

A Work Project, presented as part of the requirements for the Award of a Master's degree in
Management from Nova School of Business and Economics

NAVIGATING THE FUTURE OF LEADERSHIP:

**SELF-LEADERSHIP AT THE CORE: EXPLORING ITS INFLUENCE ON WORK
ENGAGEMENT THROUGH THE LENSES OF MEANING OF WORK AND
PSYCHOLOGICAL EMPOWERMENT**

JIL KRISTIN RUCH

Date of submission: 15th of December 2023

Supervisor: Prof. Filipa Castanheira

Abstract Collective Project: Navigating the Future of Leadership

Exploring the evolution of leadership in today's world, this thesis employed a mixed-methods approach to investigate the evolving dynamics of leadership in a world reshaped by the pandemic. The first study examines the evolution of leadership roles, focusing on the shift from traditional styles to a more empathetic and adaptive approach. The work project then explores self-leadership and the impact of mindfulness on work engagement and burnout. Finally, the thesis highlights key findings on psychological empowerment, boundary control, and work-life dynamics, and underscores the need for leaders to foster a resilient, purpose-driven, inclusive, and thriving organizational culture.

Key Words: leadership, post-pandemic, remote work, well-being, leadership demands, job resources

Abstract Sub-Project 2: Self-leadership at the Core

Previous research confirms a positive relationship between self-leadership and work engagement, but the underlying mechanisms and applicability in post-pandemic times remain unexplored. Building on the Conservation of Resources theory, Sub-Project 2 employs a longitudinal quantitative approach to investigate the mediating effects of meaning of work and psychological empowerment on the relationship between self-leadership and work engagement. Results show that self-leadership positively predicts work engagement and that this relationship is fully mediated by meaning of work and psychological empowerment. The results offer valuable insights for leaders and organizations while also highlighting practical implications for individuals, facilitating overall well-being and organizational success.

Keywords: self-leadership, meaning of work, psychological empowerment, work engagement, COR, job resources, longitudinal study

Acknowledgments

We extend our deepest gratitude to Prof. Filipa Castanheira for her support and guidance throughout the course of this work project. Her expertise was instrumental in helping us find our research topic and navigate the complexities of this project. We would also like to express our sincere thanks to all survey participants who generously contributed their time and insights. Their participation was essential to the success of this research, in making a significant contribution to the depth and quality of the findings.

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

Table of Content

1. Introduction	5
1.1 Remote Work	6
1.2 Demographic Changes	7
1.3 New demand of leadership	9
2. Sub-Project 2: Self-leadership at the Core	11
2.1 Introduction	11
2.2 Theoretical Background	13
2.2.1 Self-Leadership and Work Engagement	13
2.2.2 Self-Leadership, Meaning of Work and Work Engagement	15
2.2.3 Self-Leadership, Empowerment and Work Engagement	17
2.3 Methodology	19
2.3.1 Procedure and sample.....	19
2.3.2 Measuring instruments	20
2.3.3 Control variables	22
2.4 Results	22
2.4.1 Descriptive Statistics	23
2.4.2 Hypotheses tests	23
2.5 Discussion	25
3. Discussion.....	27
3.1 Theoretical Implications.....	27
3.2 Practical Implications for Leaders.....	29
3.3 Limitations & Future Research	32
4. Conclusion.....	35
5. References	36

Abbreviations

COR Theory	Conservation of Resources Theory
e.g.	Exempli gratia; for example
et al.	Et alia; and others
H	Hypothesis
i.e.	Id est; that is
JD-R Model	Job Demands-Resources Model
LLCI	Lower Limit Confidence Interval
ULCI	Upper Limit Confidence Interval

List of Figures

Figure 1 Factors that are important to employees versus what employers think is important (De Smet et al. 2021).....	9
Figure 2 Mediation Model Study 2	12

List of Tables

Table 1 Descriptive statistics and bivariate correlations Study 2	23
Table 2 Regression results for Mediation Model Study 2	24

1. Introduction

In today's work environment, marked by rapid technological advancements and evolving social dynamics, the nature of leadership is undergoing significant transformation. This shift is particularly evident in the context of remote work, a trend accelerated by global events such as the COVID-19 pandemic (Microsoft 2022). The rise of remote work, coupled with demographic changes in the workforce, presents unique challenges and opportunities for leadership strategies. With our study, we aim to re-evaluate traditional leadership models, which are largely built around physical office environments and babyboomer-attitudes and examine how leadership can be adapted to meet the needs of a young, diverse, and digitally connected workforce.

The group project is divided into a collective part and three individual parts. The collective part addresses the topic of remote working as the main driver of change and explores generational change in the context of the changing work environment. Building on this foundation, the study branches into three individual parts. Each of these sections delves deeper into specific aspects of leadership in the context of the changing work dynamics brought about by remote work and changing attitudes and values. The first study examines the challenges leaders face in today's work environment and the essential skills required for effective leadership. The second study investigates the concept of self-leadership and its effectiveness as a tool for creating work engagement, meaning of work, and a sense of empowerment. The third study explores the relevance and application of mindfulness as a leadership strategy. It examines how mindfulness can aid leaders in navigating the complexities of today's work environment and can help foster positive work outcomes.

1.1 Remote Work

The first driver of change, remote work, is defined as “a type of flexible working arrangement that allows an employee to work from remote locations outside of corporate offices” (Gartner n.d.). While remote work has been an established concept in companies since the 1970s it has gained significantly more importance in the late 1990s with the rise of the internet and home computers (Tavares 2017). More recently, due to the COVID-19 pandemic and corresponding country-wide lockdowns, working from home has experienced an extreme boost in attractiveness and forms a major aspect of today’s working world. While in pre-pandemic times only 11% of employees took advantage of remote work settings, in 2021 around 22% of employees were working from home at least some of the time (Llave et al. 2022) and in 2022 around 45% of global participants stated to work remotely (Statista 2023). This is mainly possible because digitalization has enabled companies to redesign their business processes, resulting in new jobs and new business models (Microsoft 2022).

One of the biggest advantages of remote work is the flexibility and autonomy it brings regarding working hours, i.e., workers find it easier to balance home and work life (Tavares 2017). Furthermore, remote work has proven to be time efficient as commuting time is reduced to a minimum. Nowadays, remote work options are a must for companies to attract and maintain talents and remain competitive in the market (Shirmohammadi, Au, and Beigi 2022) as the concept has proven to increase job satisfaction and morale (Tavares 2017).

While most employees are embracing flexible work environments, research and experience unveil several challenges: There is a great tension between the stated productivity of workers and leaders’ confidence in their productivity. While 87% of workers argue that they are productive, only 12% of leaders are convinced that their team works productively in remote settings. Especially hybrid managers state that they struggle to trust their employees to do their best work (Microsoft 2022). Working from home blurs the lines between private and work life

and makes it harder to disconnect from work. Technostress reinforces worker's inability to disconnect, since employees are continuously reminded and distracted by notifications (e.g., e-mails or Microsoft Teams messages). This tension results in a longer number of unusual work hours of employees compared to pre-pandemic office times. Furthermore, connecting with colleagues becomes harder due to a lack of communication which causes increased feelings of isolation (Llave et al. 2022).

In summary, remote work has seen significant growth, accelerated by the COVID-19 pandemic. While it offers advantages such as flexibility and time efficiency, remote work also poses challenges related to trust, work-life boundaries, and isolation. As the workforce continues to adapt, addressing these issues becomes crucial for a successful remote work environment.

1.2 Demographic Changes

Modern organizations and leaders of tomorrow must not only maneuver through new flexible working conditions but also adapt to significant demographic changes, that can have a crucial impact on organizations. The rise of generational conflicts can be attributed to changing workforce compositions which go hand in hand with a shift in employer needs and expectations that diverge from traditional notions of leadership.

Being faced with different generations at the workplace is not a new phenomenon, yet the current rise of Generation Z, which is soon to become the most populous and diverse generation on Earth, highlights the importance of the topic (Gomez, Mawhinney, and Betts, n.d.). Generation Z stands in clear contrast to their previous generation, as their preferences, attitudes, and behaviors are radically different and have the potential to have a huge impact on workplaces (Gomez, Mawhinney, and Betts, n.d.). We define generations as an umbrella term for people born in a specific period of time, namely: 1946-1964 Boomers; 1965-1980 Generation X; 1981–1996 Millennials; 1997-2012 Generation Z. Without doubt, having a diversely aged work set-up

with multiple perspectives and approaches to the same problem can be a win for any company. To make it a win, leaders, predominantly in Generation X or the Millennial generation, must adapt to the rise of Generation Z, which brings, as any generation, new values and attitudes, needs, leader behaviors, career experiences and leadership and teamwork preferences (Lyons and Kuron 2013).

Generally, it can be observed that younger generations tend to a “work to live” mindset, as work-life balance is one of their biggest priorities (Lyons and Kuron 2013). Furthermore, younger generations tend to prefer leadership behaviors focusing on individual fulfilment more than on organizational success (Lyons and Kuron 2013). They are hyper-independent, focus strongly on themselves and are less committed to their workplace, which can explain their preference for mobile working solutions (Lyons and Kuron 2013). Whilst for older generations, thinking team- and company-oriented is a key motivation driver, younger generations want to find personal fulfillment (Manpower Group 2020). Leaders and organizations that recognize these dynamics and proactively support individuals in their pursuit of self-fulfillment and finding purpose will inherently become more appealing to them (Lyons and Kuron 2013). The younger generation often experiences tensions between work and family life, a matter often overlooked by their older counterparts, who may not even perceive this as a significant issue, as suggested by Kunreuther (2003). This dynamic effectively illustrates the high intergenerational conflict potential.

In conclusion, it is crucial to understand these nuances in order to keep inventing future leadership styles that do not lead to frustration, misunderstanding and ultimately company success failure, but rather in added value, growth and dynamic new work set-ups.

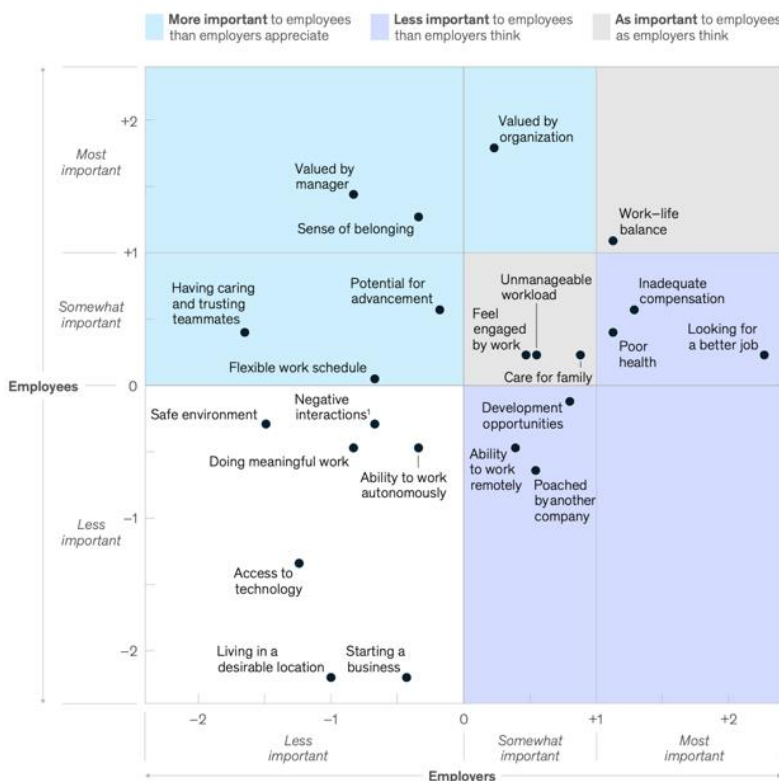
1.3 New demand of leadership

As the world changes, so do the demands and circumstances in which leaders operate. The change is significantly influenced by different drivers of change (e.g., remote work) and changes in attitudes, behaviors and values.

Many companies, in their efforts to mitigate the shifts in today's work environment, often rely on ineffective actions based on misconceptions. Instead of hastily implementing change processes based on these assumptions, it is advisable for organizations to take a moment to reconsider their strategies to avoid a mismatch of expectations between employees and employers. It is time to create a successful post-pandemic organization since this period has irrevocably changed what people expect from work. (De Smet et al. 2021).

Figure 1 provides a comprehensive overview of the mismatches between and employee expectations and employers perception.

Figure 1 Factors that are important to employees versus what employers think is important (De Smet et al. 2021).



The described development is resulting in a range of outcomes for leaders. Thus, leaders should force themselves to meet employees' expectations to keep them satisfied, motivated and in the company (Korn Ferry 2021). This involves cultivating a sense of openness and demonstrating an active engagement with change. Regarding the shift to hybrid and remote work, the key challenge for leaders is to ensure cohesion and social relationships within teams (Microsoft 2022). In many cases, work can be done even more effectively remotely, so companies need to manage their teams more closely, focusing on the capabilities that people and technology can provide.

The power shift from companies to employees is unstoppable and it is vital to see this as an opportunity, rather than a disadvantage, to unlock this new potential together as a community. Given the need for flexibility and rapid innovation, companies have started to use diverse teams with different backgrounds and ways of thinking. In fact, companies can no longer afford to be a collection of individuals. Their focus must be on harnessing the collective wisdom of teams to solve complex problems (Korn Ferry 2021). Positive business outcomes depend on positive human outcome. Hence, employees should not be treated as numbers or machines, but like humans.

In conclusion, leaders must adapt and enhance their leadership abilities in light of evolving circumstances, such as changing attitudes and the prevalence of remote work. A significant aspect of this evolution is building a workplace that fosters meaningful work and offers a viable work-life balance for employees, enhancing work engagement and satisfaction. Moreover, incorporating strategies such as mindfulness and self-leadership into their approach can profoundly transform their leadership style, aligning it with these demands.

2. Sub-Project 2: Self-leadership at the Core

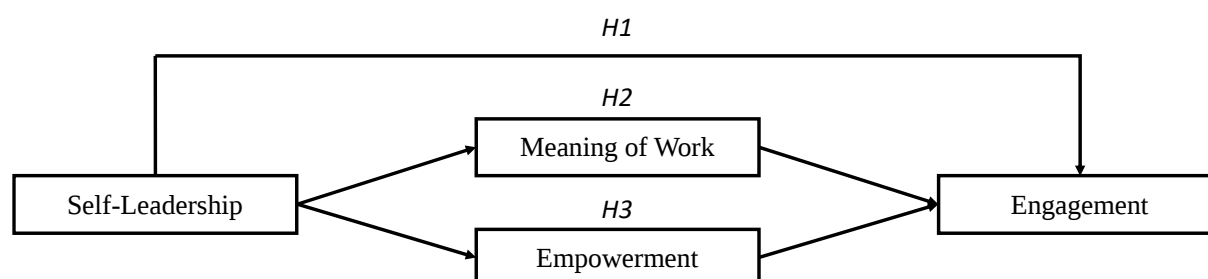
2.1 Introduction

In today's complex world, driven by technological advancements, generational change, the aftereffects of the COVID-19 pandemic, and increased instability due to ongoing conflicts and wars, the concept of self-leadership plays a crucial role in navigating modern work challenges. After the peak in uncertainty posed by the COVID-19 pandemic, most areas of life have returned to normal. Contrary, work environments are still marked by a lot of change, as i.e., remote work makes up a big part of today's workplace (Statista 2023) and employees need to adapt to the changing circumstances.

In this context, this study aims to analyze self-leadership processes as a resource to succeed in complex work environments. Self-leadership is defined as a self-influence process aimed at self-direction and self-motivation to optimize performance levels (Manz 1986). Taking the dynamic changes in the work environment into account, the need for a re-evaluation of self-leadership research becomes evident as it remains unclear what resources and leadership skills are necessary for today's workforce to foster positive work outcomes (e.g., work engagement) (Tagliaro and Migliore 2021). The necessity for new insights on self-leadership is underscored by the fact that employees are increasingly required and open to manage their own time, resources, and well-being autonomously (Sub-Project 1; Vartiainen and Hyrkkänen 2010). Accordingly, as previously mentioned, the nature of leadership is evolving from a top-down bureaucratic approach to an empowering and self-led leadership style (Sub-Project 1; Pearce & Manz, 2005). This study is based on the Conservation of Resources Theory (COR; Hobfoll 1989) which states that resources, broadly defined as valued elements crucial for well-being, are central to human behavior. In this context, self-leadership is explored as a key resource influencing work engagement, mediated by meaning of work and psychological empowerment.

Work engagement is widely acknowledged as a key concept for promoting well-being at work (Bakker and Demerouti 2008). Research shows that high levels of well-being result in better overall health and longer life (Zaninotto and Steptoe 2019). Therefore, it is important to know and analyze variables that positively predict work engagement. Previous research verified the importance of resources for work engagement (Crawford, LePine and Rich 2010; Halbesleben 2010), but exploring the mediating effects of meaning of work and psychological empowerment on the relationship of self-leadership and work engagement in today's setting offers a new perspective. As previously mentioned, there is a shift in employee needs towards more meaningful work (i.e., purpose; Arnold et al. 2007) and a greater sense of empowerment (Spreitzer 1995; Sub-Project 1). This shift is critical in today's environment, where traditional motivators like financial compensation are becoming less influential (Sub-Project 1). The focus on these mediators provides an essential understanding of how self-leadership contributes to work engagement in today's dynamic work environment. Integrating these resources into the COR theory (Hobfoll 1989), we propose that people with extensive self-leadership skills (i.e., resource) will be more engaged in their job (Bakker and Demerouti 2007) and that this relationship is facilitated through meaning of work (i.e., resource) and psychological empowerment (i.e., resource). Our research model can be seen in Figure 4.

Figure 2 Mediation Model Study 2



With a three-time-lagged panel of data, we adopt a longitudinal approach to understand the evolving nature of self-leadership and its impact on work engagement over time. By measuring

at different points in time, we aim to gain insights into the processes that influence changes in work engagement. This methodical approach, while controlling for remote work, contributes to existing research as it adds a longitudinal and recent perspective on the relationship between self-leadership and work engagement.

Through our focus on work engagement, we contribute to research in the field of work- and organizational psychology since exploring the mediated benefits of self-leadership in today's dynamic work environment can offer solutions for the challenges that arise with generational change, technological advancements, and high levels of uncertainty (Tavares 2017; Lyons and Kuron 2013).

Our study will offer practical implications for organizations and employees: If self-leadership positively predicts work engagement this invokes companies to support self-leadership practices, e.g., by offering self-leadership trainings. Furthermore, if the relationship between self-leadership and work engagement is mediated by meaning of work and psychological empowerment, this highlights the necessity for self-leadership skills among employees for improved perception of the workplace and a sense of fulfillment.

2.2 Theoretical Background

We base our work on the COR theory (Hobfoll 1989) to understand the relationship between self-leadership and work engagement in work settings, mediated by meaning of work and psychological empowerment by framing self-leadership, meaning of work, and psychological empowerment as resources within the theoretical framework.

2.2.1 Self-Leadership and Work Engagement

Self-leadership is defined as a self-influence process individuals engage in to help them achieve self-direction and self-motivation to optimize their performance (Manz 1986). Whereas traditional leadership settings include leaders motivating subordinates, self-leadership, as an

internal source of leadership, relies on an individual's intrinsic motivation (Manz 1986; Harari et al. 2021). Self-leadership can be explained by three individual strategies. Behavior-focused strategies are based on self-observation, self-goal setting, self-reward, self-correcting feedback, and self-cueing processes that aim at identifying and replacing ineffective behaviors (Neck and Houghton 2006). Natural reward strategies aim at increasing feelings of competence, purpose, and self-control (Deci and Ryan 1985). They can be implemented by adding pleasant elements to tasks, e.g., decorating one's workplace, to increase enjoyment (Houghton et al. 2012). Lastly, constructive thought strategies are aimed at enhancing personal effectiveness and performance by incorporating elements such as self-dialogue, mental imagery, beliefs, assumptions, and thought patterns thereby reshaping mental processes (Neck and Houghton 2006; Neck and Manz 1992).

In our study, we are looking at self-leadership in the setting of the COR theory. The theory describes resources as an essential part of human behavior and well-being which individuals strive to acquire and protect (Hobfoll 1989). Resources are defined as “those things they [individuals] centrally value” and help achieve goals (Hobfoll et al 2018, Halbesleben et al. 2014). Consequently, resources can be of different values to different individuals based on their situation or personal experience (Halbesleben et al. 2014). The main principle of the COR theory states that people must invest resources to gain and recover resources and to prevent the loss of resources (Westman et al. 2004). According to Hobfoll et al. (2018), resources can be categorized as object resources, condition resources, personal resources, energy resources or cognitive resources. We argue that self-leadership can be categorized as a resource, as the investment of self-leadership can be viewed as a resource investment targeted at achieving personal goals (e.g., improved performance) and building resources (e.g., meaning of work) (Kotzé 2017, Neck et al. 2013). Ben-Zur (2016) states that high levels of psychological resources contribute to well-being. This relationship has been explored in the realm of work

engagement: The COR theory proposes that high levels of job resources play an important role in fostering positive work outcomes like work engagement (Demerouti et al. 2001; Xanthopoulou et al. 2009).

Work engagement is defined as a positive mental state, characterized by vigor, dedication, and absorption (Bakker and Demerouti 2008). Vigor involves a high level of persistence and mental resilience at work, often manifesting as the willingness to invest effort in one's tasks, even in the face of difficulties (Balducci, Fraccaroli, and Schaufeli 2010). Dedication refers to a strong sense of identification with one's job, i.e., characterized by feelings of enthusiasm or inspiration (Çapri, Gündüz, and Akbay 2017). Lastly, absorption is described as a state of deep concentration on and immersion in one's work, (Venz, Pundt, and Sonnentag 2017; Porto-Martins, Basso-Machado, and Benevides-Pereira 2013). Resources (e.g., self-leadership) are core antecedents for motivational processes resulting in work engagement (Bakker, Demerouti, and Sanz-Vergel 2014; Xanthopoulou et al. 2009). The positive relationship between self-leadership and work engagement has been empirically validated: Breevaart, Bakker, and Demerouti's (2014) study highlights the processes behind the relationship and analyzes how self-management strategies increase work engagement by enhancing employee resourcefulness. While previous studies referred to daily variations in work engagement, we are pursuing a longitudinal between-person approach with our study. Thus, aiming at a replication of these earlier findings and the COR theory (Hobfoll 1989) on a longitudinal level, we propose the following hypothesis:

Hypothesis 1: The relationship between self-leadership and work engagement is positive. (H1)

2.2.2 Self-Leadership, Meaning of Work and Work Engagement

Meaning of work can be explained by three distinct elements: significance, broader purpose, and self-realization (Martela and Pessi 2018). Meaning of work can be defined as the

significance of work to people regarding its value and worth (Rosso, Dekas, and Wrzesniewski 2010). The value of meaning of work is further explained by Arnold et al. (2007) as finding a purpose for working that goes beyond just the external benefits or payoffs of the job. Purpose is a very relevant topic in today's working world (Steger 2016) and can be closely connected to the concept of meaning of work. Self-realization is defined as the ability to realize and express oneself through work (Chalofsky and Cavallaro 2013). In the context of the COR theory meaning of work is considered an important resource of job-related well-being (Kim and Beehr 2018). As stated by Hobfoll (1989) the investment of resources (e.g., self-leadership) leads to a gain spiral. Resource gain spirals describe that individuals with high resource levels are in a better position to invest resources and explain that high levels of resources not only cause more investments but also result in further resource gain (Hobfoll 1989). Resource caravans suggest that resources often cluster together (i.e., self-leadership might be generally accompanied by meaning of work) (Hobfoll et al. 2018). Thus, we claim that high levels of self-leadership could positively predict meaning of work, indicating the presence of a resource caravan (Hobfoll et al. 2018).

While the relationship between empowering leadership and meaning of work has already been analyzed (Kim and Beehr 2018), there is a lack of research on the relationship between self-leadership and meaning of work. Research connected to behaviors related to self-leadership (e.g., goal setting; Devarajan, Shweta, and Veena 2018) has shown to positively impact meaning of work, suggesting that there is a positive direct effect of self-leadership on meaning of work. Previous cross-sectional studies (Hakanen, Bakker, and Schaufeli 2006; Xanthopoulou et al. 2007) examined that several job resources related positively to work engagement. We assume that the use of self-leadership helps employees to develop meaning of work, which in turn results in work engagement. The positive effects of meaning of work on work engagement have been empirically validated (Steger and Dik, 2009). Generally, high levels of meaning of

work coexist with greater well-being (e.g., work engagement) (Arnold et al. 2007). Based on the motivational process of the COR theory, which has been empirically validated within the JD-R model (Bakker and Demerouti 2007), and previous research, this study explores whether meaning of work, framed as a personal resource, mediates the relationship between self-leadership and work engagement on a longitudinal level, which is why we state that:

Hypothesis 2: The positive relationship between self-leadership and work engagement is mediated by meaning of work, such that higher levels of self-leadership are associated with more meaning of work, which in turn is associated with more work engagement. (H2)

2.2.3 Self-Leadership, Empowerment and Work Engagement

Psychological empowerment differs from other definitions of empowerment since it is focused on intrapersonal empowerment, as proposed by Conger and Kanungo (1988). It is a continuous variable that reflects the perceived degree of empowerment (Spreitzer 1995). Psychological empowerment is defined by four dimensions, namely a sense of meaning, self-determination, competence, and impact (Spreitzer 1995). Meaning describes the fit between the job role and one's own beliefs and values (Brief and Nord 1990). Competence, or job-specific self-efficacy, describes the confidence in one's capability to successfully perform work-related tasks (Gist and Mitchell 1992). Self-determination explains a certain freedom and autonomy in decision-making processes and work behaviors of one's own work (Bell and Staw 1989). Impact is determined by the influence power one has over work-related outcomes in one's department (Ashforth 1989).

Self-leadership has proven to be an effective mechanism for facilitating psychological empowerment (Prussia, Anderson, and Manz 1998). The reasons behind this mechanism have been further examined by Manz (1992) stating that self-leadership skills (e.g., natural-reward strategies) are at the core of the psychological empowerment process. Lee and Koh (2001) argue

that leadership has a positive effect on psychological empowerment since its components enhance the perception of meaningfulness, purpose, self-determination, competence, and self-efficacy. Behavior-focused self-leadership strategies (e.g., self-goal setting), for example, are intended to create feelings of self-determination and competence (Uzman and Maya 2019).

Though research is limited, some studies have empirically validated the positive effect of psychological empowerment on work engagement (Stander and Rothmann 2010). While the direct effect of psychological empowerment on work engagement has been examined, there is a lack of research including the key drivers of work engagement (e.g., self-leadership) (Quiñónes, Van Den Broeck, and De Witte 2013). Quiñónes, Van Den Broeck, and De Witte (2013) validated that psychological empowerment acts as a mediator for task autonomy, skill utilization, and social support from the supervisor. This relationship gives first hints for a relationship between resources, the mediating role of psychological empowerment, and work engagement. Nevertheless, it remains unclear whether other personal resources, like self-leadership in connection with psychological empowerment as a mediator, enhance work engagement. We assume that self-leadership and psychological empowerment form a resource caravan, as their components are closely connected, and result in a resource gain spiral (Hobfoll 1989).

High levels of resources foster a motivational process explained by the JD-R model (Bakker and Demerouti 2007), which results in increased work engagement (Halbesleben 2010; Quiñónes, Van Den Broeck, and De Witte 2013). This motivational process derives from reduced job demands and associated stress (Bakker and Demerouti 2007). There is a lack of research including longitudinal studies, to examine the processes of psychological empowerment and work engagement across time. Based on the motivational process of the COR theory and previous research, this study explores whether psychological empowerment,

framed as a personal resource, mediates the relationship between self-leadership and work engagement on a longitudinal level, which is why we state that:

Hypothesis 3: The positive relationship between self-leadership and work engagement is mediated by psychological empowerment, such that higher levels of self-leadership are associated with more psychological empowerment, which in turn is associated with more work engagement. (H3)

2.3 Methodology

2.3.1 Procedure and sample

Participants have been recruited by sharing informative text messages and social media posts with friends, work colleagues, and the personal network. Furthermore, everyone who received a message was asked to spread the text message to their network. This approach enhanced the collection of a diverse sample.

The main criterion to participate in the surveys was that people needed to be employed or self-employed and working in either remote, hybrid, or on-site work settings. People who were interested in participating could use the link in the first message which led to the first survey. By entering their e-mail addresses at the end of the first survey, participants gave us the chance to reach out to them regarding their participation in the two follow-up surveys. Participants were asked to create a personal code to anonymize their responses for the data analysis. We informed all participants about the time horizon of the studies and the general process of data collection. Additionally, we asked for each participant's consent to collect and analyze their data for scientific purposes. After giving informed consent, participants were able to start each of the three studies.

The study was designed and conducted on the online application Qualtrics and was split into three moments: one initial survey and two follow-up questionnaires for which participants received e-mails each time a questionnaire was due. The participants answered the first survey after receiving one of our initial text messages or social media posts. The second survey had to be filled out two days after the initial survey and the third survey two days after the second one. All participants received an invitation e-mail to fill out the follow-up surveys at the time each survey was due and, if the survey had not been answered yet, reminder e-mails were sent out. In addition, we posted reminder posts to our social media channels which included the respective survey links.

In total, 130 people completed the first survey. For the analysis, we had to look at the data from all three surveys combined, which 92 people managed to complete. Out of the 92 participants in the sample, 49 identified as female (53.4%), 42 identified as male (45.7%), and one person identified as non-binary (1.1%). The mean age was 28.26 years ($SD = 8.921$, range 21 to 59). Most respondents (39.1%) had organizational tenure of less than one year and 33.7% of participants worked at their current job between one and two years. On average, the participants worked 3.09 days per week remotely ($SD = 1.727$). With 80.4%, most of the participants were of German origin, while the rest of the participants, among others, came from the USA (6.5%), France (3.3%), and Sweden (2.2%).

Participants worked in different industries, such as corporate (21.7%), consulting (23.9%), startups (8.7%) and others. Most of the employees worked in full-time work settings (62%) and 25 participants (27.2%) were working as working students. In total, 81 of the participants (88.1%) had graduated from an academic path at a university (Bachelor, Master, PhD).

2.3.2 Measuring instruments

The study was conducted in the English language. We gathered the variable self-leadership in the first questionnaire, psychological empowerment and meaning of work in the second

questionnaire, and work engagement in the final questionnaire. Additionally, we measured demographics in the first and second survey and measured sex, organizational tenure, and remote days as control variables.

Self-leadership was measured using nine items from the *Abbreviated Self-Leadership Questionnaire* (ASQL; Houghton, Dawley and DiLiello 2012). Sample items are “I work toward specific goals I have set for myself”, “Sometimes I talk to myself (out loud or in my head) to work through difficult situations” and “I try to mentally evaluate the accuracy of my own beliefs about situations I am having problems with”. The answer possibilities ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Responses yielded acceptable internal consistency (Cronbach’s alpha = .765).

Psychological Empowerment at Work was measured with twelve items from Spreitzer’s (1995) work on psychological empowerment. Sample items are “The work I do is very important to me”, “I am confident about my ability to do my job” and “I have a great deal of control over what happens in my department”. The answer possibilities ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). Responses yielded good internal consistency (Cronbach’s alpha = .887).

Meaning of Work was measured using the ten items from the *Work and Meaning Inventory* by Steger, Dik, and Duffy (2012). Sample items are “I have found a meaningful career”, “I view my work as contributing to my personal growth” and “The work I do serves a greater purpose”. The answer possibilities ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Responses yielded good internal consistency (Chronbach’s alpha = .918).

Work Engagement was measured using nine items from the *Utrecht Work Engagement Scale* (Schaufeli, Bakker, and Salanova 2006). Sample items include “At my work, I feel bursting with energy”, “My job inspires me” and “I am immersed in my work”. The answer possibilities

ranged from 1 (*very strongly disagree*) to 7 (*strongly agree*). Responses yielded good internal consistency (Chronbach's alpha = .918).

2.3.3 Control variables

We used sex, remote days, and organizational tenure to control for potential confounding effects. Sex was measured in the first moment, whereas remote work and organizational tenure were measured at moment 2. Controlling for these variables is beneficial since previous research has shown that sex and organizational tenure, as demographic variables, relate to an individual's experience of work engagement (Schaufeli and Salanova 2007). Furthermore, we controlled for remote work, since this concept has an immense impact on today's working world (Shirmohammadi, Au, and Beigi 2022). Sex was coded with 1 coded for male and 2 for female, and remote days were measured between 1 (*fully present*) to 5 (*fully remote*) days. Organizational tenure was coded as an ordinal variable where 1 means "less than 1 year", 2 "between 1 and 2 years", 3 "between 3 and 5 years", 4 "between 5 and 15 years", and 5 "more than 15 years".

2.4 Results

To analyze the data, we used the regression-based analysis tool PROCESS in IBM SPSS Statistics 29 (Hayes 2012). We analyzed the mediation hypotheses using the bootstrapping method with SPSS-Macro PROCESS (Hayes 2012) Model 4 and 5,000 Bootstrap samples. Bootstrapping and confidence intervals are state-of-the-art methods to test indirect effects (MacKinnon, Lockwood, and Williams 2004). We included the control variables in all analyses. Using Model 4, the mediators meaning of work and psychological empowerment were included. Thereby we empirically tested the occurrence of a statistically significant direct effect of self-leadership on work engagement (H1) and tested whether self-leadership is associated with work engagement through meaning of work and work engagement (H2 and H3).

2.4.1 Descriptive Statistics

Descriptive statistics and bivariate correlations are shown in Table 1. The bivariate correlations show first hints for the hypotheses. The dataset shows that the correlation between meaning of work and work engagement shares the strongest relationship ($r = 0.667$, $p < 0.01$). A similarly strong relationship can be noted between psychological empowerment and work engagement ($r = 0.573$, $p < 0.01$).

Table 1 Descriptive statistics and bivariate correlations Study 2

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1 Sex (a)			--						
2 Remote Days	3.09	1.727	-.010	--					
3 Organizational Tenure (b)			-.402**	.213*	--				
4 Self-Leadership	3.60	.635	-.019	-.133	.075	--			
5 Empowerment	5.10	.995	-.141	-.188	.272**	.384**	--		
6 Meaning of Work	3.44	.846	.116	.007	.040	.375**	.500**	--	
7 Work Engagement	4.86	1.084	-.102	-.030	.054	.247*	.573**	.667**	--

(a) Sex was coded with 1 for male and 2 for female.

(b) Organizational Tenure was coded as an ordinal variable where 1 means “less than 1 year”, 2 “between 1 and 2 years”, 3 “between 3 and 5 years”, 4 “between 5 and 15 years”, and 5 “more than 15 years.”

N=92

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

2.4.2 Hypotheses tests

Hypothesis 1 stated that self-leadership was associated with more work engagement and Hypothesis 2 and 3 stated that this relationship was mediated by meaning of work (H2) and psychological empowerment (H3). Table 1 shows that self-leadership is positively associated with work engagement ($r=.247$, $p<.05$), thereby supporting H1.

In addition, in the mediation analyses, we found that self-leadership (Table 2) was no longer positively associated with work engagement ($B=-.14$, $t=-1.03$, $p=0.30$), but self-leadership was

significantly and positively associated with meaning of work ($B=.50$, $t=3.77$, $p<.001$) and with psychological empowerment ($B=.56$, $t=3.69$, $p<.001$). Furthermore, meaning of work and psychological empowerment showed significant direct paths to work engagement (Table 2: $B=.71$, $t=6.16$, $p<.001$ and $B=.37$, $t=3.64$, $p<.001$, respectively). Indeed, we observed significant indirect effects of self-leadership across time through meaning of work and through psychological empowerment on work engagement (Table 2: indirect effect =.36; 95% CI from .10 to .70; and indirect effect =.21; 95% CI from .06 to .40, respectively), supporting Hypotheses H2 and H3.

Table 2 Regression results for Mediation Model Study 2

Meaning of Work R2 = .16 p<.001					Empowerment R2 = .47 p<.001			
	B	SE	t	p	B	SE	t	p
Constant	1.46	.52	2.83	.01	2.62	.59	4.43	.00
Self-Leadership	.50	.13	3.77	.00	.56	.15	3.69	.00
Sex	.27	.18	1.46	.15	-.10	.21	-.48	.63
Organizational Tenure	.06	.08	.78	.44	.17	.09	1.92	.06
Remote Days	.,03	.05	.,53	.60	.05	.06	.95	.34

Work Engagement R2 = .74 p<.001				
	B	SE	t	p
Constant	1.48	.55	2.69	.01
Self-Leadership	-.14	.14	-1.03	.30
Meaning of Work	.71	.12	6.16	.00
Empowerment	.37	.10	3.64	.00
Sex	-.37	.18	-2.07	.04
Organizational Tenure	-.11	.07	-1.45	.15
Remote Days	.00	.05	-.03	.97

Direct effect of Self-Leadership on Work Engagement				
	Effect	SE	LLCI	ULCI
(a)				
	-.14	.14	-.42	.13

Indirect Effect of Self-Leadership through				
	Effect	Boot	Boot	Boot
(a)	SE	LLCI	ULCI	
Meaning of Work	.36	.15	.10	.70
Empowerment	.21	.09	.06	.40

2.5 Discussion

The primary purpose of this sub-project was to test the relationship between self-leadership and work engagement over time. The second goal was to examine the mediating role of meaning of work and psychological empowerment on the relationship of self-leadership and work engagement. Based on the Conservation of Resources Theory (Hobfoll, 1989), the research sought to understand how resources (e.g., self-leadership, meaning of work, and psychological empowerment) impact broader well-being outcomes. Our findings, presented in the previous chapter, indicate that self-leadership has a significant positive impact on work engagement. This expands Breevaart, Bakker, and Demerouti's (2014) study which stated that some self-management strategies increase work engagement by enhancing employee resourcefulness on a daily within-person level.

Furthermore, meaning of work and psychological empowerment seem to fully mediate this relationship. This indicates that self-leadership alone does not directly enhance work engagement. Rather, it is the increased sense of meaning and feeling of empowerment that employees derive from self-leadership practices that ultimately drive their work engagement. For organizations and leaders, this suggests that fostering self-leadership among employees is valuable not just for its direct benefits, but because it cultivates a sense of meaningful work and empowerment, which are crucial drivers of work engagement. While there has been research indicating links between self-leadership and the individual mediators (Sjöblom, Juutinen, and Mäkikangas 2022 for meaning of work; Prussia, Anderson, and Manz 1998 for psychological empowerment), and the mediators and work engagement (Steger and Dik, 2009 for meaning of work; Stander and Rothmann 2010 for psychological empowerment), this study contributes to research by providing a comprehensive mediation model unraveling the processes behind self-leadership. Whereas Unsworth and Mason (2012) state that self-leadership functions as an effective stress management intervention, our study reveals that self-leadership is not only a

coping mechanism but rather a proactive tool to succeed in today's working world, expanding the COR theory.

Moreover, our study contributed to existing research as we used a longitudinal between-person approach providing new insights regarding the order of the associations between the resource self-leadership, the mediating resources meaning of work and psychological empowerment, and the positive state of mind work engagement. Our study reveals the processes behind self-leadership, namely in what way self-leadership facilitates meaning of work and psychological empowerment, and how these two resources then again enhance work engagement over time. Furthermore, our study contributes to the COR theory by examining self-leadership, meaning of work, and psychological empowerment as resources and analyzing gain spirals and caravan effects (Hobfoll 1989).

3. Discussion

3.1 Theoretical Implications

Our joint research project followed a mixed-method approach consisting of one qualitative (Study1) and two quantitative studies (Studies 2 and 3). Our research aimed to unravel the challenges of the modern work environment and its implications for traditional leader-follower relationships as well as for personal leadership. In detail, our studies analyzed self-leadership (Study 2) and mindfulness (Study 3) as two specific resources to mitigate the rising challenges. The challenges have been defined in our qualitative research (Study 1), which provided the basis for our quantitative analyses.

The COVID-19 pandemic has been a huge catalyst for changes which immensely affected work through digitalization and leadership transformations. Through the acceleration in digitalization, remote work has become the new normal and employees are asking for more flexibility and a more favorable work-life balance. This trend has been acknowledged in our quantitative research as we controlled for remote work. Consequently, all our results remain valid in today's dynamic work environment and in all kinds of remote, hybrid or fully present settings. Furthermore, with changing demographics, values, and new work settings, leader experienced an increased demand for purpose-driven work and reported that employees are actively trying to find fulfillment in their professional life. This trend deeply impacts leadership, as professional growth, meaning of work, and psychological empowerment gain more importance.

Our findings highlighted the importance of resources as key predictors and mediators in work engagement processes and as prevention for burnout. Our research offers expansions to the COR theory (Hobfoll 1989) as well as the JD-R model (Bakker and Demerouti 2007) as it

explores new resources and uncovers the working mechanisms between resources, as well as resource-well-being relations.

In line with previous research (Malinowski and Lim 2015; Breevaart, Bakker, and Demerouti 2014), our research found that mindfulness and self-leadership are relevant resources to foster work engagement among employees. Based on the COR theory and the JD-R model, self-leadership and mindfulness display two proactive approaches to increased work engagement, as they build on resource gain spirals and actively prepare employees for the changing work environment. Work engagement is a key factor of well-being (Demerouti et al. 2001), which is not only beneficial for employees, but also helps employers to attract and retain talents (Attridge 2009) and overcome challenges.

In addition to existing literature, the working mechanisms have been further explored by us, proving that positive spillover from work-to-family mediates the relationship between mindfulness and work engagement, and that meaning of work and psychological empowerment mediate the relationship between self-leadership and work engagement. Furthermore, mindfulness is also linked to lower levels of burnout through positive spillover from work-to-family. These mediating models have been tested in a three-time-lagged survey which indicates that the direct, and mediating effects persist over time.

Contrary to our assumptions and previous research, boundary control did not have a significant mediating effect on the relationship between mindfulness and work engagement. The reason for this insignificant effect might be, that work engagement is more strongly influenced by other factors that are connected to mindfulness or factors within the perceived work environment (e.g., meaning of work and psychological empowerment). Additionally, boundary control is highly influenced by an individual's perception of segmentation needs (Straub et. al 2019, Chen, Powell, and Greenhaus 2009b). Boundary control significantly mediated the relationship between mindfulness and burnout, indicating that the prominence of boundary control

contributes to overall well-being. The analysis of our mediators provides meaningful theoretical implications, as it gives insights into the processes resulting in work engagement. Additionally, mediators such as meaning of work and psychological empowerment are extremely relevant to the background of our qualitative study, since they are important tools to leverage a feeling of purpose and fulfilment among employees (Arnold, Turner, Barling, Kelloway, and McKee 2007). The importance of these mediators becomes evident, as they fully mediate the relationship between self-leadership and work engagement, presenting that work engagement is highly dependent on these factors.

The mediating effect of boundary control closely relates to our qualitative findings, as well as theoretical sources stating that remote work blurs the lines between work and life and boundary control can be a helpful contribution to managing work-life balance. Mindfulness as a concept is relevant, as it is a suitable practice for leaders to explore their role and impact, while maintaining high levels of work engagement themselves.

Exploring these changes and adaptations in post-pandemic times through a holistic approach, including qualitative as well as quantitative research, offers great theoretical implications and starting points.

3.2 Practical Implications for Leaders

The findings of our studies highlight the compelling demand for leaders and workplaces to acknowledge and adapt to changing work environments and therefore employee needs. Mindfulness and self-leadership are crucial tools – both for leaders, but also for employees to be better equipped for modern work requirements.

It is critical for leaders to be adaptable to rapid changes, particularly concerning the shift towards remote and hybrid working models, as without continuous learning and development, leaders are not likely to succeed effectively in the long term. This implies that leaders have to

stay on top of technological advancements to fully understand the nuances of managing remote teams. In this context, self-leadership arises as a relevant concept to address challenges. But also, other evolving leadership skills, such as mindfulness, show to develop more resilient and reflective leaders. Researchers pivot on the importance of such incorporation to take place as a repeated practice and integration across curriculum content for effectiveness, which is why we argue for it to not only become a relevant part of every management education, but also of daily work routine in general.

In leadership trainings, leaders should likewise get taught to act as coaches, supporting their team through challenges and opportunities, and focusing on guiding rather than on commanding (i.e., coaching mindset). This empowering and supportive leadership style is an essential prerequisite for inclusive leader-employee relationships that promotes individual decision-making.

Leadership trainings should crunch upon the importance of an individualized approach: Leaders need to recognize the diverse needs of their employees and adapt their style to provide the right balance of guidance, support, and autonomy to each individual. To ensure that both are addressed effectively, a balance between addressing individual employee needs and the collective goals of the team and the company is essential.

Since we found employee satisfaction to be linked to the communication style (attention, open attitude, and calmness) of leaders, we strongly suggest empathetic communication to be a mandatory part of any leadership development program. That includes acknowledging and addressing mental workloads of employees and therefore creating a work environment that supports mental health and self-care (i.e., well-being).

Another relevant concept that warrants attention in workplaces and should be part of leadership trainings is self-leadership. Self-leadership does not only enhance well-being and work engagement, but also creates a feeling of meaning of work and psychological empowerment

among employees, which fosters employee loyalty to a company. Individuals are seeking purpose, and self-leadership serves as a tool to empower them to find meaning in their tasks. By creating environments that nurture self-leadership skills, trusting your employees, granting them autonomy, and fostering a culture of experimentation, leaders can enhance work engagement, leading to improved well-being, which in turn boosts productivity, sparks innovation, and strengthens commitment to the organization. Furthermore, self-leadership is a relevant tool for all employees (i.e., leaders and followers) to tackle challenges (e.g., remote work) and goes beyond leader-follower relationships. Consequently, self-leadership practices should be an essential part of trainings for all employees.

We suggest making it a fundamental onboarding step for employees, to create a common ground for a boundary set-up with their employer that reflects the employee's needs, since this will support positive spillover from work-to-family, decrease work-to-family conflict, and increase work engagement. Striving for congruence between employee's preferences and possibilities of their workplace, is a crucial part of FSSB (family supportive superior behavior): a powerful tool to manage work-life balance in organizational settings.

Taking the employees' work-life balance under consideration goes hand in hand with the above. A tool shown to be beneficial in this context, are MBIs. Such show significant positive impacts: on employees' psychological health and well-being, productivity, performance, overall organizational success but also on work engagement and burnout. Research indicates that MBIs act as mediators in this context, as they improve self-awareness, stress management, and reflective practices among participants: vital tools for leaders to succeed in their roles. Leaders should partake in such interventions and impose them on their employees.

Adding to that, leaders should focus on the personal and professional growth of their employees. This is due to the fact that employees are less motivated by solely monetary compensation and regard opportunities to learn, develop and engage in meaningful activities as increasingly

important. Leaders must create environments that foster self-leadership skills, trust their employees, and give them autonomy to create environments for experimentation and personal development.

Finally, looking at the big picture that our studies create, fostering team spirit, and ensuring that employees feel like valued team members, part of a common mission, is crucial to increase work engagement. One result of our study (3) has implied factors within the work environment such as workplace culture and intrinsic motivation to be key in increasing work engagement. Findings of another one of our studies (2) shows that self-leadership is a big lever as it cultivates a sense of belonging and increases the meaning of work, which in turn increases work engagement. Self-leadership and mindfulness are useful strategies to support employees and could be a tool to increase trust in leader-follower relationships, as leaders can trust in the positive outcomes related to both strategies. Consequently, leaders should foster self-leadership and mindfulness among employees to drive not only their work engagement but ultimately the business success of their organizations.

3.3 Limitations & Future Research

In examining the collective findings of our three studies, several limitations can be identified. These limitations belong to aspects such as sample size and diversity, geographical constraints, industry representation, methodological constraints, and study design, each contributing to the overall understanding of the generalizability and applicability of the research outcomes.

The sample size and lack of diversity describes the first limitation, as the qualitative study includes twelve in-depth interviews and the quantitative studies 92 and 95 participants each. The limited sample size and specific demographics potentially restrict the broader applicability of the findings and raise concerns about the representativeness of our findings for the wider

workforce. Particularly in the first study, most of the participants were female, which may have impacted the results.

A notable limitation across the studies is the geographical concentration of participants. The majority of the study participants were German and worked for German companies, presenting a potential limitation in the applicability of the findings to other cultural and geographic contexts. Additionally, the industry representation can be classified as another potential limitation. While participants within the first study came from diverse industries, it is unclear whether all relevant sectors, particularly those in which leadership dynamics could significantly vary, were included. This concern is also reflected in the second and third study, where we were confronted with a lack of clarity regarding the representation of different industries which might affect the relevance of the findings to different work environments.

Across the studies, methodological issues present challenges. The first study relies on semi-structured interviews which may introduce biases such as self-reporting bias and the interpretation of the researcher. The second and third study, utilizing self-reported data, acknowledge the potential for biases like social desirability or inaccuracies in self-assessment. Subsequently, there is a common method bias in the second and third study, as the same response method (survey) was used for all variables. Moreover, in these two studies, the time difference between the surveys was not consistent, as some participants needed to be reminded several times to fill out the follow-up surveys.

In summary, while these studies provide valuable insights, they also have limitations that underscore the need for more comprehensive, diverse, and longitudinal research to improve the generalizability and applicability of findings in the dynamic areas of leadership, self-leadership and mindfulness.

The investigation of leadership, self-leadership, and mindfulness in the workplace holds promising possibilities for future studies in current academic discourse.

A crucial area for future research lies in understanding how leadership styles and challenges, including self-leadership and mindfulness, vary across different cultural contexts and industries, especially those undergoing significant transformations. Hence, to establish the universality of the results, it is suggested to conduct similar studies in different cultural and geographical contexts.

Moreover, exploring the long-term effects of remote and hybrid work models is also paramount. This includes examining how these work arrangements influence leadership practices, work engagement, and the adoption and effectiveness of mindfulness in the workplace. The interplay between these factors in different work settings, such as remote versus on-site environments, offers a rich area for investigation. In this context, it might be plausible to study how advancements in technology and digitalization affect self-leadership, work engagement and mindfulness in various work settings. Since the advent of emerging technologies like artificial intelligence and automation, as well as the increasing use of digital technology, presents new challenges and opportunities, research should focus on how these technologies impact leadership roles, self-leadership practices, and the overall well-being of employees in diverse work environments in a more detailed manner.

As the variables were tested separately, there is great potential to combine them to investigate their relationship. By studying these variables conjointly, researchers could gain a more profound understanding of how self-leadership and mindfulness interact and impact each other. This approach could uncover nuanced aspects of how individuals can simultaneously use self-leadership skills and mindfulness techniques to enhance their personal and professional development. Furthermore, the integration of these findings with wider leadership concepts offers a chance to examine the overall significance of these specific practices within leadership frameworks. In this way, we can better understand their impact on critical leadership outcomes such as decision making, work engagement, and organizational culture. It could provide

valuable insights into the ability of leaders to navigate the complexities of modern work environments, manage stress, and maintain high levels of performance through these practices. This may result in the enhancement of leadership models that are more sophisticated, combining personal well-being and self-management principles into effective organizational leadership practices.

4. Conclusion

Combining the themes of leadership adaptations, self-leadership, and mindfulness, we observe a nuanced framework for navigating the complexities of modern work environments. The rise of remote working has revolutionized traditional work structures, bringing both opportunities and challenges. This paradigm shift requires a re-evaluation of leadership strategies, where understanding and addressing the diverse needs of a multi-generational workforce is crucial. A key element is the development of an empathetic, agile leadership style that fosters a culture of inclusivity and adaptability. Essentially, integrating self-leadership and mindfulness practices enhances resources, sense of empowerment and work engagement as well as emotional regulation and resilience, which are crucial for productivity and personal growth in decentralized work environments. In addition, effective leaders must navigate the nuances of remote work environments and promote a balance between autonomy and connectivity to ensure both individual well-being and organizational effectiveness. This work project thus presents a future leadership journey for an increasingly digital and diverse work landscape.

5. References

- Arnold, Kara A., Nick Turner, Julian Barling, E. Kevin Kelloway, and Margaret C. McKee. 2007. "Transformational Leadership and Psychological Well-Being: The Mediating Role of Meaningful Work." *Journal of Occupational Health Psychology* 12 (3): 193–203. <https://doi.org/10.1037/1076-8998.12.3.193>.
- Arnoux-Nicolas, Caroline, Laurent Sovet, Lin Lhotellier, Annamaria Di Fabio, and Jean-Luc Bernaud. 2016. "Perceived Work Conditions and Turnover Intentions: The Mediating Role of Meaning of Work." *Frontiers in Psychology* 7 (May). <https://doi.org/10.3389/fpsyg.2016.00704>.
- Attridge, Mark. 2009. "Measuring and Managing Employee Work Engagement: A Review of the Research and Business Literature." *Journal of Workplace Behavioral Health* 24 (4): 383–98. <https://doi.org/10.1080/15555240903188398>.
- Bakker, Arnold B., and Evangelia Demerouti. 2007. "The Job Demands-Resources Model: State of the Art." *Journal of Managerial Psychology* 22 (3): 309–28. <https://doi.org/10.1108/02683940710733115>.
- Bakker, Arnold B., and Evangelia Demerouti. 2008. "Towards a Model of Work Engagement." *Career Development International* 13 (3): 209–23. <https://doi.org/10.1108/13620430810870476>.
- Bakker, Arnold B., Evangelia Demerouti, and Ana Isabel Sanz-Vergel. 2014. "Burnout and Work Engagement: The JD–R Approach." *Annual Review of Organizational Psychology and Organizational Behavior* 1 (1): 389–411. <https://doi.org/10.1146/annurev-orgpsych-031413-091235>.
- Balducci, Cristian, Franco Fraccaroli, and Wilmar B. Schaufeli. 2010. "Psychometric Properties of the Italian Version of the Utrecht Work Engagement Scale (UWES-9)."

- European Journal of Psychological Assessment* 26 (2): 143–49.
<https://doi.org/10.1027/1015-5759/a000020>.
- Bandura, Albert. 1989. “Regulation of Cognitive Processes through Perceived Self-Efficacy.” *Developmental Psychology* 25 (5): 729–35. <https://doi.org/10.1037/0012-1649.25.5.729>.
- Ben-Zur, Hasida. 2016. “Social and Temporal Comparisons as Moderators of Psychological Resources Associations with Wellbeing.” *Journal of Individual Differences* 37 (2): 96–104. <https://doi.org/10.1027/1614-0001/a000193>.
- Brief, Arthur P., and Walter R. Nord. 1990. “Work and Meaning: Definitions and Interpretations.” <https://psycnet.apa.org/record/1990-98937-001>.
- Çapri, Burhan, Bülent Gündüz, and Sinem Evin Akbay. 2017. “Utrecht Work Engagement Scale-Student Forms’ (UWES-SF) Adaptation to Turkish, Validity and Reliability Studies, and the Mediator Role of Work Engagement between Academic Procrastination and Academic Responsibility.” *Educational Sciences: Theory & Practice*. <https://doi.org/10.12738/estp.2017.2.0518>.
- Conger, Jay A., and Rabindra N. Kanungo. 1988. “The Empowerment Process: Integrating Theory and Practice.” *Academy of Management Review* 13 (3): 471–82. <https://doi.org/10.5465/amr.1988.4306983>.
- Crawford, Eean R., Jeffery A. LePine, and Bruce Louis Rich. 2010. “Linking Job Demands and Resources to Employee Engagement and Burnout: A Theoretical Extension and Meta-Analytic Test.” *Journal of Applied Psychology* 95 (5): 834–48. <https://doi.org/10.1037/a0019364>.
- De Smet, Aaron, Bonnie Dowling, Marino Mugayar-Baldocchi, and Bill Schaninger. 2021. “‘Great Attrition’ or ‘Great Attraction’? The Choice Is Yours.” *McKinsey & Company*,

- September. <https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/great-attrition-or-great-attraction-the-choice-is-yours>.
- Deci, Edward L., and Richard M. Ryan. 1985. "Conceptualizations of Intrinsic Motivation and Self-Determination." In *Springer eBooks*, 11–40. https://doi.org/10.1007/978-1-4899-2271-7_2.
- Demerouti, Evangelia, Arnold B. Bakker, Jan De Jonge, Peter P. M. Janssen, and Wilmar B. Schaufeli. 2001. "Burnout and Engagement at Work as a Function of Demands and Control." *Scandinavian Journal of Work, Environment & Health* 27 (4): 279–86. <https://doi.org/10.5271/sjweh.615>.
- Devarajan, R, Maheshwari Shweta, and Vohra Veena. 2018. "Managing Performance: Role of Goal Setting in Creating Work Meaningfulness." *The Business and Management Review* 9 (4).
- Gartner. n.d. "Definition of Remote Work." *Gartner Glossary*. <https://www.gartner.com/en/information-technology/glossary/remote-work>.
- Gist, Marilyn E., and Terence R. Mitchell. 1992. "Self-Efficacy: A Theoretical Analysis of Its Determinants and Malleability." *Academy of Management Review* 17 (2): 183–211. <https://doi.org/10.5465/amr.1992.4279530>.
- Gomez, Karianne, Tiffany Mawhinney, and Kimberly Betts. n.d. "Understanding Generation Z in the Workplace." *Deloitte*. <https://www2.deloitte.com/us/en/pages/consumer-business/articles/understanding-generation-z-in-the-workplace.html>.
- Halbesleben, Jonathon R. B. 2010. "A Meta-Analysis of Work Engagement: Relationships with Burnout, Demands, Resources, and Consequences." In *Work Engagement - a Handbook of Essential Theory and Research*, January. <http://psycnet.apa.org/psycinfo/2010-06187-008>.

- Halbesleben, Jonathon R. B., Jean-Pierre Neveu, Samantha C. Paustian-Underdahl, and Mina Westman. 2014. "Getting to the 'COR.'" *Journal of Management* 40 (5): 1334–64. <https://doi.org/10.1177/0149206314527130>.
- Harari, Michael B., Ethlyn A. Williams, Stephanie L. Castro, and Katarina K. Brant. 2021. "Self-leadership: A Meta-analysis of over Two Decades of Research." *Journal of Occupational and Organizational Psychology* 94 (4): 890–923. <https://doi.org/10.1111/joop.12365>.
- Hayes, A. F. 2012. "An analytical primer and computational tool for observed variable moderation, mediation, and conditional process modeling." Retrieved from <http://www.afhayes.com/public/process2012.pdf>.
- Hobfoll, Stevan E. 1989. "Conservation of Resources: A New Attempt at Conceptualizing Stress." *American Psychologist* 44 (3): 513–24. <https://doi.org/10.1037/0003-066x.44.3.513>.
- Hobfoll, Stevan E., Jonathon R. B. Halbesleben, Jean-Pierre Neveu, and Mina Westman. 2018. "Conservation of Resources in the Organizational Context: The Reality of Resources and Their Consequences." *Annual Review of Organizational Psychology and Organizational Behavior* 5 (1): 103–28. <https://doi.org/10.1146/annurev-orgpsych-032117-104640>.
- Hobfoll, Stevan E., Vanessa Tirone, Lucie Holmgreen, and James Gerhart. 2016. "Conservation of Resources Theory Applied to Major Stress." In *Elsevier eBooks*, 65–71. <https://doi.org/10.1016/b978-0-12-800951-2.00007-8>.
- Houghton, Jeffery D., David Dawley, and Trudy C. DiLiello. 2012. "The Abbreviated Self-Leadership Questionnaire (ASLQ): A More Concise Measure of Self-Leadership." *International Journal of Leadership Studies* 7 (2).

- https://www.researchgate.net/publication/278018847_The_Abbreviated_Self-Leadership_Questionnaire_ASQ_A_More_Concise_Measure_of_Self-Leadership.
- Houghton, Jeffery D., Jinpei Wu, Jeffrey L. Godwin, Christopher P. Neck, and Charles C. Manz. 2012. "Effective Stress Management." *Journal of Management Education* 36 (2): 220–38. <https://doi.org/10.1177/1052562911430205>.
- Kim, Minseo, and Terry A. Beehr. 2018. "Organization-Based Self-Esteem and Meaningful Work Mediate Effects of Empowering Leadership on Employee Behaviors and Well-Being." *Journal of Leadership & Organizational Studies* 25 (4): 385–98. <https://doi.org/10.1177/1548051818762337>.
- Korn Ferry. 2021. "Future of Work Trends 2022: A New Era of Humanity." <https://www.kornferry.com/insights/featured-topics/future-of-work/2022-future-of-work-trends>.
- Kotzé, Martina. 2017. "The Influence of Psychological Capital, Self-Leadership, and Mindfulness on Work Engagement." *South African Journal of Psychology* 48 (2): 279–92. <https://doi.org/10.1177/0081246317705812>.
- Lee, Mu Shin, and Joon Koh. 2001. "Is Empowerment Really a New Concept?" *International Journal of Human Resource Management* 12 (4): 684–95. <https://doi.org/10.1080/09586190110037344>.
- Llave, Oscar Vargas, John Hurley, Eleonora Peruffo, Ricardo Rodríguez Contreras, Dragos Adascalitei, Laura Botey Gaude, Elisa Staffa and Carlos Vacas Soriano. 2022. "The rise in telework: Impact on Working Conditions and Regulations : Working Conditions." <https://www.eurofound.europa.eu/en/publications/2021/rise-telework-impact-working-conditions-and-regulations>

- Lyons, Seán, and Lisa Kuron. 2013. "Generational Differences in the Workplace: A Review of the Evidence and Directions for Future Research." *Journal of Organizational Behavior* 35 (S1): S139–57. <https://doi.org/10.1002/job.1913>.
- MacKinnon, David P., Chondra M. Lockwood, and J.R. Williams. 2004. "Confidence Limits for the Indirect Effect: Distribution of the Product and Resampling Methods." *Multivariate Behavioral Research* 39 (1): 99–128. https://doi.org/10.1207/s15327906mbr3901_4.
- Manpower Group. 2020. "Closing the Skills Gap: Know What Workers Want." <https://workforce-resources.manpowergroup.com/white-papers/closing-the-skills-gap-know-what-workers-want>.
- Manz, Charles C., Prussia, Gregory E., Joe S. Anderson, and Charles C. Manz. 1998. "Self-Leadership and Performance Outcomes: The Mediating Influence of Self-Efficacy." *Journal of Organizational Behavior* 19 (5): 523–38. [https://doi.org/10.1002/\(sici\)1099-1379\(199809\)19:5](https://doi.org/10.1002/(sici)1099-1379(199809)19:5).
- Manz, Charles C. 1986. "Self-Leadership: Toward an Expanded Theory of Self-Influence Processes in Organizations." *Academy of Management Review* 11 (3): 585–600. <https://doi.org/10.5465/amr.1986.4306232>.
- Manz, Charles C. 1992. "Self-Leading Work Teams: Moving Beyond Self-Management Myths." *Human Relations* 45 (11): 1119–40. <https://doi.org/10.1177/001872679204501101>.
- Martela, Frank, and Anne Birgitta Pessi. 2018. "Significant Work Is about Self-Realization and Broader Purpose: Defining the Key Dimensions of Meaningful Work." *Frontiers in Psychology* 9 (March). <https://doi.org/10.3389/fpsyg.2018.00363>.

- Microsoft. 2022. “Hybrid work is just work. Are we doing it wrong?”
<https://www.microsoft.com/en-us/worklab/work-trend-index/hybrid-work-is-just-work>.
- Neck, Christopher P., and Charles C. Manz. 1992. “Thought Self-leadership: The Influence of Self-talk and Mental Imagery on Performance.” *Journal of Organizational Behavior* 13 (7): 681–99. <https://doi.org/10.1002/job.4030130705>.
- Neck, Christopher P., and Jeffery D. Houghton. 2006. “Two Decades of Self-leadership Theory and Research.” *Journal of Managerial Psychology* 21 (4): 270–95.
<https://doi.org/10.1108/02683940610663097>.
- Neck, Christopher P., Heidi M. Neck, Charles C. Manz, and Jeffrey L. Godwin. 1999. ““I Think I Can; I Think I Can.”” *Journal of Managerial Psychology* 14 (6): 477–501.
<https://doi.org/10.1108/02683949910287912>.
- Neck, Christopher P., Jeffery D. Houghton, Shruti Sardeshmukh, Michael G. Goldsby, and Jeffrey L. Godwin. 2013. “Self-Leadership: A Cognitive Resource for Entrepreneurs.” *Journal of Small Business & Entrepreneurship* 26 (5): 463–80.
<https://doi.org/10.1080/08276331.2013.876762>.
- Pearce, Craig L., and Charles C. Manz. 2005. “The New Silver Bullets of Leadership: The Importance of Self- and Shared Leadership in Knowledge Work.” *Organizational Dynamics* 34 (2): 130–40. <https://doi.org/10.1016/j.orgdyn.2005.03.003>.
- Quiñónes, Marcela, Anja Van Den Broeck, and Hans De Witte. 2013. “Do Job Resources Affect Work Engagement via Psychological Empowerment? A Mediation Analysis.” *Revista De Psicología Del Trabajo Y De Las Organizaciones* 29 (3): 127–34.
<https://doi.org/10.5093/tr2013a18>.

- Rosso, Brent D., Kathryn H. Dekas, and Amy Wrzesniewski. 2010. "On the Meaning of Work: A Theoretical Integration and Review." *Research in Organizational Behavior* 30 (January): 91–127. <https://doi.org/10.1016/j.riob.2010.09.001>.
- Schaufeli, Wilmar B., and Arnold B. Bakker. 2004. "Job Demands, Job Resources, and Their Relationship with Burnout and Engagement: A Multi-sample Study." *Journal of Organizational Behavior* 25 (3): 293–315. <https://doi.org/10.1002/job.248>.
- Schaufeli, Wilmar B., Arnold B. Bakker, and Marisa Salanova. 2006. "The Measurement of Work Engagement with a Short Questionnaire." *Educational and Psychological Measurement* 66 (4): 701–16. <https://doi.org/10.1177/0013164405282471>.
- Schaufeli, Wilmar B., and M. Salanova. 2007. "Work Engagement: An Emerging Psychological Concept and Its Implications for Organizations." In S. W. Gilliland, D. D. Steiner, & D. P. Skarlicki (Eds.), *Research in Social Issues in Management. Managing Social and Ethical Issues in Organizations*, Vol. 5, 135–177. Charlotte, NC: Information Age.
- Shirmohammadi, Melika, Wee Chan Au, and Mina Beigi. 2022. "Remote Work and Work-Life Balance: Lessons Learned from the Covid-19 Pandemic and Suggestions for HRD Practitioners." *Human Resource Development International* 25 (2): 163–81. <https://doi.org/10.1080/13678868.2022.2047380>.
- Spreitzer, Gretchen M. 1995. "Psychological Empowerment in the Workplace: Dimensions, Measurement, and Validation." *Academy of Management Journal* 38 (5): 1442–65. <https://doi.org/10.5465/256865>.
- Stander, Marius W., and Sebastiaan Rothmann. 2010. "Psychological Empowerment, Job Insecurity and Employee Engagement." *Sa Journal of Industrial Psychology* 36 (1). <https://doi.org/10.4102/sajip.v36i1.849>.

- Statista. 2023. "Global Telework State and Trend COVID 2020-2022." November 10, 2023.
<https://www.statista.com/statistics/1199110/remote-work-trends-covid-survey-september-december/>.
- Steger, Michael F. 2016. "Creating Meaning and Purpose at Work." In *John Wiley & Sons, Ltd eBooks*, 60–81. <https://doi.org/10.1002/9781118977620.ch5>.
- Steger, Michael F., and Bryan J. Dik. 2009. *Work as Meaning: Individual and Organizational Benefits of Engaging in Meaningful Work*. Oxford University Press eBooks.
<https://doi.org/10.1093/oxfordhb/9780195335446.013.0011>.
- Steger, Michael F., Bryan J. Dik, and Ryan D. Duffy. 2012. "Measuring Meaningful Work." *Journal of Career Assessment* 20 (3): 322–37.
<https://doi.org/10.1177/1069072711436160>.
- Tavares, Aida Isabel. 2017. "Telework and Health Effects Review." *International Journal of Healthcare* 3 (2): 30. <https://doi.org/10.5430/ijh.v3n2p30>.
- Unsworth, Kerrie L., and Claire M. Mason. 2012. "Help Yourself: The Mechanisms through Which a Self-Leadership Intervention Influences Strain." *Journal of Occupational Health Psychology* 17 (2): 235–45. <https://doi.org/10.1037/a0026857>.
- Uzman, Ersin, and İlknur Maya. 2019. "Self-Leadership Strategies as the Predictor of Self-Esteem and Life Satisfaction in University Students." *International Journal of Progressive Education* 15 (2): 78–90. <https://doi.org/10.29329/ijpe.2019.189.6>.
- Vartiainen, Matti, and Ursula Hyrkkänen. 2010. "Changing Requirements and Mental Workload Factors in Mobile Multi-Locational Work." *New Technology, Work and Employment* 25 (2): 117–35. <https://doi.org/10.1111/j.1468-005x.2010.00243.x>.
- Venz, Laura, Alexander Pundt, and Sabine Sonnentag. 2017. "What Matters for Work Engagement? A Diary Study on Resources and the Benefits of Selective Optimization

- with Compensation for State Work Engagement.” *Journal of Organizational Behavior* 39 (1): 26–38. <https://doi.org/10.1002/job.2207>.
- Westman, Mina, Stevan E. Hobfoll, Shoshi Chen, Oranit B. Davidson, and Shavit Laski. 2004. “Organizational Stress Through the Lens of Conservation of Resources (COR) Theory.” In *Research in Occupational Stress and Well Being*, 167–220. [https://doi.org/10.1016/s1479-3555\(04\)04005-3](https://doi.org/10.1016/s1479-3555(04)04005-3).
- Wu, Wei-Li, and Yi-Chih Lee. 2020. “Do Work Engagement and Transformational Leadership Facilitate Knowledge Sharing? A Perspective of Conservation of Resources Theory.” *International Journal of Environmental Research and Public Health* 17 (7): 2615. <https://doi.org/10.3390/ijerph17072615>.
- Xanthopoulou, Despoina, Arnold B. Bakker, Evangelia Demerouti, and Wilmar B. Schaufeli. 2007. “The Role of Personal Resources in the Job Demands-Resources Model.” *International Journal of Stress Management* 14 (2): 121–41. <https://doi.org/10.1037/1072-5245.14.2.121>.
- Xanthopoulou, Despoina, Arnold B. Bakker, Evangelia Demerouti, and Wilmar B. Schaufeli. 2009. “Reciprocal Relationships between Job Resources, Personal Resources, and Work Engagement.” *Journal of Vocational Behavior* 74 (3): 235–44. <https://doi.org/10.1016/j.jvb.2008.11.003>.