



**Employee Organizational Citizenship Behavior:  
Examining the Role of Transformational Leadership  
and Organizational Innovation Climate**

Pauline Künzel

Dissertation written under the supervision of professor  
Cristina Soares Pacheco Mendonça

Dissertation submitted in partial fulfilment of requirements for the MSc in  
Management with specialization in Strategy, Entrepreneurship & Impact, at the  
Universidade Católica Portuguesa, 10.03.2024.

## **Abstract**

**Title:** Employee organizational citizenship behavior: Examining the role of transformational leadership and organizational innovation climate

**Author:** Pauline Künzel

While the role of transformational leadership on employees' organizational citizenship behavior (OCB) is well established, research is in its infancy concerning the role of organizational innovation climate. This research investigated the influence of transformational leadership and organizational innovation climate on OCB. The study hypothesized that transformational leadership directly fosters OCB and that an organizational innovation climate not only promotes OCB but also strengthens the effect of transformational leadership on OCB. Utilizing a cross-sectional survey design with 177 participants from various industries predominantly within Europe, the research employs statistical analyses to test these hypotheses. The findings support the propositions that both transformational leadership and organizational innovation climate have significant, positive relationships with OCB, independently enhancing voluntary employee behaviors that benefit the organization. Contrary to expectations, the study does not support the hypothesis that organizational innovative climate moderates the relationship between transformational leadership and OCB, indicating that each factor individually contributes to fostering OCB. The research underscores the importance of cultivating transformational leadership and an innovative climate as distinct yet complementary strategies to enhance organizational performance through OCB. The study provides new insights and practical implications, while also laying the groundwork for further research on the topic and exploring the interplay between leadership, organizational climate, and employee behavior.

**Keywords:** Transformational Leadership, Organizational Citizenship Behaviour, Organizational Innovation Climate, Theory of Transformational Leadership, Social Exchange Theory

## **Sumário**

**Título:** Comportamento de cidadania organizacional dos colaboradores: Examinando o papel da liderança transformacional e do clima de inovação organizacional

**Autor:** Pauline Künzel

Embora o papel da liderança transformacional no comportamento de cidadania organizacional (CCO) dos trabalhadores esteja bem estabelecido, a investigação sobre o papel do clima organizacional de inovação é ainda incipiente. Este estudo investigou a influência da liderança transformacional e do clima organizacional de inovação no CCO. A hipótese do estudo é que a liderança transformacional promove diretamente o CCO e que um clima organizacional de inovação não só promove o CCO como também reforça o efeito da liderança transformacional no CCO. Utilizando um desenho de inquérito transversal com 177 participantes de várias indústrias predominantemente na Europa, a investigação emprega análises estatísticas para testar estas hipóteses. Os resultados apoiam as proposições de que tanto a liderança transformacional como o clima organizacional de inovação têm relações significativas e positivas com o CCO, reforçando de forma independente os comportamentos voluntários dos colaboradores que beneficiam a organização. Contrariamente às expectativas, o estudo não apoia a hipótese de que o clima organizacional de inovação modera a relação entre a liderança transformacional e o CCO, indicando que cada fator contribui individualmente para promover o CCO. A investigação sublinha a importância de cultivar a liderança transformacional e um clima de inovação como estratégias distintas, mas complementares, para melhorar o desempenho organizacional através do CCO. O estudo fornece novas perspectivas e implicações práticas, ao mesmo tempo que lança as bases para mais investigação sobre o tema e explora a interação entre liderança, clima organizacional e comportamento dos trabalhadores.

**Palavras-chave:** Liderança Transformacional, Comportamento de Cidadania Organizacional, Clima de Inovação Organizacional, Teoria da Liderança Transformacional, Teoria da Troca Social

## Acknowledgments

This dissertation marks the end of my master's program at Católica Lisbon School of Business & Economics, which has been one of the most wonderful, exciting, and enlightening experiences for me. This is now the final step of my academic journey, and it would not have been possible without some people who have always supported me along the way.

*My parents and my two older brothers* for always supporting me and believing in me. I can always count on them, and they always have a listening ear whenever needed.

*Philipp* for keeping me motivated and always making me laugh, no matter how stressed I am.

*Professor Cristina Soares Pacheco Mendonça* for her outstanding academic support and mentoring throughout the dissertation process. Thank you for always being available to answer all my questions, for always sharing your experiences, and, above all, for always motivating me.

*My friends from Lisbon*, especially my *roommates*, for their friendship, shared experiences, and the laughter we have enjoyed together. Their support made my time in Lisbon unforgettable.

Thanks to all of you!

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## List of Abbreviations

&	And
$\alpha$	Cronbach's alpha
b	Regression coefficient
DV	Dependent variable
F	F-statistic
H1	Hypothesis 1 (2, 3 respectively)
IV	Independent variable
M	Sample mean
N	Total number of cases
OCB	Organizational citizenship behavior
OIC	Organizational innovation climate
p	p-value
r	Correlation coefficient
R	Relatedness
R <sup>2</sup>	R-squared; coefficient of determination; measure of variance explained
SD	Standard deviation
TL	Transformational leadership

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# 1 Introduction

“An organization, no matter how well designed, is only as good as the people who live and work in it.” - Dee Hock, founder and CEO of Visa International

Referencing Dee Hock’s statement to management theory, it underlines the importance of the individual within an organizational structure and anticipates the rise of human resources as a strategic force. To be more precise, organizations derive most of their success from their extent of employee engagement and personnel willing to go the extra mile, above and beyond their employment contract. The term organizational citizenship behavior (OCB) reflects this concept and serves as the foundation for a long-term, well-functioning workforce (Le Pine et al., 2002). It refers to the additional efforts that employees voluntarily make, which are not part of their formal job description but significantly enhance organizational performance (Morrison, 1996). OCB encompasses activities such as assisting others, going the extra mile without being prompted, and taking initiative, all of which contribute to a thriving organizational culture (Organ et al., 2005). The significance of OCB is emphasized by its association with several advantages for the organization (Podsakoff et al., 2009). These include reduced turnover intention (Chen et al., 1998), increased organizational efficiency (Podsakoff et al., 2009), enhanced performance (Sun et al., 2007), and higher job satisfaction (Organ et al., 2005). In the modern context of digital transformation and remote working, OCB plays a crucial role in cultivating this sense of community and connection between dispersed teams, which is an essential prerequisite for sustainable productivity and unity (Krajcsák & Kozák, 2022). Consequently, when looking at all these advantages that OCB brings to an organization it is important to foster and maintain a culture that facilitates OCB.

In today's contemporary workforce, the cultivation of OCB is closely linked to the concept of leadership. Leadership is not just about directing or instructing, but also about inspiring and transforming. One leadership style that is particularly relevant in this context is transformational leadership. It is characterized by the ability to inspire and motivate employees to transcend their own interests for the good of the organization, to think innovatively, and to develop a sense of purpose and commitment (Bass, 1985). A dominant theory in this field is the transformational leadership theory proposed by Bass (1985) which proposes that leaders influence followers by inspiring them to advance beyond their own self-interests through four key behaviors: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. In support of this theory, recent research provides evidence that

this leadership style is crucial in fostering an environment where OCB can thrive (Purvanova et al., 2006). Building on this, the success of transformational leadership is significantly influenced by the environment in which it operates. The ability of leaders to inspire and motivate is not solely a personal trait, but also a result of the organizational context in which they operate (Abid et al., 2021).

The concept of organizational climate is crucial in this regard, as it encompasses the collective perceptions of an organization's policies, practices, and procedures as perceived and described by its employees (Schneider & Ehrhart, 2013). Within this broad framework, the focus of this thesis is on the organizational innovation climate, which is the aspect of the climate that specifically fosters new ideas and ways of working and supports the dynamic capabilities of an organization. An innovation climate that is carefully nurtured within an organization could potentially enhance the positive effects of transformational leadership on OCB. Conversely, the absence of such a climate could inhibit these effects. Given the rapid pace of change in today's business environment, the ability to innovate and adapt is more important than ever. So, does an organizational innovative climate enhance the effects of transformational leadership on OCB? And if so, to what extent? This is what this thesis is about.

## **1.1 Academic and Managerial Relevance**

Exploring the relationship between transformational leadership and OCB in an innovative organizational climate has considerable academic and managerial relevance. From an academic perspective, this thesis adds to the transformational leadership literature and extends transformational leadership theory by examining the role of organizational climate in enhancing OCB. It responds to calls for more contextualized leadership research by exploring how the environmental setting interacts with leadership. From a management perspective, understanding these relationships is essential for organizational development and human resource strategies. Organizations are increasingly aware of the need to develop leaders who can inspire and innovate, particularly in industries where adaptability and creativity are key to sustainability and competitive advantage (Bass & Riggio, 2006; Jaiswal & Dhar, 2017). By providing empirical support to this area of research, this thesis aims to provide managers with actionable insights to foster a conducive work environment that increases employee engagement and organizational performance. Thus, the findings of this thesis will provide both theoretical extensions and practical blueprints for leveraging transformational leadership and

innovation climate for optimal organizational citizenship behavior. Ultimately, this paves the way for valuable insights into the area of organizational behavior.

## **1.2 Problem Statement**

In the field of organizational behavior, extensive research has been conducted to comprehend what variables may be involved in the relationship between transformational leadership and OCB. Several key variables have been identified, such as trust (Pillai et al., 1999), job characteristics (Piccolo & Colquitt, 2006), justice perceptions (Cho & Dansereau, 2010), and emotional intelligence (Majeed et al., 2017). However, little is known about the role of organizational climate, in particular organizational innovation climate, in predicting OCB and how it may impact the relationship between transformational leadership and OCB. An innovative climate plays a crucial role in shaping the daily experiences and perceptions that drive OCB (Turnipseed & Turnipseed; 2013). In contrast to the relatively static nature of organizational culture, which evolves incrementally over time, organizational climate is more receptive to rapid adaptation. This dissertation focuses on the innovative climate in organizations and its facilitating role in transformational leadership in enhancing OCB. The research aims to address the following research question: How does transformational leadership and organizational innovative climate, independently and in interaction, relate to employees' organizational citizenship behaviors?

## **1.3 Structure of the Dissertation**

The dissertation follows the classic empirical research format. It started with an introduction that sets out the topic, the problem statement, and the research question. Followed by a literature review of the relevant literature on organizational citizenship behavior, transformational leadership, and organizational innovation climate in Chapter 2, which forms the basis of the hypotheses. Chapters 3 and 4 detail the dissertations' study and present empirical findings, respectively. Chapter 5 discusses the results in the context of existing research, deriving implications, and recognizing limitations. The dissertation concludes with a summary of findings and practical takeaways for management professionals.

## **2 Literature Review**

### **2.1 Organizational Citizenship Behaviour and its Dimensions**

OCB was first formally defined by Organ in 1988 as individual discretionary behavior that promotes the efficient and effective functioning of the organization but is not directly or explicitly recognized by the formal reward system (Organ et al., 2005). OCB has also been referred to as the behaviors that employees choose to engage in, which exceed their formal job descriptions to support organizational functioning (Van Dyne et al., 1994). OCB is a multidimensional construct consisting of five dimensions: altruism, conscientiousness, sportsmanship, courtesy, and civic virtue (Polat, 2009). This is a widely recognized and commonly used model for understanding OCB. Altruism refers to volunteering to help specific employees with tasks or problems relevant to the organization and reflects employees' proactive commitment to supporting their colleagues (Grego-Planer et al., 2019). Conscientiousness refers to the extent to which employees exceed the minimum required levels in terms of attendance, adherence to rules, and undertaking additional responsibilities (Debusscher et al., 2017). Sportsmanship refers to an employee's ability to endure less than ideal circumstances without expressing dissatisfaction (LePine et al., 2002). Courtesy involves taking steps to prevent work-related conflicts with others, and civic virtue signifies responsible and constructive involvement in the political life of the organization (Podsakoff et al., 2009). Kumari and Thapliyal (2017) argue that the five OCB dimensions collectively enhance organizational efficiency by underscoring the importance of employees' voluntary contributions. Although OCB is recognized as a multidimensional construct, research often investigates it as a collective whole to understand its overarching impact on organizational functioning (LePine et al., 2002; Podsakoff et al., 2009).

### **2.2 Antecedents of OCB: Individual Characteristics and Leadership**

Understanding the antecedents of OCB is a subject of significant scientific interest. The determinants of OCB are diverse, ranging from individual characteristics to broader organizational factors. The individual characteristics that will be highlighted in this literature review include personality traits, satisfaction with one's job, perceptions of organizational support, and organizational commitment. Associated evidence pertaining to these predictors will be covered first, before progressing to the core antecedent of interest, that of leadership.

Regarding personality traits, Chiaburu et al. (2011) found that personality traits, particularly conscientiousness, emotional stability, extraversion, and openness, play a central role in predicting OCB, whereby they are all positively associated with OCB. This was further identified in recent research by Pletzer et al. (2020) who found that extraversion and conscientiousness, in particular, are associated with higher levels of OCB, indicating that individuals who are sociable and reliable tend to engage more in citizenship behaviors within their organizations. Additionally, job satisfaction, another key predictor, is also positively associated with OCB. Employees who are content with their job and work conditions are more inclined to go above and beyond their formal job requirements (Casu et al., 2021). Furthermore, perceived organizational support, which is the extent to which employees believe their organization appreciates their contributions and cares about their well-being, has been found to positively influence OCB. Employees who feel supported are more likely to reciprocate with positive behaviors that benefit the organization (Thompson et al., 2020). Building on this, organizational commitment, particularly affective commitment, has shown a strong correlation with OCB, suggesting that employees who identify with their organization's goals and values are more likely to exhibit discretionary behaviors that benefit the organization (Chen & Francesco, 2003).

In the landscape of organizational behavior, the interplay between leadership and OCB has long been a focus of research (Ehrhart, 2004; Jiao et al., 2011). Leaders shape the workplace environment and influence the extent to which employees are willing to engage in OCB (Appelbaum et al., 2004). Although various leadership styles can contribute to fostering OCB, transformational leadership has been found to have a particular influence due to its inspirational, visionary, and individual-focused approach (Purwanto et al., 2021). Before discussing transformational leadership in more depth, an overview of leadership, its core types, and its role within organizations will be provided.

### **2.3 Leadership and Leadership Styles**

Leadership is the process of inspiring and guiding a group of individuals towards achieving a common goal (House, 1971). It is a critical factor in the success or failure of organizations and is characterized by the leader's ability to influence and guide followers (Cavaliere et al., 2021). The style of leadership is a key determinant of how leaders interact with their employees, make decisions, and inspire action. In the field of organizational leadership, there are various leadership styles ranging from authoritarian to democratic and

laissez-faire (Batthi et al., 2012; Eagly et al. 2003; Wang & Guan, 2018). These styles have distinct implications for how leaders interact with their teams. However, in the context of organizational performance and employee motivation, transactional and transformational leadership styles are often highlighted (Alharbi & Aljounaidi 2021; Zareen et al., 2015). Transactional leadership is a leadership style that is based on structured tasks and rewards, with clear expectations and predictable processes (Bass et al., 2003). Transactional leaders guide or motivate their followers towards established goals by clarifying role and task requirements. In contrast, transformational leadership goes beyond mere transactions. It aims to inspire and energize followers by creating a vision for the future, encouraging innovation, and fostering an environment where individuals feel valued (Bass & Riggio, 2006). The fundamental difference between those two leadership styles lies in the transformational leader's ability to stimulate and inspire followers to exceed their own self-interests for the group or organization's well-being, rather than simply transacting for desired outcomes (Bryant, 2003). The focus of this dissertation will be on transformational leadership as this is the leadership style that has become increasingly prevalent in the 21st-century workplace (Bakker et al., 2023; Top et al., 2020).

### **2.3.1 Transformational Leadership: Conceptualisation and Theoretical Frameworks**

A dominant theory in research on transformational leadership is the theory of transformational leadership, formulated by Burns (1978) and later expanded by Bass (1985), which assumes that leaders can transfer and transform the values, needs, and aspirations of followers from their own interests to the good of the group, organization, or society. This theory proposes that transformational leaders are effective as a consequence of their four desirable characteristics. More specifically, the four core dimensions, according to Avolio et al. (1998), are: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. While these dimensions have always been present in the original theory, scholars continue to refine their definitions. Namely, idealized influence refers to the perception of the leader as charismatic and powerful, with high ethical standards and strong opinions (Antonakis & House, 2014). Inspirational motivation involves the leader presenting a clear and appealing vision, providing encouragement and enthusiasm to foster collective commitment (Yammarino & Dubinsky, 1994). Intellectual stimulation encourages employees to think innovatively and critically and promotes a culture of creativity and problem-solving (Den Hartog et al., 1997). Additionally, providing individualized support demonstrates that the manager is responsive to the unique needs and personal development of each employee (Dionne et al., 2004).

While there is some research to show that these characteristics of transformational leadership lead to detrimental outcomes, such as psychological strain (Franke & Felfe, 2011), the literature proposes that these characteristics are fruitful in leading to various positive employee and organizational outcomes (Men, 2014). Specifically, these dimensions foster a leadership approach that not only enhances performance but also nurtures followers' growth and alignment with organizational goals (Grant, 2012).

In terms of empirical support of these propositions, a wealth of studies has demonstrated the desirable effects of transformational leadership on a host of employee and organizational-level outcomes (Ng, 2017; Peng et al., 2021). While it is not within the scope of this dissertation to cover all this literature, it is worth highlighting that transformational leadership positively impacts employees in ways that may be strongly interlinked with their decision to pursue OCBs. For instance, transformational leadership is shown to foster a stronger commitment to the organization, motivating employees to align their personal goals with the organization's vision and objectives (Piccolo & Colquitt, 2006; Walumbwa et al., 2005), and other research has shown strong correlations between employee motivation, commitment, and OCB (Rachman, 2019; Rumengan et al., 2022). In addition, Carter et al. (2013) found that transformational leadership enhances employee task performance by improving the quality of relationships between leaders and employees. In other research, these outcomes are also related to OCB, for instance in a study by Ozer (2011), who found that higher levels of OCB positively impact job performance through improved relationships with coworkers. As such, this theory is noteworthy for the present thesis, as the overall aim is to examine the effectiveness of transformational leadership on organizational citizenship behavior.

While the theory of transformational leadership is focal to this area of literature, a second core theory of interest is the social exchange theory (Blau, 1968). This is also relevant to the present thesis, as a large body of research has used social exchange theory to explain the dynamics between transformational leadership and OCB (Nohe & Hertel, 2017; Kayaalp et al., 2021). According to this theory, relationships are established and maintained through reciprocal exchanges that benefit all parties involved (Cropanzano & Mitchell, 2005). In the field of organizational behavior, leaders who exhibit transformational leadership qualities foster positive relationships with their followers (Pradhan & Pradhan, 2015). This relationship fosters trust and loyalty, which motivates employees to engage in behaviors that go beyond their formal role requirements, such as OCB (Blau, 1964; Nohe & Hertel, 2017). So, the relationship between transformational leaders and employees is exchange-based. This means that positive behaviors and support from transformational leaders create a sense of obligation

among employees to engage in OCB as a form of reciprocation for the beneficial treatment they receive (Podsakoff et al., 2000). Social exchange theory effectively explains the direct relationship between transformational leadership and OCB by illustrating how mutual benefit and reciprocity underpin this dynamic interaction.

## **2.4 Transformational Leadership and OCB**

Building on the two theories from the previous sections, there is also a large body of literature dealing with OCB as an outcome of transformational leadership (Jiang et al., 2017; Mi et al., 2019; Nohe & Hertel, 2017). Research on the direct relationship between transformational leadership and OCB has been robustly supported by empirical studies over the years. A study by Podsakoff et al. (1990) is fundamental in demonstrating the relationship between transformational leaders and the display of OCB by followers. Their study demonstrates that transformational leadership behaviors have a direct and positive correlation with enhanced OCB across the dimensions of OCB, including conscientiousness, sportsmanship, courtesy, and altruism. These results highlight the significant impact that transformational leaders have on promoting an environment conducive to OCB (Podsakoff et al., 1990). Building on this original research, Nohe and Hertel (2017) conducted a meta-analysis that confirmed the positive impact of transformational leadership on OCB. Their analysis included correlations from published meta-analyses encompassing 761 studies and 227,419 individuals overall and therefore serves as a robust indicator of the positive and significant relationship between transformational leadership and OCB.

In addition to this aforementioned research, recent studies have further validated the direct and positive relationship between transformational leadership and OCB post-meta-analysis across different types of organizations and highlight again how transformational leaders directly encourage employees to go beyond their job descriptions (Kim & Park, 2019; Pattnaik & Sahoo). Moreover, this relationship is not limited to the borders of any single country but is rather universally observable. For example, Moon (2016) found a positive association between transformational leadership and OCB in the United States. The relationship has been observed not only in the Western context but also in the East, with Zhang et al. (2020) uncovering significant contributions of transformational leadership to OCB in China. Further affirming this global pattern, Choudhary et al. (2016) identified a similar positive correlation in Australia. Transformational leadership has been found to have a significant impact on OCB in a cross-

cultural context. Based on the consistent empirical support and the theoretical frameworks discussed earlier, the following hypothesis is advanced:

H1: Transformational leadership will be positively related to OCB.

Acknowledging the influence of transformational leadership on OCB, it is important to examine additional organizational factors that could further shape this relationship. The focus of this dissertation extends to the wider organizational context – the organizational climate to examine whether this impacts the relationship between such leadership practices and employee behaviors.

## **2.5 Organizational Climate and the Climate for Innovation**

Organizational climate has traditionally been conceptualized as the shared perceptions of organizational policies, practices, and procedures (Schneider, 1975). It encompasses the collective attitudes and behaviors that define the work environment and shape employees' interactions with the organization and each other. These perceptions have a major impact on employee motivation and commitment and ultimately on performance (Patterson et al., 2005). It is important to mention that the concepts of organizational culture and climate are interrelated but distinctly different constructs. Organizational culture refers to the deep-rooted beliefs and values that guide an organization's practices, and climate describes the shared perceptions of those practices among employees (Schneider et al., 2013). Culture is the essence of how things are done and why they are done that way, while climate is more indicative of employees' perceptions of how things are done (Moran & Volkwein, 1992). In addition, organizational culture differs from climate in that it is more enduring and less susceptible to direct manipulation (Zhang et al., 2023). While organizational climate can be relatively quickly influenced or changed through individuals in power, shifts in organizational culture require a more profound transformation of core values and assumptions (Ostroff et al., 2003).

The literature varies a lot in the way it breaks down and defines the sub-dimensions of organizational climate. However, it often refers to Bitsani (2013), who breaks down the concept of organizational climate into three dimensions: structural, interpersonal, and individual. The structural dimension refers to the tangible aspects of an organization, including its physical space, hierarchical structure, and the distribution of roles. The interpersonal dimension reflects how well people in the organization get along, work together, and deal with disagreements and

it's about whether these relationships build a strong team. The individual dimension focuses on the subjective experiences of each employee, focusing on how they personally interpret and react to the organization's conditions and their own roles within it. These dimensions work together to form the overall atmosphere of the workplace (Bitsani, 2013).

Within organizations, various climates are perceived by employees, each with its own defining characteristics. In a supportive climate, employees perceive the organization as committed to their personal and professional development, often through encouragement and the provision of resources for growth (Luthans et al., 2008). In a constructive climate, the emphasis is on open communication and collaboration; employees perceive an environment that fosters mutual respect and teamwork, aiming for high-quality outcomes and collective achievement (Schneider et al., 2013). In an ethical climate, employees perceive the organization's ethical standards as a collective understanding of what constitutes proper conduct, driven by policies and practices that promote fairness, integrity, and accountability (Alpkan & Elci, 2009).

Besides those types of organizational climates, one particularly influential is the climate for innovation, which is crucial to driving the generation of new ideas and solutions in businesses. Especially in today's volatile market conditions and demands, such novel ideas and solutions are vital for companies to remain competitive (Sari et. al., 2023). Hence, this type of climate is the focus of the present research. In the literature, the climate for innovation is commonly defined as the shared perceptions at the individual, team, and organizational levels regarding the extent to which processes within these entities encourage and enable innovation (Shanker et al., 2020). Specifically, it focuses on the support, encouragement, and promotion of innovative thinking and problem-solving within the organization (Ekvall, 1996). It represents the extent to which an organization is conducive to the development and implementation of new ideas, products, or processes (Anderson & West, 1998). Moreover, a climate for innovation is characterized by factors such as high levels of autonomy, encouragement, team cohesion, openness to change and risk-taking, and the availability of sufficient resources (Crespell & Hansen, 2008). These elements contribute to creating an environment where creativity and innovation can thrive. Furthermore, the literature suggests that innovation climate is a critical antecedent for innovative behaviors within teams (Shanker et al., 2017).

### **2.5.1 The Impact of Organizational Climate on OCB**

While the present research aims to focus on the role of climate for innovation and how it relates to employees' OCB, it is worth noting that the research on these associations is in its infancy. However, noteworthy findings have been produced from research on organizational climate in general and specific types and OCB. Before evaluating the literature that has focused on the impact of organizational innovation climate, alternative climates are reviewed, namely supportive, ethical, and constructive.

A supportive organizational climate has been shown to encourage employees to go above and beyond their formal job requirements (Kaur & Randhawa, 2015). Kaur and Randhawa (2015) found that when employees perceive their organizational climate as fair, supportive, and empowering, they are more likely to engage in OCB. Since the study was conducted with a sample of 509 employees in a large-scale food processing industry, it could be argued that these results may not be generalizable due to a sample of such a specific industry. However, comparable results have been found across other industries. For example, studies in the banking industry (Maamari & Messarra, 2012), in the healthcare sector (Safan et al., 2018), and in the public sector (Farooqui, 2012) also found evidence for a positive and significant relationship between a supportive organizational climate and OCB.

Furthermore, the perception of an ethical climate within an organization has been linked to an increase in some of the OCB dimensions (Cavus & Develi, 2017). In their study, Cavus and Develi (2017) found that an ethical climate has a significant and positive effect on the OCB dimensions of sportsmanship, civic virtue, and courtesy. These findings underscore the importance of ethical practices and frameworks within an organization and suggest that a climate perceived as ethical encourages employees to exhibit citizenship behaviors that align with these ethical standards. Building on these insights, Marinova et al. (2019) further identified a constructive organizational values climate, which is characterized by mutual respect and support and has been found to predict OCB (measured as an overarching construct). Notably, their findings reveal that such a climate is predictive of behaviors like helping colleagues without prompts, taking the initiative to solve problems proactively, and engaging in creative thinking that drives innovation.

Moving onto the key type of organizational climate of interest, that of organizational innovation climate, there does not appear to be any empirical research investigating the direct impact of this climate on OCB. However, there is a strong reason to expect that organizational climate will be related to OCB when drawing from literature on similar and interrelated

outcomes. In particular, it is worth noting the research on the links between organizational innovation climate and innovative work behavior, because both organizational innovation climate and innovative work behavior are aimed at improving organizational performance, share a conceptual overlap in exceeding role expectations, and have been statistically shown to strongly correlate (Ismail & Rodzalan, 2021; Prabowo, 2020; Shanker et al., 2017).

Regarding empirical evidence showing that organizational innovation climate is related to innovative work behavior, Scott and Bruce (1994) were among the first to propose that an organization's psychological climate for innovation is a crucial determinant of innovative work behavior, and their empirical research found support for their hypothesized model. Building on these insights, Shanker et al. (2017) found that the climate for innovation was positively associated with innovative work behavior, further reinforcing the importance of a supportive and encouraging environment for innovation within organizations. Further evidence for this relationship was found in recent research by Huang and Li (2021), who also found a positive association between climate for innovation and innovative work behavior by conducting a study with 385 employees of software companies in China. The study demonstrated that innovation climate had a positive influence on knowledge acquisition, dissemination, and responsiveness, as well as on idea generation and promotion as dimensions of innovative work behavior. The findings by Shanker et al. (2017) and Huang and Li (2021) echo the earlier work by Scott and Bruce (1994), highlighting a consistent narrative across studies that a conducive climate for innovation is integral to fostering innovative behaviors among employees.

Taken together, since there is evidence of other forms of climate related to OCB and there is evidence of organizational innovation climate on outcomes similar to OCB, such as innovative work behavior, this leads to the following hypothesis:

H2: Organizational innovative climate will be positively related to OCB.

## **2.6 Transformational Leadership and OCB: The Moderating Role of Organizational Innovation Climate**

So far, this dissertation has proposed a direct positive effect between transformational leadership and OCB; a relationship underpinned by theory and evidence from prior studies that have examined this effect. In addition, this research has proposed a direct positive effect between organizational innovation climate and OCB; a novel hypothesis, albeit one which is supported by associated evidence (i.e., on similar types of climate and outcomes). Beyond these

direct effects, this research aims to examine the interplay between transformational leadership and organizational innovative climate on OCB. This is a yet to be explored relationship in the literature. However, previous research has shown that the organizational innovation climate plays a significant moderating role in the relationship between transformational leadership and performance (Qammar & Abidin, 2020), and innovative work behavior (Afsar and Umrani, 2020). While these outcomes are different from OCB, they are still employee-level, and in some way conceptually align with OCB. The conceptualizations all have a similarity in that they all mention the importance of individual or collective actions aimed at improving organizational outcomes and underline the value of proactive, contributory behaviors (Bedarkar & Pandita, 2014; De Jong & Den Hartog, 2008). Moreover, research has shown that OCB is statistically correlated with adaptive performance (Nejjari & Aamoum; 2020), employee performance (Dinka; 2018), and innovative work behavior (Purwanto et al., 2021).

Regarding empirical evidence showing that organizational innovation climate is moderating the mentioned outcomes, Charbonnier-Voirin et al. (2010) found empirical evidence through a multilevel model that organizational innovation climate significantly moderates the relationship between transformational leadership and adaptive performance among employees. Specifically, their study suggests that an innovative climate enhances the positive effects of transformational leadership on employees' ability to adapt to changing tasks and roles. Extending these insights, Qammar and Abidin (2020) examined the interaction between transformational leadership and employee performance, identifying an innovative climate as a key factor. Their study found that an innovation climate moderates the relationship between transformational leadership and employee performance. In essence, when the innovation climate is positive, transformational leadership has a more pronounced effect on improving employee performance outcomes (Qammar & Abidin, 2020).

Reinforcing the previous research findings, a study by Afsar and Umrani (2020) found that a climate for innovation acts as a moderator in the relationship between transformational leadership and innovative work behavior. Their study, which collected data from 338 employee-supervisor dyads in Pakistan and analyzed it using structural equation modeling, demonstrated that a supportive innovation climate significantly enhances the effects of transformational leadership on employee innovative work behavior. This finding was further supported by two very recent studies. Khalifa et al. (2023) and Lin (2023) have independently found that an innovative organizational climate acts as a critical moderating influence, strengthening the relationship between transformational leadership and innovative work behavior. Collectively, these studies underscore how a supportive climate for innovation is a

key enhancer of the transformational leader's ability to inspire innovative behavior in employees and confirm the consistency of this effect across different research contexts.

Taken together, as there is evidence that the organizational innovation climate moderates the relationship between transformational leadership and similar outcomes to OCB, such as performance and innovative work behavior, the following hypothesis can be proposed:

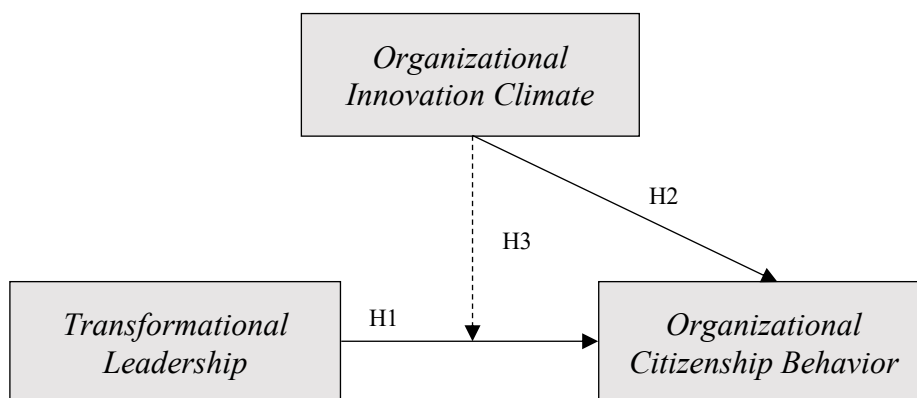
H3: The positive relationship between transformational leadership and OCB will be strengthened by the organizational innovation climate.

## 2.7 Conceptual model

Taken together, it is hypothesized that both transformational leadership and organizational innovation climate have a direct association with OCB. Additionally, it is hypothesized that organizational innovation climate moderates the effect of transformational leadership on OCB, proposing that the impact of transformational leadership on OCB is strengthened by a higher organizational innovation climate. The predicted complete model is shown in Figure 1.

**Figure 1**

*Conceptual Model*



## **3 Methodology**

### **3.1 Study Design**

Data collection for this research was conducted using a cross-sectional study design with an online self-report questionnaire to assess the relationship between transformational leadership (the predictor variable), organizational innovation climate (the moderator), and employees' OCB (the outcome variable). This research was conducted using the Qualtrics platform, which provided a structured and efficient way to collect relevant data from participants. The design of the study allowed for the measurement of these variables across a broad demographic at a single point in time, providing an overall view of how these variables interact.

### **3.2 Participants**

The study was mainly shared on LinkedIn, using a professional network to reach people who were currently employed in different industries and professions. The recommended sample size for the study was determined to be 240, as Maxwell (2000) advises 218 participants for a three-predictor regression (i.e., the moderation analysis) and an extra 10% were added to allow for failed attention checks. A total of 281 participants took part in the study. Of these, 47 were removed due to current unemployment, and 11 were excluded for not having a direct supervisor in their job role. An additional 33 participants were omitted because of incomplete data. Following the removal of 13 participants who did not pass the attention test, a final sample of 177 participants was used for further analysis. The gender composition of the sample was 51.4% female and 45.8% male, ensuring a balanced representation. The sample also included 1 participant who identified as “other” and reported using “they/them” pronouns. Additionally, there were 2 participants who preferred not to disclose their gender and 2 participants for whom gender data were missing. The average age of the participants was 30.9 years ( $SD = 9.05$ ), with ages ranging from a minimum of 22 to a maximum of 75, providing a broad perspective across different ages. Furthermore, participants reported being in their current role or job position for an average of 3.65 years ( $SD = 5.44$ ) and working on average 44.48 hours per week ( $SD = 15.18$ ). Furthermore, most participants (64.4%) reported holding a master's and 27.7% a bachelor's degree as their highest level of education. In terms of employment levels among participants, the majority were in entry-level positions (41.1%), followed by those with intermediate or senior experience (33.1%). In addition, the industries with the highest

representation were “Corporate services” (16.0%), “Finance” (13.7%), and “Software and IT Services” (13.1%). Lastly, participants in the study were predominantly from Germany, with 73.1% of the sample, while Denmark was the second most represented country with 6.9%. A detailed description of the survey demographics can be found in Appendix 2.

### **3.3 Procedure**

After expressing interest, participants were provided with an informed consent form explaining the purpose, expected duration, and nature of the study, as well as the confidentiality of their responses and their right to withdraw at any time. After reading the consent form, participants who agreed to take part provided their consent by continuing with the survey. The initial section of the survey screened participants for their current employment status and situation with their supervisor, where those who were not employed and those who had no supervisor in their job role were automatically directed to the end of the survey. Afterwards, participants were instructed to focus on their most dominant job role /organization if they worked for more than one. Additionally, they were instructed to focus on the supervisor to whom they report most frequently if they have more than one supervisor in their dominant job role. The survey proceeded with a section on transformational leadership, asking participants to reflect on their direct supervisor's behaviors and leadership style through a series of statements. Here, an attention check was embedded within the questions to ensure the accuracy of the responses, following best practices outlined in research by Kung and collaborators (2018), who found that such checks do not compromise the validity of survey scales. Subsequently, participants proceeded to the OCB scale and then assessed the organizational innovation climate in the following section. The final section of the survey collected demographic information about gender, age, nationality, weekly work hours, highest level of education, employment level, industry they work in, and tenure in the current role. An open-ended question at the end of the survey allowed for additional comments or feedback. Upon completion, participants were thanked for their contributions and were debriefed about the goals of the study. For more detailed information on the survey, please refer to Appendix 1.

### **3.4 Measurement variables**

Each variable of interest was assessed using robust scales from the existing literature to ensure adequate reliability and validity of the measures. The choice of these scales was made based on their known psychometric qualities and widespread recognition in scholarly research, which guarantees that they fit well with the study goals.

#### **3.4.1 Independent Variable**

*Transformational Leadership:* The Global Transformational Leadership Scale (Carless et al., 2000) was used to measure how participants perceive their supervisor's leadership as being transformational. This scale has also been used by other researchers such as Eisele (2020) and Munir et al. (2010). It consists of seven items on a 5-point Likert scale ranging from 1 (*To a very small extent*) to 5 (*To a very large extent*). Example items are “My supervisor communicates a clear and positive vision of the future” and “My supervisor fosters trust, involvement, and cooperation among team members”. In the original study, the scale had a very good internal consistency with a Cronbach's  $\alpha$  of 0.90 (Carless et al., 2000).

#### **3.4.2 Dependent Variable**

*Organizational Citizenship Behavior:* The 10-item version of the Organizational Citizenship-Checklist (OCB-C) by Spector et al. (2010) was used to measure the extent to which participants engage in citizenship behaviors in the workplace. The ten items are presented on a 5-point Likert scale where 1 = “Never”, 2 = “Once or twice”, 3 = “Once or twice/month”, 4 = “Once or twice/week” and 5 = “Every day”. Example items of the OCB-C are “Helped co-worker learn new skills or shared job knowledge” and “Lent a compassionate ear when someone at work had a work problem”. In the original study, the scale demonstrates adequate reliability with a Cronbach's  $\alpha$  of 0.80 (Spector, Bauer & Fox, 2010).

#### **3.4.3 Moderating Variable**

*Organizational Innovation Climate:* The Climate for Innovation Scale (Scott & Bruce, 1994) was used to measure participants' perception of the organizational innovation climate. The 16 items of the scale measure how the organization supports innovation, for example how employees perceive the organization to be open to change, supportive of new ideas, and tolerant of diversity among its members. The scale is presented on a 5-point Likert scale ranging from “Strongly disagree” to “Strongly agree”. Example items are “Creativity is encouraged here”

and “This organization is open and responsive to change”. In the original study, the scale has a very good internal consistency with a Cronbach's  $\alpha$  of 0.92 (Scott & Bruce, 1994).

#### **3.4.4 Covariates**

*Organizational tenure:* Organizational tenure was included as a covariate based on findings by Delle & Kumassey (2013) that it is significantly and positively associated with OCB. To measure tenure, participants were asked to specify the length of time they have held their position within the current organization.

*Hours working per week:* The number of hours worked per week is considered a covariate due to its potential impact on OCB (Bergeron et al., 2013). Participants were asked to report the number of hours they worked per week.

*Industry:* The use of industry as a covariate is supported by a significant body of research indicating that OCB varies across different industries (Jim et al., 2014; Nadiri & Tanova, 2010; Joy & Sidhiwue, 2016). To capture industry-specific effects, participants were asked, "Which of the following industries most closely matches the one in which you are employed?". They were provided with a choice among 24 different industries.

*Employment level:* Employment level was included as a covariate due to its relevance to OCB, with evidence suggesting that OCB varies by employment status (Stamper & Van Dyne, 2001). Participants reported their employment level, selecting five predefined options ranging from "Entry-level" to "Executive or senior management”.

*Demographics:* As per previous research, the study controlled for demographic variables such as age, gender, nationality, and education (Casu et al., 2021; Zayas-Ortiz et al., 2015). Gender was reported as either male, female, other, or prefer not to say. Age was assessed in years. Nationality and education were collected using the options provided by Qualtrics.

## **4 Results**

### **4.1 Data Preparation and Cleaning**

First, data were systematically transferred from Qualtrics to IBM SPSS Statistics. Within the innovation climate scale, some items were designed to be reverse scored. To maintain consistency across the scale, these items were recoded accordingly. To ensure the accuracy of the statistical results, a check for outliers was performed using z-scores. According to Tabachnick et al. (2013), any data point with a z-score greater than  $\pm 3.29$  is considered an outlier. Upon review, no data points exceeded these thresholds, and so no data were excluded as outliers. In addition, the dataset was checked for missing values, and two missing responses were identified in the climate for innovation scale. To address this, a substitution method was used to replace missing values with the mean score of the item across all respondents (Schafer & Graham, 2002). Before conducting the main analysis, variables with multiple categories were recoded into binary groups. Gender was coded as “male” or “female”, with any non-responses or other genders marked as missing. Country was categorized as either 'Germany' or “other”, with “other” including all participants not from Germany. Industry was divided into “Corporate Service & Tech”, which combined “Corporate Services”, “Legal”, “Real Estate”, “Finance”, “Hardware and Networking”, and “Other”, which included all remaining industries. Employment level was recoded into “entry-level” for those in entry-level positions and “Other” for all higher employment levels.

### **4.2 Scale Assessment**

The reliability of the scales used in this study was assessed to ensure the consistency of the measures. Although the literature has already established the reliability of these scales, they were reassessed for the purpose of this current research by examining their Cronbach's  $\alpha$  values. The global transformational leadership scale had a Cronbach's  $\alpha$  of .91 and the climate for innovation scale a Cronbach's  $\alpha$  of .92, which is considered as very good (Gliem & Gliem, 2003) and confirms the high reliability of these scales. The organizational citizenship-checklist reported an  $\alpha$  of .89, which is considered as good (Gliem & Gliem, 2003) and validates the use of this scale. Consequently, the research proceeded with these scales and used the composite scores in the forthcoming analyses.

### 4.3 Descriptive Statistics

Descriptive statistics include numerical measures and graphical representations that summarize the main characteristics of a dataset, making it easier to interpret and understand (Fisher & Marshall, 2009). Table 1 shows the number of responses ( $N = 177$ ), range of scores (minimum and maximum), mean scores, and standard deviations for the transformational leadership, organizational citizenship behavior, and organizational innovation climate variables.

**Table 1**

*Descriptives of main variables*

	N	Minimum	Maximum	Mean	SD
TL	177	1.00	5.00	3.67	0.88
OCB	177	1.00	5.70	3.11	0.80
OIC	177	1.63	4.94	3.59	0.75

### 4.4 Bivariate Correlations

Bivariate correlation is a statistical method that quantifies the strength and direction of the relationship between two variables, which are typically measured by Pearson's correlation coefficient for linear relationships (Schober, Boer, & Schwarte, 2018). To see a comprehensive overview of all the correlations among the studied variables refer to Table 2 as it provides the detailed correlation coefficients for each pair of variables.

With regards to the significant correlations involving OCB (i.e., the dependent variable in this study), transformational leadership was positively and significantly related to OCB,  $r = .48, p < .001$ . Organizational innovation climate was also found to be positively and significantly related to OCB,  $r = .43, p < .001$ . In terms of the relationship between the control variables and OCB, employment level was significantly and negatively related to OCB,  $r = -.34, p < .001$ . As the employment level variable was coded as 1 = "Entry-level" and 0 = every level higher than entry-level, this means that OCB was lower for the entry-level employees. In addition, there was a significant and positive relationship between hours an employee works per week and OCB,  $r = .30, p < .001$ .

With regards to the significant correlations involving transformational leadership, it was found that transformational leadership is negatively correlated with employment level,  $r =$

-.16,  $p < .05$ . This suggests that those in higher employment levels perceive less transformational leadership. With regards to the significant correlations involving organizational innovation climate, it was significantly correlated with transformational leadership,  $r = .59$ ,  $p < .001$ , which underscores the role of transformational leadership in fostering an innovative work climate. In addition, there was a significant negative correlation between organizational innovation climate and employment level,  $r = -.13$ ,  $p < .001$ . This negative correlation suggests that employees with higher levels of employment perceive a less innovative climate in their organization.

**Table 2**

*Bivariate Correlations for Study and Demographic Variables*

Variable	1	2	3	4	5	6	7	8	9	10
1. Age	-									
2. HoursW	.06	-								
3. YearsW	.71***	.14	-							
4. Gender	.14	-.19*	.16*	-						
5. Nationality	.03	-.04	-.01	-.02	-					
6. Industry	-0.08	.08	-.16*	-.11	-.04	-				
7. Emp Le	-.44***	-.28***	-.32***	-.08	.06	.04	-			
8. TL	-.13	-.02	-.16*	-.05	.09	-.05	-.08	-		
9. OCB	.06	.30***	-.12	.02	-.04	-.10	-.34***	.48***	-	
10. OIC	-.01	.01	-.05	.06	-.09	-.11	-.13**	.59***	.43***	-

*Note.*  $N = 177$ . Age = age in years; HoursW = number of hours working per week; YearsW = number of years in the current job position; Gender (1 = male; 2 = female); Nationality (1 = Germany; 0 = other); Industry (1 = corporate service & tech; 0 = other); Emp Le (1 = entry-level; 0 = other); TL = transformational leadership; OCB = organizational citizenship behavior; OIC = organizational innovation climate. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## 4.5 Hypothesis Testing

A statistical analysis was conducted using Hayes' PROCESS macro for SPSS (Hayes, 2018). Initially, a moderated regression analysis was performed without controlling for covariates to examine the direct effects of transformational leadership and organizational innovation climate on OCB, as well as their interaction<sup>1</sup>. This preliminary model (Model 1), which did not account for hours worked per week or employment level, explained 26.75% of the variance in OCB ( $R^2 = .27$ ,  $F(3, 173) = 21.06$ ,  $p < .001$ ). Transformational leadership had a positive and significant relationship with OCB ( $b = 0.33$ ,  $p < .001$ ), and organizational

<sup>1</sup> To assess potential multicollinearity, a regression was conducted with OCB as the outcome and transformational leadership and organizational innovation climate as predictors. The VIFs were reported as 1.5, indicating no multicollinearity issue.

innovation climate was also found to be positively related to OCB ( $b = 0.25, p = .01$ ). However, the interaction term between transformational leadership and organizational innovative climate was not significant ( $b = 0.04, p = .62$ ), suggesting that the influence of transformational leadership on OCB is not conditional on the level of organizational innovation climate. The full output is presented in Appendix 3.

Following this, a moderated regression analysis was undertaken to examine the same relationships while controlling for covariates (Model 2). This model controlled for covariates that were significantly related to OCB in the correlations (see Table 2). These were hours worked per week and employment level. The full output is presented in Appendix 4. The model showed that the predictors and covariates explained 39.99% of the variance in OCB and this model was significant,  $F(5, 169) = 22.52, p < .001$ . Transformational leadership was positively and significantly related to OCB,  $b = 0.33, p < .001$ . Therefore, H1 is supported. Organizational innovation climate is positively and significantly related to OCB,  $b = 0.18, p = .03$ . Therefore, H2 is supported. However, there was no significant interaction between transformational leadership and organizational innovation climate on OCB,  $b = -0.04, p = .55$ . Therefore, H3 is not supported. In terms of the control variables, hours worked per week was positively and significantly related to OCB,  $b = 0.01, p < .001$ . Employment level was negatively and significantly related to OCB,  $b = -0.35, p < .001$ . As employment level was coded 1 = entry-level and 0 = everyone higher than entry-level, this means that the entry-level employees had lower levels of OCB than those with higher levels of employment. Refer to Table 3 for a summary of Model 1 and Model 2.

**Table 3**

*HAYES Process Model 1 and Model 2*

Variable	Model 1			Model 2		
	b	SE	p	b	SE	p
TL	.33	.06	.00	.33	.07	.00
OIC	.25	.09	.01	.18	.08	.03
TLxOIC	.04	.07	.62	-.04	.07	-.18
Hours_W				.01	.00	.01
Empl_L				-.35	.10	-.55

*Note.*  $R^2 = .27$  for Model 1;  $R^2 = .39$  for Model 2; TL = transformational leadership; OIC = organizational innovation climate; Hours\_W = hours working per week; Empl\_L = employment level

## 5 Discussion

This dissertation aimed to answer the research question: How does transformational leadership and organizational innovative climate relate to employees' organizational citizenship behaviors? The research question emerged from a gap in existing research and aimed to understand how transformational leadership and an organizational innovation climate individually and together influence employees to voluntarily go beyond their job descriptions for the betterment of their organization. The study tested three hypotheses.

H1 proposed to find a direct and positive association between transformational leadership and OCB. H1 was supported, as the study found that transformational leadership was significantly and positively related to OCB. The study demonstrated that leaders who exhibit higher levels of transformative qualities, such as vision, inspiration, personal attention to employees, and intellectual stimulation, foster employees to take actions that benefit the organization as a whole. The support for H1 aligns with a wide range of existing studies in the literature indicating that transformational leadership is a significant driver of OCB (Kim & Park, 2019; Nohe & Hertel, 2017; Pattnaik & Sahoo, 2021). Prior research was undertaken in various locations, including the United States, China, and Australia, providing a global perspective. However, there has been less emphasis on European samples. This study contributes to the existing body of literature since the majority of the participants came from Europe (all except two participants came from Europe). Therefore, the results provide valuable insights into the dynamics of transformational leadership and OCB within a European context, further reinforcing that the principles of transformational leadership are effective across different cultural settings.

Furthermore, the study's findings are consistent with social exchange theory, which provides a theoretical basis for understanding the dynamics between leaders and followers (Nohe & Hertel, 2017; Kayaalp et al., 2021). As described by Blau (1964), social exchange theory proposes that relationships are established through the exchange of benefits and rewards. In an organizational context and in line with the findings of H1, if leaders exhibit the characteristics of transformational leadership, employees may feel compelled to reciprocate with positive behaviors that exceed their formal job requirements. This reciprocation can be expressed as OCB, where employees voluntarily contribute in ways that are not explicitly required but are critical to the smooth functioning and improved performance of the organization. Furthermore, linking back to the foundational theory of transformational

leadership (Bass, 1985), our results support the theory's core proposition that leaders can inspire followers to align their interests with those of the group and organization.

H2 proposed a direct relationship between an organizational innovative climate and OCB. The results showed that a climate that encourages higher levels of innovation is itself a significant positive contributor to OCB. This suggests that when organizations actively support new ideas, provide resources for innovation, and maintain an atmosphere that fosters creative thinking, employees are more likely to exhibit citizenship behaviors. The evidence collected aligns with the research by Kaur and Randhawa (2015). While Kaur and Randhawa (2015) did not examine organizational innovation climate specifically, they did show that an alternative type of climate, specifically a supportive climate, was positively related to OCB. Thus, the present research supplements these findings by showing that an organizational innovation climate is also influential in promoting OCB, representing a new and significant contribution to the literature on organizational behavior.

H3 in the thesis proposed a moderating effect of organizational innovative climate on the relationship between transformational leadership and OCB. This hypothesis was underpinned by literature that showed that organizational innovation climate moderates the relationship between transformational leadership and similar outcomes to OCB, such as performance and innovative work behavior (Dinka, 2018; Purwanto et al., 2021). Contrary to expectations, and this prior literature, the study did not support this hypothesis. This finding indicates that the enhancement of OCB through transformational leadership is not strengthened in the presence of a higher organizational innovation climate. Instead, transformational leadership alone seems to be a robust predictor of OCB, consistent with the robust individual effects found in prior studies (Jiang et al., 2017; Mi et al., 2019; Nohe & Hertel, 2017). The lack of a significant interaction effect also suggests that an innovative climate, while supportive of OCB on its own, does not modify the influence that transformational leadership has on these behaviors.

Furthermore, the current research controlled for the covariates of employment level and hours worked per week. These controls were added because past research showed they were significantly and positively related to OCB (Stamper & Van Dyne, 2001; Bergeron et al., 2013). The findings of this study are consistent with previous research indicating that employment level and hours worked per week are significant predictors of OCB. Since prior studies did not control for these two covariates explicitly (when examining the relationships between transformational leadership and OCB), the research is adding further value to the current literature by showing how the relationships between transformational leadership and

OCB, and between organizational innovation climate and OCB are still significant even when controlling for employment level and hours worked per week.

Additionally, it is worth evaluating the effects of the covariates. Notably, the finding that entry-level employees exhibited lower levels of OCB compared to those in higher employment statuses could point to differences in opportunities or motivations to engage in OCB based on job roles within the organizational hierarchy. Another notable covariate in the study was the number of hours worked per week, which was found to have a positive effect on OCB. This finding is suggestive of a relationship where employees who spend more time at work may have more opportunities to engage in behaviors that are not part of their formal job descriptions. It could also imply that a greater investment of time at work corresponds with a deeper commitment to the organization's welfare, thus motivating additional discretionary efforts.

### **5.1 Study Limitations and Avenues for Future Research**

The current study provides valuable insights into the relationship between transformational leadership, organizational innovation climate, and OCB. However, it is subject to several limitations that must be acknowledged. Firstly, the data was collected at a single point in time due to the cross-sectional nature of the study. Therefore, changes over time cannot be examined, and causal relationships cannot be established. Future research could benefit from a longitudinal approach to assess the impact of transformational leadership and organizational climate on OCB over extended periods. Additionally, the use of self-report measures may introduce bias, as individuals may respond in a socially desirable manner or lack self-awareness, which can distort the accuracy of the reported data. Future studies could consider incorporating multi-source data, such as peer assessments or supervisor evaluations of OCB, to address the limitations of self-reported data. Furthermore, while the sample size is sufficient for basic statistical analyses, it is not representative of the broader population (not merely because of the sample size, but also because the sample is dominated by German nationals), which could impact the generalizability of the findings. Conducting subsequent research with larger and more diverse samples could enhance the robustness and external validity of the results.

For additional future research, a more detailed examination of OCB would be desirable. OCB is a complex concept that includes dimensions such as altruism, conscientiousness, civic virtue, courtesy, and sportsmanship. Exploring how transformational leadership and an innovative organizational climate might impact these specific dimensions of OCB could reveal

targeted management strategies to promote particular characteristics of citizenship behaviors. Furthermore, it is suggested that future studies analyze the components of transformational leadership, including idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, to determine their influence on specific OCB dimensions, again to provide support for targeted management strategies.

## **5.2 Practical Implications**

Although this research did not find significant results that organizational innovation climate moderates the effect on transformational leadership in OCB, the results demonstrate that organizational innovation climate and transformational leadership are positively associated with OCB. Therefore, it is recommended that organizations strive to recruit and hire more transformational leaders, while investing in the development of transformational leaders (for those already appointed) and to enhance their abilities in creating a vision and guiding change through inspiration. Additionally, it is recommended that organizations also invest in an overall working environment that promotes, supports, and encourages the development and implementation of new ideas, processes, products, or services (i.e., the characteristics that form a high organizational innovation climate).

### **5.2.1 Recommendations for Selecting Transformational Leaders and Developing Transformational Leadership Style**

To identify new leaders who already have high levels of transformational leadership qualities, organizations could implement new forms of assessment during their selection and assessment (hiring) processes. For instance, validated self-report measures, such as the multifactor leadership questionnaire (MLQ), can be used during the recruitment phase to identify candidates with transformational leadership potential (Avolio & Bass, 2004). Another possible method of incorporating the assessment of transformational leadership into the recruitment process is to include it in the company's reference checks. This can be achieved by inquiring with the referees about the candidate's transformational behavior during the reference check. As an example, the global transformational leadership scale could offer a possibility to measure how participants perceive their manager's leadership to be transformational, providing an external perspective on the candidate's leadership style (Carless et al., 2000). Referees could also be asked to comment on the characteristics of transformational leaders that are described

in the literature, such as their ability to inspire and intellectually stimulate employees, as well as their tendency to show individual consideration (Bass & Riggio, 2006).

As mentioned, the integration of transformational leadership into organizations does not stop at recruitment; it extends to the cultivation and development of the skills and behaviors of current leaders in the organization. Organizations could aim to achieve this via transformational leadership developmental programs. Transformational leadership development programs are generally designed to bring about significant change in both the leaders and the organizations they are part of. The aim of these programs is to develop leaders who can inspire and motivate their teams to achieve results beyond expectations. Abrell et al. (2011) conducted a longitudinal study in Germany that demonstrated the positive effects of a structured transformational leadership program. The program not only improved perceived transformational leadership but also increased OCB in employees. By using multiple methods such as leadership feedback, training, and coaching over an extended period, and measuring at various intervals post-training, organizations can ensure that their investment in leadership development yields sustainable growth and aligns with the ever-evolving challenges within the global business environment (Abrell et al., 2011).

As the study's results align with social exchange theory, it is recommended that leaders are trained in understanding and utilizing its principles. This involves recognizing that when employees feel genuinely valued and supported, they are more likely to reciprocate with positive discretionary behaviors that go beyond their formal job requirements (Blau, 1964). Leaders should attend workshops and seminars that provide a comprehensive understanding of social exchange theory and its applications in the workplace. These sessions can be informed by the foundational work of Blau (1964) and expanded by contemporary research to include case studies and practical scenarios that demonstrate the impact of reciprocal relationships on employee behavior.

### **5.2.2 Recommendations for Developing an Organizational Innovation Climate**

To further strengthen and develop an organizational innovation climate, it is recommended that organizations devote more attention to developing team characteristics. According to Dackert et al. (2004), team characteristics are crucial for fostering a climate that promotes innovation. Managers should encourage reflection, ambition, and mutual motivation within the team in order to significantly improve innovation. This can be effectively fostered through team building exercises and strategic planning sessions, where teams jointly set goals

and reflect on shared experiences to develop a common vision for innovation (Dackert et al., 2004). Furthermore, ambitious goals are key to encouraging teams to think creatively and find innovative solutions. Managers should set challenging but achievable goals to push teams beyond the routine and foster an environment where new approaches and creative problem-solving are necessary for success (Hoegl & Parboteeah, 2003). Additionally, enhancing the organizational innovation climate can be further augmented by incorporating a strategic reward system into performance appraisals. It is essential that such a system not only acknowledges but also incentivizes innovation. This can be achieved by clearly integrating recognition of innovative efforts as a metric within performance evaluations. The rewards could be in various forms, such as bonuses, promotions, or recognition programs (Noorazem et al., 2021).

Further, it is crucial to clearly communicate the company's commitment to innovation to all employees. This could be achieved via two main approaches. The first is via the company's marketing efforts that put a spotlight on the company's innovative projects and successes. The second is within the company whereby managers should act as role models, embodying and promoting innovative values in their daily actions and decisions.

## 6 Conclusion

Based on the detailed examination of the relationships between transformational leadership, organizational innovation climate, and OCB, this dissertation has contributed significant insights into the role that transformational leaders and organizational innovation climate have in terms of their association with OCB. That is, the employees' behaviors in going above and beyond. The findings validate and expand upon existing literature in several important ways. The study confirmed that transformational leadership has a direct and positive relationship with OCB, underscoring the pivotal role of leaders who inspire, motivate, and intellectually stimulate their employees to voluntarily contribute to the organization's success. This aligns with social exchange theory, suggesting that transformational leadership fosters a reciprocal relationship where employees are more likely to engage in positive discretionary behaviors. Similarly, organizational innovation climate was found to positively influence OCB, indicating that environments supportive of innovation encourage employees to go the extra mile without being prompted and taking initiative.

Given these findings, organizations are encouraged to cultivate both transformational leadership and an innovative climate as distinct but complementary strategies to enhance OCB. The practical implications of this research underscore the importance of selecting leaders who are already high on transformational leadership characteristics, coupled with leadership development programs that focus on transformational qualities and the creation of organizational environments that support innovation.

In conclusion, this thesis contributes to a deeper understanding of how transformational leadership and organizational innovative climate are crucial drivers of OCB. By fostering an environment where transformational leadership and innovation are prioritized, organizations can achieve a more engaged, productive, and innovative workforce that is poised to excel in the complex and dynamic landscape of the modern business world.

## 7 References

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## 8 Appendices

### Appendix 1: Qualtrics Survey

Welcome and thank you for considering participating in this experiment on decision-making.

I, Pauline Künzel, am conducting this experiment as part of my Master Thesis at Católica Lisbon School of Business and Economics, under the supervision of Professor Cristina Mendonça.

The study consists of answering questions about **yourself, your work environment and your supervisor**. It will take about 5 minutes to complete. The purpose of the study is to explore how work environment and supervisor characteristics may be related to employee engagement and behaviours.

Please answer as honestly as possible. All answers will be kept strictly confidential and are anonymous. This means that it will not be possible to link your responses to your identity. The data collected will be used for research purposes only and may be presented in my thesis or disseminated in academic journals, always in an aggregated form, never about any individual response.

I ask you to take the study in one go, without interruptions.

There are no expected side effects of participating in this study beyond those associated with looking at a computer screen for circa 5 minutes.

You may change your mind and drop out at any point of the study during its completion (i.e., by simply closing this web page).

If you have any questions about this study, please email Pauline Künzel (s-pkunzel@ucp.pt). By continuing you agree to participate.

Thank you!

---

#### Q1 Which of the following best describes your employment status?

- I work for one organization.
  - I work for more than one organization.
  - I am currently unemployed.
-

**Q2 A supervisor is the person in your organization to whom you report directly. How many supervisors do you have at work?**

- One supervisor
- More than one supervisor
- No supervisor

If you work for more than one organization, from this point onward please focus on your **most dominant job role/organization** (e.g., the role were you devote most hours).

If you have more than one supervisor in this dominant job role, from this point please focus on the one that you **report most frequently to**.

**Q3 Transformational Leadership:** A supervisor is the person in your organization that you report the most frequently to.

Before you begin responding to the statements below, please take a moment to relax and reflect on your personal experiences and perceptions of your supervisor's leadership style.

How well do the following statements reflect your supervisor's behavior and approach?

**My supervisor...**

	To a very small extent	To a small extent	Somewhat	To a large extent	To a very large extent
... communicates a clear and positive vision of the future. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

... treats staff as individuals, supports and encourages their development. (2)

... gives encouragement and recognition to staff. (3)

... fosters trust, involvement and cooperation among team members. (4)

... please select "To a very small extent". (11)

... encourages thinking about problems in new ways and questions assumptions. (5)

... is clear about his/her values and practises what he/she preaches. (6)

... instills pride and respect in others and inspires me by being highly competent. (7)

**Q4 Organizational Citizenship Behavior:** Please take a moment to read each of the following statements carefully.

Reflect on your own behaviors and attitudes as they relate to your current workplace.

**How often have you done each of the following things on your present job?**

	Never	Once or twice	Once or twice/month	Once or twice/week	Every day
Took time to advise, coach, or mentor a co-worker. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helped a co-worker learn new skills or shared job knowledge. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helped new employees get oriented to the job. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lent a compassionate ear when someone at work had a work problem. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Offered suggestions to improve how work is done. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helped a co-worker who had too much to do. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Volunteered for extra work assignments. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked weekends or other days off to complete a project or task. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Volunteered to attend meetings or work on committees on own time. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gave up meal and other breaks to complete work. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q5 Innovation Climate:** Now I would like you to think about the organisation you work for. Please take a moment to read each of the following statements and rate how much you agree with them based on your experience within your organisation.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Creativity is encouraged here. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our ability to function creatively is respected by	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

the leadership.  
(2)

Around here,  
people are  
allowed to try  
to solve the  
same problems  
in different  
ways. (3)

The main  
function of  
members in  
this  
organization is  
to follow  
orders which  
come down  
through  
channels. (4)

Around here, a  
person can get  
in a lot of  
trouble by  
being  
different. (5)

This  
organization  
can be  
described as  
flexible and  
continually  
adapting to  
change. (6)

A person can't  
do things that  
are too  
different  
around here  
without  
provoking  
anger. (7)

The best way  
to get along in  
this  
organization is  
to think the  
way the rest of  
the group  
does. (11)



People around here are expected to deal with problems in the same way. (12)

This organization is open and responsive to change. (13)

The people in charge around here usually get credit for others' ideas. (14)

In this organization, we tend to stick to tried and true ways. (15)

This place seems to be more concerned with the status quo than with change. (16)

The reward system here encourages innovation. (17)

This organization publicly recognizes those who are innovative. (18)

The reward system here benefits mainly those who don't rock the boat. (19)

Thank you for your answers!

To end, we would like you to please answer a couple of demographic questions.

---

**Gender** **What is your gender?**

Male (1)

Female (2)

Other (3) \_\_\_\_\_

Prefer not to say (4)

---

**In which country do you currently live?**

▼ Afghanistan (1) ... Zimbabwe (1357)

---

**How old are you?**

\_\_\_\_\_

---

**What is your highest level of education?**

- Primary (1)
- High school (2)
- Undergraduate (3)
- Post graduate (4)
- Other (5) \_\_\_\_\_

-----

Q27 For the final demographic questions, please refer to the organization that you reported on throughout the entire survey.

-----

**Q17 How many hours do you work per week?**

\_\_\_\_\_

-----

**Q15 How many years have you been in your current role or job position? (numbers only)**

\_\_\_\_\_

-----

**Q4 Which of the following industries most closely matches the one in which you are employed?**

▼ Agriculture (21) ... Wellness and Fitness (44)

-----

**Q29 What is your current employment level?**

- Entry-level (1)
  - Intermediate or experienced (senior staff) (21)
  - First-level management (22)
  - Middle management (23)
  - Executive or senior management (24)
- 

**Q31 If you have any feedback or comments, please feel free to write them here:**

---

**Appendix 2: Detailed Description of Demographics**

*Demographics*

Baseline characteristic		<i>n</i>	%
Gender	Male	81	45.8
	Female	91	51.4
	Other	1	0.6
	Prefer not to say	2	1.1
	Missing	2	1.1
Country	Austria	10	5.7
	Belgium	1	0.6
	Canada	1	0.6
	Denmark	12	6.9
	Egypt	1	0.6
	France	3	1.7
	Germany	128	73.1
	Lebanon	1	0.6
	Netherlands	3	1.7
	Portugal	8	4.6
	Spain	2	1.1
	Switzerland	4	2.3
	United Kingdom	1	0.6

Education	Primary	3	1.7
	High School	7	3.9
	Undergraduate	49	27.7
	Post Graduate	115	64.4
	Other	2	1.1
	Missing	3	1.7
Industry	Agriculture	2	1.1
	Arts	1	0.6
	Construction	4	2.3
	Consumer Goods	9	5.1
	Corporate Services	28	16.0
	Design	2	1.1
	Education	9	5.1
	Energy and Mining	5	2.9
	Entertainment	5	2.9
	Finance	24	13.7
	Hardware	1	0.6
	Health Care	14	8.0
	Legal	6	3.4
	Manufacturing	2	1.1
	Media/Communication	9	5.1
	Nonprofit	7	4.0
	Public Administration	3	1.7
	Public Safety	1	0.6
	Real Estate	10	5.7
	Retail	3	1.7
Software	23	13.1	
Transportation	3	1.7	
Wellness & Fintess	4	2.29	
Employment Level	Entry-Level	72	41.1
	Intermediate	58	33.1
	First-level Mngmt	23	13.1
	Middle Mngmt	12	6.9
	Executive	10	5.7

### Appendix 3: PROCESS Model without covariates

```

*****
Model : 1
  Y : OCB
  X : TL
  W : OIC

Sample
Size: 177

*****
OUTCOME VARIABLE:
  OCB

Model Summary
      R      R-sq      MSE      F      df1      df2      p
      .5172   .2675   .4797   21.0594   3.0000   173.0000   .0000

Model
      coeff      se      t      p      LLCI      ULCI
constant   3.0921   .0593   52.1830   .0000   2.9751   3.2090
TL          .3296   .0760   4.3345   .0000   .1795   .4796
OIC         .2473   .0863   2.8663   .0047   .0770   .4176
Int_1       .0369   .0738   .5000   .6177  -.1087   .1824

Product terms key:
Int_1 :      TL      x      OIC

Test(s) of highest order unconditional interaction(s):
      R2-chng      F      df1      df2      p
X*W      .0011      .2500      1.0000      173.0000      .6177

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
  95.0000

```

## Appendix 4: PROCESS Model with covariates

```

*****
Model : 1
  Y : OCB
  X : TL
  W : OIC

Covariates:
  Hours_W  Empl_n

Sample
Size: 175

*****
OUTCOME VARIABLE:
  OCB

Model Summary
      R      R-sq      MSE      F      df1      df2      p
      .6324   .3999   .4008   22.5237   5.0000   169.0000   .0000

Model
      coeff      se      t      p      LLCI      ULCI
constant   2.6780   .1710   15.6567   .0000   2.3403   3.0157
TL          .3309   .0718   4.6115   .0000   .1892   .4725
OIC         .1800   .0808   2.2264   .0273   .0204   .3395
Int_1      -.0416   .0690   -.6035   .5470  -.1777   .0945
Hours_W     .0133   .0033   4.0218   .0001   .0068   .0199
Empl_n     -.3498   .1036  -3.3768   .0009  -.5542  -.1453

Product terms key:
Int_1 : TL x OIC

Test(s) of highest order unconditional interaction(s):
      R2-chng      F      df1      df2      p
X*W   .0013   .3642   1.0000   169.0000   .5470

***** ANALYSIS NOTES AND ERRORS *****
Level of confidence for all confidence intervals in output:
95.0000

```