

MASTERARBEIT | MASTER'S THESIS

Titel | Title

Health-related proactivity at work: The role of organizational factors and health motivation

verfasst von | submitted by
Hannah Pucher BSc

angestrebter akademischer Grad | in partial fulfilment of the requirements for the degree of
Master of Science (MSc)

Wien | Vienna, 2024

Studienkennzahl lt. Studienblatt | Degree programme code as it appears on the student record sheet:

UA 066 840

Studienrichtung lt. Studienblatt | Degree programme as it appears on the student record sheet:

Masterstudium Psychologie

Betreut von | Supervisor:

Ass.-Prof. Dipl.-Psych. Dr. Jana Kühnel

Abstract

Hintergrund: Gesundheitsbezogene Proaktivität am Arbeitsplatz ist ein neu vorgestelltes Konstrukt, das die selbstinitiierten Bemühungen der Mitarbeitenden umfasst, Ideen zu entwickeln und Maßnahmen umzusetzen, die darauf abzielen, die aktuelle Gesundheitssituation im Unternehmen zu verändern und sich auf eine zukünftige Verbesserung der Gesundheit zu konzentrieren. Auf der Grundlage früherer Forschung zu Proaktivität und Gesundheit zielt die vorliegende Studie darauf ab, einen Einblick in das Konstrukt der gesundheitsbezogenen Proaktivität am Arbeitsplatz zu geben und Faktoren zu ermitteln, die gesundheitsbezogenes proaktives Verhalten fördern.

Hypothesen: Die vorliegende Studie hat zum Ziel, tägliche Schwankungen von gesundheitsbezogener Proaktivität am Arbeitsplatz zu erforschen und eine neu entwickelte Skala zur Bewertung von gesundheitsbezogener Proaktivität am Arbeitsplatz zu validieren. Darüber hinaus wird ein positiver Zusammenhang zwischen Faktoren der Arbeitsumgebung, insbesondere dem tagesspezifischen organisationalen Gesundheitsklima und dem tagesspezifischen Gesundheitsverhalten der Führungsperson und der tageszeitspezifischen gesundheitsbezogenen Proaktivität am Arbeitsplatz angenommen. Darüber hinaus wird postuliert, dass der positive Zusammenhang zwischen tagesspezifischen Umweltfaktoren und tagesspezifischer gesundheitsbezogener Proaktivität am Arbeitsplatz durch tagesspezifische Gesundheitsmotivation mediiert wird.

Methode: Es wurde eine tägliche Tagebuchstudie über zwei Arbeitswochen ($N = 74, 462$ Tage) durchgeführt. Die Teilnehmenden füllten vor Beginn der Studie einen Fragebogen zur Vorerhebung und über einen Zeitraum von zehn Arbeitstagen einmal täglich einen Fragebogen aus.

Ergebnisse: Die Analysen zeigten, dass die Skala zur Messung gesundheitsbezogener Proaktivität am Arbeitsplatz für die tägliche Anwendung geeignet ist. Darüber hinaus zeigte gesundheitsbezogene Proaktivität am Arbeitsplatz eine Varianz innerhalb der Personen über die Arbeitswochen hinweg, was darauf hindeutet, dass das Konstrukt täglichen Schwankungen unterliegt. Die Analysen zeigten einen positiven Zusammenhang zwischen dem tagesspezifischen organisationalen Gesundheitsklima und der tagesspezifischen gesundheitsbezogenen Proaktivität am Arbeitsplatz. Es konnte jedoch kein positiver Zusammenhang zwischen dem tagesspezifischen Gesundheitsverhalten der Führungsperson und der tagesspezifischen Gesundheitsmotivation und der tagesspezifischen gesundheitsbezogenen Proaktivität am Arbeitsplatz gefunden werden. Die Analyse der indirekten Effekte zeigte, dass die tagesspezifische Gesundheitsmotivation keinen indirekten

Einfluss auf den Zusammenhang zwischen tagesspezifischem organisationalem Gesundheitsklima, tagesspezifischem Gesundheitsverhalten der Führungsperson und tagesspezifischer gesundheitsbezogener Proaktivität am Arbeitsplatz hat.

Diskussion: Die Ergebnisse unterstreichen die Relevanz eines gesundheitsfördernden Organisationsklimas für das Entstehen gesundheitsbezogener Proaktivität sowie die Bedeutung organisatorischer Faktoren für die Förderung von Gesundheitsmotivation.

Abstract

Background: Health-related proactivity at work is a recently introduced construct that entails employees self-directed efforts to generate ideas and implement measures aimed at changing the current health situation within the organization and focusing on future health improvement. Based on previous research on proactivity and health, the present study aims to provide insight into the construct of health-related proactivity at work and identify factors that facilitate health-related proactive behaviors.

Hypotheses: The present study seeks to explore day-specific fluctuations of health-related proactivity at work and aims to validate a recently developed scale designed to assess health-related proactivity at work. Moreover, a positive relationship between factors of the work environment, specifically day-specific organizational health climate and day-specific health behavior of the supervisor, and day-specific health-related proactivity at work is proposed. Furthermore, it is postulated that the positive relationship between day-specific environmental factors and day-specific health-related proactivity at work is mediated by day-specific health motivation.

Method: A daily diary study over two workweeks ($N = 74$, 462 days) was conducted. Participants filled in a pre-survey questionnaire before the beginning of the study and a daily questionnaire once a day over a period of ten working days.

Results: The analyses demonstrated an adequate fit of the health-related proactivity at work scale for daily assessment. Moreover, health-related proactivity at work showed a within-person variance throughout the workweeks, indicating that the construct is subject to daily fluctuations. The analyses demonstrated a positive relationship between day-specific organizational health climate and day-specific health-related proactivity at work. However, no positive relationship between day-specific health behavior of the supervisor nor day-specific health motivation and day-specific health-related proactivity at work could be found. The analysis of the indirect effects demonstrated that day-specific health motivation did not indirectly affect the relationship between day-specific organizational health climate, day-specific health behavior of the supervisor, and day-specific health-related proactivity at work.

Discussion: The results underline the relevance of a health supporting organizational climate for health-related proactivity to emerge, as well as the importance of organizational factors for the promotion of health-motivation.

Table of contents

Introduction	1
Theoretical Background	3
Health-Related Proactivity in the Workplace	3
Antecedents of Health-Related Proactivity at Work.....	8
Organizational Health Climate and Health-Related Proactivity at Work	9
The Supervisor as Role Model for Health-Related Proactivity at Work	10
Health Motivation and Health-Related Proactivity at Work.....	11
The Indirect Effect of Health Motivation	12
Method	13
Sample and Procedure	13
Measures	15
Health Related Proactivity at Work.....	15
Organizational Health Climate.....	15
Health Behavior of the Supervisor.....	16
Health Motivation	16
Proactive Vitality Management.....	16
Self-Care of the Employees	16
Translation of the Scales	17
Analysis	17
Test of Hypotheses	17
Discussion	20
Limitations and Future Research.....	24
Practical Implications	26
References	27

Introduction

The workplace seems to be one of the most important environments in terms of health promotion. According to the European Commission (Eurostat, 2023), individuals aged 20 to 64 in Austria spent an average of 36 hours per week at work in 2022. With 74% of the Austrian population aged 15 to 64 being employed (Statistics Austria, 2022a), the workplace seems to be the ideal setting to reach a significant proportion of the population and provide easily accessible, low-threshold health promotion opportunities (Hymel et al., 2011). Notably, absenteeism due to sickness increased by 36.1% from 2021 to 2022, marking the highest absenteeism rate since 1995 (Statistics Austria, 2022b). These statistics underline the importance of broad public health promotion in the work context.

According to Aldana et al. (2001), investing in health promotion programs yields valuable benefits for companies, such as avoiding or recovering costs that come along with health problems among employees (Basinska-Zych & Springer, 2021). Negative health practices of employees have been associated with higher rates of absenteeism and a loss in productivity (Shain & Kramer, 2004). Poor employee health behavior can not only reduce an organization's revenue, but also cause additional costs, such as paying for medication or medical care (Shain & Kramer, 2004; Aldana et al., 2001). Another reason why companies might invest in employee's health is to create a work environment that promotes community and satisfaction, thus enhancing the company's image (Aldana et al., 2001).

Not only companies, but also employees, can benefit from a healthy workplace. According to Basinska-Zych and Springer (2021), employees can benefit from a health promoting work environment cognitively, physiologically, and psychologically. A health promoting workplace can improve an individual's ability to learn new skills and strengthen their sense of control over their work. It can also improve employee's general physical health and is associated negatively with pain, chronic illness, and overweight. Moreover, a health promoting work environment can lead to an improvement in mental health, wellbeing, and job satisfaction. (Harvey et al., 2014; Nielsen et al., 2017).

Despite the promising outcomes for companies and employees, attempts to promote employee health often do not result in the desired effect. Studies on health promotion in the workplace often show only small efficacy and inconclusive results (Rongen et al., 2013; Malik et al., 2014). Many programs to improve health in the workplace are designed to implement measures that employees can decide to participate in. Nevertheless, participation rates are often low, due to a lack of time, interest, or motivation (Groeneveld et al., 2009; Rongen et al., 2014). In a study by Nöhammer et al. (2013), employees specified few

perceived benefits for themselves, feeling pushed, or sensing a lack of credibility of the organization as reasons for not participating in health promotion programs. In many workplace health promotion designs, employees are seen as passive recipients of the organization's intervention (Egan et al., 2009; Nielsen et al., 2010). However, it has been shown that the involvement of employees in developing and implementing ideas for organizational change can lead to a better acceptance of and a higher participation rate in these interventions (Nielsen et al., 2010). Nielsen et al. (2010) define the inclusion of employees in the interventional process as a key component of health promotion in the workplace. Therefore, the question arises as to how employees can be included in the process of health-promotion and what they can do to proactively improve their own health.

Proactivity, as defined by Grant and Ashford (2008), is an anticipatory behavior that is autonomously initiated by the individual and is aimed at modifying oneself or the environment. Grant and Ashford (2008) define proactivity not as a single action but as a process that involves anticipating, planning, and striving for change. This process is not limited to a single set of actions but can be applied to various areas of action (Grant and Ashford, 2008). Engaging in self-directed actions can provide opportunities to master challenges and accomplish work-related goals. Consequently, proactivity can foster a feeling of autonomy and self-efficacy in the workplace (Cangiano et al., 2015). According to Parker and Collins (2010) proactive behavior includes self-directedly changing the work environment and expressing concerns regarding work-related issues. Moreover, it involves generating ideas that align with the organization's goals, and preventing obstacles that could inhibit organizational change.

Building on the understanding of general proactive behavior, the construct of health-related proactivity at work has been proposed. Health-related proactivity at work entails the enhancement of employee health by fostering autonomous decision making and self-initiated actions. It encompasses employees engaging in self-initiated, goal-oriented, and future-focused behaviors to promote organizational or individual health. Health-related proactivity at work includes features of general proactive behavior but focuses primarily on implementing changes and challenging existing norms to maintain or improve worksite health. Building on the definition of proactive behavior by Parker and Collins (2010), a scale for evaluating health-related proactivity at work has been developed. The scale assesses health-related proactivity at work by evaluating whether employees self-directedly implement changes, speak up on health-related issues, and prevent potential challenges to maintaining or improving worksite health. This study aims to validate the construct of health-related

proactivity at work using the newly developed scale and to identify factors that facilitate health-related proactive behavior.

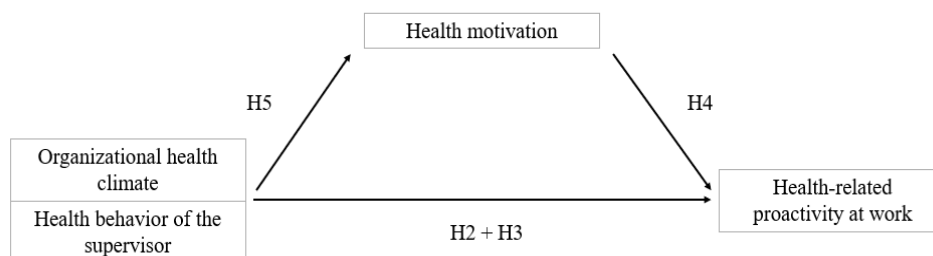
The present study aims to contribute to the emerging research field of health-related proactivity at work and expand theoretical knowledge about the construct. Following the definition of Parker and Collins (2010), health-related proactivity at work entails employees generating and implementing ideas themselves rather than organizations implementing an intervention for passive consumption by employees. According to Ross and Barnes (2018), employees are more likely to show health-relevant behaviors if they experience a feeling of self-determination and autonomy. This is particularly significant considering that interventions implemented by organizations often face resistance and result in low participation rates (Nöhammer et al., 2013). Unlike programs initiated by organizations, encouraging employees to independently implement health-promoting behaviors empowers them to make self-directed decisions and take action themselves. Consequently, fostering health-related proactivity at work and, thus, a feeling of self-determination and autonomy (Cangiano et al., 2015), could serve as an effective approach to promoting worksite health. According to Parker et al. (2006), proactive behavior is influenced by the perceived work environment as well as by individual factors. In this study, the influence of environmental factors on health-related proactivity, specifically organizational health climate and health behavior of the supervisor, as well as health motivation as individual factor will be explored. By identifying factors influencing health-related proactivity at work, organizations can develop targeted interventions to promote such behavior, thereby enhancing employee health and well-being. As health-related proactivity at work is directed towards improving employee health and well-being, it could lead to organizational advantages such as reduced absenteeism rates, increased productivity, and lower healthcare costs (Basinska-Zych & Springer, 2021). The proposed research model is presented in Figure 1.

In the following section, previous theoretical and empirical research on proactivity and health will be reviewed to give insights into the construct of health-related proactivity at work and its relations to external and internal factors.

Theoretical Background

Health-Related Proactivity in the Workplace

Proactivity in the workplace has received increasing attention in the last decades due to its positive implications for employees and organizations (Grant & Ashford, 2008). Proactive behavior in the workplace has been linked to employee job performance (Chan, 2006),

Figure 1*Proposed Research Model*

employee satisfaction, organizational innovation, and progress (Seibert et al., 2001). Grant and Ashford (2008) argue that proactivity can be distinguished from general motivated behavior and more reactive behavior in two ways: Firstly, proactive behavior entails acting in advance, meaning that individuals display anticipation and autonomy in their behavior. They engage in deliberating, planning, and acting in advance to prepare for future events, rather than merely reacting to occurring events. Secondly, proactive behavior intends to have an impact. It is change-oriented and aimed at making a meaningful difference. Proactive individuals achieve the desired outcome by modifying their own behavior, influencing others, and shaping their environment. Previous research on proactivity in the workplace has mainly focused on work-related outcomes, such as employee productivity or job performance (e.g., Joo & Bennett, 2018; Zahoor, 2020).

A new subject of research in this field is the investigation of proactivity in the context of worksite health. The concept of health-related proactivity at work considers how the employee's and the organization's health can be affected by proactive behaviors. Parker and Collins (2010) propose a higher-order structure of proactive behavior, depending on the intended target that the behavior is directed towards. According to Parker and Collins (2010) proactive behavior can intend to affect the internal organizational environment (proactive work behavior), the fit between organization and environment (proactive strategic behavior) or the fit between individual and organizational environment (proactive person-environment behavior). Health-related proactivity at work entails characteristics of proactive work behavior and proactive person-environment behavior. Proactive person-environment behavior entails the compatibility of an individual's characteristics with the situation at, such as whether the individual's skills fit the requirements of the job or whether the person's values align with those of the organization. Proactive work behavior includes taking charge, voice,

individual innovation, and problem prevention (Parker & Collins, 2010). These behaviors focus on changing the internal environment by questioning the status quo, coming up with new ideas, and actively implementing solutions (Parker & Collins, 2010). Based on the framework proposed by Parker and Collins (2010), the construct of health-related proactivity at work was developed, which encompasses health-related taking charge, voice, and problem prevention.

Drawing from these elements of proactive behavior (Parker & Collins, 2010), the Health-Related Proactivity at Work (HR-ProW) scale was developed in a research seminar at the University of Vienna. The scale was designed to serve as an instrument for assessing proactive behaviors primarily focused on promoting and maintaining individual or organizational health. Health-related proactivity involves devising and implementing ideas and strategies regarding worksite health as well as advocating for these ideas within the organization, and encouraging colleagues to engage in health-related concerns. The items of the HR-ProW scale were built on taking charge (e.g., “I try to change the organizational rules or policies that affect my well-being or that of my team.”), voice (e.g., “I suggest ideas for health maintenance and improvements to my colleagues.”), and proactive problem prevention (“I make an effort to solve health-related problems in my organization so they will not happen again.”). Taking charge refers to voluntary and constructive behavior of employees, that aims to change or improve processes within the organization, with respect to organizational structures and the way their job is executed (Morrison & Phelps, 1999). In terms of health-related proactivity, employees who take charge might independently challenge the current health status of themselves or the organization, generate ideas, and execute strategies to enhance organizational health. This would encompass modifying organizational frameworks, such as worksite health conditions or policies, and actively acquiring skills relevant to improving or maintaining health. Voice is described as the expression of concerns regarding matters impacting one's work environment and actively seeking information about these matters (Parker & Collins, 2010). Health-related voice would include openly expressing concerns regarding health in the workplace and actively contributing ideas to promote a healthy work environment. It may also involve fostering awareness of health-related issues and encouraging fellow employees to participate in health initiatives. Proactive problem prevention includes taking self-directed and anticipatory measures to prevent the recurrence of work-related issues or barriers (Parker & Collins, 2010). In terms of health-related proactivity, problem prevention would involve taking proactive measures to detect potential health risks and anticipate future health-related challenges in the workplace. It might include

preparing for possible obstacles by identifying suitable resources and measures that foster the preservation or improvement of health. Employees demonstrating problem prevention may dedicate time and effort to finding ways to prevent the recurrence of health-threatening issues within the organization.

However, the exploratory factor analysis of the HR-ProW scale revealed a two-factor structure rather than a three-factor structure of the construct, including social health-related proactivity at work, and individual health-related proactivity at work. Social health-related proactivity at work refers to health-related proactive behavior that occurs within a social work environment, requiring interaction with others, and cannot be performed individually. It is a self-initiated behavior but aimed at improving the health of the whole team or organization. Individual health-related proactivity at work describes health-related proactive behavior that can be carried out independently, isolated from the social context. The validation of the questionnaire in a cross-sectional study revealed a total of eleven final items, with seven items assessing social health-related proactivity at work and four items assessing individual health-related proactivity at work.

In the present study, the HR-ProW scale is used in a longitudinal design, evaluating health-related proactivity at work over a period of 10 working days. According to Ruspini (2002) longitudinal studies offer the advantage of assessing changes of a construct over time, allowing the evaluation of its persistence and whether it exhibits stability or fluctuation. Investigating if constructs are trait-based or state-based is central for examining their relationship with other constructs, mitigating the effect of confounding variables, and considering unobserved individual characteristics that might influence the outcome variable (Ruspini, 2002). Considering the advantages of longitudinal studies, the employment of the HR-ProW scale might present relevant implications for practical application as well as for further research directions. Therefore, the following hypothesis will be examined within this study:

Hypothesis 1a: The confirmatory factor analysis of the HR-ProW scale achieves appropriate goodness-of-fit values in the longitudinal validation sample.

Previous research has shown that proactive behavior exhibits daily fluctuations (e.g., Cangiano et al., 2019; Fay & Sonnentag, 2012; Ouyang et al., 2019). Fay and Sonnentag (2012) found a within-person variance of proactivity of 88.4%, suggesting that proactivity can vary over time. The study revealed that proactive behavior was influenced by day-specific positive affect states, leading to variances throughout the week. In a study by Cangiano et al. (2019) proactivity demonstrated a within-person variance of 69% and was linked to day-

specific well-being. Given these findings regarding the daily fluctuations of proactivity, it prompts the question of whether health-related proactivity may also undergo day-specific fluctuations. Therefore, the following hypothesis is proposed:

Hypothesis 1b: Health-related proactive behavior at work is subject to day-specific fluctuations.

Health-related proactivity at work involves the self-initiated generation of new ideas, implementing actions, and adjusting circumstances with the aim of improving individual and organizational health. A similar workplace behavior, that is directed towards enhancing personal health is employee self-care. Franke et al. (2014) define employee self-care as internal capability that facilitates employees to improve their health by successfully managing work demands and establishing health-promoting workplace conditions. Self-care involves health behavior, value of health, and health awareness. Health behavior encompasses personal involvement in health-promoting activities, while value of health refers to an employee's interest in and commitment to health issues and the importance, they attach to fostering health. Health awareness refers to the attention spent on health issues, work-related challenges, and potential influences on health. Health-related proactivity at work and employee self-care both entail a sense of responsibility for one's health, considering potential challenges to the improvement of health, and the motivation to initiate changes to promote health in the workplace. Considering the theoretical similarities between health-related proactivity at work and employee self-care, the convergent validity of health-related proactivity at work will be assessed by investigating its association with employee self-care. The following hypothesis is proposed:

Hypothesis 1c: Scores obtained on the HR-ProW scale show at least a medium positive correlation with day-specific employee self-care.

Another construct that entails proactive behavior aiming to enhance workplace health is proactive vitality management. Proactive vitality management, as proposed by Op den Kamp et al. (2018), involves employees proactively managing their mental and physical energy to promote effectiveness. According to Op den Kamp et al. (2018), it entails a clear proactive component, as it is self-initiated, goal-directed, and future-focused. Proactive vitality management focuses on renewing one's resources by effectively recovering from work as well as engaging in energizing activities during the workday. The preliminary goal of proactive vitality management is to optimize functioning in the workplace and facilitating the achievement of work-related objectives. Employees pursue these goals by engaging in activities that foster mental or physical health. For example, employees practicing proactive

vitality management would go for a walk before work or enjoy a coffee break to focus their mental and physical energy, thus enhancing their ability to concentrate on work tasks. Despite both proactive vitality management and health-related proactivity at work focus on improving health in the work environment, they diverge in their overarching goals: Proactive vitality management intends to enhance employee health to optimize individual functioning and therefore work-related outcomes, such as productivity or creativity. Health-related proactivity, on the other hand, aims to improve individual or organizational health outcomes, including employee well-being or a better work-life-balance. Given these distinctions between the constructs, the discriminant validity of health-related proactive behavior in the workplace will be assessed by examining its relationship with proactive vitality management. The following hypothesis is proposed:

Hypothesis 1d: Scores obtained on the day-specific HR-ProW scale do not correlate significantly with day-specific proactive vitality management.

Antecedents of Health-Related Proactivity at Work

Parker et al. (2010) introduced a conceptual framework that proposes three motivational states of proactive behavior: *Can do*, *reason to*, and *energized to*. This framework attempts to explain why some individuals might engage in proactive behavior while others might not, and underlines the impact of external factors on proactive behaviors. *Can do* refers to perceptions of self-efficacy, assessment of feasibility, and consideration of expected costs of the action. Parker et al. (2010) underline the importance of believing that the proactive behavior will result in the desired outcome for initiating proactive behavior. *Reason to* refers to the perceived personal value of engaging in the proactive behavior. According to Parker et al. (2010) individuals will be more likely to engage in proactive behavior if they consider the activity as enjoyable or interesting, therefore offering personal fulfillment and intrinsic motivation. *Energized to* involves affective states influencing proactive behavior. Parker et al. (2010) suggest that positive affect can increase the likelihood that an individual sets proactive goals.

According to Parker et al. (2010) these motivational states of proactive behavior can be impacted by various factors within the work environment or the organization. For example, factors of work design or leadership style can either facilitate or inhibit proactive behaviors. The framework by Parker et al. (2010) highlights the importance of identifying to organizational factors that can promote health-proactivity in the workplace.

Organizational Health Climate and Health-Related Proactivity at Work

Organizational climate, defined as the employees' subjective perception of how the work environment impacts them (Glisson, 2007), plays a significant role in promoting proactivity and innovation at work (Baer & Frese, 2003). A safe and supportive climate, that encompasses openness and trust, encourages employees to generate new ideas and engage in proactive behavior (Unsworth & Parker, 2003). For example, Axtell et al. (2000) have found that if organizational support is perceived high, the number of new ideas and suggestions for improvement made by employees increases. A study by Parker et al. (2006) has demonstrated, that a work environment that facilitates autonomy and communication, can enhance self-efficacy, perceived control, and positive affect. Organizational climate entails frequent patterns of behavior, attitudes, and feelings experienced by the employees within the daily work environment (Isaksen & Lauer, 1999). When employees experience that proactive behaviors are supported and rewarded within the organization, they are more likely to exhibit proactive behaviors (Kilic & Gök, 2022). Considering the motivational state framework by Parker et al. (2010), a supportive organizational climate signals that proactive behavior is expected and valued, consequently activating reason to motivational states (Kilic & Gök, 2022). By enhancing employees' self-efficacy, a supportive organizational climate can also activate can do motivational states (Parker et al., 2010).

A supportive organizational health climate has been linked to various health outcomes among employees, including physical activity and healthy eating behavior (Sonnentag & Pundt, 2015; Sonnentag & Venz, 2017). For example, Bronkhorst et al. (2014) discovered a positive relationship between organizational health climate and employees' mental well-being. Sonnentag and Pundt (2015) define the health-related organizational climate as the shared perception of an organization's strategies that relate to the promotion of employee health. When employees experience support from their team or organization regarding health-related issues, they are more likely to engage in health promoting behaviors (Zweber et al., 2015). Organizational Support Theory (Eisenberger et al., 1986), as outlined by Zweber et al. (2015), suggests that employees attribute human-like characteristics to the organization and consequently expect care and support from it. This perspective is further explained by social exchange theory (Blau, 1964), wherein employees who experience a positive relationship with the organization, valuing and caring for their health, are more likely to exhibit behaviors that benefit their own or the organization's health (Zweber et al., 2016). Sonnentag and Venz (2017) observed a positive relationship between organizational health climate and employees' eating behavior, outlining that the organization comprises values and expectations, that

influence employees' behavior. In line with the framework proposed by Parker et al. (2010), the organizational health climate defines health as a desirable outcome for both individuals and organizations, consequently activating reason to motivational states.

In terms of health-related proactivity at work, a positive organizational health climate might encourage employees to devise and execute strategies to enhance individual and organizational health. Moreover, it could emphasize the importance of health-oriented changes and provide resources for implementing these changes. By communicating openness for change, the employees might be encouraged to question the status quo and propose ideas to improve the current situation. If the organizational health climate is perceived as supportive, employees may voluntarily adjust their own behavior as well as organizational structures to maintain or improve individual or organizational health.

Based on theoretical and empirical findings regarding the relationship between organizational health climate, proactive behavior, and employees' health behavior, a positive relationship between day-specific organizational health climate and day-specific health-related proactive behaviors at work is anticipated. The following hypothesis is proposed:

Hypothesis 2: On days when the organizational health climate is perceived as more (versus less) health-promoting, employees experience more (versus less) health-related proactivity at work.

The Supervisor as Role Model for Health-Related Proactivity at Work

Leaders can act as role models for proactive behavior. According to Schmitt et al. (2016), leaders can enhance employee proactivity by exhibiting proactive behaviors themselves and therefore functioning as a role model. In a study by Wang et al. (2022) a positive relationship between the leader's proactive goal regulation and proactive behaviors of the employees was found. Wang et al. (2022) attribute these findings to social learning theory (Bandura, 1986), which suggests that individuals can learn behaviors through role modeling in social situations. The proactive behavior of the leader can act as a contextual factor that impacts the employees' cognition and behavior. Thus, leaders who intentionally engage in proactive behaviors, monitor the progress, and evaluate the outcome can serve as a role model for the employees (Wang et al., 2022).

The importance of the leader as a role model has also been outlined in health-related settings. Kranabetter and Niessen (2017) propose that supervisors, through role modeling health awareness and behaviors, can encourage employees to exhibit health promoting behaviors. When supervisors are perceived as role models for health, employees become more aware of their own health and feel empowered to face challenges regarding health issues.

Kranabetter and Niessen (2017) found that managers' health awareness was negatively associated with employee exhaustion and cynicism.

Franke and Felfe (2014) introduced a comprehensive model of health-oriented leadership. Within this framework, the employees are impacted by the way the leader cares for their own health (self-care) as well as the way the leader cares about employees' health (staff-care). The health-oriented leadership model highlights the importance of the leader's communication of health-related work issues and their values towards employees' health. In line with social learning theory (Bandura, 1986) the perceived self-care of the supervisor can serve as role model for how the employees maintain and promote their own health. A study by Klebe et al. (2021) conducted during the COVID-19 pandemic found that health-oriented leadership positively influences employee health and well-being, with this effect being even stronger during crises.

In the context of health-related proactivity at work, supervisors who engage in health-related proactive behaviors at work, such as speaking up on health issues and implementing strategies and change to promote well-being, could serve as role models for the employees. When experiencing proactive health behavior of the supervisor, employees, in line with social learning theory and the health-oriented leadership model, may align their behavior with the supervisor's and engage in more proactive health behaviors.

Based on the role modeling influence of the supervisor proposed by the health-oriented leadership framework and its association with positive health outcomes, a positive relationship between the health behavior of the supervisor and health-related proactivity at work is proposed. The following hypothesis is postulated:

Hypothesis 3: On days when the supervisor's behavior is perceived as more (versus less) beneficial to their own health, employees experience more (versus less) health-related proactivity in their work.

Health Motivation and Health-Related Proactivity at Work

Health motivation, defined as a psychological drive directed towards maintaining and improving one's health (Moorman & Matulich, 1993), is an essential component of health-promoting behavior, as proposed by O'Neal (2007). Health motivation plays an important role in initiating new health-promoting behaviors (O'Neal, 2007) and increases the likelihood of converting health-related knowledge and skills into health-promoting practices (Moorman & Matulich, 1993). O'Neal (2007) refers to self-regulation theory of motivation, which proposes that an individual is motivated to achieve an optimal state or system balance (Baumeister and Vohs., 2007). According to this model, experiencing a lack of balance will lead to self-

initiated behaviors and efforts that try to restore balance. Previous studies have found associations between health motivation and healthy eating (Sonnentag & Venz, 2017), physical activity (Sliter, 2013), and searching for health-related information (Moorman & Matulich, 1993). According to Moorman and Matulich (1993) health motivation moderates the influence of health ability on health-promoting behaviors. It encourages individuals to learn and apply knowledge and skills to improve health. In a study on health-motivation and healthy food choices, Moorman and Matulich (1993) found that high health motivation among consumers led to increased acquisition of health-relevant information and the adaptation of a health-benefiting diet.

The role of motivation in driving proactive behavior has been outlined in the framework proposed by Parker et al. (2010). In terms of health, *can do* would mean that an individual believes that their actions will lead to an improvement of health. *Reason to* would mean that someone considers health-promoting behavior to be rewarding or meaningful and therefore is more likely to engage in it. *Energized to* would refer to positive affect that is associated with health improvement practices and therefore fosters these actions.

In the context of health-related proactivity at work, health motivation might energize employees to engage in health-proactive behaviors. Employees who show high health motivation may take initiative to foster health and readily implement innovative solutions for maintaining or improving health. Moreover, health motivated employees might proactively use available resources and voluntarily acquire new skills to enhance their own health or contribute to organizational health.

Considering the framework by Parker et al. (2010) linking motivational states to proactive behavior and the findings regarding the impact of health motivation on beneficial health outcomes, a positive relationship between health motivation and health-related proactivity at work is suggested.

Hypothesis 4: On days when employees experience more (versus less) health motivation, they also experience more (versus less) health-related proactivity at work.

The Indirect Effect of Health Motivation

Parker et al. (2010) underline how environmental factors can influence proactive behaviors by enhancing employees' motivation towards proactive goals. A study by Sonnentag and Venz (2017) on employees' eating behaviors within an organization revealed that the organizational climate could positively affect the employees' food choices via the mechanism of health motivation. Sonnentag and Venz (2017) elucidate these findings in the light of motivated action theory (DeShon & Gillespie, 2005). According to motivated action

theory, environmental factors can activate higher-level individual goals, which in turn lead to an activation of related goal networks. Frequently activated goals become more accessible to the individual and therefore facilitate acting towards these goals in the future. This means, that environmental cues, such as organizational health climate or health behavior of the supervisor, can activate employees' higher-level goal of living a healthy lifestyle. This higher-level goal can in turn activate more concrete, practicable goals, such as suggesting ideas for health-promotion or implementing small changes to improve well-being.

In an environment with a strong organizational health climate or a positive health behavior of the supervisor, many cues may direct the employees' motivation towards improving health, thereby stimulating concrete health-promoting proactive behaviors.

Given the relationship between environmental factors, motivation, and proactive behavior proposed by Parker et al. (2010) as well as the propositions of motivated action theory, it is postulated that contextual factors such as organizational climate or health behavior of the supervisor can indirectly influence health-related proactive behavior by enhancing health motivation that fuels health-related proactive behavior. The following hypothesis is derived:

Hypothesis 5: The positive day-specific relationship between (a) organizational health climate and (b) the perceived health behavior of the supervisor and health-related proactivity at work is mediated by the experience of health motivation.

Method

Sample and Procedure

In the following section, the procedure of the study, the recruitment of participants and the data collection will be described in detail. A total sample of 74 participants and a total of 462 days were recruited. The data was collected between October 2023 and December 2023 in Austria. A daily diary study was conducted, wherein the participants were asked to complete an online questionnaire over a period of two workweeks (ten workdays). To take part in the study, the participants filled in a preliminary questionnaire. There, participants could select one out of four periods they would like to participate in and provided their email addresses. In the selected period, participants received a daily email invitation to complete the questionnaire between 11:00 a.m. and 8:00 p.m. The questionnaire was only during this period to avoid distortions of memories of the working day due to interfering events. This approach is based on the experience sampling method (ESM), which aims to assess participants' experiences in the moment or shortly after they occur (Csikszentmihalyi & Larson, 1992). The purpose of this method is to examine the interaction of a person with their natural

environment, thereby facilitating ecological validity. To access the questionnaire, participants had to click on a link attached to the email. The questionnaire consisted of 57 items and could be completed within 10 to 15 minutes. To increase the response rate, another email with a reminder to fill in the questionnaire was sent at 05:00 PM.

In the preliminary questionnaire, demographic data was assessed. Before completing the preliminary questionnaire, the participants had to accept an informed consent sheet. In the informed consent sheet, the terms of the study were presented, such as the processing of data, risks of participation, and conditions of ending participation. The participants were informed that the data would be treated anonymously, that they had the option of deleting the data before it was anonymized, and that they could terminate their participation at any time without providing reasons.

Participants were recruited using personal contacts, advertising on social media platforms, and snowball sampling. A flyer was designed containing information about the study, the conditions of participation, and a link leading to the pre-survey questionnaire. The flyer was digitally sent to family, friends, work colleagues, etc. Moreover, the flyer was posted on platforms like Instagram, Facebook, and WhatsApp. To provide an incentive for participation, three vouchers worth 50€ from "Wunschgutschein.at" will be awarded to three randomly selected participants.

The target group comprised people aged 18 or older who were employed for a minimum of 20 hours per week at the time of the survey. Additionally, the study focused on individuals who work within teams and organizations, as the study included assessing organizational health climate as well as team health climate. Therefore, individuals who do not work within a team or an organization were excluded from participation. Additionally, participants under the age of 18 and individuals working less than 20 hours per week were excluded.

The preliminary questionnaire was completed by 81 individuals. Participation criteria were verified through filtering questions. However, three more participants were excluded as they did not complete a single day of the daily questionnaire. Consequently, the total sample size comprised 74 participants, generating a total of 462 days.

Of the 74 participants who completed the survey, 54.1% claimed to be female and 45.9% to be male. The participant's age ranged from 22 to 72 years, with an average age of 38.61 years ($SD = 13.55$). 79.1% reported having a degree from university or advanced technical college, 12.2% indicated having graduated from a general or vocational secondary school, and 5.4% held an apprenticeship certificate. The sectors participants claimed to be

employed in included health, social affairs, and education (36.5%), accounting, law, and administration (17.6%), and sales, commercial services, and tourism (13.5%). Moreover, 64.9% reported having a job primarily based in an office setting, while 6.8% indicated that their work primarily involved crafting and manufacturing tasks. 27% mentioned that their job involved a combination of both, and 1.4% did not disclose information about the type of their work. The average contractual working hours were 32.79 ($SD = 8.46$) and the average actual working hours were 37.77 ($SD = 8.81$). Participants worked in organizations with an average size of 6333,47 ($SD = 28228.71$, $Mdn = 145$). The average duration of participants tenure within their organization was 9.13 years ($SD = 11.02$). Furthermore, 17.6% of the participants claimed that their job includes the maintenance or promotion of organizational health. In the following section, the measures of the constructs will be described in detail.

Measures

Health Related Proactivity at Work

To assess day-specific health related proactivity at work, the Health-Related Proactivity at Work Scale (HR-ProW) was used. The scale was developed in a research seminar at the University of Vienna and has already been validated in a cross-sectional study, with Cronbach's alpha being .89. The scale contains 11 items that were adapted for daily use for this study. An example item is “Today I thought about new ways to increase or maintain general well-being in my company”. The items were answered on a 5-point Likert scale ranging from 1 (*do not agree*) to 5 (*agree*). Participants were also given the option to not answer the item (*cannot tell*). The HR-ProW scale demonstrated a Cronbach's alpha of .95 on the within-person level.

Organizational Health Climate

Day-specific organizational health climate was assessed using the multi-faceted organizational health climate assessment scale (MOHCA) developed by Zweber et al. (2015). The scale consists of 10 items that measure the organizational facet, the work group facet, and the supervisor facet. As only the organizational facet was supposed to be assessed, 6 items were excluded. After the adaptation for daily use, one more item was excluded as it was not suitable for daily assessment, resulting in a total of 3 items. An example item is “Today my organization was committed to employee health and well-being”. The items are scored on a 5-point Likert scale ranging from 1 (*do not agree*) to 5 (*agree*). The scale showed satisfactory reliability on the within-person level, with Cronbach's alpha being .87.

Health Behavior of the Supervisor

To measure day-specific health behavior of the supervisor, the health-oriented leadership questionnaire (HoL) developed by Pundt and Felfe (2017) was used. 10 items of the scale “Self-Care of the Supervisor (external assessment of the employees)” were adapted to daily use. 2 items were excluded because they were not suitable for daily assessment. An example item is “My supervisor consciously took care of their health today”. The items are assessed on a 5-point Likert scale ranging from 1 (*do not agree*) to 5 (*agree*). An additional answer option (*cannot tell*) was provided. Cronbach's alpha of the of the “Self-Care of the Leader” subscale on the within-person level was .67.

Health Motivation

Day-specific health motivation was assessed using a scale developed by Moorman (1990) consisting of 9 items. During the adaptation for daily assessment, 3 items were excluded because they were not suitable for daily use. An example item is “Today I tried to prevent health problems before I felt any symptoms”. Items are answered on a 5-point Likert scale ranging from 1 (*do not agree*) to 5 (*agree*). An additional response option (*cannot tell*) was provided. The reliability of the health motivation scale was calculated, demonstrating a Cronbach's Alpha of .43.

Proactive Vitality Management

To assess day-specific proactive vitality management, the proactive vitality management scale (PVM) by Op den Kamp et al. (2018) was used. The scale consists of eight items on the within-person level. An example item is “Today, I made sure that I felt energetic during my work”. Items were assessed on a 5-point Likert scale ranging from 1 (*do not agree*) to 5 (*agree*). The PVM scale showed a satisfactory Cronbach's alpha of .93 on the within-person level.

Self-Care of the Employees

The day-specific self-care of the employees was measured using the health-oriented leadership questionnaire by Pundt and Felfe (2017). 16 items from the subscale “Self-Care of the Employees (self-assessment) were adapted for daily use. Two items were excluded because they were not suitable for daily assessment. An example item is “Today I realized when something was wrong with my health”. Participants evaluated their day specific self-care on a 5-point Likert scale ranging from 1 (*do not agree*) to 5 (*agree*). The “Self-Care of the Employees” subscale demonstrated a Cronbach's alpha of .9 on the within-person level.

Translation of the Scales

The items of the multi-faceted organizational health climate assessment scale (MOHCA), the health-oriented leadership scale, the proactive vitality management scale, and the health motivation scale were translated from English to German. To enhance the quality of the translation, the back-translation method by Tyupa (2011) was used. The items were first translated into German. Then the translated items were translated back to English by an external translator who was not familiar with the original items. No major differences were found between the original items and the back-translated ones. Small differences were discussed, and items were adapted if necessary.

In the following section, the analysis of the collected data will be described in detail.

Analysis

Because of the multilevel structure of the data, a demo version of Mplus 8.10 (Muthen & Muthen) was used to test Hypotheses 1b, 2, 3, 4 and 5. Multilevel regression analyses as well as mediation analyses were conducted. Because the demo version of Mplus only allows 6 variables in the data set, SPSS version 29.0.0.0.(241) (IBM) and JASP version 0.18.2 (JASP Team, University of Amsterdam) were used to test Hypotheses 1a, 1c and 1d and to conduct correlation and additional analyses. Using SPSS, the data set was transformed from wide to long format, allowing analyses on the within-person level. The additional answer option (6 = *cannot tell*) was recoded into missing value. Missing values were defined and reversed items were recoded. Reliabilities on the daily level were calculated for all scales. The scale means for each day were calculated using the mean value of the respective items. The correlations of the scales on the within-person level and on the between-person level were calculated using SPSS. The intraclass correlation coefficients for each scale were calculated with Mplus.

Test of Hypotheses

To test Hypothesis 1a, a confirmatory factor analysis was performed using JASP. Given the nested structure of the data, the items of the HR-ProW scale were group mean-centered using SPSS. For this, the group mean of each person was calculated for every item. After that, the value of the group mean was subtracted from the general mean of the item. The group mean centered values were then used to perform the confirmatory factor analysis. Since the items of the HR-ProW have a two-factor-structure (social health related proactivity at work and individual health related proactivity at work), a two-factor confirmatory analysis was conducted. Daily fluctuations of health-related proactive behavior at work (Hypothesis 1b) were tested by calculating the intraclass correlation coefficient (ICC) for the HR-ProW scale mean using Mplus. To test the convergent validity of the HR-ProW scale (Hypothesis

1c) a within-person correlation analysis between the health-related proactivity at work and the self-care of the employees was performed. Hypothesis 1d (discriminant validity of the HR-ProW scale) was tested by conducting a within-level correlation analysis between health-related proactivity at work and proactive vitality management.

To test the relationship between factors of the work environment and health-related proactivity at work (Hypothesis 2 and 3), two multilevel regressions with day-specific organizational health climate (Hypothesis 2) and day-specific health behavior of the supervisor (Hypothesis 3) as the predictors and day-specific health-related proactivity at work as the outcome variable were conducted. Hypothesis 4 concerning the relationship between individual factors and health-related proactivity at work was tested performing a multilevel regression analysis between day-specific health motivation as the predictor and day-specific health-related proactivity at work as the dependent variable.

To test, if day-specific health motivation mediates the relationship between day-specific organizational health climate and health behavior of the supervisor (Hypotheses 5a and 5b), the indirect effect on the within level was estimated using Mplus. For additional analyses, the correlation of the scales with demographic variables was performed.

Results

In Table 2 the results of the Level 1 (within-person level) correlation analysis, the intraclass correlation coefficients, and the descriptive information for all variables are presented. Moreover, the correlations of the scales with demographic and control variables are presented.

Test of Hypotheses

Hypothesis 1a, indicating that the HR-ProW scale demonstrates an adequate fit in the longitudinal sample, was tested by performing a two-factor confirmatory analysis. The two-factor model of the HR-ProW scale with four items loading on individual health-related proactivity at work and seven items loading on social health-related proactivity at work demonstrated the best goodness-of-fit values compared to the three-factor model and the one-factor model ($\chi^2 = 139.03$, $df = 43$, $CFI = .94$, $TLI = .93$, $RMSEA = .07$, $SRMR = .04$, $p < .001$). The HR-ProW scale could be validated in the longitudinal sample, therefore Hypothesis 1a was supported. The results of the confirmatory factor analysis are presented in Table 1.

Hypothesis 1b, specifying that health-related proactivity is subject to daily fluctuations, was tested by calculating the intraclass coefficient (ICC). The ICC for health-related proactivity at work was .67. Thus, health-related proactivity at work showed a within-person variance of 33%. Therefore, Hypothesis 1b was supported.

Hypothesis 1c, indicating that day-specific health-related proactivity at work and day-specific self-care of the employees show a at least medium correlation, was tested by calculating the Pearson correlation coefficient between day-specific health-related proactivity and self-care of the employees. The analysis showed a significant correlation on the within level ($r = .52, p = .001$). Consequently, Hypothesis 1c was confirmed.

To test the discriminant validity of the HR-ProW scale, as proposed by Hypothesis 1d, the Pearson correlation coefficient between day-specific health-related proactivity at work and day-specific proactive vitality management was calculated. The analysis showed a significant correlation on the within level ($r = .44, p < .001$). Thus, Hypothesis 1d was rejected.

Hypothesis 2, proposing an increase in day-specific health-related proactivity at work of the employees when the day-specific organizational health climate is perceived as beneficial to their own health, was tested by performing a multilevel regression between organizational health climate as the predictor and health-related proactivity at work as the dependent variable. The regression analysis showed a significant Level-1 (within-person) effect of organizational health climate on health-related proactivity at work ($Estimate = .10, SE = 0.04, t = 2.36, p = 0.02$). Therefore, Hypothesis 2 was supported. The results of the multilevel regression analyses are presented in Table 3.

The relationship between day-specific health-related proactivity at work and day-specific health-promoting self-care behavior of the supervisor, as postulated in Hypothesis 3, was tested by conducting a multilevel regression analysis between health behavior of the supervisor as the predictor and health-related proactivity at work as the dependent variable. The regression analysis showed no significant Level-1 effect of day-specific health behavior of the supervisor on day-specific health-related proactivity at work ($Estimate = .08, SE = .07, t = 1.18, p = .24$). Thus, Hypothesis 3 was rejected.

To test Hypothesis 4, proposing that on days when employees feel more health motivation, they would also show more health-related proactivity at work, a multilevel regression analysis between day-specific health motivation as the predictor variable and day-specific health-related proactivity at work as the dependent variable was performed. The analysis did not demonstrate a significant Level-1 effect of health motivation on health-related proactivity at work ($Estimate = .03, SE = .06, t = .46, p = .65$). Therefore, Hypothesis 4 was rejected.

Hypothesis 5a, proposing that day-specific health motivation mediates the relationship between day-specific organizational health climate and day-specific health-related proactivity at work, as postulated in Hypothesis 5a, was tested by calculating the Level 1 indirect effect

of day-specific health motivation on the effect between organizational health climate and health-related proactivity at work. The analysis demonstrated no significant indirect effect ($Estimate = .00$, $SE = .01$, $t = .16$, $p = .87$). Thus, Hypothesis 5a was rejected. However, the Level-1 direct effect of organizational health climate on health motivation showed to be significant ($Estimate = .20$, $SE = .07$, $t = 2.80$, $p = .01$), indicating a positive relationship. To test Hypothesis 5b, postulating that day-specific health motivation mediates the relationship between day-specific health-behavior of the supervisor and day-specific health-related

Table 1

Results of the Confirmatory Factor Analyses

Model	χ^2	<i>df</i>	CFI	TLI	RMSAE	SRMR
Model 1: Two factor model	139.03	43	.94	.93	.07	.04
Model 2: Three factor model	158.05	41	.93	.91	.08	.04
Model 3: One factor model	161.07	44	.93	.91	.08	.04

Note: Model 1: Individual health-related proactivity at work, social health-related proactivity at work. Model 2: Health-related taking charge, health-related voice, health-related problem prevention. Model 3: Health-related proactivity at work.

proactivity at work, the Level-1 indirect effect of health motivation on the effect between health behavior of the supervisor and health-related proactivity at work was calculated. The analysis showed no significant indirect effect ($Estimate = -.00$, $SE = .02$, $t = -.11$, $p = .91$). Therefore, Hypothesis 5b was rejected. Nevertheless, the Level-1 direct effect of health-behavior of the supervisor on health motivation was significant ($Estimate = .20$, $SE = .06$, $t = 3.45$, $p = .00$), indicating, that health behavior of the supervisor has a positive effect on health motivation. The results of the mediation analyses are presented in Table 4.

Discussion

The present study explored health-related proactivity in the workplace with the goal of exceeding traditional health interventions implemented by organizations that are passively consumed by employees. Instead, the study aimed to discover new ways in which employees can actively promote their own health and the overall workplace health.

The construct of health-related proactivity at work showed variance on the within-person level and the HR-ProW scale was validated on a daily level, indicating its suitability

Table 2

Means, Standard Deviations, Intraclass Correlations, and Correlations of Variables

Variable	M	SD	ICC	1	2	3	4	5	6
<i>Within-person variables</i>									
1. Health related Proactivity at work	1.92	1.02	.67		.52***	.44***	.31***	.08	.27***
2. Self-care of the employees	3.20	.82	.61	.52***		.42***	.33***	-.07	.35***
3. Proactive vitality management	3.31	.95	.45	.44***	.42***		.24***	.19***	.29***
4. Organizational health climate	2.11	1.11	.60	.31***	.33***	.24***		.33***	.16***
5. Health behavior of the supervisor	2.87	1.01	.46	.08	.07	.19***	.33***		.12
6. Health motivation	2.76	.70	.44	.27***	.35***	.29***	.16***	.12	
<i>Between-person variables</i>									
7. Age	38.61	13.55		.26*	.17	.17	.24*	-.08	.08
8. Gender ^a	.54	.50		.10	.18	.15	.16	.10	-.05
12. Working hours by contract	32.79	8.46		-.14	-.19	-.25*	.15	-.10	-.12
13. Working hours	37.78	8.81		-.01	-.15	-.00	.19	.11	.02

Note: Correlations on level 1 (within person) are presented above the diagonal, correlations on Level 2 (between person) are depicted below the diagonal. ICC = Intraclass correlation coefficient (percentage of variance between person (variance between persons/(variance between persons + variance within persons)). * $p < .05$, ** $p < .01$, *** $p < .001$.

a = Dummy coded, 1 = female, 0 = male

Table 3

Multilevel Regression Models Predicting Health-Related Proactivity at Work

Variable	Day-specific health related proactivity at work			Modell 1			Modell 2			Modell 3		
	Est	SE	t	Est	SE	t	Est	SE	t	Est	SE	t
Intercept	.33	.10	5.93***	1.11	.27	4.09	1.38	.56	2.48	1.38	.61	-1.84
Level 1 predictors												
Day-specific organizational health climate				.10	.04	2.36*						
Day-specific health behavior of the supervisor							.08	.07	1.18			
Day-specific health motivation							.41	.04	9.20	.03	.06	.46
Level 1 intercept variance				.33	.02	13.82				.34	.03	13.07
Level 2 intercept variance				.57	.12	5.36			4.60	.51	.10	5.02

Note: Est = estimate (unstandardized), N_{Model1} = 456, N_{Model2} = 224, N_{Model3} = 446. *p < .05., **p < .001

Table 4

Total, Direct, and Indirect Effect on the Within-Person Level

	Health motivation			Health-related proactivity at work		
	Path	Est	SE	Est	SE	t
Total effects						
Organizational health climate	c			.10	.04	2.37
Health behavior of the supervisor	c			.08	.07	1.26
Direct effects						
Organizational health climate	a	.20**	.07			
Organizational health climate	c'			.10*	.04	2.33
Health behavior of the supervisor	a	.20***	.06			
Health behavior of the supervisor	c'			.09	.07	1.24
Health motivation	b			.01	.05	2.35
Indirect effects						
Organizational health climate via health motivation	a × b			.00	.01	.16
Health behavior of the supervisor via health motivation	a × b			-.00	.02	-.11

Note: Est = estimate (unstandardized), N_{Organizational health climate} = 485, N_{Health behavior of the supervisor} = 224, N_{Health motivation} = 446. *p < .05, **p < .01, ***p < .001.

for longitudinal studies. The results of the present study highlight the relevance of individual and social proactive behaviors in terms of the promotion of worksite health.

Contrary to the initial assumption, the divergent validity of health-related proactivity at work could not be confirmed, as it showed a significant correlation with proactive vitality management. Proactive vitality management implies using proactive behavior to energize physical and mental energy to enhance their working abilities (Op den Kamp et al., 2018). On the contrary, health-related proactivity at work focuses on improving individual or organizational health without directly considering work outcomes. However, the convergent validity of health-related proactivity at work was confirmed, showing a significant correlation with employee self-care. Both constructs involve internal motivation to promote health, the consideration of potential challenges, and the readiness to implement changes to promote health (Franke et al., 2014). Further research should concentrate on linking and differentiating health-related proactivity at work from related constructs that measure proactivity in other contexts.

In line with previous research on organizational health climate and health-relevant behaviors (Bronkhorst et al., 2014; Sonnentag & Venz, 2017), I found a positive relationship between day-specific organizational health climate and day-specific health-related proactivity. These results highlight the importance of fostering a health-promoting organizational climate to foster health-improving proactive behaviors among employees. In future research, it would be interesting to investigate whether an organizational health climate that supports health-related proactivity at work, leads to positive health outcomes for employees. Singh and Jha (2022) identified a positive relationship between organizational health climate and employee well-being. Additionally, Sliter (2013) discovered that a supportive organizational health climate can positively influence employee weight maintenance. Given the findings of the present study, it would be interesting to explore whether health-related proactivity may function as a mediator between the organizational health climate and the observed employee health outcomes.

In contrast to prior research suggesting a positive relationship between a leader's role modeling of health behavior and favorable health practices (e.g., Kranabetter & Niessen, 2017), the present study did not identify a significant association between health behavior of the supervisor and health-related proactivity at work. However, a direct positive effect of the supervisor's health behavior on employee health motivation was observed. These findings suggest that supervisors can serve as role models for health motivation by prioritizing their own health, yet this motivation does not translate into proactive health behavior of the

employees. Parker et al. (2010) argue that various factors can influence whether proactive motivation is turned into actual proactive behavior, including distal factors such as personality traits and personal skills, as well as organizational factors such as work design and job control. Further research is needed to identify factors that facilitate or inhibit the translation of health motivation into health-related proactive behavior. The present study focused on employees' perceptions of their leader's health-related self-care. For a comprehensive understanding of how health-oriented leadership practices interact with health-related proactive behaviors, future research should also examine the relationship between the employees' perception of leader's concern for their employees' health (staff care) and health-related proactivity at work.

The findings of the present study indicate that certain conditions must be met for health motivation to translate into health-related proactivity at work. A positive direct effect of day-specific health behavior of the supervisor and day-specific organizational health-climate was found, yet no indirect or direct effect of health-motivation on health-related proactivity at work was observed. For example, in a study by Burris et al. (2008) psychological detachment was found to mediate the relationship between the perception of the supervisor and proactive voice behavior. Fritz and Sonnentag (2009) observed that job stressors such as time pressure could also increase the probability of showing proactive taking charge behavior. Future research should focus on identifying certain conditions under which environmental factors and health motivation can lead to health-related proactivity at work.

Limitations and Future Research

The present study showed some notable results regarding the relationship between organizational health climate and health-related proactivity at work, as well as the relationship between organizational factors and health motivation. Moreover, the HR-ProW scale could be validated for daily assessment. Nevertheless, the present study demonstrates a few limitations that must be discussed.

The first limitation concerns the sample used for data collection. The sample was recruited using personal contacts, social media advertising, and the snowball sampling method. Consequently, the sample fails to ensure representativeness of the broader population, thereby limiting the generalizability of the results. Moreover, the intended sample size of 150 participants could not be attained, as the final sample only consisted of 74 participants. Furthermore, the sample showed a bias towards participants with a university degree or advanced technical college degree (79.1%). These factors introduce potential distortions to the results and constrain their applicability to a more diverse population. Future research in this

field should aim to recruit samples that show a more balanced distribution of demographic criteria to facilitate more generalizable assumptions concerning the construct of health-related proactivity at work and its interaction with individual and environmental factors.

It should also be noted that the data is based on subjective assessments of the participants. The responses might be distorted by personal or organizational factors unrelated to health, like day-specific mood or events occurring during the day. Even though the participants were instructed to complete the daily questionnaire immediately after finishing their workday and restricting the access to the questionnaire 11:00 a.m. to 08:00 p.m., it cannot be ensured that the responds were not affected by events happening between the end of the workday and the completion of the questionnaire. For example, a participant could have ended their workday at 12:00 p.m. but complete the questionnaire at 05:00 p.m., potentially distorting the recollection of their workday because of interfering events in the afternoon. Future research should apply more objective methods to assess health-related proactivity at work, that are less susceptible object to event interference and distortion. For instance, two independent observers, who assess the proactive health behavior of the employees over the day, could be deployed.

Another limitation of the study concerns the relatively small Cronbach's alpha of the health-oriented leadership scale (Pundt & Felfe, 2017) and the health motivation scale (Moorman, 1990) on the within-person level. Specifically, the subscale self-care of the leader demonstrated a Cronbach's alpha of .67 and the health motivation scale exhibited a Cronbach's alpha of .43 on the daily level. This restricts the interpretability of the findings regarding the relationship between health-related proactivity at work and health motivation and health behavior of the supervisor. It requires further assessment to evaluate the reliability of the scales on a daily level. If necessary, other scales should be explored for a daily assessment of health motivation and health behavior of the supervisor.

Additionally, the daily assessment of health-behavior of the supervisor showed a relatively high proportion of missing values. Specifically, the self-care of the supervisor scale showed a total of only 224 responses, whereas other scales, such as health-related proactivity at work showed a total response number of 457. Participants noted that the instructions lacked clarification of who they should consider as their supervisor. Consequently, many participants assessed the behavior of their overall supervisor, such as the CEO of the company, rather than their direct supervisor, such as a team leader. This increased the rate of “cannot tell” responses as participants typically have less interaction with the overall leader compared to their direct supervisor. This might constrain the interpretability of the relationship analysis between

health-related proactivity at work and health behavior of the supervisor. In future assessments, it is important to define clearer guidelines regarding who participants should consider as their supervisor.

Practical Implications

The identification of concrete facilitators of proactive behavior allows organizations to effectively promote health-related proactivity by integrating these facilitators into the organizational structures. Employing the HR-ProW scale could enable organizations to enhance their employee health and well-being, and consequently increase organizational outcomes like productivity, creativity, or innovation (Gerald et al., 2010).

The positive relationship between organizational health climate and health-related proactivity at work emphasizes the importance for organizations to focus on improving proactive health behavior. Practical actions for enhancing health-related proactivity could include establishing an organizational climate, that is open to change and values employees' ideas (Zweber et al., 2015), such as providing space where employees can suggest and talk about their ideas. Moreover, organizations should provide constructive feedback as well as the opportunity for coaching and mentoring (Ozyilmaz & Karaeminogullari, 2018).

As the results suggest, organizational health climate and health behavior of the employer can positively influence employees' health motivation. As demonstrated in prior research (Sonntag & Venz, 2017; Sliter, 2013), health motivation can lead to various health promoting behaviors. Therefore, organizations and supervisors should take steps to activate the employee's health promotion goals, leading to a concrete set of health enhancing actions. Health motivation can be fostered by communicating the importance of health, defining health promotion as a common goal, and demonstrating to the employees that their health and well-being are valued (Zweber et al., 2016).

References

- Aldana, S. G. (2001). Financial impact of health promotion programs: A comprehensive review of the literature. *American Journal of Health Promotion, 15*(5), 296–320. <https://doi.org/10.4278/0890-1171-15.5.296>
- Axtell, C. M., Holman, D. J., Unsworth, K. L., Wall, T. D., Waterson, P. E., & Harrington, E. (2000). Shopfloor innovation: Facilitating the suggestion and implementation of ideas. *Journal of Occupational and Organizational Psychology, 73*(3), 265–285. <https://doi.org/10.1348/096317900167029>
- Baer, M., & Frese, M. (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior, 24*(1), 45–68. <https://doi.org/10.1002/job.179>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.
- Basinska-Zych, A., & Springer, A. (2021). Organizational and individual outcomes of health promotion strategies - a review of empirical research. *International Journal of Environmental Research and Public Health, 18*(2), 383. <https://doi.org/10.3390/ijerph18020383>
- Baumeister, R. F., & Vohs, K. D. (2007). Self-regulation, ego depletion, and motivation. *Social and Personality Psychology Compass, 1*(1), 115–128. <https://doi.org/10.1111/j.1751-9004.2007.00001.x>.
- Blau, P. M. (1964). *Exchange and power in social life*. Wiley.
- Bronkhorst, B., Tummers, L., Steijn, B., & Vijverberg, D. (2014). Organizational climate and employee mental health outcomes: A systematic review of studies in health care organizations. *Health Care Management Review, 40*(3), 254–271. <https://doi.org/10.1097/HMR.0000000000000026>
- Burriss, E. R., Detert, J. R., & Chiaburu, D. S. (2008). Quitting before leaving: The mediating effects of psychological attachment and detachment on voice. *Journal of Applied Psychology, 93*(4), 912–922. <https://doi.org/10.1037/0021-9010.93.4.912>
- Cangiano, F., & Parker, S. K. (2015). Proactivity for mental health and well-being. In Clarke, S., Probst, T. M., Guldenmund, F., & Passmore, J. (Eds.) *The Wiley Blackwell Handbook of the Psychology of Occupational Safety and Workplace Health* (pp. 228–250). Chichester, UK: John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118979013.ch11>

- Cangiano, F., Parker, S. K., & Yeo, G. B. (2019). Does daily proactivity affect well-being? The moderating role of punitive supervision. *Journal of Organizational Behavior*, *40*(1), 59–72. <https://doi.org/10.1002/job.2321>
- Chan, D. (2006). Interactive effects of situational judgment effectiveness and proactive personality on work perceptions and work outcomes. *Journal of Applied Psychology*, *91*(2), 475–481. <https://doi.org/10.1037/0021-9010.91.2.475>
- Csikszentmihalyi, M., & Larson, R. (1992). Validity and reliability of the experience sampling method. In M. W. deVries (Ed.), *The experience of psychopathology: Investigating mental disorders in their natural settings* (pp. 43–57). Cambridge University Press. <https://doi.org/10.1017/CBO9780511663246.006>
- DeShon, R. P., & Gillespie, J. Z. (2005). A motivated action theory account of goal orientation. *Journal of Applied Psychology*, *90*(6), 1096–1127. <http://dx.doi.org/10.1037/0021-9010.90.6.1096>
- Egan, M., Bamba, C., Petticrew, M., & Whitehead, M. (2009). Reviewing evidence on complex social interventions: Appraising implementation in systemic reviews of the health effects of organisational-level workplace interventions. *Journal of Epidemiology & Community Health*, *63*(1), 4–11. <https://doi.org/10.1136/jech.2007.071233>.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*(3), 500–507. <https://doi.org/10.1037/0021-9010.71.3.500>
- Eurostat. (2023, September 9). How much time do Europeans usually work? [https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20230920-1#:~:text=In%202022%2C%20the%20usual%20working,and%20Bulgaria%20\(40.2%20both\)](https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20230920-1#:~:text=In%202022%2C%20the%20usual%20working,and%20Bulgaria%20(40.2%20both).).
- Fay, D., & Sonnentag, S. (2012). Within-person fluctuations of proactive behavior: How affect and experienced competence regulate work behavior. *Human Performance*, *25*(1), 72–93. <https://doi.org/10.1080/08959285.2011.631647>
- Franke, F., Felfe, J., & Pundt, A. (2014). The impact of health-oriented leadership on follower health: Development and test of a new instrument measuring health-promoting leadership. *Zeitschrift Für Personalforschung*, *28*(1/2), 139–161. <https://doi.org/10.1177/239700221402800108>

- Fritz, C., & Sonnentag, S. (2009). Antecedents of day-level proactive behavior: A look at job stressors and positive affect during the workday. *Journal of Management*, *35*(1), 94–111. <https://doi.org/10.1177/0149206307308911>
- Glisson, C. (2007). Assessing and changing organizational culture and climate for effective services. *Research on Social Work Practice*, *17*(6), 736–747. <https://doi.org/10.1177/1049731507301659>
- Grant, A., M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, *28*, 3–34. <https://doi.org/10.1016/j.riob.2008.04.002>
- Groeneveld, I. F., Proper, K. I., van der Beek, A. J., Hildebrandt, V. H., & van Mechelen, W. (2009). Factors associated with non-participation and drop-out in a lifestyle intervention for workers with an elevated risk of cardiovascular disease. *The International Journal of Behavioral Nutrition and Physical Activity*, *6*(1), 80–80. <https://doi.org/10.1186/1479-5868-6-80>
- Harvey, S. B., Joyce, S., Tan, L., Johnson, A., Nguyen, H., Modini, M., & Growth, M. (2014). Developing a mentally healthy workplace: A review of the literature. *National Mental Health Commission (Australia), Mentally Healthy Workplace Alliance*.
- Hymel, P. A., Loeppke, R. R., Baase, C. M., Burton, W. N., Hartenbaum, N. P., Hudson, T. W., McLellan, R. K., Mueller, K. L., Roberts, M. A., Yarborough, C. M., Konicki, D. L., & Larson, P. W. (2011). Workplace health protection and promotion: a new pathway for a healthier and safer workforce. *Journal of occupational and environmental medicine*, *53*(6), 695–702. <https://doi.org/10.1097/JOM.0b013e31822005d0>
- IBM SPSS Statistics for Windows (29.0.0.0.(241)) [Computer software]. (2022). IBM Corp.
- Isaksen, S. G., & Lauer, K. J., (1999). Relationship between cognitive style and individual psychological climate: Reflections on a previous study. *Studia Psychologica*, *41*(3), 177.
- JASP (0.18.2) [Computer software]. (2023). JASP Team, University of Amsterdam.
- Joo, B.K., Bennett, R., & Georgia Southwestern State University. (2018). The influence of proactivity on creative behavior, organizational commitment, and job performance: Evidence from a Korean multinational. *Journal of International and Interdisciplinary Business Research*, *5*(1). <https://doi.org/10.58809/GWXR1454>
- Kilic, E., & Gök, M. Ş. (2022). Employee proactivity and proactive initiatives towards creativity: exploring the roles of job crafting and initiative climate. *International Journal of Organizational Analysis (2005)*, *31*(6), 2492–2506. <https://doi.org/10.1108/IJOA-01-2022-3100>.

- Klebe, L., Felfe, J., & Klug, K. (2021). Healthy leadership in turbulent times: The effectiveness of health-oriented leadership in crisis. *British Journal of Management*, 32(4), 1203–1218. <https://doi.org/10.1111/1467-8551.12498>
- Kranabetter, C., & Niessen, C. (2017). Managers as role models for health: Moderators of the relationship of transformational leadership with employee exhaustion and cynicism. *Journal of Occupational Health Psychology*, 22(4), 492–502. <https://doi.org/10.1037/ocp0000044>
- Malik, S. H., Blake, H., & Suggs, L. S. (2014). A systematic review of workplace health promotion interventions for increasing physical activity. *British Journal of Health Psychology*, 19(1), 149–180. <https://doi.org/10.1111/bjhp.12052>
- Moorman, C. (1990). The effects of stimulus and consumer characteristics on the utilization of nutrition information. *The Journal of Consumer Research*, 17(3), 362–374. <https://doi.org/10.1086/208563>
- Moorman, C., & Matulich, E. (1993). A model of consumers' preventive health behaviors: The role of health motivation and health ability. *The Journal of Consumer Research*, 20(2), 208–228. <https://doi.org/10.1086/209344>
- Morrison, E. W., & Phelps, C. (1999). TAKING CHARGE AT WORK: EXTRAROLE EFFORTS TO INITIATE WORKPLACE CHANGE. *Academy of Management Journal*, 42, 403–419. <https://doi.org/10.2307/257011>.
- Muthén, L. K., & Muthén, B. O. (2023). *MPLUS* (Demo version 8.10) [Computer software]. Muthén & Muthén.
- Nielsen, K., Nielsen, M. B., Ogbonnaya, C., Käsälä, M., Saari, E., & Isaksson, K. (2017). Workplace resources to improve both employee well-being and performance: A systematic review and meta-analysis. *Work and Stress*, 31(2), 101–120. <https://doi.org/10.1080/02678373.2017.1304463>
- Nielsen, K., Randall, R., Holten, A. L., & González, E. R. (2010). Conducting organizational-level occupational health interventions: What works? *Work and Stress*, 24(3), 234–259. <https://doi.org/10.1080/02678373.2010.515393>
- Nöhammer, E., Schusterschitz, C. & Stummer, H. (2013). Employee perceived effects of workplace health promotion. *International Journal of Workplace Health Management*, 6(1), 38–53. <https://doi.org/10.1108/17538351311312312>
- O'Neal, P. W. (2007). *Motivation of health behavior*. Nova Science Publishers, Inc.
- Op den Kamp, E. M., Tims, M., Bakker, A. B., & Demerouti, E. (2018). Proactive vitality management in the work context: Development and validation of a new instrument.

- European Journal of Work and Organizational Psychology*, 27(4), 493–505.
<https://doi.org/10.1080/1359432X.2018.1483915>
- Ouyang, K., Cheng, B. H., Lam, W., & Parker, S. K. (2019). Enjoy your evening, be proactive tomorrow: How off-job experiences shape daily proactivity. *Journal of Applied Psychology*, 104(8), 1003–1019. <https://doi.org/10.1037/apl0000391>
- Ozyilmaz, E. B., & Karaeminogullari, A. (2018). Trust in organization as a moderator of the relationship between self-efficacy and workplace outcomes: A social cognitive theory-based examination. *Journal of Occupational and Organizational Psychology*, 91(1), 181–204. <https://doi.org/10.1111/joop.12189>
- Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management*, 36(3), 633–662.
<https://doi.org/10.1177/0149206308321554>
- Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management*, 36(4), 827–856.
<https://doi.org/10.1177/0149206310363732>
- Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, 91(3), 636–652. <https://doi.org/10.1037/0021-9010.91.3.636>
- Pundt, F., & Felfe, J. (2017). *Health-oriented Leadership (HoL) - Instrument zur Erfassung gesundheitsförderlicher Führung*.
- Rongen, A., Robroek, S. J. W., Van Lenthe, F. J., & Burdorf, A. (2013). Workplace health promotion: A meta-analysis of effectiveness. *American Journal of Preventive Medicine*, 44(4), 406–415. <https://doi.org/10.1016/j.amepre.2012.12.007>
- Rongen, A., Robroek, S. J., Van Ginkel, W., Lindeboom, D., Altink, B., & Burdorf, A. (2014). Barriers and facilitators for participation in health promotion programs among employees: A six-month follow-up study. *BMC Public Health*, 14(1), 573–573.
<https://doi.org/10.1186/1471-2458-14-573>
- Ross, B. M., & Barnes, D. M. (2018). Self-determination theory with application to employee health settings. *AAOHN Journal*, 66(8), 367–372.
<https://doi.org/10.1177/2165079917749863>
- Ruspini, E. (2002). *Introduction to longitudinal research*. Routledge.
- Schmitt, A., Den Hartog, D. N., & Belschak, F. D. (2016). Transformational leadership and proactive work behaviour: A moderated mediation model including work engagement

- and job strain. *Journal of Occupational and Organizational Psychology*, 89(3), 588–610. <https://doi.org/10.1111/joop.12143>
- Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, 54(4), 845–874. <https://doi.org/10.1111/j.1744-6570.2001.tb00234.x>
- Shain, M., & Kramer, D. M. (2004). Health promotion in the workplace: framing the concept; reviewing the evidence. *Occupational and Environmental*, 61(7), 643–648. <https://doi.org/10.1136/oem.2004.013193>
- Singh, A., & Jha, S. (2022). Relationship between employee well-being and organizational health: symbiotic or independent? *Industrial and Commercial Training*, 54(2), 231–249. <https://doi.org/10.1108/ICT-03-2021-0018>
- Sliter, K. A. (2013). Development and validation of a measure of workplace climate for healthy weight maintenance. *Journal of Occupational Health Psychology*, 18(3), 350–362. <https://doi.org/10.1037/a0033132>
- Sonnentag S., Pundt, A., & Venz, L. (2017). Distal and proximal predictors of snacking at work: a daily-survey study. *Journal of Applied Psychology*, 102(2), 151–162. <https://doi.org/10.1037/apl0000162>
- Sonnentag, S., & Pundt., A. (2015). Organisational health behavior climate: Organisations can encourage healthy eating and physical exercise. *Applied Psychology*, 65 (2), 259-286. <https://doi.org/10.1111/apps.12059>
- Statistics Austria. (2020). Arbeitsunfälle, arbeitsbezogene Gesundheitsprobleme. <https://www.statistik.at/statistiken/arbeitsmarkt/arbeit-und-gesundheit/arbeitsunfaelle-arbeitsbezogene-gesundheitsprobleme>
- Statistics Austria. (2022a). Erwebstätigenquotient (15-64 Jahre). <https://www.statistik.at/statistiken/arbeitsmarkt/erwerbstaetigkeit/erwerbstaetigemerkmale>
- Statistics Austria. (2022b). Krankenstände. <https://www.statistik.at/statistiken/arbeitsmarkt/arbeit-und-gesundheit/krankenstaende>
- Tyupa, S. (2011). A theoretical framework for back-translation as a quality assessment tool. *New Voices in Translation Studies*, 7(1), 35-46. <https://doi.org/10.14456/nvts.2011.4>
- Unsworth, K. L., & Parker, S. K. (2003). Proactivity and innovation: Promoting a new workforce for the new workplace. *The New Workplace*, 175–196. <https://doi.org/10.1002/9780470713365.ch10>

- Wang, A.-C., Kim, T.-Y., Jiang, Y., & Tang, G. (2022). Employee proactive goal regulation and job performance: The role modeling and interacting effects of leader proactive goal regulation. *Human Relations*, 75(2), 373–400. <https://doi.org/10.1177/0018726720984838>
- Zahoor, A. (2020). Employee proactivity, work engagement, job resources and service recovery performance: a study of structural linkages. *Journal of Contemporary Marketing Science*, 3(2), 153–168. <https://doi.org/10.1108/JCMARS-02-2019-0016>
- Zweber, Z. M., Henning, R. A., & Magley, V. J. (2016). A practical scale for multi-faceted organizational health climate assessment. *Journal of Occupational Health Psychology*, 21(2), 250–259. <https://doi.org/10.1037/a0039895>
- Zweber, Z. M., Henning, R. A., Magley, V. J., & Faghri, P. (2015). Considering the differential impact of three facets of organizational health climate on employees' well-being. *TheScientificWorld*, 2015, 1–10. <https://doi.org/10.1155/2015/407232>