the Practice of Health-specific Leadership

Categories	**Barriers**		
	Leader level	**Employee level**	**Organizational level**
Health value			
	Lack of commitment	Lack of self-responsibility	Insufficient support within the management team
	Low priority given to the issue		
Health awareness			
	Lack of personal contact	-[1)]	-[1)]
Role modelling			
	Insufficient personal demarcation	-[2)]	-[2)]
Health behaviour			
	Lack of time	Employees' lack of interest	Lack of financial resources
	Difficulties to convey the issue	Habitual behaviour	Lack of time resources
	Impatience		Lack of personnel resources
	Insufficient health-specific knowledge		Lack of planning reliability
	Lack of persistence		Insufficient possibilities for work design
			Negative team climate
			Workload

Notes: 1) No barriers were found in the data analysis. 2) Role modelling refers only to the leader as an individual.

Table 3.3. Drivers with Definition and Example Quotes

Categories	Definition	Example quote
Leader level	Leader level includes any aspects within the individual leader/manager, such as knowledge, attitudes or competencies.	
Economical perspective	Situational assessment based on economical values, such as financial benefit, return on investment, etc.	From a business viewpoint, I invest amount X, for instance in food. If I get a better work performance than I have already, then it is good for both sides.
Meaning of work	Greater meaning or value associated to the overall work, such as patient well-being, societal benefit, etc.	If the residents are happy and satisfied and the employees were engaged and we worked as a team, this is what motivates me.
Positive vision	Vision of an overall positive future or positive effects of current work or measures.	Well, the vision you have: That you have strengthened employees that they feel well, that they are committed to the company, that they are satisfied and stay many years with you.
Healthcare-specific knowledge	Knowledge that considers healthcare-specific circumstances to better understand employees' work situation	I don't think it is harmful if you come from the healthcare sector yourself, if you notice where the stress is maybe homemade.
Personal demarcation	Distance oneself from work-related issues to protect one's own well-being.	I will never make everyone happy and satisfied, but I can live with these cutbacks.
Serenity	Reacting calmly to unintended or unpleasant situations or changes	I think I do a good job, because I am always relatively relaxed. I, uhm, yes, don't explode right away […] This clam I have, it influences my employees a lot, I think.
Stress regulation	Coping with stressful situation, e.g. by finding proper compensation or resilience	Well, for me it is always important to have a good compensation to work, that you at least have a clear head at home.
Willingness to take risks	Willingness to take risks in order to promote changes, implement new ideas, etc.	Of course, we make mistakes, but at that time we were in the planning phase, and we said, we can't forecast every eventuality… Sometimes it will fall flat if you plan too long.
Pragmatism	Focusing on realistic and achievable actions	You shouldn't always go down on the emotional level, but always stay a bit functional.
Critical self-reflection	Reflecting one's own position, ideas and behaviour etc. for future improvement	Well, yes, to look for mistakes, to question yourself: What went wrong? Why? Yes, to evaluate again and again, to see if you can maybe take another path.
Flexibility	Acting flexible by adapting plans to the current situation and upcoming changes	It is the flexibility you need to have. That you always keep your eyes on the right, concise things, which are important for patient care.

Decisiveness	Making decisions without long hesitation	Immediately grab the bull by its horns and to see how to implement it fast. This is also the most fun, I think.
Persistence	Commitment to goals and plans and not giving up because of setbacks	Again and again, just like Don Quixote against the windmills.
Creativity and innovative capacity	Creating new ideas and solutions for challenging situations	If it is not possible to solve this inhouse. […] Still try to change [something]. Introduce your own ideas and so on.
Exchange within external networks	Exchange of information, experience and problems with persons outside the own organization, such as other managers, business coaches, etc.	We have an 'experience circle' with other healthcare directors. We meet once or twice a year and this December we talked about our projects for 2015. And I talked about my idea to do something with healthy workplaces, healthy company.
Employee level	Employee level includes any aspects within the individual employee, such as knowledge, attitudes or competencies.	-
Self-responsibility	Taking care of one's own well-being, health and health-related issues	And at this point I am responsible for myself. That's how I see it. Because I want to sell my manpower.
Accountability	Taking responsibility for actions, measures, changes, etc. within the company	…that I determine responsibilities when we introduce a new measure.
Willingness to change	Being open to change, e.g. adopt work routines, habitual behaviour, new measures etc.	…and by this you realize that these women or these men fancy change.
Organizational level	Organizational level includes any aspects within the context of the organization (e.g. resources, structures, social interactions).	
Supportive head of management	Receiving support from the executive director in terms of resources or general support	I think what's important is that you have to live it in the business. So, I think it starts at the very top. That the management, the director, stands behind the topic and live it themselves.
Interpersonal interaction	Personal interaction with colleagues and employees, e.g. conversations, formal and informal meeting	Yeah, I think listening is most important and to get in contact with each other. So, talk to each other and listen to what the other says.
Sufficient financial resources	sufficient financial resources for health promotion issues	First of all, you need to know the costs. This is always the first point and then, if it is in the course, then you probably can implement one or the other thing.
Sufficient time resources	sufficient times resources for health promotion issues	This might also be an instrument to foster employees' health: That I give them enough time reserves.

Planning reliability	Reliability to plan and implement processes, measures etc.	The calmer a company is, there is stability, which is the key to success.
Possibilities for flexible work design	Possibility to design work processes structures and places according to employees' needs	Why all at once? We can split the working demands over the whole week. […] The stress on Monday is already split up over the whole week and thereby they can work more relaxed.
Positive team climate	Positive social climate within the workforce, e.g. support, atmosphere, cohesion etc.	Well, a healthy work climate is what I think, you really have to maintain.
Multipliers within the team	Staff members who forward and multiply ideas, values etc. to other employees	Maybe you should pick out multipliers. Employees you explain it to and they spread [the idea] with their own words then.
Exchange within the management team	Exchange of information, experience and problems with other managers within the own company	Us managers also meet quite often […] You sit together and ask yourself: Why is it that way? What can we do to change it? How did we get there? So that you analyse it a bit, why it is this way.
Transparency and employee participation	Participation of employees in decisions, information, planning of measures etc.	To involve the employees from A to Z. You have to communicate totally openly, otherwise in the end they don't know what the outcome is and what the goal is and why it has to be this way.

Table 3.4. Barriers with Definition and Example Quotes

Categories	Definition	Example quote
Leader level	Leader level includes any aspects within the individual leader/manager, such as knowledge, attitudes or competencies.	
Lack of commitment	Not being committed to health-specific leadership or health promotion issues in general	I think the barriers you have are in my opinion self-made. Uhm, they are within the person. Uhm, your laziness, your lethargy, your uhm, too little engagement.
Low priority given to the issue	Low priority to health-specific leadership and health-related issues in general beyond other topics such as profit, performance etc.	There is a personal list of priorities. It goes: staff in the first place, structures, organization in the second place, then come three, four, five, six other priorities and eventually at the tenth place maybe health prevention.
Lack of personal contact	Lack of personal contact with colleagues and employees, e.g. conversations, formal and informal meeting	Often I see my employees at noon for the first time in a day, when they come back from their tour. That is the first time I see them snuffy.
Insufficient personal demarcation	Inability to distance oneself from work-related issues to protect one's own well-being.	I recognize your problem and to a certain level I can comply with you but in the end, I have to protect myself, because I don't want to make my employees' problems my problems. I can't handle that. That is a line, that…That is a topic that is difficult for me personally.
Lack of time	Lack of time to grapple with health-related issues or to show health supportive behaviour	That is a problem of time. The time problem. Like at this moment, when I reflect the last three, four month, my personal lack of time.
Difficulties to convey the issue	Difficulties to convey the relevance and benefit of health promotion in general and in relation to specific measures	I think, uhm, the basic problem for such an issue, if you want to create a certain level of motivation: How do you make it tangible? How do you make it perceptible?
Impatience	Inability to stay patient when in vague situations, such as interventions, new measures, changes etc.	…and you have to stay calm yourself. Sometimes it is hard for me…When I say something for the fifth time and nothing happens, that's the point I get to my limits.
Insufficient health specific knowledge	Insufficient knowledge on worksite health promotion, health behaviour, interventions, etc.	Well, I think, a lot is based on the fact that the management is not trained well enough.
Lack of persistence	Lack of commitment to goals and plans or giving up due to setbacks	Eventually it will come to nothing. Sticking to the issue and reminding oneself is hard sometimes.

Employee level	Employee level includes any aspects within the individual employee, such as knowledge, attitudes or competencies.	
Lack of self-responsibility	Not feeling responsible for one's own well-being, health and health-related issues	It is the lack of interest of my colleagues for their own, personal health. Uhm, then you can talk a lot, provide a lot, try a lot…
Employees' lack of interest	Lack of interest in health promotion at the workplace, specific health intervention etc.	To be honest, if they don't want, they don't want. In this case you can talk as much as you want.
Habitual behaviour	Sticking to habitual behaviour and difficulties in adapting to change, new procedures etc.	The difficulty to get out of the routine. To see new things. Not to work according to the books, but look to the right and to the left. To be flexible. That is the biggest problem.
Organizational level	Organizational level includes any aspects within the context of the organization (e.g. resources, structures, social interactions).	
Insufficient support within the management team	Insufficient support from other managers, concerning resources, exchange, ideas etc.	But also from my colleagues, my co-managers you don't get any input, any pressure that we need to address this topic.
Lack of financial resources	Insufficient financial resources for health-promotion issues	The equipment is expensive. It is a question of costs.
Lack of time resources	Insufficient time resources for health-promotion issues	Because of the lack of time they say: ok, with bedding assistant I need 10 minutes, without I need 5 minutes. So I will do it without [assistant].
Lack of personnel resources	Insufficient personnel resources for health promotion issues	You would need considerably more staff to promote employees' health properly.
Lack of planning reliability	Lack of reliability in planning and implementing processes, measures etc.	Probably it is typical for this sector, that we are confronted with unexpected situations in day to day work. In general, you can only plan a certain framework.
Insufficient possibilities for work design	Limited possibility to design work processes, structures, and places according to employee needs	Of course, in theory it sounds good to provide job rotation and what not. But in healthcare it is only possible to a limited extent.
Negative team climate	Negative social climate within the workforce, e.g. discord, disloyalty, negative mood etc.	Right now we have a little war between the two stations and then they cannot work together. And for us managers, our hands are tied, because they can't listen to reason anymore.
Workload	High level of workload and work-related demands	When I say, for instance, the company offers to promote health prevention, all they say is: 'Oh even more work'.

3.4. Discussion

The aim of this study was to identify factors that influence the practice of health-specific leadership in healthcare facilities. The results show drivers and barriers on (a) leader level, (b) employee level, and (c) the organizational level. These were related to all four aspects of health-specific leadership (value, awareness, role modelling, and behaviour) based on previous research. As the study focused on practice, drivers and barriers were related mostly to health behaviour. Links to role modelling were only found on the leader level since it refers only to the leader as an individual. In addition, drivers and barriers are partially interrelated across and within the categories. For instance, managers' creativity, willingness to take risks, as well as exchange with external networks on the leader level can bring up new ideas and create new possibilities for flexible work design on the organizational level. At the organizational level too, different factors are interrelated. Support from the head of management may be linked to financial or personnel resources, whereas interpersonal exchange and interaction in general may lower difficulties in conveying the issue and foster employee willingness to change. Previous research supports the present results by pointing out the relevance of several influencing factors found in this study. The key findings are discussed below.

3.4.1. Managers' Personal Initiative

In terms of health behaviour, most drivers at the leader level relate to a proactive 'hands-on' mentality of the manager, such as decisiveness, willingness to take risks, flexibility, persistence and pragmatism. Proactive, self-starting and persistent behaviour can be understood as personal initiative. Taking a personal initiative results in an active approach to change the environment consonant with organizational goals (Frese & Fay, 2001). Based on these goals, personal initiative is associated with different performance outcomes (Fay & Frese, 2001). For health-specific leadership, employee health can be understood as the key performance outcome (Franke et al., 2014). Showing initiative enables managers to actively support employee health and show health-supporting behaviour. Therefore, managers' personal initiative can be

interpreted as a central individual driver for successful practice of health-specific leadership. Concordant results were found in a study by Baer and Frese. The authors found personal initiative as a facilitating factor for organizational innovation and change processes (Baer & Frese, 2003). With regard to managers' self-care, personal initiative can also result in stress reduction (Searle, 2008) and thereby strengthen health-related role modelling. However, the relevance of personal initiative as a driver on the leader level is limited. Proactive behaviour can refer to different goals (Belschak & Den Hartog, 2010). If managers prioritize not on employee health but on other outcomes, they might show personal initiative in areas not relevant to health-specific leadership. The concept of health-specific leadership addresses this issue through the aspect of health value. Only if managers are interested in employee health, are they motivated to show corresponding health behaviour (Franke et al., 2014). Additionally, personal initiative by managers depend on further individual factors, such as relevant knowledge and personality factors (e.g. need for achievement, action orientation, and psychological conservatism) (Fay & Frese, 2001).

3.4.2. Employees' Willingness to Change

At the employee level, accountability and willingness to change were mentioned as drivers, whereas habitual behaviour and a lack of interest were mentioned as counterpart barriers. The employees' individual motivations and willingness to show health behaviour and participate in health promotion activities were the most important factors mentioned in the successful practice of health supporting behaviour. The relevance of an individual's intention to change can be found in several common theories on health behaviour (e.g. Health Belief Model; Janz & Becker, 1984; Transtheoretical Model; Prochaska, Redding, & Evers, 2008) and are widely and empirically supported (Jones, Smith, & Llewellyn, 2014; Salmela, Poskiparta, Kasila, Vähäsarja, & Vanhala, 2009). The manager's influence on employee health is limited if the individuals are not ready to change. Therefore, managers need to raise employees' health awareness and self-efficacy and point out effects of healthy behaviour. However, an employee's

intention towards healthy behaviour is not always relevant to worksite health promotion. For instance, managers can show health-specific leadership behaviour and influence employee health by creating health-promoting workplaces that are not reliant on the employee willingness to change. Fostering job characteristics, such as autonomy, skill variety, task identity, task significance, and feedback from the job, support employee satisfaction and reduce anxiety, stress and burnout (Humphrey, Nahrgang, & Morgeson, 2007). Also reducing physical and mental workload could reduce health impairments (Kawada et al., 2010).

3.4.3. Organizational Resources and Restrictions

At the organizational level, sufficient financial, personnel and time resources are crucial drivers for the successful practice of health-specific leadership; whereas a lack of these resources is mentioned as a barrier. In a previous study, limited financial resources were found to be the main reason behind healthcare managers not being able to implement measures for health promotion (Metz, Kunze, Hamann, Gehltomholt, & Urbach, 2009). Organizational support was also found to be a relevant resource before. Research in the field of occupational health and safety point out the importance of a supportive head of management for supervisors to manage occupational health and safety (Tappura, Syvänen, & Saarela, 2014). Furthermore, possibilities for flexible work design are relevant organizational characteristics. Wilde and her colleagues (Wilde et al., 2009) identified organizational possibilities in job design as a significant predictor for initiating health-specific leadership. Leaders can support employee well-being by creating health-promoting workplaces and tasks that foster job characteristics, such as autonomy, skill variety, task identity, task significance, and feedback from the job (Humphrey et al., 2007). However, barriers at the organizational level may be linked to specifications of the healthcare sector. Task requirements and legal frameworks can limit managerial possibilities to support employee health. For instance, legal restrictions on patient-staff ratio or wages can result in insufficient personnel and time resources, as well as a high workload. Insufficient possibilities for work design are also based on the needs of primary

healthcare provision. This relation points out the relevance of environmental factors functioning as a framework for organizations as well as for individual staff members to act in. Horstmann and Eckerth already emphasized the relevance of environmental factors for leadership in the healthcare sector (Horstmann & Eckerth, 2016).

3.4.4. Relevance of Change Management

The findings of this study indicate that the health behaviour of managers is often associated with health promotion interventions and measures. The literature on worksite health intervention emphasizes the relevance of planned change management processes (Nielsen, Randall, Holten, & González, 2010; Nytrø, Saksvik, Mikkelsen, Bohle, & Quinlan, 2000). The drivers and barriers identified in this study support this perspective. Several identified factors were also found to be relevant to manage change processes. For instance, transparency and employee participation in the process can be understood as a guiding principle for occupational health interventions (Nielsen et al., 2010). Participation in the decision process is a key predictor for employees' openness to change (Wanberg & Banas, 2000). Providing relevant information and communicating the purpose and sense are essential in this context (Battilana, Gilmartin, Sengul, Pache, & Alexander, 2010; Weick, Sutcliffe, & Obstfeld, 2005). As another study showed, support within the management team is important for the implementation of health intervention at the workplace. While senior managers set high priority on the issue, middle managers take on a more proactive role. They engage the staff in participation, foster discussions, decide specific measures and monitor the process of implementation (Hasson, Villaume, von Thiele Schwarz, & Palm, 2014). The results from previous research point out the relevance of change management for health-specific leadership. Therefore, managing the implementation of health-specific behaviour has to be considered an additional driver for health-specific leadership.

3.4.5. Limitations

There are several limitations to this study. In general, qualitative findings are open to interpretation. Although we implemented several strategies in the study design and procedure to assure trustworthiness, researchers' subjectivity affects the framing of the interview questions and interpretation of the findings. In addition, study participation was voluntary and can cause sample bias since only managers with an interest in the topic participated. However, we are confident about the credibility of the findings as large sample size can create data saturation. The transferability of the findings to other countries has to be viewed with caution. National specifications in the healthcare sector vary in different national settings. However, we can assume transferability in the international context as similar frameworks and challenges are known to occur in other western countries (Letvak et al., 2012; Lim et al., 2010).

3.5. Conclusion

The study contributes a deeper understanding of health-specific leadership and could improve practice in healthcare services and nursing (MacGuire, 2006). The findings emphasise the relevance of different factors that influence the practice of health-specific leadership. Furthermore they support the theory of health-specific leadership since the identified drivers and barriers relate to all four aspects of the theory. To further validate the explorative findings, the results should be reviewed in quantitative studies and different national settings. Further theoretical examinations of the findings should be conducted.

The findings of this study point at the relevance of factors that influence the practice of health-specific leadership. Thereby, supporting employee health has to be considered in context of individual and organizational factors. These results indicate implications for leadership practice and training. Personnel development programmes should foster managers' self-reflection and self-care as well as competencies for change management and health-specific knowledge. Reflecting on their own role and intentions could help them show personal initiative in supporting employee health and act as a role model. When implementing specific measures

for occupational health promotion, managers could facilitate successful implementation by managing the change process. But employees also need to be willing to change their health behaviour. They should therefore be sensitized about their individual responsibility towards their health and be motivated to exhibit healthy behaviour. However, some organizational barriers also result from restrictive legal frameworks in the healthcare sector. Reviewing these provisions on a political level appears promising and could ease successful practice of health-specific leadership and effective health promotion in healthcare facilities.

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4. Enhancing Employee Self-care: The Moderating Effect of Personal Initiative on Health-specific Leadership

Abstract

The present study investigates the relationship between health-specific leadership and employee health. Health-specific leadership is a domain-specific leadership style that is characterized by the focus of leaders on employee well-being and their intentional support of employee health. Following the theory, I argue that managers influence employee health not only directly but also indirectly by encouraging employees to take care of their own health. Further, I extend the scope of previous research and argue that managers' personal initiative acts as an individual driver for health-specific leadership; as indicated by previous research, proactivity is crucial for effective leadership behaviour. A cross-sectional questionnaire study (n = 525) was conducted. Health-specific leadership, managers´ personal initiative, employee self-care, and employee burnout symptoms have been measured. A moderated mediation was tested using structural equation modelling. The findings confirm a positive relationship between health-specific leadership and employee health. As expected, this relationship is partially mediated by employee self-care. Managers' personal initiative shows an interaction effect on employee self-care but not on burnout symptoms. The study results verify the concept of health-specific leadership and highlight the importance of proactive leadership behaviour as a driver for health-specific leadership. Finally, practical implications for leadership research and practice are provided.

4.1. Introduction

Employee health and well-being are very relevant to organizational practice and research for several reasons. First, health is linked to performance outcomes on the individual and organizational levels. Employees with a lower health status show lower job performance (Cotton & Hart, 2003; Ford, Cerasoli, Higgins, & Decesare, 2011). Second, health problems and illness involve substantial costs. Companies have to compensate for sickness-related absence and loss of working hours, while health insurances and the general community have to compensate for medical costs and healthcare (Dewa, Chau, & Dermer, 2010). Mental illness alone costs the global economy around 2.5 trillion dollars each year (Bloom et al., 2011). Third, employee health and worksite health promotion will be more crucial in the future. Due to the demographic change and the consequent lack of qualified staff, the impact of employee health on organizational outcomes will increase (Bloom et al., 2011; Gloersen et al., 2016; National Institue for Disease Control and Prevention, 2002). Likewise, work-related demands are likely to shift due to increasing digitalization and diversity (Böhm, Bourovoi, Brzykcy, Kreissner, & Breier, 2016; Bundesministerium für Arbeit und Soziales, 2017). In particular, statistics indicate an increase in mental health problems over the past few years (Henderson & Madan, 2013; Hensing, Andersson, & Brage, 2006; Kordt, 2014). Mental disorders are associated with cognitive impairment and lower productivity (Adler et al., 2006; Kircanski, Joormann, & Arditte, 2012) and are also more costly due to the long duration of sickness-related absence and treatment (Dewa et al., 2010; Dewa, Loong, Bonato, & Hees, 2014). Therefore, worksite health promotion is seen as a major challenge for western countries in general and for organizational leadership in particular (Robelski, Harth, & Mache, 2017; Siegrist, 2016).

The association between leadership style and employee health has been investigated in several reviews (Gregersen, Kuhnert, Zimber, & Niehaus, 2011; Skakon, Nielsen, Borg, & Guzman, 2010). In general, positive leadership styles such as transformational leadership (Zwingmann et al., 2014), transactional leadership (Rowold & Schlotz, 2009), and relation-

based leadership behaviour – e.g. leader-member exchange (LMX) and consideration behaviours (Gregersen, Vincent-Höper, & Nienhaus, 2014) – are positively related to employee health outcomes. Further, destructive leadership behaviour negatively affect employee health (Schyns & Schilling, 2013; Tepper, 2007). To better understand how leadership influences employee health and well-being, health-specific leadership concepts have been developed in the past years (Böhm, Baumgärtner, & Kreissner, 2016). However, research on health-specific leadership is limited to a few studies. Influencing factors on the individual and contextual level have not been considered. This study addresses this gap and contributes to latest research findings in the following ways: First, I provide additional evidence pertaining to the concept of health-specific leadership and its relationship to employee health outcomes. Second, I consider self-care by employees as a mediating factor on their health, as self-responsibility is crucial for individual health behaviour (Hagger, Chan, Protogerou, & Chatzisarantis, 2016; Marshall & Biddle, 2001). Third, I expand the scope of previous research and take into account manager proactivity as a driver for health-specific leadership. Proactive behaviour, such as personal initiative, is an essential characteristic of effective leadership practice (Crant, 2000; Glaub, Frese, Fischer, & Hoppe, 2014; Tornau & Frese, 2013). In this study, I assume that personal initiative enhances the impact of health-specific leadership. By doing this, I provide a better understanding of the impact of leadership behaviours on employee health and indicate certain approaches to promote employee health at the workplace.

4.1.1. Health-specific Leadership

Health-specific leadership is a domain-specific leadership style that focuses on employee health. The concept is characterized by the leaders' intention to support employee health by caring about employee well-being and intentionally showing health-supportive behaviour, such as fostering positive resources and reducing work-related demands (Böhm, Baumgärtner, et al., 2016; Gurt, Schwennen, & Elke, 2011). Therefore, health-specific leadership can be discriminated from general leadership styles, such as transformational

leadership, transactional leadership, and LMX, and explains additional variance in health outcomes (Franke, Felfe, & Pundt, 2014; Gurt et al., 2011). Health-specific leadership can be defined by four components: (1) value of health, (2) health awareness, (3) health behaviour, and (4) role-modelling (Franke & Felfe, 2011; Franke et al., 2014). Value of health includes the importance leaders place on their own health and that of employees. High value of health can be considered as an essential motivating factor for managers to support employee health in the first place (Wilde, Hinrichs, Pavez, & Schüpbach, 2009). Health awareness refers to the leaders' knowledge and sensitivity about employee health, health risks, and potential health promotion. A high level of health awareness helps managers to show adequate health-related behaviour consistent with employee health complaints and possibilities for health promotion (Kranabetter & Niessen, 2016). Health behaviour pertains to actions relevant to health promotion, such as reducing work-related demands, establishing health-promoting workplaces and conditions, providing health-relevant information, and giving positive feedback (Franke & Felfe, 2011). The three components – value of health, health awareness, and health behaviour – can be self-directed ('self-care') or employee-directed ('staff-care'). Within this framework, the managers' self-care sets the basis for the fourth component – health-related role-modelling. Employees take better care of their own health (employee self-care) if they perceive their supervisors as health-related role models who take care of their own health (leader self-care) (Franke et al., 2014). In a recent study, Horstmann and Remdisch (2016) show that health-specific leadership is negatively related to employee health complaints and positively related to employee affective commitment. Based on the results of previous studies, I assume a positive association between health-specific leadership and employee health in the present study. An overview of all the derived hypotheses is given in Figure 4.1.

H1: Health-specific leadership is positively related to employee health.

Further, I assume that employee self-care mediates the relationship between health-specific leadership and employee health. Research shows that self-care is associated with better health outcomes. People who show self-care are more aware of their own health status and therefore show greater well-being and less unhealthy behaviour (Ball & Bax, 2002; Richards, Campenni, & Muse-Burke, 2010). Franke and her colleagues (Franke et al., 2014) show in a longitudinal study that subordinates' self-care partially mediates the effect of health-specific leadership on employee health status positively and employee health complaints and irritation negatively over a period of four month. Aligned to these findings, I assume the following hypothesis:

H2: The effect of health-specific leadership on employee health is partially mediated by employee self-care.

4.1.2. Personal Initiative

In the past few decades, research studies have paid growing attention to proactivity in the organizational context in general (Crant, 2000; Thomas, Whitman, & Viswesvaran, 2010) and for leadership behaviour in particular (Crant & Bateman, 2000; Crossley, Cooper, & Wernsing, 2013). While the concept of proactive personality defines proactivity as a relatively stable personal tendency to influence the environment (Bateman & Crant, 1993), proactive behaviour is more flexible. A common concept used to describe proactive behaviour is personal initiative (Frese & Fay, 2001). The concept of personal initiative (PI) reflects a work behaviour that is proactive, self-starting and that overcomes barriers. PI results in an active approach to change the environment (Frese & Fay, 2001). It is thus closely related to other proactive concepts, but differs from them in two additionally required aspects: the proactive behaviour needs to be persistent in overcoming upcoming barriers and in accordance with organizational overall goals (Fay & Frese, 2001). Numerous studies show that PI is related to individual and organizational performance outcomes, such as job performance (Thomas et al., 2010), career success (Fay & Frese, 2001), entrepreneurial success (Glaub et al., 2014), and employment

growth (Frese, Hass, & Friedrich, 2016). However, the concept of PI indicates a broader understanding of performance and is not limited to common performance measures. PI's central issue is bringing about an active change in the environment while remaining consistent with organizational goals (Fay & Frese, 2001; Frese & Fay, 2001). Depending on the organizational and individual goals, different outcomes are conceivable. The effects of PI have been proved for different outcomes, such as innovativeness and work engagement (Hakanen, Perhoniemi, & Toppinen-Tanner, 2008), creativity (Herrmann & Felfe, 2014), work control (Frese, Garst, & Fay, 2007), and affective commitment (Den Hartog & Belschak, 2007).

In extending the scope of previous research, I assume that managers' PI is a crucial driver for health-specific leadership. In general, PI is consistent with the particular organizational goals (Frese & Fay, 2001). If a manager intends to support employee health, his or her PI can be directed towards this goal. Health-specific leadership reflects this managerial goal of supporting employee health. As shown above, health-specific leadership aims to support employee health and well-being and is sensitive to health-related issues (Franke et al., 2014). PI can facilitate the effect of health-specific leadership in different ways. First, PI might be important for the direct effect of health-specific leadership on employee health. Workplace health promotion involves implementing new measures and procedures and initiating change processes (Nielsen, Randall, Holten, & González, 2010). Managing these change processes is a central characteristic of leadership, which is associated with employee well-being (Pearson et al., 2007). As PI results in an active change of the environment, also change processes that aim to foster employees' health ought to be more successful if managers also show a high level of PI. Previous research already identified PI as a moderator in change processes (Baer & Frese, 2003). Hence, I assume that managers with high level of PI show more effective health-specific leadership behaviour, as they actively change the environment to foster employee health.

H3: Managers' personal initiative moderates the relationship between health-specific leadership and employee health.

Second, I assume that managers' PI moderates the relationship between health-specific leadership and employee self-care. Based on the social learning theory (Bandura, 1977, 1986), role-modelling is more likely to occur if the behaviour is perceivable and has a positive outcome and if self-efficacy is expected. Following this argument, employees are more likely to show self-care if they perceive more, and more effective, health-oriented behaviour on the part of their managers. As shown above, PI ought to facilitate effective health-specific leadership behaviour. Therefore, employees are more likely to adopt the health-specific behaviour of their managers and show self-care if the managers show high levels of PI. In addition, PI is also positively related to several individual health outcomes, such as positive affect (Den Hartog & Belschak, 2007), stress reduction (Searle, 2008), and lower levels of exhaustion (Taris & Wielenga-Meijer, 2010). Hence, managers with higher PI levels are also more likely to take better care of their own health and therefore be more credible role models for their employees. Thereby, I derive the following hypothesis:

H4: Managers' personal initiative moderates the relationship between health-specific leadership and employee self-care.

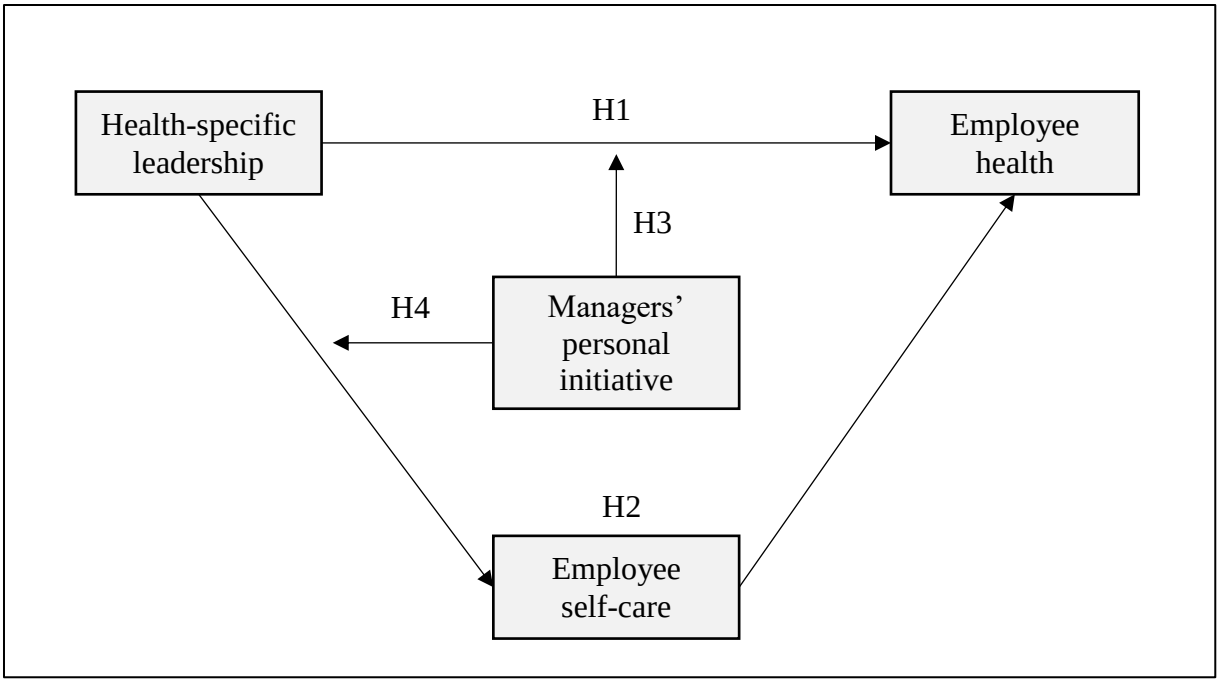

Figure 4.1. Hypothesized Model

4.2. Method

4.2.1. Sample

Data were collected in 24 geriatric care facilities in Germany between November 2016 and March 2017. The companies were contacted via a mailing list and invited to participate in the study. In return for participation, each company received an individual summary report. The questionnaires were sent directly to the participating companies by mail. To ensure high response rates, facility managers received detailed instructions on how to collect the data in their companies. Participant anonymity was ensured and information about the purpose of the study was provided. In total, 1,699 employees from 24 companies were asked to participate in the study, of whom 525 actually took part. This is equivalent to a response rate of 30.9%. Of the participants, 85.9% were female; 67.5% worked as nurses, 20.4% in housekeeping, and 12.1% in other professions. On average, 22.1% of the participants were 30 years old or younger, 22.1% were between 30 and 40, 24% between 40 and 50, 25.4% between 50 and 60, and 6.5% were older than 60 years. Participants had on average 11.6 years of work experience and had worked for an average of 6.3 years in their present company.

4.2.2. Measures

Health-specific leadership was assessed using the German instrument 'Health-oriented Leadership' (HoL) by Franke and Felfe (2011). The instrument consists of four subscales: health awareness (eight items, e.g. '*My supervisor immediately notices when something is wrong with my health.*'), health value (three items, e.g. '*It is important for my supervisor to reduce health risks at my workplace.*'), health behaviour (seven items, e.g. '*My supervisor invites me to inform him/her about health risks at my workplace.*'), and health-related role-modelling (three items, e.g. '*My supervisor motivates me to live a healthy lifestyle.*'). All items were rated on a five-point scale from 1 ('not at all true') to 5 ('completely true'). Internal consistency (Cronbach's alpha) values ranged from .87 (health awareness) to .91 (health behaviour).

Employee self-care (SC) was assessed by the self-rating version of HoL (Franke & Felfe, 2011), including three subscales: health awareness (eight items, e.g. '*I immediately notice when something is wrong with my health.*'), health value (three items, e.g. '*It is important for me to reduce health risks at my workplace.*'), and health-related self-efficacy (three items, e.g. '*When I am stressed at work, I know what I can do about it.*'). All items were rated on a five-point scale from 1 ('not at all true') to 5 ('completely true'). Internal consistency (Cronbach's alpha) values were .77 for health value, .79 for health awareness, and .89 for self-efficacy.

Personal initiative (PI) was assessed with the seven-item scale from Frese and colleagues (Frese, Fay, Hilburger, Leng, & Tag, 1997). All items (e.g. '*I actively attack problems.*') were measured on a five-point Likert scale (1= 'I disagree' to 5 = 'I totally agree'). Internal consistency was .93.

Employee health was measured with the German version of the 'Maslach Burnout Inventory General Survey' (MBI-GS-D; Büssing & Glaser, 1998; Schaufeli, Leiter, Maslach, & Jackson, 1996). The instrument consists of three subscales: emotional exhaustion (five items,

e.g. '*I feel emotionally drained by my work.*'), cynicism (five items, e.g. '*I have become less enthusiastic about my work.*'), and personal accomplishment (six items, e.g. '*I can effectively solve the problems that arise in my work.*'). All items were measured on a six-point frequency rating scale ranging from 1 ('never') to 6 ('very often'); items for personal accomplishment were scored in reverse to indicate burnout. Cronbach's alpha values for the scales were .73 for personal accomplishment, .84 for cynicism, and .88 for exhaustion.

4.2.3. Data Analysis

MPlus version 8 (Muthén & Muthén, 2017) software was used for all data analysis. As the data structure was nested, I tested a baseline model without predictors to determine whether multilevel-analysis was adequate, using the intra-class correlation (ICC). The ICC represents the proportion of variance between groups in relation to the total variance (Hox, 2010). For the outcome variable (MBI), ICC was .006 and hence below the recommended cut-off (ICC > .05; Bliese, 2000). The result indicates that only 0.6% of the total variance is distributed between groups. Therefore, multilevel analysis was considered unsuitable for the present data. Alternately, I took the multilevel structure into account by adjusting standard errors for cluster effects (Huang, 2016).

As all data were collected via self-reporting in a cross-sectional design, several measures were implemented to reduce method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The participants' anonymity was ensured, predictor and criterion measures were separated in the questionnaire design, and different response formats were chosen. Further, I tested the measurement model in a confirmatory factor analysis (CFA), including all four measures (health-specific leadership, self-care, personal initiative and employee health) and tested the proposed four-factor model against models with one factor (HoL, PI, SC, and MBI loading on one factor), two factors (HoL and PI loading on one factor and SC and MBI loading on another factor), and three factors (HoL and PI loading on the same factor). The analysis confirms the four-factor model. Based on the recommendations of Schermelleh-Engel, Moosbrugger, and

Müller (2003), the postulated model reveals an acceptable model fit: χ^2 (112) = 355.29 ($p < .01$), $\chi^2/df = 3.17$, CFI = .96, RMSEA = .06. It shows a significantly better model fit than the one-factor model (χ^2 (118) = 1367.33 ($p < .01$), $\chi^2/df = 11.59$, CFI = .77, RMSEA = .14), the two-factor model (χ^2 (117) = 1006.49 ($p < .01$), $\chi^2/df = 8.60$, CFI = .84, RMSEA = .12), and the three-factor model (χ^2 (115) = 799.93 ($p < .01$), $\chi^2/df = 6.96$, CFI = .88, RMSEA = .11). In the second step, the model was tested for common method variance by adding a common latent factor (Williams, Cote, & Buckley, 1989). The fit indices show only marginal changes (χ^2 (96) = 269.02 ($p < .01$), $\chi^2/df = 2.80$, CFI = .97, RMSEA = .06) compared to the four-factor model. Therefore, common method variance does not appear to be a severe problem in the present data set.

To test the hypotheses, I used structural equation modelling (SEM) with latent moderated structural equations (LMS; Klein & Moosbrugger, 2000) to model the interaction term and test the moderation effect. As common model fit indices (e.g. χ^2, RMSEA, CFI) are not available for LMS, I followed Maslowsky, Jager, and Hemken (2015) and applied a two-step approach to assess the fit of the model. First, a Model 0 without the latent interaction term was estimated, including the common fit indices. Second, a Model 1 with the interaction term was estimated and compared to Model 0 using the log-likelihood ratio test as a relative model fit. If the model fit of Model 0 was good and Model 1 was found to be – based on the log-likelihood ratio test – significantly superior to Model 0, I could assume that Model 1 is also well-fitted (Klein & Moosbrugger, 2000; Maslowsky et al., 2015).

4.3. Results

4.3.1. Descriptive Statistics

Means, standard deviations, and correlations of all variables are displayed in Table 4.1. Health-specific leadership is positively correlated with managers' PI ($r = .75$, $p < .01$) and employee self-care ($r = .30$, $p < .01$) and negatively correlated with employee burnout ($r = -.54$, $p < .01$). PI is positively correlated with self-care ($r = .22$, $p < .01$) and negatively correlated

with employee burnout (r = -.44, p < .01). Self-care is negatively correlated with burnout (r = -.41, p < .01).

Table 4.1. Means, Standard Deviations, and Correlations

	M	SD	1	2	3	4
1. Health-specific leadership	3.41	.911	(.93)			
2. Personal initiative	3.95	.951	.75**	(.93)		
3. Self-care	3.80	.659	.30**	.22**	(.87)	
4. Burnout	2.50	.777	-.54**	-.44**	-.41**	(.88)

Notes: n = 525. Internal consistency (α) estimates are on the diagonal. ** p < .01 * p < .05; two-tailed tests.

4.3.2. Hypothesis Testing

Structural equation modelling for Model 0 reveals an adequate model fit (χ^2 (142) = 263.15 (p < .01), χ^2/df = 1.85, CFI = .96, RMSEA = .05). Comparing Model 1 to Model 0 with the log-likelihood ratio test, showed that model 1 is significant superior to Model 0 (D(2)= 12.90; p < .01), indicating also adequate model fit for Model 1. The results for Model 1 are summarized in table 4.2 and illustrated in Figure 4.3. Employee age and gender were used as control variables.

Hypothesis 1 predicts that health-specific leadership is positively related to employee health. The model shows a significant negative effect of health-specific leadership on employee burnout symptoms (β = -.36, p < .01). Therefore, Hypothesis 1 can be confirmed. Hypothesis 2 predicts a partial mediation of the relationship between health-specific leadership and employee health by employee self-care. The model shows that health-specific leadership is positively related to self-care (β = .37, p < .01), which in turn is negatively related to employee burnout (β = -.44, p < .01). The indirect effect of health-specific leadership on employee health via self-care is significant (β = -.16, p < .01). As the direct effect of health-specific leadership on employee health is significant in the overall model (Hypothesis 1), it can be considered not fully but partially mediated. Therefore, Hypothesis 2 can be confirmed. Further, Hypothesis 3

predicts a moderation of PI on the relationship between health-specific leadership and employee health. The model shows neither a significant effect of PI on burnout (β = -.02, p = .82) nor a significant effect of the two-way interaction between health-specific leadership and PI on burnout (β = -.03, p = .42). The direct effect of health-specific leadership on employee health is not moderated by PI. Therefore, Hypothesis 3 is rejected. Hypothesis 4 predicts a moderation of PI on the relationship between health-specific leadership and employee self-care. The model shows no significant effect of PI on employee self-care (β = .09, p = .48). However, the effect of the two-way interaction of health-specific leadership and PI on employee self-care is significant (β = .17, p < .01). Therefore, the direct effect of health-specific leadership on employee self-care is moderated by PI. The interaction effect of PI and health-specific leadership is plotted in Figure 4.2 for one standard deviation above and below the mean. As expected, the relationship between health-specific leadership and employee self-care is stronger when the PI is high. Therefore, Hypothesis 4 can be confirmed.

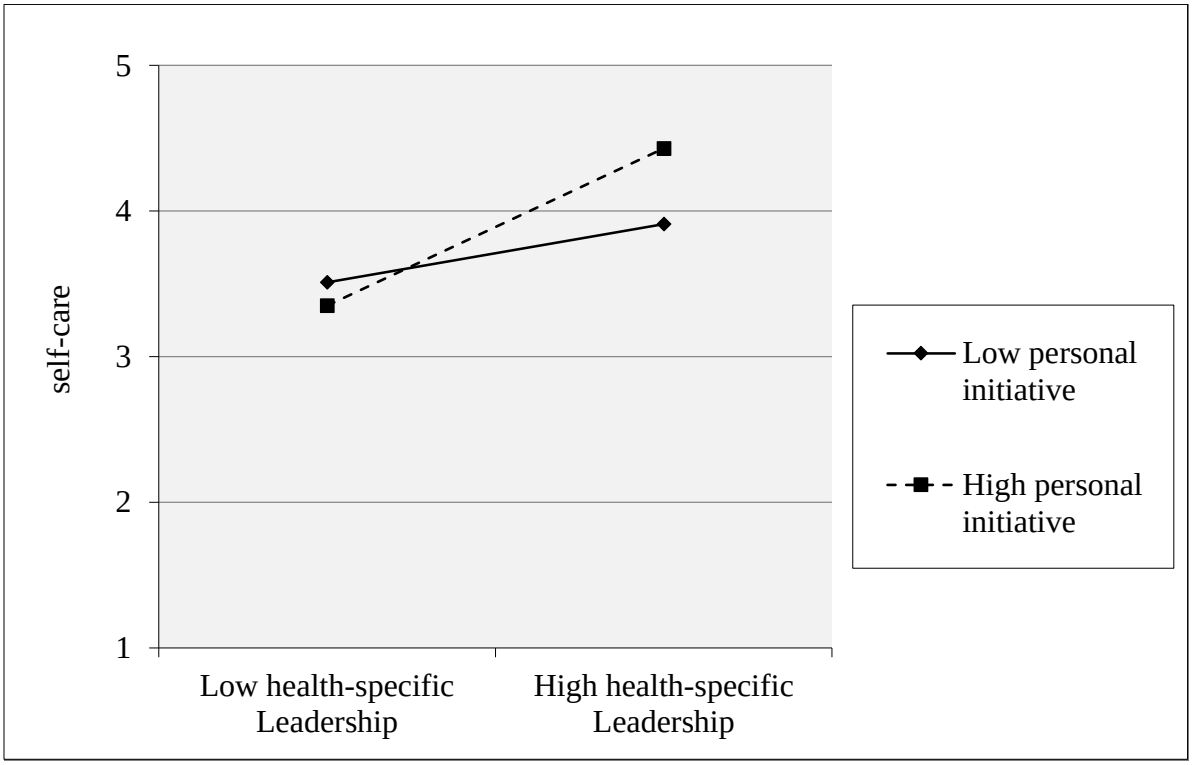

Figure 4.2. Two-way Interaction between Health-specific Leadership and Personal Initiative in Predicting Employee Self-care. High Values Indicate One Standard Deviation above the Mean, Low Values Indicate One Standard Deviation below the Mean.

Table 4.2. Regression Weights of Structural Equation Model (Model 1)

Dependent Variable	**Self-care**		**Burnout**	
	β	SE	*β*	SE
Control variables				
age	.03*	.05	-.07	.04
sex	-.10	.05	.08	.04
Predictors				
health-specific leadership	.37**	.12	-.36**	.12
personal initiative	.09	.12	-.02	.09
self-care	-	-	-.44**	.06
Two-way interaction				
leadership × personal initiative	.17**	.04	-.03	.04
R^2	.25**		.51**	

Notes: n = 525; *β* = standardized estimates; SE = standard error; ** p < .01; * p < .05; two-tailed tests.

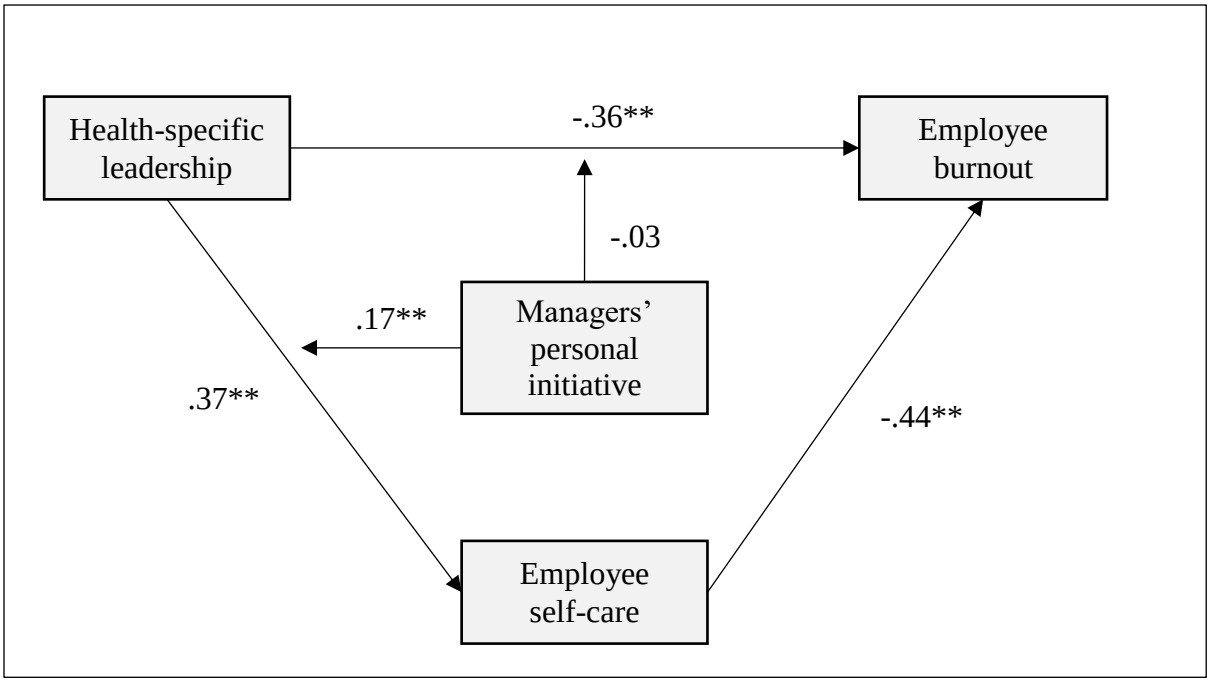

Figure 4.3. Standardized Estimates of Structural Equation Model (Model 1); ** p < .01; Two-tailed Tests.

4.4. Discussion

The aim of this study was to examine the factors influencing the relationship between health-specific leadership and employee health. I considered employee self-care as a mediator and managers' personal initiative as a moderator for health-specific leadership. The results of this study mostly support my hypotheses. As predicted, health-specific leadership was positively related to employee health. The higher employees rated their supervisors on the health-specific leadership scale, the lower were their burnout symptoms. Employee self-care partially mediated this relationship between health-specific leadership and employee burnout symptoms. Employees, who perceive their supervisors as more health-oriented take better care of their own health, and in turn show fewer burnout symptoms. Furthermore, I have found support for the assumption that managers' PI moderates the relationship between health-specific leadership and employee self-care. The relationship between health-specific leadership and employee health was observed to become stronger as managers' PI was increased. Managers' PI did not show a moderation effect on employee burnout.

The findings provide a better understanding of the relationship between leadership behaviour and employee health and contribute to literature in several ways. First, they provide general support for the concept of health-specific leadership, which emphasizes the active role of managers for worksite health promotion, beyond the influence of positive leadership styles on employee health (Franke et al., 2014; Gurt et al., 2011). The observed relationship between health-specific leadership and employee health outcome is in line with previous research findings (Franke et al., 2014; Horstmann & Remdisch, 2016). The four aspects of health-specific leadership – awareness, value, behaviour, and role-modelling – seem to have theoretical and practical relevance for managers in their effort to support employee health. Future research should shed light on the interrelation of these aspects of health-specific leadership. For instance, it is conceivable that managers' health value and health awareness are causal antecedents of their health behaviour and role-modelling.

Second, I postulated an indirect effect of health-specific leadership on employee health, where employee self-care functions as a mediator. These results are in line with previous findings by Franke et al. (2014). Thereby, managers can influence their employees' health not only directly but also indirectly via the employees' motivation to take care of their own health. This result implies two aspects: (1) The impact of managers on employee health is limited if health is not important for the employees. Self-responsibility is important for individual health behaviour, as postulated in common health behaviour theories (e.g. Theory of Planned Behavior, Ajzen, 1991; Transtheoretical Model, Prochaska, Redding, & Evers, 2008) and as empirically supported (Hagger et al., 2016; Salmela, Poskiparta, Kasila, Vähäsarja, & Vanhala, 2009); (2) Managers act as role models for their employees. Therefore, the managers' own health behaviour becomes relevant for employee health. Previous studies show that managers can act as a role model for healthy behaviour (Kranabetter & Niessen, 2016) and work-life balance (Koch & Binnewies, 2015).

Third, I linked health-specific leadership to the concept of personal initiative. Thereby, I broaden the perspective on leadership behaviour in the context of health promotion. The results showed an interaction effect of PI with health-specific leadership on employee self-care. Managers' PI had no direct effect on employee health or self-care; however, it functions as a facilitator to health-specific leadership. In a previous study, PI was found to facilitate employee creativity (Baer & Frese, 2003). These findings are likely to support the postulate of a more general role of PI beyond just performance outcomes (Frese & Fay, 2001), in organizational behaviour in general and leadership behaviour in particular. Future research should take into account the facilitating role of managers' PI on employee outcomes.

Overall, these results emphasize the influence of managers' PI and employee self-care on health-specific leadership. Apart from interpersonal characteristics, such as social resources and demands (Horstmann & Remdisch, 2016), intrapersonal characteristics of employees as

well as mangers have to be considered as important influencing factors. In general, the results underline the complexity of the relationship between health-specific leadership and employee health and well-being. Revealing this complexity enables leadership behaviour to act as a cornerstone in the successful promotion of occupational health (Dellve, Skagert, & Vilhelmsson, 2007).

4.4.1. Practical Implications

The findings also reveal implications for leadership practice and worksite health promotion. Especially in the context of increasing workloads and job demands, new approaches to support employee health and well-being might be beneficial. Managers play a crucial role in implementing worksite health promotion (Dellve et al., 2007). Beyond this, worksite health promotion should address a more active and intentional role of managers. Leadership development and training should focus on raising managers' health awareness as well as value of health, and equip them with adequate measures to foster employee health and well-being at the workplace. In addition, proactive work behaviour, such as personal initiative, seems to be an effective overall leadership competency. Trainings on PI already have been found to be effective in different contexts (Frese et al., 2016; Searle, 2008). Combining elements of PI trainings as well as elements of health-specific leadership trainings in a specific 'health-initiative' training approach could be even more effective to implement leadership-based health promotion. In light of the results pertaining to the mediating role of self-care, employees should also be sensitized about their responsibility and ways to take care of their own health. Raising health awareness is an effective intervention for fostering healthy behaviour (Grossman, Niemann, Schmidt, & Walach, 2004; Gu, Strauss, Bond, & Cavanagh, 2015).

4.4.2. Limitations and Future Research

My study contributes to a better understanding of health-specific leadership. However, several limitations have to be considered when interpreting the results. First, I have used only cross-sectional data. Therefore, effects can be interpreted bidirectionally and not causally. For

instance, employee well-being might not only be influenced by leadership behaviour, but itself might influence employees' rating of their supervisors (van Dierendonck, Haynes, Borrill, & Stride, 2004). Also, work-related stressors might support employee behaviour to cope with the stress (Fay & Sonnentag, 2002). However, Franke and her colleagues (Franke et al., 2014) found evidence of the effect of health-specific leadership on employee health outcomes in a longitudinal design. Future research should focus on longitudinal and/or experimental study designs to prove the interaction effect of health-specific leadership and managers' PI. Second, all data were collected by the same method and from one source, which increases the risk of common method bias (Podsakoff et al., 2003). However, I am confident that common method bias is limited in this sample, as I have applied several measures to reduce method bias. Participants' anonymity was ensured, predictor and criterion measures were separated in the questionnaire design, and different response formats were chosen. In addition, adding a common method factor to the measurement model showed only marginal changes. Still, future studies should collect data from different sources, such as peer rating form supervisors, or take into account objective health outcomes (e.g. absenteeism, physiological outcomes) to avoid method bias. Third, the data were collected from German healthcare facilities. Future research should validate the findings in international studies and in different sectors. However, I believe that the results can be transferred to other settings, as similar conditions can be found in other western countries (Letvak, Ruhm, & McCoy, 2012; Lim, Bogossian, & Ahern, 2010) and as generic characteristics of health-specific leadership have been identified, regardless of sectoral specifics (Skarholt, Blix, Sandsund, & Andersen, 2016).

4.5. References

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5. General Discussion

The aim of this dissertation was to deepen the understanding of the relationship between health-specific leadership and employee health. Previous studies show that organizational characteristics are crucial factors for employee health (Demerouti & Bakker, 2011; Humphrey, Nahrgang, & Morgeson, 2007) and that they are important to understand the influence of leadership behaviour on employee health in general (Karanika-Murray, Bartholomew, Williams, & Cox, 2015; Tafvelin, Armelius, & Westerberg, 2011). Moreover, leadership behaviour itself does not take place in a vacuum and is influenced by contextual, interpersonal, and intrapersonal factors (Liden & Antonakis, 2009). Building on this previous research, this dissertation analysed the importance of influencing factors in terms of the relationship between health-specific leadership and employee health. For this purpose, three studies in healthcare settings were conducted. Figure 5.1 combines the overall findings from all the three studies in a single framework and outlines the identified individual and work-related factors that influence health-specific leadership. The key findings are summarized below. Theoretical and practical implications as well as limitations and future research scopes are discussed afterwards.

The results of the first study proved the relationship between health-specific leadership and the physical demands of employees in the healthcare setting. The study shows that health-specific leadership is also related with the affective organizational commitment of employees as an additional outcome. The study also revealed the importance of social demands and social resources for health-specific leadership, which are highly relevant in healthcare facilities (Eurofound, 2014). Based on the job demands-resources model (Bakker & Demerouti, 2007), social demands at the workplace mediate the effects of health-specific leadership on employees' physical demands, while social resources mediate the effects on employee commitment through a separate path.

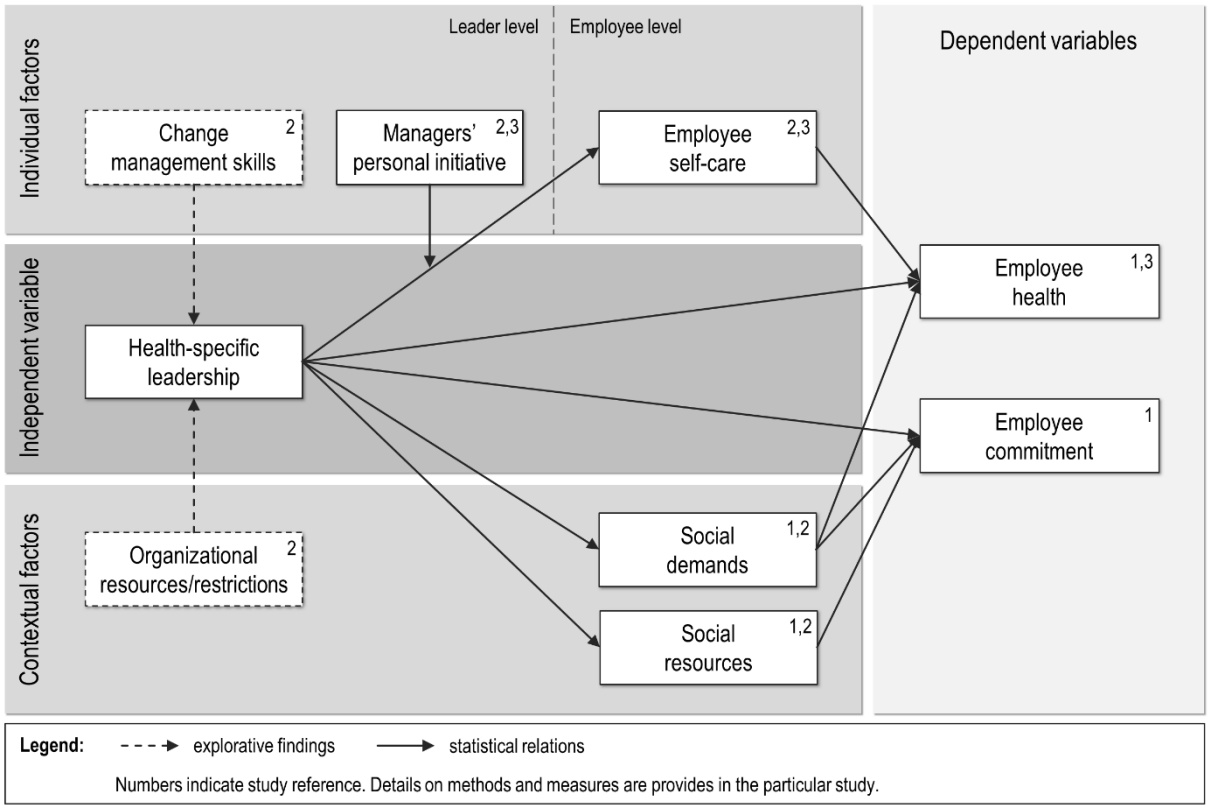

Figure 5.1. Framework of Influencing Factors on Health-specific Leadership

The second study identified in an explorative manner several drivers and barriers for a successful health-specific leadership practice in healthcare facilities. These drivers and barriers relate to leadership, employees, and the organizational context. The main findings emphasize managers' personal initiative, employees' willingness to change, organizational resources and restrictions, and elements of change management as crucial factors for successful implementation of health-specific leadership. The third study focused on the influence of intrapersonal factors and proved the importance of employee self-care and managers' personal initiative for health-specific leadership. The results showed that employee self-care partially mediates the relationship between health-specific leadership and employee health. Furthermore, managers' personal initiative moderates the relationship between health-specific leadership and employee self-care, where high personal initiative acts as a driver and accordingly strengthens the relationship.

5.1. Theoretical Implications

The dissertation contributes to supporting the concept of health-specific leadership as a domain-specific leadership style and helps to explain the influence of leadership behaviour on employee health even beyond general leadership styles (Franke, Felfe, & Pundt, 2014). The dissertation provides several theoretical implications. First, the results of the dissertation set health-specific leadership into context, thereby providing a better understanding of the mechanisms by which health-specific leadership influences employee health. Previous research on the relevance of contextual factors for health-specific leadership is clearly limited. The findings of this dissertation emphasize the relevance of context; they, for the first time, identify specific relevant contextual and individual factors in terms of health-specific leadership by developing them in an explorative way. Thereby, the dissertation follows the call to consider context more often in leadership research (Liden & Antonakis, 2009) and for the relationship between leadership and employee health (Wegge, Shemla, & Haslam, 2014). The results do not merely reflect a transfer of the previous findings for general leadership (Humphrey et al., 2007) to health-specific leadership, but also broaden research by identifying certain factors that clearly refer to health. In particular, employee willingness to change is a fundamental determinant of individual health behaviour (Hagger, Chan, Protogerou, & Chatzisarantis, 2016) and was identified as a crucial influencing factor.

Second, this dissertation provides quantitative evidence of crucial influencing factors and explains how these factors influence health-specific leadership. Besides the identification and categorization of contextual factors in the second study, it provides new insights by linking the concept of health-specific leadership with other established theories. Building on the job demands-resources model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), the first study considers social demands and social resources as mediating variables between health-specific leadership and employee health and commitment. The results provide a differentiated understanding of the influence of social workplace characteristics for health-specific leadership

by indicating two separated paths through which health-specific leadership impacts employee health and employee commitment. In the third study, the personal initiative taken by managers and the self-care of employees were considered as influencing factors. Based on the concept of personal initiative (Frese & Fay, 2001), the study sheds light on the moderating effect of proactive leadership characteristics for health-specific leadership. The findings acknowledge the relevance of personal initiative for leadership behaviour as a facilitator. Hence, the findings contribute not only to a better understanding of health-specific leadership, but also to research on the concept of personal initiative. The facilitating effect of personal initiative highlights the theorized requirement that it is not merely related to performance outcomes, but also directed toward an organization goal, which, in this case, happens to be employee health promotion (Frese & Fay, 2001).

Third, the dissertation provides new insights into the outcomes of health-specific leadership. The results prove the relationship of health-specific leadership not only with physical health complaints, but also with employee burnout and affective organizational commitment for the first time. Health cannot only be understood as the absence of sickness; it also includes physical as well as mental and social well-being (World Health Organization [WHO], 2001). By considering mental and emotional aspects of employees' well-being, this dissertation brings new insights into the effects of health-specific leadership beyond traditional health outcomes.

Furthermore, the overall findings of the dissertation not only confirm the relevance of contextual and individual factors for health-specific leadership and employee health. On an overarching level, these findings also underpin the interdependence of individual and organizational characteristics and outcomes. Individual behaviours, especially personal initiative and self-care, social work climate, and additional organizational factors, interplay with health-specific leadership and employee health and motivation. The concept of organizational

health provides a framework to describe the dynamic interactions between individual and organizational characteristics on the one hand and individual health and organizational performance on the other (Cotton & Hart, 2003). Thus, employee health cannot be merely interpreted on an individual level; it should also be interpreted in the organizational context. Organizational characteristics, especially leadership, demands, and resources influence employee health. In turn, employee health and well-being influence organizational culture, productivity, and product/service quality, thereby becoming a crucial antecedent of performance (Grawitch, Gottschalk, & Munz, 2006; Shoaf, Genaidy, Karwowski, & Huang, 2004). In this context, leadership plays a central role and acts as the link between organizational and environmental factors on the one hand and individual health outcomes on the other (Orvik & Axelsson, 2012; Quick, Macik-Frey, & Cooper, 2007).

The findings of the dissertation contribute to this framework by providing evidence of the interplay between leadership behaviours, employee health, and contextual and individual characteristics, thereby providing a better understanding of the connectional role of leadership in the framework of organizational health as a holistic approach to understand health in the organizational context. In line with this, organizational characteristics and leadership should be considered for a successful implementation of worksite health promotion programs (McLellan et al., 2015). Placing health-specific leadership in a context of organizational health also helps to understand and encounter the impact of future developments, such as digitalization that affect the organization as a whole, including leadership, employee health, and work organization and collaboration (Hesse, 2018; Richter, Kliner, & Rennert, 2017).

5.2. Practical Implications

Besides theoretical implications, this dissertation provides practical implications as well. The findings underpin the importance of leadership behaviour for employee health and can enhance leadership practice and approaches to worksite health promotion.

Regarding leadership practice, the results can improve the implementation of health-specific leadership in practice. It is important to know which contextual factors are relevant and how these factors influence health-specific leadership to help managers to promote employee health more successfully. The concept of health-specific leadership reflects different cognitive and behavioural aspects (Franke et al., 2014) that provide information about how managers can promote employee health. These aspects may take the full effect if contextual factors are utilized and organizational possibilities for health promotion are enhanced (Wilde, Hinrichs, Pavez, & Schüpbach, 2009). Addressing the social demands and resources of employees as well as their self-care can foster employee health. Enhancing their personal initiative, their change management skills, and organizational resources can help managers to facilitate health-specific leadership practice. In particular in the healthcare setting, which is characterized by high job demands, the findings provide knowledge of specific factors and enhance possibilities to address employee health as a key challenge in the healthcare sector (Horstmann & Eckerth, 2016).

Regarding worksite health promotion, leadership is not only important to implement health promotion interventions and measures successfully at the workplace (Hoert, Herd, & Hambrick, 2016; McLellan et al., 2015). Beyond that, the findings imply that leadership itself can be an objective of health promotion interventions. Previous research showed that it is important to understand and address the underlying processes to foster the effectiveness of psychological interventions (Walton, 2014). Therefore, interventions focusing on health-specific leadership should address the key elements of the underlying concept. Such interventions should foster managers' value of health, health awareness, and encourage reflecting the personal role of a leader (Franke et al., 2014). Practitioners can utilize the insight into the dissertation on the influencing factors for health-specific leadership to deduce more effective interventions. Systemic approaches that consider the interplay between leadership,

employees, and organizational variables are effective in improving employee health and showing potential productivity and cost savings (Cooklin, Joss, Husser, & Oldenburg, 2017). Study 1 and Study 3 imply three concrete aspects that can contribute to improve leadership-based health promotion interventions by taking influencing factors into account. First, managers should learn how to address workplace characteristics, especially social demands and resources. For instance, they could foster teamwork by reducing conflicts, strengthening communication and cooperation within the team (Salas, Shuffler, Thayer, Bedwell, & Lazzara, 2015), or building trust (Lazzara et al., 2016). Second, the inclusion of employees as active participants in worksite health promotion addresses the relevance of employee self-care and can improve employee health behaviour (Sorensen et al., 2005). Third, the relevance of personal initiative as a general competence for health-specific leadership should be addressed. Personal initiative training is effective (Glaub, Frese, Fischer, & Hoppe, 2014) and could enhance health-specific leadership interventions.

5.3. Strengths, Limitations, and Future Research

For this dissertation, various strengths can be identified. First, the dissertation addresses a current topic with high theoretical and practical relevance. The concept of health-specific leadership is relatively new and has only started to gain scholars' attention (Böhm, Baumgärtner, & Kreissner, 2016). By examining the relevance of contextual factors for health-specific leadership and its relationship with employee health, this dissertation targets the research gap on contextualizing the leadership–health relation (Wegge et al., 2014). From a practical point of view, employee health is highly relevant for company performance in general (Chaker et al., 2015) and a major challenge for healthcare facilities in particular (Kliner, Rennert, & Richter, 2017). Understanding health-specific leadership by acknowledging contextual factors can establish a set of new approaches to this challenge. As shown above, the dissertation provides different theoretical and practical implications. Second, the studies are based on large sample sizes and different methodological strategies. In quantitative studies,

large sample sizes reduce the standard errors of samples and thereby increase the validity and generalization of the findings (Coolican, 2014). Quantitative Study 1 and Study 3 follow a hypotheses-based approach and were conducted with numerous participants from various companies. Study 1 is based on 861 participants from 28 companies, while Study 3 is based on 525 participants from 24 companies. Qualitative Study 2 is based on 51 Interviews from 18 companies. In this case, data analysis indicates data saturation, which increases the trustworthiness of the qualitative findings (Shenton, 2004). Moreover, the combination of explorative and statistical approaches in this dissertation allows a triangulation of the findings. The cross-examination shows a consistency among the results. In Quantitative Study 2, a positive/negative team climate was identified as a driver/barrier for health-specific leadership, which corresponds to the social demands and resources that have been identified as mediators in Study 1. Furthermore, the personal initiative taken by managers was identified as a driver for health-specific leadership in Study 2; it was confirmed as a moderator for the relationship between health-specific leadership and employee self-care. Third, this dissertation addresses health as a multifactorial construct. In line with the holistic concept of health by the WHO (World Health Organization [WHO], 2001), the dissertation allows a broader understanding of health and provides evidence of the relevance of health-specific leadership for physical as well as mental and social aspects. Besides the physical demands of employees, the first study considers employee affective commitment as an additional outcome of health-specific leadership, while the third study assesses burnout symptoms as an aspect of mental health.

Besides these strengths, some limitations of the dissertation should also be considered. While specific limitations of the three studies are discussed in previous chapters in detail, more general restrictions concerning the overall findings are discussed in the following. Congruent suggestions for future research are outlined. First, all studies are based on cross-sectional data. Therefore, the interpretation of the quantitative studies 1 and 3 is limited. Leadership ratings by

employees may also be influenced by their own well-being (van Dierendonck, Haynes, Borrill, & Stride, 2004). However, the influence of health-specific leadership on several employee health outcomes has been proven in a longitudinal study with two measurement points four months apart (Franke et al., 2014). Nevertheless, future research should validate the findings of the present dissertation – especially on the mediating and moderating effects – in longitudinal and experimental studies to allow causal interpretations. Second, only subjective data were collected for all three studies. This increases the risk of common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, preliminary data analysis indicates limited method bias. In general, any bias based on a single data source should not be overestimated (Spector, 2006). In particular, when it comes to health outcomes, subjective health ratings are valuable sources to evaluate the health status and can be even more insightful compared to objective data (Idler & Benyamini, 1997). Yet, future research should validate the findings with objective outcomes, such as sick days or bio-physiological data to rule out the common method bias. Third, all studies were conducted in the healthcare sector and therefore the results are limited to the healthcare setting and its specific demands. Different factors may be more or less relevant in different sectors. Thus, future studies should confirm the findings in different settings. However, such differences may not generally contradict the mechanisms found for the relationship between health-specific leadership and employee health, but rather affect its effect size. As a matter of fact, the results of this dissertation are in line with those of previous studies on health-specific leadership (Franke et al., 2014; Jiménez, Bregenzer, Kallus, Fruhwirth, & Wagner-Hartl, 2017). As these studies were conducted in different sectors, the present findings support the general mechanisms of health-specific leadership independent of sectoral specifics.

5.4. Conclusion

Health-specific leadership positively influences employee health and well-being. Notably, various factors at the individual and organizational level influence leadership behaviour and employee health in general. This dissertation identifies the influencing factors for health-specific leadership in healthcare settings. In addition, the influence of social demands and resources, managers' personal initiative and employee self-care for health-specific leadership are proven. Thereby, this dissertation provides a better understanding of the mechanisms by which health-specific leadership influences different employee health outcomes. Thus, the findings could help managers to promote employee health more efficiently as a central challenge in the healthcare sector. Future research needs to examine the influence of work-related and individual factors on health-specific leadership in different settings other than the healthcare sector.

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