LEADERSHIP AND INNOVATION IN THE PUBLIC SECTOR

Studying the Organizational, Team and Individual Level

STEPHAN DORSMAN



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Leadership and innovation in the public sector: Studying the organizational, team and individual level

Leiderschap en innovatie in de publieke sector: Een onderzoek naar het organisatieniveau, teamniveau en individuele niveau

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Voorwoord (Preface in Dutch)



Na een aantal jaren intensief gewerkt te hebben, is toch opeens het moment daar: de afronding van mijn proefschrift. Het traject dat geleid heeft tot dit proefschrift beschouw ik als een erg leerzame ervaring waar ik met veel plezier op terugkijk. Zo heb ik de kans gekregen om belangrijke theoretische, methodologische en analytische vaardigheden te ontwikkelen, diverse trainingen en cursussen te volgen, en conferenties in Nederland en in het buitenland (Ottawa, Leuven, Guangzhou, Boekarest, Birmingham en Cardiff) bij te wonen. In combinatie met het verzorgen van onderwijs, het begeleiden van studenten bij hun scriptie, werken bij PBLQ en het coördineren van een omvangrijk project bij UWV zie ik mijn promotietraject als een levenslange en waardevolle ervaring. Echter, de totstandkoming van dit proefschrift is zeker niet alleen mijn verdienste. Graag wil ik een aantal mensen specifiek bedanken.

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<u>Chapter 1</u> Introduction and Research Objectives



1.1 Introducing the study

Public sector organizations throughout the world are facing unprecedented challenges (Van Wart, 2013a). This is especially true in the current economic circumstances, which have resulted in shrinking budgets, increased demands on public services, and stringent public scrutiny. For example, citizens, the media, and private organizations are demanding high levels of accountability and transparency from public sector organizations by pressuring them to justify every currency paid in tax or donations. As a result, these organizations are developing new ways of delivering services in ways that are efficient, cost-effective, and convenient. With these efforts, they are attempting to cultivate greater trust and satisfaction amongst citizens and the beneficiaries of services, even as they reduce costs and increase efficiency. More generally, public organizations are thus facing major challenges and conflicting demands.

Given these challenges and demands, fostering innovation could obviously be a very useful strategy for public organizations (see, e.g., Osborne & Brown, 2011; Walker, 2014). As proposed by Bysted and Hansen (2015: 699), increased innovativeness is of key importance for public organizations, due to the challenges with which they are confronted (e.g., budgetary pressures and grand societal challenges). In this regard, innovation is often advanced as a "magic concept' when discussing the role of the government in dealing with wicked problems under challenging circumstances (Pollitt & Hupe, 2011). For example, Bekkers and colleagues (2011) emphasize that innovation has improved the legitimacy of public organizations and the services that they provide, in addition to enhancing their responsiveness to the demands of citizens and stakeholders. Whereas innovation is often related to profits and financial revenues in the literature on private management, this characterization is inappropriate in the public sector. In public organizations, innovation is expected to bring a certain element of novelty and substantial improvements (De Vries et al., 2016). From this perspective, scholars of public management (e.g., Osborne & Brown, 2011; Walker, 2008) argue that innovation often refers to doing something new, introducing new practices or processes, creating new products (or goods or services), or adopting a new pattern of relationships within or between organizations.

Despite the important role of innovation, it is not a characteristic for which public organizations are well known (Damanpour & Schneider, 2009). Various reasons have been advanced to explain why this might be the case. First, according to public choice theory, public sector organizations are usually monopolies, meaning that there is no competitive

pressure to innovate (Bekkers et al., 2011: 18). Second, political scientists observe that the media and other stakeholders have a strong tendency to expose failures within the public sector. This forms a powerful obstacle to innovation. At the same time, stringent central agency constraints, which are designed to minimize, failures, and corruption, in addition to ensuring due process, also create barriers to innovation (Borins, 2002: 467). Finally, organizational sociologists note that most public sector organizations are large bureaucracies, which are aimed at performing their core tasks with high levels of stability and consistency, although this may limit incentives to innovate (Wilson, 1989: 218-226). In recent years, however, the evidence has become more nuanced. For example, with regard to innovation, Bysted and Hansen (2015: 713) argue, "it is not sector per se that is important, instead it is the differences between subsectors or industries and job types." Although enhanced innovativeness has been identified as crucial for public organizations in the contemporary world, it thus appears that innovation does not necessarily come naturally to them.

In light of the observations above, it is of great importance for public sector organizations to embrace strategies that have the potential to accelerate innovation. The literature reports a wide variety of antecedents to innovation, including among else environmental factors (e.g., media attention, political demands), organizational structures, and job-related knowledge (De Vries et al., 2016). This study investigates the role that leadership plays in innovation. According to Bekkers and colleagues (2011: 26), leadership can generally be perceived as one of the core elements needed in order to spark innovation, as it has the potential to play a crucial role in disrupting old patterns and the status quo, possibly encouraging followers to develop new ideas. More specifically, many scholars emphasize the strong relationship between transformational leadership and innovativeness (Bass & Avolio, 1994; Burns, 1978; Jung et al., 2003; Keller, 1992). In this regard, leaders who communicate a clear vision that inspires and intellectually stimulates followers are capable of developing "coalitions of the willing," thereby creating a context for innovation (Bekkers et al., 2011; Elkins & Keller, 2003).

It is particularly important to investigate the roles that leaders play in innovation at different hierarchical levels. First, as noted by Van Wart (2003:214), public managers at the *top level* of the organization are likely to play an important role in providing "an overarching sense of direction and vision, an alignment with the environment, a healthy mechanism for innovation and creativity, and a resource for invigorating the organizational culture." Similarly, as reported by Fernandez and Wise (2010: 984), leadership on the part of top managers can facilitate changes in both the culture and settings of organizations in ways that

foster innovation. Second, in the private management literature, leadership at the *team level* is often related to innovation (see e.g., Bass & Riggio, 2006; Eisenbeiss et al., 2008; Somech & Drach-Zahavy, 2013). For example, in their systematic literature review, Anderson and colleagues (2014: 1310) note that leadership at the team level "has directly attributable and likely strong effect upon team innovativeness," thereby referring to the positive impact that transformational and participative forms of leadership can have on innovation. Third, as argued by Borins (2002: 469), advocate leadership at the *individual level* within public organizations may initiate and drive the ability to innovate by supporting and rewarding the creative, bottom-up initiatives of followers. In addition, Hartley (2005: 33) notes the need to move beyond the traditional hierarchical models of innovation and acknowledge that leadership-innovation relationships are distributed within public organizations, thereby assuming that individuals can play a role as well.

In conclusion, initial evidence in the academic literature depicts the role of leadership should span different hierarchical levels in public sector organizations in order to cultivate strategies designed to foster innovation.

1.2 Key concepts

This section is devoted to discussing the three main concepts of this dissertation.

1.2.1 Innovation

Shrinking budgets and expanding expectations of society are pressuring governments to do more with fewer resources, thereby greatly increased their focus on innovation (Bartlett & Dibben, 2002). This has created a need to understand opportunities through which public sector organizations can increase their innovativeness (Bysted & Hansen, 2015).

In their systematic literature review on public sector innovations, De Vries and colleagues (2016) report that most studies do not provide any clear definition of innovation, thus failing to describe the boundaries of the concept. When definitions are given, they are often quite general. In this light, most definitions are based on Rogers (2003: 12), who defines innovation as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption." Other scholars draw upon Rogers as well, defining innovation as the first attempts to adopt a new idea, practice, or object by a given organization (e.g., Borins, 2000). The definitions that are used thus reflect the two main dimensions: the perceived

novelty of an idea, practice, or object (e.g., Bhatti et al., 2011); and the adoption of an idea, practice, or object for the first time by a given organization (e.g., Borins, 2000).

Although the definition of innovation is often quite broad, types of innovation are specified (Moore & Hartley, 2008). Based on their review, De Vries and colleagues (2016) distinguish four different types of innovation: process innovation, product or service innovation, governance innovation, and conceptual innovation. Evidence reported by De Vries and colleagues (2016) indicates that the largest category in the public sector consists of process innovation, which involves improving the quality and efficiency of internal and external processes (Walker, 2014).

While the study does not neglect the importance of innovation types, this dissertation, however, examines two different aspects of innovation in the public sector. First, it focuses on the organizational context of *a climate for innovation* (Anderson & West, 1998; Somech & Drach-Zahavy, 2013). In recent years, scholars have paid increasing attention to the topic of "climate strength" (e.g., Probst, 2015; Zohar & Polachek, 2014). Most scholars agree that organizational climate can be considered an important antecedent of performance and affective outcomes, including innovation (Green et al., 1996; Hunter et al., 2007). More generally, scholars indicate that climate measures can predict innovation in real-world settings (Chen et al., 2013; Mathisen & Einarsen, 2004). In this light, it would be relevant to investigate a climate for innovation. Academic work devoted to innovative climate (Anderson & West, 1998; Somech & Drach-Zahavy, 2013) associate it with common perceptions about the desired practices, procedures, and behaviors that promote new combinations of existing resources. More specifically, a climate of innovation can be characterized by employees who help and support each other, by risk-taking behavior, and by the exchange of promising ideas (Isaksen & Akkermans, 2011).

Second, this dissertation addresses *innovation performance* as a means of investigating innovation in the public sector. The importance of investigating innovation performance is argued in a literature review by De Vries and colleagues (2016), who identify the most frequently mentioned motivation for innovation as the need to enhance the performance of public organizations, often for purposes of effectiveness or efficiency. Innovation performance concerns the extent to which organizations, teams, or individuals actually introduce and apply ideas, processes, products, or procedures that are new to the organization and that are designed to be useful (Osborne & Brown, 2011; Somech, 2006: 132). For example, innovative employees might implement new ways of cooperating with

citizens or develop novel strategies for coping with pressures relating to accountability (Voorberg et al., 2014).

1.2.2 Leadership

The academic literature contains no clear consensus regarding what leadership is (Bass & Bass, 2008: 5). The diffuse nature of this field is largely due to the frequent confusion of leadership with headship or management, although leadership is often regarded as the most exciting aspect of management. Academic work devoted to these issues generally associate leadership with creativity and change, while associating management with stability and control (Bass & Bass, 2008; Kotter, 1990; Yukl, 2008). For example, a leader might envisage a compelling vision for the future of a given organization, while a manager might exhibit willingness to organize and structure the organization.

This dissertation defines leadership according to one core perspective on the concept: the behavioral approach to leadership, which places strong emphasis on how leaders act (Bass & Bass, 2008). Behavioral theories of leadership thus focus on what leaders actually do (behavior). These theories define leadership in terms of particular behaviors, in which "a leader engages in the course of directing and coordinating the work of group members" (Bass & Bass, 2008: 17). The focus of this dissertation is thus on particular *activities* that supervisors perform to influence others (Van Wart, 2013b), corresponding to the behavioral approach to leadership (Yukl, 2008; 't Hart, 2014).

Leadership activities can vary in different ways. As argued by Van Wart (2012: 243), "first and foremost, they vary according to one's level in the organization." Three core hierarchical levels are often mentioned in this regard: the organizational level, the team level, and the individual level. First, the organizational level, which can be viewed as the highest hierarchical level of an organization, refers to the total number of members within a given organization. These members are all structured and managed in order to meet a need or to pursue collective goals. At the organizational level, this research analyses the following leadership activities, thereby building upon the work of Van Wart (2012: 245): scanning the environment, strategic planning, articulating the mission and vision, networking and partnering, performing general management functions, decision making, and managing organizational change.

Next, the team level concerns working-group units of two or more members interacting interdependently to achieve a common objective (Bell, 2007). Teams exist within

a larger organization and interact with other teams, as well as with the organization. At the team level, this study investigates activities corresponding to *rule-following leadership*, which refers to "encouraging employees to carry out tasks in line with governmental rules and regulations" (Tummers & Knies 2016: 436). The importance of this form of leadership for public leaders has been emphasized by various scholars, including Oberfield (2010), who argues that ignoring or departing from governmental rules and regulations increases the likelihood of corruption and the inconsistent implementation of policies.

Finally, the lowest level in the organizational hierarchy, the individual level, consists of individual employees. The roles, responsibilities, and job duties of employees are often analyzed at this level. At the individual level, this research focuses on activities that can be related to *servant leadership*. Servant leadership is characterized by putting the needs of others first and helping people to achieve the greatest possible personal development (Greenleaf, 1977). In this respect, scholars have argued that the service orientation of servant leaders inside and outside their organizations may be of great value to leaders in public organizations, which are facing a decrease in public confidence, due to reports of corruption and other self-interested initiatives on the part of their employees (Miao et al., 2014).

To summarize, each of the three hierarchical levels described above has consequences for the study of leadership activities in this dissertation, as depicted in Table 1.1.

Table 1.1: Leadership activities spanning different hierarchical levels

Hierarchical level	Leadership activities		
Organizational level	Scanning the environment		
	Strategic planning		
	Articulating the mission and vision		
	Networking and partnering		
	Performing general management functions		
	Decision-making		
	Managing organizational change		
Team level	Encouraging to carry out tasks in line with		
	governmental rules and regulations		
Individual level	Putting the needs of others first and helping people		
	to achieve the greatest possible personal		
	development		

As demonstrated in Table 1.1, the leadership activities studied depend upon the hierarchical level of the organization. For example, at the organizational level, this research analyses leadership activities that can be related to environmental scanning, defined as "gathering and critically evaluating data related to external trends, opportunities, and threats on an ongoing and relatively informal basis" (Van Wart, 2012: 287). In a similar vein, at the team level, this dissertation investigates leadership activities that encourage "employees to carry out tasks in line with governmental rules and regulations" (Tummers & Knies, 2016: 436).

Given that the study of leadership activities depends upon the hierarchical level of the organization, this dissertation investigates the activities of leaders in innovation across three different levels in the hierarchy: the organizational level, the team level, and the individual level.

1.2.3 A public sector context

Public management research often highlights specific characteristics of the public sector. The authors of such studies argue that the particular context of public organizations affects the behavior and management of public organizations (Rainey, 2014). For example, Boyne (2002: 188) notes that "management techniques cannot be exported successfully from one sector to another because of the differences in organizational environments, goals, structures and managerial values. These variables represent a set of contingencies that require different approaches to management in public agencies and private firms."

Several scholars have emphasized core differences between public and private organizations (Boyne, 2002: Rainey, 2014). In contrast to private sector organizations, public organizations are collectively owned by members of a political community. The economic system is thus the dominant authority in the private sector, while public sector organizations are controlled by the political system. In addition, public organizations are forced to provide benefits to individuals and groups in society. These benefits are funded by taxation rather than through direct payments from citizens or "clients" (Boyne, 2002). Finally, whereas private sector organizations can enter or exit particular markets, the only choice for public organizations concerns *how* they will operate within a given society (Rainey, 2014).

Although scholars have identified important differences between public and private organizations (DeSantis & Durst, 1996; Guest & Conway, 2002), the New Public Management (NPM) reforms (which started in the 1980s) make it challenging to distinguish the public sector from the private sector (Bozeman & Bretschneider, 1994). These reforms

assume that rationalities used in the private sector should be applied in the public sector as well, in order to improve the efficiency and effectiveness of public organizations. This has given rise to many hybrid organizations that bridge the two sectors (Van Thiel, 2006).

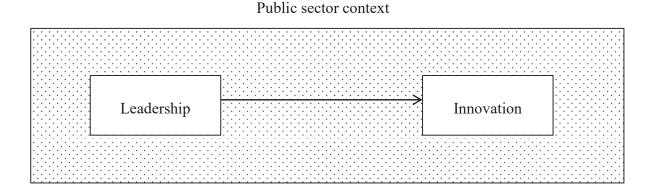
Acknowledging that the differences between public and private organizations are becoming increasingly vague, one perspective is that public organizations are particularly likely to be subjected to restrictive managerial practices, as they are held accountable, both economically and politically, for their outcomes (Emery & Giauque, 2005). For this reason, scholars have proposed that public organizations are likely to encounter resistance to change and innovation, given the environmental demands and public scrutiny with which they must cope (Pollitt, 2003; Rainey, 2009).

The suppression of the role of innovation due to the factors discussed above further underscores the importance of studying the leadership of innovation within a public sector context. This is because enhanced innovativeness could be considered crucial to the ability of contemporary public organizations to overcome major challenges and conflicting demands.

1.3 Overall aim, research questions and relevance

The research area of this dissertation lies within the boundaries of three distinct concepts (see Figure 1.1).

Figure 1.1: Research area of the dissertation



The overall aim of this research is to develop greater insight into the relationship between leadership and innovation within a public sector context. In line with the overall aim, the main research question of this study is as follows:

This research question has been investigated in the Dutch Employee Insurance Agency (abbreviated in Dutch to UWV), an autonomous professional administrative authority (in Dutch: ZBO). The organization selected for this study can be regarded as a "machine bureaucracy" for three reasons (Mintzberg, 1992; Morton and Hu, 2008). First, the organization is defined by its standardization. Within the UWV, work is highly formalized, there are many routines, procedures are analyzed regularly for efficiency, and jobs are clearly defined. Next, the organization has a tight vertical structure. Functional lines within the UWV go all the way to the top, allowing managers spanning the highest hierarchical level to maintain centralized control. Third, the organization in the current study has a large technocratic structure and support staff. Within the UWV, key individuals and teams are working in such functions as human resources, controlling, and planning. However, the organizational selected may be less representative of other types of public organizations than "machine bureaucracies", including for example municipalities or ministeries. This reduces the external validity of the research.

1.3.1 Sub-questions

Three sub-questions have been formulated as a means of specifying the central research question. Together, they provide an answer to the main research question of this dissertation.

The first sub-question is as follows: Which roles do top managers envision for themselves, and which leadership activities do they perform in order to foster a climate for innovation in a public sector context? This sub-question is intended to provide empirical exploration of: 1) the characteristics that top managers associate with a climate of innovation, 2) the leadership activities that top managers substantiate for themselves with regard to an innovative climate, and 3) the ways in which top managers envision and conceptualize turbulence and complexity within the external environment (e.g., political constraints), given that leadership at the highest hierarchical level focuses particularly on the external organizational environment (Van Wart, 2012; 2013b). By doing so, this sub-question specifies the central research, as it examines leadership-innovative climate relationships at the top level of the organization.

After exploring characteristics of a climate for innovation and its leadership at the highest hierarchical level, this study concentrates on a lower level of the organization. From this perspective, the second sub-question is formulated as follows: To what extent does rulefollowing leadership influence the innovation performance of teams in a public sector context? This sub-question is intended to provide empirical investigation of the role that rulefollowing leadership plays in innovation performance at the team level. The exploration of this sub-question also shifts the focus of the dissertation from a climate for innovation at the highest hierarchical level to innovation performance at the team level. The most important reason for this conceptual change is that it allows the research to determine whether particular characteristics of an innovative climate at the highest organizational level – or their absence – have an impact on the extent to which a team actually introduces and applies new ideas, processes, products, or procedures that are designed to be useful. Consequently, this leads to a specification of the central research question, as this sub-question investigates relationships between rule-following leadership and innovation performance at the team level, thereby increasing study's focus on a particular aspect of innovation at the top level of the organization.

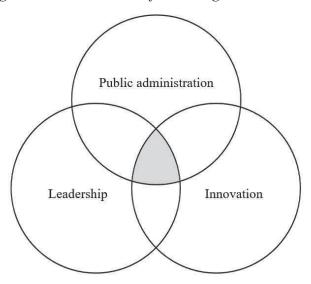
Proceeding from the insight developed into particular relationships between leadership and innovation within a public sector context at both the organizational level and the team level, the final sub-question of this study focuses on the individual level: To what extent is servant leadership related to employee innovation performance and employee job performance in a public sector context? This sub-question is intended to provide empirical investigation of the relationship of servant leadership to employee innovation performance and employee job performance in a public sector context. This sub-question also addresses the innovation performance of employees in order to capture the impact of a climate for innovation at the top level in the hierarchy of the organization on the actual introduction of new actual new ideas and processes at the individual level. Moreover, to ensure the robustness of any potential relationships between servant leadership and innovation performance identified at the individual level, this sub-question also investigates the effects of servant leadership on the overall job performance of employees in addition to innovation performance. By doing so, this sub-question specifies the central research question, as it analyses servant leadership-innovation performance relationships at the individual level, thereby expanding study's focus on particular aspects of leadership-innovation relationships at higher hierarchical levels of the organization.

In answering the different research questions, this study contributes to theoretical, methodological, and practical knowledge. The subsections below discuss these aspects in more detail.

1.3.2 Theoretical value

This study combines three distinct bodies of knowledge (see Figure 1.2).

Figure 1.2: Combining three distinct bodies of knowledge



In this research, insights are derived from the public administration literature, leadership literature and innovation literature. By combining these bodies of knowledge, this study contributes to the literature by providing additional insight into the role that leadership plays in innovation within a public sector context. More specifically, the dissertation makes three distinct contributions.

First, this study adds to the public administration literature by focusing on leadership in the public sector. Public leadership is a topic worth studying, as public organizations and their leaders are currently facing new challenges and pressures (e.g., transparency), within an increasingly complex and ambiguous world (Van Wart, 2013a). Effective leadership could help public organizations to cope with these mounting pressures ('t Hart, 2014; Vogel & Masal, 2015, Van Wart, 2013b). Despite the development of the literature on public leadership (e.g., Anderson, 2010; Fernandez, 2005; Trottier et al., 2008; Van Wart, 2013a; 2013b), Vogel and Masal (2015: 1166) conclude, however, that "in current research on public

leadership, the emphasis is still on the aspect of 'leadership' rather than on the 'public' element." In response to this call, this dissertation addresses the potential impact of a public sector context on the manner in which leadership is exerted. To illustrate this, one strategy of this study to investigate effects of public sector characteristics on the role of leadership has to do with its focus on rule-following leadership and servant leadership. Regarding rulefollowing leadership, very limited attention has been paid to the empirical examination of this leadership form within the public sector. This is surprising, given that the importance of rulefollowing is often emphasized (Lane, 1994; Oberfield, 2010). For example, Terry (2002: 77) notes that one important task of public leaders is to reduce violations of governmental rules and regulations, thus ensuring rule-following. With regard to servant leadership, Miao and colleagues (2014: 727) note that "limited research has examined the prevalence of servant leadership in the public sector, its effectiveness in promoting positive employee attitudes, and the exact mechanisms by which it exerts its effects". This dissertation relies upon a multidimensional approach to servant leadership, given its potential to identify underlying premises of servant leadership theory in public organizations. By doing so, it moves beyond public sector studies based on unidimensional approaches to servant leadership (e.g. Miao et al., 2014). So, this research contributes to the public administration literature on leadership by focusing explicitly on rule-following leadership and servant leadership.

Next, by examining the underlying premises of public sector innovation (i.e., a climate for innovation and innovation performance), this study addresses a gap in the public administration literature on innovation. Despite the literature on innovation in the public sector has developed in recent years (Bysted & Hansen, 2015; Walker, 2014). De Vries and colleagues (2016: 162) conclude, however, that "little we know about public sector innovation and [...] the kind of empirical and theoretical knowledge and research that is needed to understand and criticize the innovation journeys on which many governments have embarked." In this light, study's in-depth focus on an innovative climate and innovation performance provides increased insights into public innovation. With regard to a climate for innovation, very limited attention has been paid to the empirical examination and characteristics of such climates within a specific context of the public sector (e.g. Moolenaar, Daly, & Sleegers, 2010). This is surprising, given the important role that it is currently playing for public organizations. Regarding innovation performance, the research moves beyond studies of innovation in the field of public administration, which are limited to examining the innovative intentions of employees (e.g., Bysted & Jespersen, 2014; Fernandez & Moldogaziev, 2013). As observed by Fernandez and Moldogaziev (2013: 178), the extent to which innovative intentions directly result in actual innovations is unclear whereas innovation performance has the potential to grasp the frequency of innovations. All in all, one important contribution of this research thus relates to its value to the field of public innovation.

The final contribution of this study is to the leadership-innovation literature focusing on the public sector. In contrast to the literature in the private management field (e.g. Bass & Avolio, 1994; Burns, 1978; Keller, 1992), public administration scholars have paid scarce attention to determining the role that leadership plays in innovation. One recent exception is a study by Ricard and colleagues (forthcoming), who demonstrate that a nuanced set of leadership styles (i.e., leadership behaviors that include a transformational style, as well as behaviors that are more dedicated to motivating employees, risk-taking, and including others in decision-making) is important for accelerating innovation in the public sector. They nevertheless suggest that more research is needed with regard to potential relationships between leadership and innovation in the field of public administration, as some of their five perspectives on leadership are more robust than others are. In this light, this dissertation examines unknown relationships between leadership and innovation in the public sector, such as the potential impact of rule-following leadership on the innovation performance of teams on the one hand and, on the other hand, effects of servant leadership on the innovation performance of employees. By doing so, this dissertation contributes to the literature on leadership and innovation in the field of public management.

1.3.3 Methodological value

Several methodological concerns with respect to public management research are noted in the literature (see, e.g., Jakobsen & Jensen, 2015; Meier & O'Toole, 2013). One frequently mentioned methodological issue is common source bias. Common source bias arises when the same source is used for collecting information about independent and dependent variables (Favero & Bullock, 2015), which could possibly lead to misleading positive relationships found. Another methodological concern in social science research has to do with social desirability, which is about the tendency of respondents to answer questions in a manner that will be seen as favorable by others (Podsakoff et al., 2012). This biases the validity of research results, as it overestimates 'good behaviour' and underestimates 'bad behaviour'.

This dissertation addresses some frequently mentioned concerns in three ways. First, it uses multiple actors by including respondents from different sub-populations (e.g., top

managers, direct supervisors and employees). Second, it involves the collection of large N-data (from more than 5,000 individuals). Finally, it draws upon multiple sources, by combining different datasets and raters (i.e., employees and their direct supervisors).

Consistent with the multi-level character of this dissertation, the study devotes particular attention to different levels within a public sector organization (i.e., organizational, team, and individual levels). More specifically, it investigates characteristics of an innovative climate, as identified by top managers, in addition to the perceptions of employees regarding the leadership of their supervisors and the perceptions of supervisors with regard to the innovation performance of their teams and employees, along with their perceptions of employee job performance. In order to examine the relationship of the leadership of supervisors to team innovation performance, employee innovation performance, and employee job performance, the analytic techniques of structural equation modeling are used to perform simultaneous examination of direct and indirect relationships among the independent and dependent variables. The methodology employed is thus another contribution of this dissertation. It is discussed in greater detail in Chapter 3.

1.3.4 Practical value

The gap between theory and practice has often been discussed in the field of public administration (Bogason & Brans, 2008: 92; O'Toole, 2000; 2004). This study therefore focuses explicitly on connecting theory with practice. The benefits of linking leadership to innovation within a public sector context are not restricted to scholars. Practitioners are likely to benefit from this research as well.

This dissertation offers suggestions to practitioners concerning how to bolster innovation within a public sector context. More specifically, it enables practitioners (e.g., public leaders, managers, trainers) to analyze which activities might be important in order to increase the innovativeness of their organizations in particular circumstances. For example, when confronted with a group of employees (e.g., government officials), all of whom have a strong tendency to perform their tasks according to the formal rules and procedures of the organization, a leader can take this tendency into account when modeling behavior. Instead of demonstrating ways of acting in accordance with organizational rules and regulations, leaders could share experience-based examples of taking risks in the course of work, thus possibly encouraging their employees to be more innovative. In general, this dissertation provides public practitioners with strategies designed to bolster innovation.

1.4 Structure of the dissertation

This study consists of seven chapters, as outlined schematically in Table 1.2.

Table 1.2: Chapter overview

Chapter 1: Introduction and Research Objectives				
Chapter 2: Theoretical Exploration				
Chapter 3: Methodology				
	Sub-question 1	Sub-question 2	Sub-question 3	
Chapter 4:				
Fostering a Climate for Innovation in				
a Public Sector Context: The Role of				
Leadership Activities on the part of				
Top Managers				
Chapter 5:				
Linking Rule-Following Leadership				
to Team Innovation Performance in a				
Public Sector Context				
Chapter 6:				
Examining the Relationship of				
Servant Leadership to Employee				
Innovation Performance and				
Employee Job Performance in a				
Public Sector Context				
Chapter 7: Conclusions and Reflections				

Chapter 2 provides a brief exploration of the most important theoretical concepts used throughout the dissertation. It aims to provide additional insight into the most important concepts addressed in the current study. This chapter should not be understood as providing a "theoretical framework" for the dissertation, however, as the underlying theoretical premises needed to answer the three sub-questions are addressed in the three chapters focusing on the different hierarchical levels (Chapter 4, 5, and 6).

Chapter 3 provides a discussion of the research design, analytic techniques, and the instruments used to measure for the central concepts. In addition, the methodological choices that have been made are explained and discussed, with particular attention to the reasons for and implications of combining both qualitative and quantitative methods and techniques.

Chapters 4, 5, and 6 are based on empirical data derived from top managers, team supervisors, and employees "nested" in teams, all of whom were employed in a specific public sector organization. The study addressed in Chapter 4 explores relationships between leadership on the part of top managers and a climate for innovation in a public sector organization, thereby responding to the first sub-question of this dissertation. Chapter 5 tests hypotheses with respect to rule-following leadership and the innovation performance of teams, in addition to explaining any significant results, thereby addressing the second subquestion. Chapter 6 focuses on testing and explaining potential relationships of servant leadership to employee innovation performance and employee job performance in a public sector context, thereby addressing the third sub-question.

Finally, *Chapter 7* integrates the empirical findings, thereby formulating an answer to the main research question of this dissertation, addressing the contributions and limitations of the research, and discussing theoretical and practical implications.

<u>Chapter 2</u> Theoretical Exploration



2.1 Introduction

This chapter presents a theoretical exploration of the three main concepts addressed in this dissertation. The theoretical background to these concepts is built upon a detailed discussion of the literature on public administration, leadership, and innovation literature. The chapter should not be understood as a theoretical framework for the research, however, given that the theoretical insights needed to answer the sub-questions are presented in the chapters focusing on the different hierarchical levels (Chapters 4, 5, and 6). The sole purpose of this chapter is to explore the central concepts of the study.

The following section (2.2) presents the theoretical background on innovation, particularly through a discussion of the characteristics of a climate for innovation and innovation performance. Section 2.3 consists of a theoretical exploration of the concept of leadership, discussing various approaches to leadership. Section 2.4 discusses a public sector context by building upon relevant public administration literature. The final section contains a conclusion based on the theoretical exploration presented in this chapter.

2.2 Innovation

In the past decade, innovation has become an important focus for governments around the world, as they are being confronted with major challenges. Shrinking budgets are pressuring governments to do more with fewer resources, and expanding community expectations and obligations have created a need to understand the topic of innovation (Bartlett & Dibben, 2002; Bysted & Hansen, 2015).

2.2.1 Definition of innovation

As argued in the introductory chapter, two dimensions are often mentioned in the most common definitions of innovation (De Vries et al., 2016). First, these definitions underscore the perceived novelty of an idea, practice, or object (e.g., Bhatti et al., 2011). Second, they emphasize the adoption of an idea, practice, or object for the first time by a given organization (e.g., Borins, 2000). Based on these two dimensions, this study defines innovation as the first attempts to adopt a new idea, practice, or object by an organization, thereby corresponding to the definition of innovation proposed by Rogers (2003: 12).

Many researchers have investigated potential drivers and barriers of public innovation. In this context, there is growing evidence that innovation in the public sector may benefit from collaboration (Bommert, 2010; Eggers & Singh, 2009). According to Gray (1989), collaboration can be viewed as "the process through which two or more actors engage in a constructive management of differences in order to define common problems and develop joint solutions based on provisional agreements that may coexist with disagreement and dissent" (Hartley et al., 2013: 826). Several arguments can be given concerning the advantages of collaboration for innovation. For example, bringing together and challenging different experiences and perspectives may spur the development of new and creative solutations (Hartley et al., 2013). On a similar vein, the attempts of diverse actors to estimate gains and risks stimulate the generation of promising ideas (Bommert, 2010).

While the collaborative approach to public innovation might seem convincing, it has been argued, however, that the role of individual persons in innovation is relevant as well. In this light, Roberts and King (1991) developed a model of the 'hero-innovator'. This hero-innovator can be characterized as a single person who is confident, is tenacious, works long hour, is goal-oriented, has a strong willingness to take risks and uses political connections (Brown & Osborne, 2005: 172). The idea of the hero-innovator has further been developed by Osborne (1998), as he states that individuals should be related to the context in which they act. In addition to context, Meijer (2014) has concluded that multiple hero-innovators are needed regarding innovation.

Innovation is often confused with change, as it has been argued that innovation and change are nearly identical concepts (Mulgan & Albury, 2003). One key difference between innovation and change, however, is that innovation concerns something original and new that is being introduced to the world, while change refers to differences in a current state of affairs related to different points of time (Osborne & Brown, 2005). Innovation thus refers to something new, while this is not necessarily the case for change.

Researchers do not agree on the differences between innovation and creativity. According to some scholars, the boundaries between the two concepts are unclear (e.g., Oldham & Cummings, 1996; Rank et al., 2004), although they are by no means identical. In order to grasp the uniqueness of both innovation and creativity, Anderson and colleagues (2014) provide additional insight into the distinction between them. In line with academic work devoted to this issue, they argue (2014: 1300) that "whereas creativity has been conceived of as the generation of novel and useful ideas, innovation has generally been argued to be both the production of creative ideas as the first stage, and their implementation

as the second stage." In essence, therefore, creativity concerns the generation of ideas, while innovation is also related to the implementation of ideas. For this reason, creativity is often viewed as the first step of innovation (Amabile, 1996).

2.2.2 A climate for innovation and innovation performance

Many aspects of public innovation are worth studying, including its objectives, processes, and outcomes. These three categories correspond to the classic distinction made by Schumpeter (1942: 83): innovation consists of both a process and outcome. First, innovation objectives relate to the expected goal of the actual introduction of a new idea, practice, or object, as with improving effectiveness or enhancing efficiency (De Vries et al., 2016). Next, the diffusion and adoption of innovation are often mentioned in the context of innovation as a process. According to Rogers, the diffusion of innovation can be defined as "a process in which an innovation is communicated through certain channels over time among members of a social system" (2003: 5), while the adoption of innovation refers to "the process through which [an organization] passes from first knowledge of an innovation, to forming an attitude towards innovation, to a decision to adopt or reject, to implementation of the new idea, and to confirmation of this decision" (2003: 20). Third, the outcomes of innovation concern "substantive results of implementation of an innovation that can be intended or unintended and positive or negative" (De Vries et al., 2016), as sometimes reflected in efforts to involve citizens or increase customer satisfaction.

The dissertation moves beyond these three categories to analyze two different aspects of public sector innovation: *climate for innovation* and *innovation performance*. While these aspects are investigated as two seperate concepts in this research, however, Anderson et al. (2014) show in their systematic literature review on innovation and creativity that researchers have revealed effects of an innovative climate on innovation performance. For example, Hulsheger and colleagues (2009) conclude that team innovation climate has a positive impact on effective innovativeness within work groups. On a similar vein, Chen and colleagues (2013) report that support at the team-level for an innovative climate captures motivational impact that mediate between transformational leadership and the innovation performance of teams. In general, the relationships found highlight the important role of social processes taking place within an innovative climate for the actual innovation performance (e.g., Perry-Smith & Shalley, 2003).

Many scholars have argued the importance of various dimensions of a climate for innovation (e.g., Eisenbeiss et al., 2008; Sarros et al., 2008). For example, Isaksen and Akkermans (2011) note that risk-taking behavior is a crucial condition for innovation, as risk-taking initiatives pre-suppose creativity and the introduction of new ideas or strategies. In general, scholars stress the need for a specific climate that embraces innovation, given that many innovations are unsuccessful or not implemented (Chen et al., 2013; Somech & Drach-Zahavy, 2013). In other words, innovation alone is not enough: an organizational climate is needed in which people feel safe to take interpersonal risks, in which they are encouraged to develop new ideas, and in which they are able to discuss problems openly (Baer & Frese, 2003: 46). This research therefore focuses on the organizational context of a climate for innovation (Anderson & West, 1998) as a means of investigating innovation in the public sector.

In general, scholars (Anderson & West, 1998; Somech & Drach-Zahavy, 2013; West & Farr, 1990) define an innovative climate as the common perceptions about the desired practices, procedures, and behaviors that promote new combinations of existing resources. Several instruments have been designed for assessing the internal environment of an organization with regard to innovation (for an overview, see: Mathisen & Einarsen, 2004). This dissertation draws on the Situational Outlook Questionnaire (SOQ; Isaksen et al., 1999), as other instruments (e.g., the Siegel Scale of Support for Innovation; Siegel & Kaemmerer, 1978) tend to be regarded as either unreliable or invalid (Mathisen & Einarsen, 2004: 125-128).

Drawing on information obtained with the SOQ, Isaksen and Akkermans (2011) characterize a climate of innovation along several dimensions: challenge/involvement, freedom, trust/openness, idea time, playfulness/humor, conflict, idea support, debate, and risk-taking. For example, when there is a high degree of trust, individuals can be open and frank with one other, which helps them to feel comfortable developing new ideas (Isaksen & Akkermans, 2011).

Organizational climate is often confused with organizational culture, as climate and culture are regarded as similar constructs for conceptualizing the ways in which people experience and describe work settings (Schneider et al., 2013: 362). It is important to distinguish climate from culture, however, as the two concepts differ in theoretical terms. Organizational climate relates to the shared perceptions, policies, and practices that employees experience, as well as the behaviors they observe being rewarded (Ostroff et al., 2003). In contrast, organizational culture could be defined as the shared basic assumptions,

values, and beliefs that characterize a setting and that are taught to newcomers as the proper ways of thinking and feeling (Schein, 2010). Climate thus refers to the psychological environment, as reflected in attitudes and perceptions, while culture is more concerned with ideologies, values, and norms.

This study also investigates innovation performance as a means of examining innovation in the public sector. The importance of studying innovation performance is justified for several reasons. For example, public organizations are currently being forced to enhance their performance (Bellé, 2014; Breevaart et al., forthcoming; Moynihan et al., 2012a). As illustrated in a systematic review by De Vries and colleagues (2016), the most important argument for innovation has to do with increasing an organization's performance (for example, see: Salge & Vera, 2009; Dias & Escoval, 2013). The focus of this dissertation on innovation performance could thus potentially generate a strategy for helping public organizations cope with pressure to enhance their performance. At the same time, by focusing on innovation performance, this dissertation moves beyond studies of innovation in the field of public administration, which are limited to examining the innovative intentions of employees (e.g., Bysted & Jespersen, 2014; Fernandez & Moldogaziev, 2013). As observed by Fernandez and Moldogaziev (2013: 178), the inclination to innovate does not automatically translate "into actual innovative proposals, whether or not those proposals are accepted." The extent to which innovative intentions directly result in actual innovations is thus unclear. This dissertation's focus on innovation performance thus contributes to analyses focusing on innovation in the public sector.

Innovation performance can be defined as the extent to which organizations, teams, or individuals actually introduce and apply ideas, processes, products, or procedures that are new to the organization and that are designed to be useful (Osborne & Brown, 2011). For example, innovative teams generate creative ideas and process them critically, such that useless ideas are discarded and promising ideas are implemented (Anderson & West, 1998).

2.3 Leadership

The widely studied phenomenon of leadership has been investigated extensively in various contexts and with a variety of theoretical foundations. For example, some leadership studies seek to develop insight by addressing individuals, while some theories also approach leadership more as a process (Bass & Bass, 2008). Given that the study of leadership varies across cultures, decades, and theories, a short description of what is generally known and

understood about leadership is needed. Although the brief overview presented below is obviously neither exhaustive nor complete, it may offer useful insight into the concept of leadership (for further elaboration, see: Schein, 2010; Selznick, 2011; Yukl, 2008).

2.3.1 The study of leadership

Following Bass and Bass (2008), several categories can be identified that capture the essence of the study of leadership. The first category concerns the attributes of great leaders, seeking to explain leadership according to internal qualities with which individuals are born (Bernard, 1926). These studies examine the personality, physical, and mental characteristics of leaders. Many researchers have proposed the existence of five core traits (Digman, 1990): neuroticism, extraversion, openness, agreeableness, and conscientiousness.

A second major category of leadership studies addresses leadership behaviors, with the objective of identifying what successful leaders do (Yukl, 2008; 't Hart, 2014). In these theories, the focus is shifted from "who leaders are" (i.e., characteristics and traits) to "what leaders do" (i.e., behavior). Studies of leadership as behavior seek to identify the behaviors exhibited by leaders that increase the effectiveness of their organizations (Bass & Bass, 2008), thereby resulting in greater attention to such issues as relationships between people, output, and performance (Fiedler, 1967).

A third category of leadership theories assumes that the effectiveness of leadership is dependent upon the context in which it is demonstrated (Bass & Bass, 2008). These contingency theories are based on the notion that the type of leadership needed changes from situation to situation. One of the first contingency theories was developed by Fiedler in the 1960s. This "least preferred co-worker (LPC) contingency model," describes how the situation changes the relationship between the trait measure "least preferred co-worker" and the effectiveness of leadership. The LPC score indicates the extent to which a leader is task-oriented (low score) or relationship-oriented (high score).

Finally, recent decades have seen the emergence of additional leadership theories that could be classified as more relationship-oriented. For example, this is illustrated by the well-known distinction between transformational and transactional leadership. Transformational leadership refers to the investigation of ways in which followers can be motivated by identifying the needed change, creating a vision to guide the change through inspiration, and executing the change in collaboration with committed followers (Bass, 1985). In contrast, transactional leadership concerns more traditional views of people and organizations, having

to do with the leader's positional power to use followers for goal achievement (Burns, 1978). These leadership theories generally emphasize that there is no one best understanding of what causes people to act as they do at work (Bass & Bass, 2008; 't Hart, 2014).

Many scholars have indicated beneficial effects of transformational leadership for organizations, including improved performance (Bellé, 2014; Moynihan et al., 2012a) and increased innovation (Chen et al., 2013). However, Van Knippenberg and Sitkin (2013) identified several problems when studying transformational leadership: 1) a clear conceptual definition is lacking, 2) the impact of each underlying dimension is unclear, 3) the conceptualization of transformational leadership and its effects are confounded, and 4) the most frequently used measurement tools fail to grasp the essential dimensional structure. Given that these problems are fundamental, the research does not investigate the role that transformational leadership might play in innovation.

2.3.2 Approach to leadership

Given the wide range of existing leadership theories, it is not surprising that defining leadership has proven difficult, thus leading to an abundance of definitions (Yukl, 2008). One common theme across these many definitions is that they describe leadership as the process of influencing others (Van Wart, 2013b: 554; Yukl, 2008: 26). This leadership process model includes four key factors: 1) the person who takes charge and directs the group's performance, 2) those who follow this person's directions on tasks and projects, 3) the context in which the work is performed, and 4) the results or outcomes of the process. In this dissertation, the focus is on particular *activities* performed by people in position of power when trying to influence others. This is in line with the behavioral approach to leadership, which concerns what leaders *do* (ideally or actually) in their work (Yukl, 2008, 't Hart, 2014).

As noted by Van Wart (2012), the activities that leaders perform depend upon the hierarchical level of the organization. For example, at the team level, leaders concentrate on staff development, which involves encouraging team members to acquire or develop skills, knowledge and viewpoints by providing learning and training facilities, as well as avenues along which such new ideas can be applied (Van Wart, 2012). In a similar vein, one activity of leaders at the individual level is to clarify roles and objectives, which refers to "working with subordinates to guide and direct behavior by communicating about plans, policies, and specific expectations" (Van Wart, 2012: 249). In this light, leadership activities are

investigated across three core hierarchical levels in this dissertation: the organizational level, the team level, and the individual level.

Van Wart (2012: 245) identifies seven types of leadership activities at the organizational level: scanning the environment; strategic planning; articulating the mission and vision; networking and partnering; performing general management functions; making decisions; and managing organizational change. This study therefore examines these leadership activities when investigating the leadership of innovation at the highest hierarchical level.

At the team level, this study analyzes rule-following leadership activities, based on the definition of rule-following leadership activities developed by Tummers and Knies (2016: 436): "encouraging employees to carry out tasks in line with governmental rules and regulations." The investigation of rule-following leadership activities at the team level of the organization is justified for at least two reasons. First, such leadership initiatives are related to the traditional rational-legal authority of a bureaucratic system (Weber, 1978; Pollitt & Bouckaert, 2011). As noted by Lane (1994: 144), the rule of law is thus at the heart of public administration. Second, the importance of rule-following activities for public leaders has been emphasized by Oberfield (2010) and Terry (2002). These authors argue that ignoring or departing from governmental rules and regulations increases the likelihood of corruption and the inconsistent implementation of policies. All in all, rule-following leadership activities are worth studying at the team level of the organization.

Finally, this research analyzes servant leadership activities at the individual level in the hierarchy of the organization. More than any other approach to leadership, servant leadership is characterized by putting the needs of others first and helping people to achieve the greatest possible personal development (Greenleaf, 1977). Servant leadership theory could be of great value to leaders in public organizations. At present, public organizations are facing a decrease in public confidence due to reports of corruption (Miao et al., 2014). This has resulted in a call for public leaders to concentrate on the interest of society in general instead of indulging self-serving tendencies (Han et al., 2010). The service orientation of servant leaders responds to the call for public leaders who are willing to forego practices that focus largely on their own self-interest. It is thus relevant to analyze the activities of servant leadership within the public context.

2.4 A public sector context

Scholars have often argued that it is of vital importance to examine differences between public and private contexts in public administration research, as public organizations cannot be managed in the same way that private organizations are (see e.g.: Barker, 1982; Boyne, 2002; Hansen & Villaden, 2010; Perry & Rainey, 1988; Rainey & Bozeman, 2000; Van Slyke & Alexander, 2006). For example, Rainey (2014) states that public organizations have fewer measures of progress or success than is the case for the private sector (e.g., profit as a clear-cut measure).

2.4.1 Differences between public and private organizations

There are two approaches to discussing differences in public and private organizations. The core approach (Niskanen, 1971) assumes that ownership (government owned vs. privately owned) is the key factor that distinguishes public organizations from private organizations (Bozeman & Bretschneider, 1994: 200). In contrast to the core approach, the dimensional approach assumes that the extent to which different types of organizations (government, private, or hybrid) are "public" or "private" depends upon the extent to which they are subject to the influence of political authority (Bozeman & Bretschneider, 1994: 202).

This dissertation is based on the dimensional approach, given that, as argued by Bozeman (1987; 2007), no organization is either wholly public or wholly private. For example, the domain to which organizations in the health-care sector belong is unclear, as some countries allow them to make a profit while providing public services. Hence, "the boundary between the two is too blurred and the public sector acquires private sector characteristics at a rapid rate" (Antonsen & Jorgensen, 1997: 338). This research therefore follows the argument that purely public and purely private organizations do not exist (Bozeman & Bretschneider, 1994: 338). It thus emphasizes that public and private organizations can vary in the extent to which they are public or private (Petrovsky et al., 2015).

In line with Antonsen and Jorgensen (1997: 337), publicness is defined in this dissertation as "organizational attachment to public sector values." Taking the dimensional approach, Boyne (2002) emphasizes that the degree of publicness can be inferred by studying four dimensions: organizational environment, organizational goals, organizational structures, and the values of the staff (note that this dissertation focuses on the staff in general, while

Boyne focuses solely on managerial values). These dimensions are also commonly mentioned and investigated in public management studies (see e.g.: Bozeman & Scott, 1996; Brewer & Walker, 2010; Bright, 2005; Chun & Rainey, 2005; Feeney, 2012; Giauque et al., 2012; Perry & Wise, 1990; Rainey & Bozeman, 2000; Van Slyke & Alexander, 2006; Vandenabeele, 2014; Tummers et al., 2016; Wright & Pandey, 2011; Wright et al., 2012). In this dissertation, therefore, it is argued that the distinctness of public organizations can be investigated based on a high degree of publicness along these four dimensions.

One problematic aspect of these four dimensions is that they are quite abstract. For this reason, the following sections discuss each of these dimensions, distilling a main public factor based on the core public administration literature, and primarily Boyne (2002).

2.4.2 Organizational environment

The first dimension of publicness relates to the organizational environment, which can be defined as the important physical and social elements outside the organization that affect the decision-making processes and organizational behavior of stakeholders within the organization (Duncan, 1972; Van der Voet et al., 2015: 291). Many scholars have analyzed the environments of public organizations (see e.g.: Bozeman, 1987; Pandey & Wright, 2006).

One well-known and distinctive factor of the external environment of public sector organizations is that it is characterized by a high degree of political constraints (Boyne, 2002: 100; Pandey, 2010; Pandey & Wright, 2006). According to Bozeman (1987), high levels of political constraints imply that public organizations are facing strong demands to achieve quick results. Consequently, this leads to continual pressure for changes in policy, especially in periods leading up to elections. Political constraints in the environment are reflected by the presence of strong control mechanisms on public organizations. Antonsen and Jorgensen (1997: 343) indicate that "laws and rules, political control, number of tasks and imposed procedures" are important characteristics of the environment of public organizations.

2.4.3 Organizational goals

The second dimension focuses on the goals of the organization. Several scholars have examined characteristics of the goals of public organizations (see e.g.: Chun & Rainey, 2005; Jung, 2014; Rainey & Bozeman, 2000; Van Slyke & Alexander, 2006). As demonstrated by

Boyne (2002: 106), one important difference between the goals of private and public organizations is those of public organizations are more ambiguous.

Following Chun and Rainey (2005: 2), goal ambiguity can be defined as "the extent to which an organizational goal or set of goals allows leeway for interpretation, when the organizational goal represents the desired future state of the organization." Goal ambiguity is higher when the members of an organization are in less agreement concerning the meaning of organizational goals and when the goals are more difficult to understand and explain (2005: 3). Although empirical findings about public-private differences in goal ambiguity are mixed (Rainey et al., 1995; Boyne, 2002), the literature generally shows that the goals of public organizations are vaguer, as compared to the goals of private organizations (Pandey, 2010; Rainey & Bozeman, 2000; Rainey & Jung, 2015).

2.4.4 Organizational structures

The third dimension of publicness concerns the organizational structure of organizations. Many scholars have investigated characteristics of the structure of public organizations (see e.g.: Bozeman, 1993; Bozeman & Scott, 1996; Feeney, 2012; Pandey & Scott, 2002; Wright & Pandey, 2010). In addition to various studies on "bureaucracy," the relationship between publicness and red tape has been the source of investigation for various studies (e.g., Bozeman & Feeney, 2011; Moynihan et al., 2012b; Pandey & Kingsley, 2000).

Substantial agreement seems to exist among scholars that the concept of red tape "is concerned with negative effects of rules and procedures" on organizational performance (Pandey & Scott, 2002: 567). Red tape thus has a strongly negative tenor (Tummers et al., 2016). A number of empirical studies have examined public-private differences in red tape (see e.g.: Bozeman & Scott, 1996; Rainey et al., 1995). In general, these authors have found that public organizations encounter more red tape than private organizations do (Pandey & Kingsley, 2000; Rainey, 2009; Boyne, 2002: 101).

2.4.5 Values of the staff

The final dimension of publicness relates to the values of the staff members in organizations. Scholars of public management have paid considerable attention to the specific values of public sector staff (see e.g.: Park & Rainey, 2008; Perry & Wise, 1990; Wright et al., 2012).

In this regard, researchers have long contended that public employees differ from employees in private sector organizations (Boyne, 2002; Billante & Link, 1981).

In addition to organizational commitment, (Kim, 2012) performance-related pay (Houston, 2006), and other characteristics, scholars often emphasize that public employees differ from private employees in terms of their motivational base (Christensen & Wright, 2011; Pandey, 2010; Perry, 1997; Wright et al., 2012). One concept that is frequently used to capture these motivational differences is that of public service motivation (Perry & Wise, 1990) or PSM, which has been defined as "an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions" (1990: 368). According to Boyne (2002: 102), people in public organizations are said to have more PSM than do people employed in private organizations.

2.4.6 A high degree of publicness

In summary, the section above discusses what a "high-publicness organization" looks like by identifying organizations according to four dimensions: organizational environment, organizational goals, organizational structures, and the values of the staff. These broad dimensions are operationalized by one main public factor (see Table 2.1).

Table 2.1: High degree of publicness

Dimension	Distinctive factor of public organizations
External environment	High degree of political constraints
Organizational goals	High degree of goal ambiguity
Organizational structures	High degree of red tape
Staff	High degree of PSM

2.5 Conclusion

This chapter provides a theoretical exploration of the three main concepts addressed in this dissertation: innovation, leadership, and a public sector context. The chapter should not be regarded as a theoretical framework for the research, however, as the answers needed to answer the research questions are contained in Chapters 4, 5, and 6, which examine the different hierarchical levels.

This research is based on two different strategies for investigating innovation. First, it focuses on the organizational context of *a climate for innovation* (Anderson & West, 1998), which refers to the common perceptions about the desired practices, procedures, and behaviors that promote new combinations of existing resources (Anderson & West, 1998; Somech & Drach-Zahavy, 2013; West & Farr, 1990). It also examines *innovation performance*, which is defined as the extent to which organizations, teams or individuals actually introduce and apply ideas, processes, products, or procedures that are new to the organization and that are designed to be useful (Osborne & Brown, 2011). While innovative climate and innovation performance are analyzed as two seperate concepts in this study, however, Anderson et al. (2014) show in their systematic literature review on innovation and creativity that evidence has indicated that an innovative climate may stimulate innovation performance.

With respect to leadership, Bass and Bass (2008) demonstrate that several categories can be identified that are able to capture the essence of the study of leadership. One common theme across the many different approaches to leadership involves describing leadership as the process of influencing others (Van Wart, 2013b: 554; Yukl, 2008: 26). For this reason, this dissertation focuses on particular *activities* performed by people in positions of power when trying to influence others. This focus corresponds to a core approach to leadership – the behavioral approach – as it concerns what leaders *do* (ideally or actually) in their work (Yukl, 2008, 't Hart, 2014).

As emphasized by Van Wart (2012), leadership activities vary across the hierarchical levels of the organization. This research therefore distinguishes the study of innovation and its leadership at the organizational level, the team level, and the individual level (see Table 2.2).

Table 2.2: This study's focus on leadership and innovation spanning different hierarchical levels

Level of	Leadership activities	Aspect of	Chapter
analysis		innovation	
Organization	Scanning the environment	Climate for	Chapter 4
	Strategic planning	innovation	
	Articulating the mission and vision		
	Networking and partnering		
	Performing general management functions		
	Making decisions		
	Managing organizational change		
Team	Encouraging staff to perform tasks in line	Innovation	Chapter 5
	with governmental rules and regulations	performance	
Individual	Putting the needs of others first and helping	Innovation	Chapter 6
	people to achieve the greatest possible	performance	
	personal development		

The relationship between leadership and innovation is investigated within a public sector context. The dimensional approach has been selected in order to grasp the essence of distinctive public sector characteristics, given Bozeman's (1987) argument that no organization is either wholly public or wholly private. In this research, therefore, it is fully acknowledged that public and private organizations can vary in the extent to which they are either public or private (Petrovsky et al., 2015). As emphasized by Boyne (2002) and as discussed above, the degree of publicness can be inferred by studying four dimensions: the organizational environment, organizational goals, organizational structures, and the values of the staff. In this study, therefore, the distinctness of public organizations is defined according to these four dimensions.

The next chapter (Chapter 3) presents the methods that have been used to obtain additional insight into the relationship between leadership and innovation in a public context.

Chapter 3 Methodology



3.1 Introduction

This chapter focuses on the methodological background of the dissertation, demonstrating how additional insight into the relationship between leadership and innovation in a public sector context will be provided. Reasons for combining both qualitative and quantitative methods and techniques are addressed, along with the implications of this combination. Consistent with the multi-level character of this dissertation, as presented in Section 1.4, particular attention is paid to empirical studies at the organizational, team, and individual levels.

To provide additional insight into the methodological background, this chapter consists of three sections. First, Section 3.2 provides a discussion of the choices made in this dissertation with regard to research design and case selection. Section 3.3 describes the advantages and implications of conducting qualitative and quantitative methods and techniques. The final section presents a conclusion concerning the methodology used in this research, as well as a summary of the research methods and techniques employed in the empirical studies.

3.2 Research design

This section presents the research design used in this study, followed by a discussion of criteria for case selection.

3.2.1 A case study design

The overall aim of this study is to develop greater insight into the relationship between leadership and innovation in a public sector context. One requirement for an appropriate research design for this study is thus that it must ensure the highest possible level of internal validity. In this respect, a case study would be the most appropriate research design for this study. A case study is the "intensive study of a single case where the purpose of that study is – at least in part – to shed light on a larger class of cases" (Gerring, 2007: 20). Compared to other designs, case-study research offers the advantage of allowing the in-depth examination of a specific case within a real-life context (Stake, 1995). As emphasized by Yin (2009), case studies are also very useful for addressing contextual conditions that are likely to be relevant to the phenomena being studied – an important feature of this research.

The case study design should be representative, in order facilitate the generalization of findings to a given group or population (Gerring, 2007; Yin, 2009). One strategy for doing so is analytical generalization (Yin, 2009), in which findings are generalized to theoretical expectations instead of to groups or populations. In this study, analytical generalization goes beyond the mere examination of leadership and innovation in a public sector context to achieve generalization by identifying detailed strategies of public leaders at different hierarchical levels with the goal of providing mechanisms for innovation. So, the research results obtained with this study allow to further develop or challenge particular public management theories.

3.2.2 Case description

The case selected for this study is the Dutch Employee Insurance Agency (abbreviated in Dutch to UWV), an autonomous professional administrative authority. In exchange for autonomy, the UWV is held accountable for its performance by the relevant ministry and the parliament, and it is sanctioned and rewarded accordingly. The UWV can be regarded as a large public service provider, as its primary task consists of implementing hundreds of thousands of employee insurance policies each year, in addition to providing labor market and data services. In all, approximately 20,000 employees are working in two line departments and five divisions of the UWV. The UWV Benefits division has been selected for this dissertation, as its responsibilities are strongly reflected in the primary task of the UWV. The UWV Benefits division is responsible for the prompt and correct handling of hundreds of thousands insurance applications each year, as well as for the payment of these benefits when citizens (i.e., "clients") apply for them. The UWV Benefits division employs 5,061 employees in 238 different teams within 12 different districts.

The organizational environment of the UWV Benefits division is characterized by turbulence and complexity. The division interacts with a great variety of stakeholders, each placing unique and sometimes conflicting demands on the division. For example, the UWV Benefits division is subject to increasing demands from its political superiors and citizens. At the same time, it is facing massive cutbacks initiated by the Dutch national government. In response to these conflicting demands, the division launched a program of organizational development in 2014. Entitled "Continuous Improvement," this program is intended to enhance the organization's innovativeness by encouraging the introduction of new insight,

knowledge, and skills. It reflects the high level of importance that the UWV Benefits division attaches to innovation in response to conflicting demands.

3.2.3 Criteria for case selection

Two different sets of criteria were used to select the case to be examined in this research. The first set concerns the extent to which the selected case is representative. In this regard, the selected case should be *typical*, such that it is a representative one of a wider array of a given population (Gerring, 2007; Yin, 2009). This means that the studied organization should be representative of a wider range of public organizations. Besides, the organizational development taking place within the organization ("Continuous Improvement") should be important for other organizations in the public sector.

As mentioned in the previous section, a large Dutch public service organization has been selected for the research addressed in this dissertation: The Benefits division of UWV. The primary task of the division can be regarded as mass production, as it is responsible for the proper handling and payment of hundreds of thousands of insurance applications from citizens ("clients"). For this reason, its operations are standardized and formalized, with many routines and procedures, as well as centralized decision-making. The UWV Benefits division is thus representative of "machine bureaucracies" in the public sector (Mintzberg, 1992: Morton & Hu, 2008). The major challenges and cutbacks that are currently prevalent in the public sector are making it necessary for such organizations to innovate. The selected organization may be less representative of other types of public organizations, however, including for example professional bureaucracies (e.g., hospitals or schools).

The "Continuous Improvement" organizational development program that is currently taking place within the UWV Benefits division can be viewed as typical of contemporary organizations in the public sector, as it is part of a larger trend toward public sector reform. The phenomena under investigation consists of reconsiderations toward more innovativeness by encouraging the development of new insights, knowledge, and skills, thus reflecting the high level of importance assigned to increased innovativeness. As impacts of the economic crisis lead to a need of such reorientations in the public sector (Bysted & Hansen, 2015), this organizational development program could be viewed as important to other public organizations. For example, the Dutch Tax and Customs Administration and the Dutch Ministery of Security and Justice are also launching programs to increase their innovativeness at this moment as a result of cutbacks and increased demands from its stakeholders.

The second set of criteria has to do with the research aims of the empirical studies. The case was also selected because of its intended contribution to the research goals of the different studies. In this light, the Benefits division of UWV devotes particular attention to innovation and its leadership. More specifically, one of its current purposes is to grasp essential characteristics of a context for innovation and to develop ways in which top managers and direct supervisors can foster such a context. In other words, the central variables of this dissertation – leadership and innovation in a public sector context – are sufficiently present to achieve the research aims of this dissertation. For example, Chapter 5 includes an examination of the potential impact of rule-following leadership on team innovation performance in a public sector context. To draw conclusions, it must be possible to grasp the essence of both rule-following leadership and team innovation performance in the selected case.

3.3 Research methods

This section focuses on qualitative and quantitative research methods and techniques, both of which are employed in this study.

3.3.1 Qualitative versus quantitative research methods

In the field of private management, studies of innovation and its leadership are based on predominantly quantitative methods (e.g., Eisenbeiss et al., 2008; Somech & Drach-Zahavy, 2013). Given the limited attention to this relationship in public management studies, however, this dissertation benefits from the use of qualitative methods (Greene et al., 1989; Robson, 2002; Tashakkori & Teddlie, 1998). Qualitative research concerns "the nonnumerical examination and interpretation of observations, for the purpose of discovering the underlying meanings and patterns of relationships" (Babbie, 2004: G7). In contrast, quantitative research has been defined as "the numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect" (Babbie, 2004: G7). Although the performance of a case study design is commonly assumed to call for the use of qualitative methods (Babbie, 2004; Gerring, 2007), they can also allow the use of quantitative research methods (Blatter & Haverland, 2012).

According to Tashakkori and Teddlie (1998), preferences for either qualitative or quantitative research methods are often based on the ontological and epistemological foundations of people. Although these types of foundations often overlap, ontology concerns what things are, while epistemology refers to how we know. In this regard, it has been argued that social constructivists build upon qualitative research methods, while positivists rely on quantitative research methods. This would seem to imply that qualitative research is related to exploring and understanding relationships, while quantitative research refers to description and explanation (Babbie, 2004; Tashakkori & Teddlie, 1998).

However, both qualitative and quantitative research methods could be conducted appropriately with any foundation of people or researchers (Guba & Lincoln, 1994). From this perspective, the methods with which researchers are familiar and the foundation that may lead to a particular method are less relevant than the main objectives and questions of the research (Robson, 2002; Tashakkori & Teddlie, 1998). For example, scholars (Blatter & Haverland, 2012; Gerring, 2007) have emphasized that qualitative research methods are also appropriate for (causal) explanation. Moreover, Robson (2002) notes that qualitative and quantitative research methods should be viewed as complementary rather than as conflicting methods by definition. Performing both qualitative and quantitative research methods within a single study is considered a mixed-method design (Bryman, 2006; Caracelli & Green, 1993; Greene et al., 1989; Robson, 2002). The following sections describe the mixed methodology used in this study and discuss the advantages of doing so.

3.3.2 Qualitative research methods

According to Babbie (2004: G7), qualitative research is a fruitful method for uncovering relationships. For this reason, qualitative methods are applied to answer the first sub-question in this dissertation, which is formulated as: Which roles do top managers envision for themselves, and which leadership activities do they perform in order to foster a climate for innovation in a public sector context? This question is intended to explore: 1) the characteristics that top managers associate with a climate of innovation, 2) the leadership activities that top managers substantiate for themselves related to an innovative climate; and 3) the ways in which top managers envision and conceptualize turbulence and complexity within the external environment (e.g., political constraints), given that leadership at the highest hierarchical level focuses particularly on the external organizational environment (Van Wart, 2012; 2013b).

The first sub-question of this research is investigated according to information obtained from semi-structured interviews with 20 public managers at the highest level in the

hierarchy of the UWV Benefits division (see Appendix A). From March 2014 until June 2014, interviews were held with one member of the UWV Executive Board, 12 district managers from the UWV Benefits division (each responsible for a district consisting of approximately 500 employees), and 7 staff managers. Together, these participants constituted the division's top management. The average age of the respondents was almost 54 years, and more than 80% of the research participants were male.

The interviews were transcribed verbatim, and MAXQDA software was used in the systematic coding and analysis of the transcripts. With respect to the coding process performed in MAXQDA, qualitative researchers must shape the entire research process to ensure the validity and reliability of their research findings (Guba & Lincoln, 1981). In this context, several individuals were engaged in discussions concerning interpretations of transcripts in the first stage of the coding process. In this process, "difficult" fragments were debated by face-to-face meetings until consensus was reached. For example, one of the decisions made during these meetings was that a it would be necessary to distinguish between the activities of public managers related to formulating the mission of the organization ("articulating the mission and the vision") and the activities of public managers related to providing direction to members of the organization ("strategic planning"). The fact that only one researcher performed the full coding tasks, however, obviously makes it impossible to determine Scott's Pi or any other inter-coder reliability score. The trustworthiness of the qualitative analyses – as presented in Chapter 4 of this study – is thus limited to some extent.

3.3.3 Quantitative research methods

Following Babbie (2004: G7), quantitative research is well suited for testing and explaining relationships. For this reason, quantitative research methods were used to answer the second and third sub-questions of this dissertation. The second sub-question is as follows: *To what extent does rule-following leadership influence the innovation performance of teams in a public sector context?* The main purpose of the second sub-question is to examine the potential effects of this type of leadership in this context. The third sub-question is formulated as follows: *To what extent is servant leadership related to employee innovation performance and employee job performance in a public sector context?* This sub-question is intended to investigate any relationship of servant leadership to employee innovation performance and employee job performance in a public sector context.

The sub-questions are examined according to a multi-source survey design. The use of multi-source data reduces the likelihood of common source bias significantly (Favero & Bullock, 2015; Jakobsen & Jensen, 2015; Meier & O'Toole, 2013). The first survey, which was launched in January 2015, involved a questionnaire administered to all 5,061 employees of the UWV Benefits division. Before the questionnaire was distributed, the public managers who participated in the qualitative analysis introduced the study to all employees by email. The survey remained open for three weeks. Three individualized email reminders were sent during these three weeks, in order to maximize the response rate. In all, 2,148 employees (42%) responded to the survey. Items on the questionnaire concerned the individual characteristics of employees and the rule-following leadership activities and servant leadership activities of their direct supervisors.

Rule-following leadership activities were measured (see Appendix B) according to the validated scale developed by Tummers and Knies (2016). Employees were asked to rate four items along a Likert-scale ranging from 1 (strongly disagree) to 7 (strongly agree). The following is an example of the items included in this scale: "My team manager emphasizes to me and my colleagues that it is important to follow the law." The overall Cronbach's alpha score was .975. In order to investigate rule-following leadership activities of supervisors, items regarding these leadership activities should be aggregated from the individual level to the team level (George & James, 1993). For the purpose of this dissertation, data were aggregated only for items having response rates of at least 30% per team and a minimum of two respondents per team. Two different analyses were conducted in order to determine whether the data structures were statistically adequate for aggregation. First, according to a one-way random-effects analysis of variance, the ICC(1) values for rule-following leadership activities were .24, and the ICC(2) values for rule-following leadership activities were .64. These results indicate (Liao & Chuang, 2004) that rule-following leadership activities differed between teams (p < .01). Second, acceptable within-team agreement is needed in order to justify using the team average as an indicator of rule-following leadership activities (rwg; James et al., 1993). The score of .70 suggests a good level of within-group inter-rater agreement (James et al., 1993), thus justifying aggregation for rule-following leadership activities.

Servant leadership activities were measured according to the validated scale developed by Van Dierendonck and Nuijten (2011). Employees were asked to rate all 30 items (see Appendix C) along a Likert scale ranging from 1 (strongly disagree) to 7 (strongly

agree). Table 3.2 provides an overview of the overall Cronbach's alpha scores for the eight dimensions of servant leadership, along with example items.

Table 3.2: Measuring servant leadership

Dimension	Overall	Example item
	Cronbach's alpha	
	score	
Empowering	.924	My team manager helps me to further develop
(7 items)		myself
Standing back	.871	My team manager keeps him-/herself in the
(3 items)		background and gives credit to others
Accountability	.917	My team manager holds me responsible for
(3 items)		the work I carry out
Forgiveness	.909	My team manager keeps criticizing people for
(3 items)		mistakes they have made in their work
		(reverse coded)
Courage	.875	My team manager takes risks and does what
(2 items)		needs to be done in his/her view
Authenticity	.873	My team manager is open about his/her
(4 items)		limitations and weakness
Humility	.951	My team manager learns from criticism
(5 items)		
Stewardship	.856	My team manager emphasizes the societal
(3 items)		responsibility of our work

In May 2015, a separate survey was conducted among 238 supervisors, in order to collect data regarding team innovation performance, employee innovation performance, and employee job performance (for similar approaches in public administration, see Hassan & Hatmaker, 2015; Wright et al., forthcoming). The 2,148 respondents who completed the first survey were employees who reported directly to these supervisors. In the second questionnaire, the supervisors rated the innovation performance of the team and the innovation and job performance of their direct subordinates, in addition to providing information about their own personal characteristics. As in the first survey, the supervisors

had three weeks to complete the survey, and up to three individual email reminders were sent. In all, 132 supervisors (55%) responded.

In the supervisory survey, team innovation performance was assessed (see appendix B) using four items adapted from Anderson and West (1998). Supervisors were asked to rate each item along a Likert-scale ranging from 1 (strongly disagree) to 7 (strongly agree). The following is an example of the items included in this scale: "My team gives little consideration to new and alternative methods and procedures for doing their work" (reverse coded). The overall Cronbach's alpha score was .816. Employee innovation performance and employee job performance were measured in the supervisor survey, each according to four items developed and validated by Welbourne and colleagues (1998). Supervisors were asked to rate each item (see appendix C) along a Likert scale ranging from 1 (needs much improvement) to 5 (excellent) in response to the following question: "How would you assess employee XXX on the following dimensions?" The following is an example of the items included in the innovation performance scale: "Coming up with new ideas." An example of items included in the job performance scale is: "Quantity of work output." The overall Cronbach's alpha scores for the two scales were .948 (innovation performance) and .869 (job performance).

To isolate main effects, several variables were included as control variables. With regard to the second sub-question, the age and tenure of teams were included as control variables by collecting information about age and tenure of team members. Tenure was indicated along a five-point scale with the following values: 1 (0–5 years), 2 (6–10 years), 3 (11–15 years), 4 (16–20 years), and 5 (longer than 20 years). In light of the third sub-question, control variables were also included for several personal characteristics of the respondents: gender, age, educational level (1: primary education, 2: secondary education, 3: intermediate vocational education, 4: higher education, 5: university education), and tenure (1: 0–5 years, 2: 6–10 years, 3: 11–15 years, 4: 16–20, 5: longer than 20 years). When using ratings provided by supervisors, it is important to control for the personal characteristics of the supervisors as well, as their individual beliefs and orientations are likely to affect their ratings of performance (Bommer et al., 1995; Fox & Bizman, 1988). For this reason, control variables were included for the gender, age, education, and tenure of individual supervisors in both quantitative studies, measuring educational level and tenure in the same manner used for employees.

Finally, the data from the first survey were linked to those of the second survey. The resulting dataset, which was used to answer the second sub-question, comprised responses

from 795 employees in 111 different teams. The average number of participants per team was 10.7 (SD = 4.96), ranging from 2 to 26 participants per team. The average response rate per team was 55%. The average age of employees in the final sample was 41.5 years (SD = 11.5 years), and 62% of them (nested in teams) were female. The dataset used to address the third sub-question contained responses from 863 employees.

3.3.4 Mixed methods

Although single methods were used to investigate the three sub-questions addressed in this study, the overall research can be defined as a mixed-method design. Such designs have crucial benefits compared to the use of a single research method (Greene et al., 1989; Robson, 2002; Tashakkori & Teddlie, 1998).

First, qualitative and quantitative methods are conducted in a complementary way to examine different elements of the potential relationship between leadership and innovation in a public sector context. As depicted in the main research question, this research attempts to identify the extent to which leadership and innovation (i.e., a climate for innovation and innovation performance) are related in a public sector context. It is also aimed at identifying strategies of leadership designed to accelerate innovation. In addition to uncovering relationships, therefore, this study tests and explains the impact of leadership on innovation. To meet these research aims, this study conducts both qualitative and quantitative research methods. Qualitative research methods are appropriate for exploring and identifying the reasons underlying relationships between leadership and innovation in a public sector context (Flyvberg, 2006). While quantitative research methods are well suited for testing relationships between these variables, they are less appropriate for uncovering the mechanisms for relationships (Babbie, 2004; Greene et al., 1989). Mixed-methods designs thus provide a strategy for combining the strengths of the two different research methods (Bryman, 2006).

Using both qualitative and quantitative research methods in this dissertation also leads to the possibility of methodological triangulation of findings (Babbie, 2004; Greene et al., 1989; Tashakkori & Teddlie, 1998). In the social sciences, methodological triangulation concerns the use of two (or more) methods to examine a potential connection between different variables (Robson, 2002). Triangulation thus refers to the application and combination of several research methods in a study of the same phenomenon, thereby facilitating the validation of research through cross-verification from two or more sources

(Greene et al., 1989). If the same result is produced by different methods, this increases confidence in that result. Researchers combine multiple research methods in order to overcome the weaknesses, intrinsic biases, or other problems associated with single methods. One implication of the advantages emerging from methodological triangulation could thus be that research questions should be answered in different, and sometimes conflicting, ways.

3.4 Conclusion and discussion

In the interest of internal validity, this research follows a case study design by investigating potential relationships between leadership and innovation in a single public organization. Given that all three empirical studies included in this research are embedded within the same organization (i.e., the UWV Benefits division), it is possible to conduct in-depth investigations. Although the main purpose of this dissertation is not to compare the outcomes of the different studies, similarities between the studies increase the extent which research results can be compared across the individual studies. Another implication of adopting a case study design is therefore that the external validity is limited in order to ensure internal validity. Nevertheless, the findings are generalized in an analytical way by exploring, testing, and explaining relationships concerning the role that leadership plays in innovation (i.e., a climate for innovation and innovation performance) within a public sector context. To this end, the research relies on analytic generalization, such that it does not draw inferences from data to a given population. Instead, it compares the research findings of one case study to existing theories.

The research consists of three studies, each of which is aimed at one empirical subquestion, thus addressing a different hierarchical level within the UWV Benefits division. The three studies are nevertheless interconnected, as they were conducted in the same organization. In its essence, the organization examined in this study is subject to conflicting demands from its stakeholders, and it exists within an increasingly competitive environment. For example, the challenges facing the UWV Benefits division include the necessity of coping with competing demands for consistency and control, in addition to the myriad legislative changes that consume the time and energy of managers and employees. In response to these conflicting demands, the UWV Benefits division launched a program of organizational development entitled "Continuous Improvement" in 2014. The program was intended to enhance innovativeness within the organization by encouraging the development

of new insights, knowledge, and skills. It reflects the high level of importance that the selected organization attaches to innovation in response to conflicting demands.

The central research question was addressed with mixed methods. Using both qualitative and quantitative methods has crucial advantages, because 1) they are complementary and 2) they allow methodological triangulation, which enhances the validity of research. In addition, multiple data sources and different research techniques were used to answer the main research question. The qualitative study (which relates to the first subquestion) relied on semi-structured interviews with managers at the top level of the selected public organization, while the two quantitative studies (which address the second and third sub-questions) were building upon a multi-source survey design focusing on the team and individual level of the organization, respectively.

However, the use of different research methods may decrease the possibility of precise cross-checking the findings obtained. For example, the impact of the external environment of the selected public organization is examined only with qualitative methods (and thus not with quantitative methods). The final chapter of this dissertation therefore contains a discussion on the methodological triangulation of results, as cross-checking research findings is not fully possible.

Another limitation is the cross-sectional character of both the qualitative and quantitative research methods, as all data are collected at one single point in time. This poses an important threat to internal validity (Babbie, 2004), as heavy reliance on a cross-sectional research design challenges the likely direction of causality (Jilke et al., 2016). In the qualitative study, top managers may have neglecting information about their leadership activities while the process of developing enhanced innovativeness was ongoing within the selected public organization. In the quantitative studies, employees who had received high ratings on their innovation performance might have been allowed more autonomy in their work by their direct supervisors ("reverse causality"). As such, any causal relationships identified (in this dissertation, moving from leadership to innovation) are based only on theoretical insights rather than on empirical observations. Ideally, research should be longitudinal or experimental in nature, such that information about research variables is gained at different points in time. The research methods used in this dissertation thus provide only limited insights about causality.

An overview of the case selection, research methods, and techniques of the three empirical studies is depicted in Table 3.3.

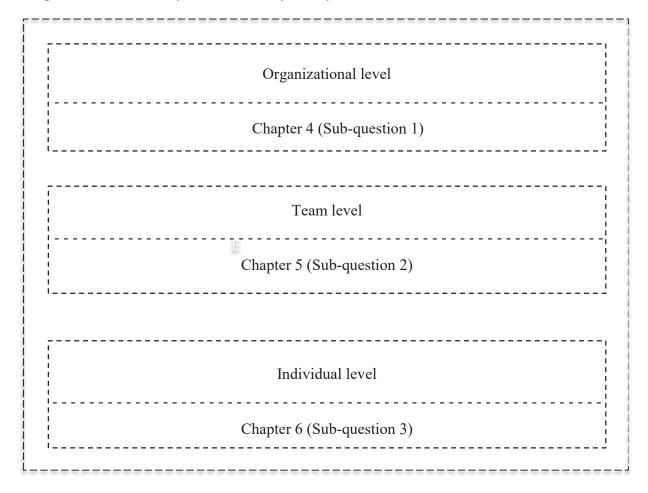
Table 3.3: Overview of the three empirical studies

Sub-question	Selected case	Research method	Techniques	Chapter
Which roles do top		Qualitative method:	Coding	Chapter 4
managers envision		Interviews held with	interview	
for themselves, and		20 top managers from	transcripts	
which leadership		March 2014 until	in	
activities do they		June 2014	MAXQDA	
perform in order to				
foster a climate for				
innovation in a public				
sector context?				
To what extent does		Quantitative method:	Data	Chapter 5
rule-following		A survey among	aggregation	
leadership influence	The UWV	5,061 employees	in SPSS and	
the innovation	Benefits	launched in January	structural	
performance of teams	division	2015, followed by	equation	
in a public sector		another survey among	modeling in	
context?		238 supervisors in	Mplus	
		May 2015		
To what extent is		Quantitative method:	Structural	Chapter 6
servant leadership		A survey among	equation	
related to employee		5,061 employees	modeling in	
innovation		launched in January	Mplus	
performance and		2015, followed by		
employee job		another survey among		
performance in a		238 supervisors in		
public sector context?		May 2015		

The three empirical studies also differ with regard to conceptual range. Although each of the three studies focus on the role that leadership plays in innovation within a public sector context, the theoretical framework underlying these studies varies across Chapter 4 through Chapter 6. The study presented in Chapter 4 is aimed at exploring connections between leadership activities on the part of top managers and a climate for innovation at the

organizational level. It also examines the impact of the distinct external environment of the public organization that is examined. In Chapter 5, relationships between rule-following leadership and innovation performance at the *team level* are analyzed. The study discussed in Chapter 6 tests and explains the ways in which servant leadership is related to employee innovation performance and employee job performance at the *individual level*. Each of these chapters thus expand the conceptual scope. Figure 3.1 outlines the theoretical focus of the empirical studies presented in Chapters 4 through 6.

Figure 3.1: Overview of the theoretical focus of the three studies



Chapter 4

Fostering a Climate for Innovation in a Public Sector Context: The Role of Leadership Activities on the part of Top Managers



Abstract

Given the challenges facing public organizations, the ability to innovate is becoming an increasingly important issue. The selected case for this study – The UWV Benefits division – exists within an increasingly competitive environment, in which a climate for innovation is essential to short-term success and long-term survival. In addition, this case study examines the real competing demands for consistency and control that reduce the likelihood of a context for innovation, along with other challenges, including the myriad legislative changes that consume the time and energy of managers. As revealed in semi-structured interviews, the managers participating in this study are aware of these tensions. The study in this chapter elaborates on their views and the ways in which their leadership activities cope with and adapt to these issues. The results indicate the need for a balance between standardized efficiency, consistency and risk aversion, as well as a need for innovation, process reengineering and mission adjustment.

4.1 Introduction

The dissertation has argued that public organizations face unique risks (Van Wart, 2013b). This has been particularly evident throughout the current economic downturn, which has resulted in shrinking budgets and rising public expenditures. These organizations are facing increasing, but unpredictable, demands on their services, in addition to public scrutiny with regard to how taxes are spent. At the same time, public stakeholders (citizens, tax payers, service users, and consumers, as well as the media and non-governmental organizations) are becoming increasingly vocal in their expectations regarding improvements in performance. The drive to provide greater value for the tax money spent has therefore become an important challenge for public organizations.

One strategy for meeting this challenge involves encouraging innovation, which is regarded as a core competence that public organizations need in order to perform effectively within a challenging and rapidly changing environment (e.g., Bysted & Hansen, 2015; Osborne & Brown, 2011; Walker, 2014). For example, increased innovativeness has been associated with improvements in public organizations with regard to legitimacy, public services, and responsiveness to the demands of citizens and stakeholders (Bekkers et al., 2011).

Although results are becoming more nuanced (Bysted & Hansen, 2015), public sector organizations are not known for their ability to innovate (Damanpour & Schneider, 2009), especially in times of economic crisis and scarcity. In fact, current economic circumstances are exerting pressure for higher levels of accountability and control, which may be expected to increase the level of centralization and formalization in public organizations (Antonsen & Jorgensen, 1997). In addition, public organizations have a monopoly on the production of specific public services (Bekkers et al., 2011). Because they do not compete with others, these organizations have little incentive to innovate. Although enhanced innovativeness has been identified as crucial to the short-term success and long-term survival of public organizations in the contemporary world, innovation does not necessarily come naturally to public organizations.

With the goal of fostering innovation in a public sector context, the study in this chapter investigates how leadership is exerted at the highest organizational level. This topic is important, given that top managers are likely to play a significant role (in some cases, the most important role) in influencing the attitudes and behavior of employees and affecting organizational culture in public organizations (Van Wart, 2003). Moreover, as argued by

Damanpour and Schneider (2009: 499), "public administrators and business managers alike can influence workers' motivation and job satisfaction, create a work and social climate [...] to improve morale, and encourage and reward innovation and change." Similarly, as noted by Fernandez and Wise (2010: 984), leadership at the highest organizational level can facilitate "the changes in culture and organizational climate that are envisioned by "re-inventers."

The study in this chapter thus emphasizes the crucial importance of enhancing innovation to the ability of organizations in a public sector context to cope with unique risks and conflicting demands. The main purpose of the study presented in this chapter is to explore the roles that top managers envision for themselves and the leadership activities they perform in order to foster a climate for innovation of the UWV Benefits division. According to private management scholars (Anderson & West, 1998; Schumpeter, 1942; Somech & Drach-Zahavy, 2013), an innovative climate refers to common perceptions about the desired practices, procedures, and behaviors that promote new combinations of existing resources.

In line with the aim of the study in this chapter, the research question that will be addressed is as follows: Which roles do top managers envision for themselves, and which leadership activities do they perform in order to foster a climate for innovation in a public sector context? Given that leadership at the highest organizational level focuses particularly on the external organizational environment (Van Wart, 2012; 2013b), this study devotes special attention to the ways in which top managers envision and conceptualize turbulence and complexity within the environment of their division when linkages of top managers' initiatives with a climate for innovation are investigated.

Whereas innovative climate has received considerable attention in the private literature (e.g. Anderson & West, 1998; Somech & Drach-Zahavy, 2013), very limited attention has been paid to the empirical examination of such climates within a specific context of the public sector (e.g. Moolenaar, Daly, & Sleegers, 2010). This is surprising, given the important role that it is currently playing for public organizations. The study in this chapter addresses this gap, in addition to investigating an important antecedent of innovative climate by analyzing the influence of leadership activities of top managers in this regard. So, this chapter makes a theoretical contribution to an important topic in the public management literature: fostering a climate for innovation in public sector organizations.

4.2 Theoretical framework

In line with the main focus of this dissertation, this section presents a theoretical exploration of what top managers should do in order to foster a climate for innovation in a public sector context.

4.2.1 The leadership activities of top managers and the external organizational environment

Although entire book chapters are spent to discuss different definitions of leadership (Bass & Bass, 2008), one common perspective in such book chapters is to define leadership by its ability to influence others (Van Wart, 2013b: 554). In line with 't Hart (2014), this chapter therefore defines the leadership of top managers as a particular set of activities and interactions to influence others, which is in line with the behavioral approach to leadership (Yukl, 2008). In this approach, the focus is on what leaders actually *do*. (Van Wart (2012: 245) identifies seven types of leadership activities for top managers (see Table 4.1).

With regard to these leadership activities, Van Wart emphasizes (2012; 2013b) that top managers devote particular attention to the external organizational environment, as evidenced in the activities of scanning the environment, and networking and partnering. In this chapter, therefore, special attention is paid to the ways in which top managers envision and conceptualize turbulence and complexity in the external environment, given that the environment influences the management of public organizations (see Rainey, 2009). This research defines the external environment as "the relevant physical and social factors that are located outside of the boundaries of the organization and have a bearing on the decisionmaking processes and organizational behavior of actors within the organization" (Van der Voet et al., 2015: 291). The environment of public organizations is often assumed to be relatively turbulent and complex (Rainey, 2009; Walker, 2008). The degree of turbulence and complexity is determined by three factors in the organizational environment on which public organizations are dependent (Duncan, 1972). One environmental factor that increases turbulence and complexity is the diversity of relevant stakeholders. Public organizations interact with a great variety of stakeholders, including clients, partners, suppliers, and political superiors (Boyne, 2002: 100). Instability is a second factor. Mechanisms of public accountability in the environment often result in a continuous process of pressure from and change in policy (Bozeman, 1987: 20). Political superiors, the media, and citizens often

scrutinize public organizations (Rainey, 2009). Finally, environmental turbulence and complexity in public organizations can be due to openness (Antonsen & Jorgensen, 1997: 342). It is relatively easy for stakeholders to influence public organizations. For example, empirical evidence has indicated that public organizations "are influenced by users, the parent ministry, politicians, professional organizations, the media, the public, the employees' trade unions, and other public organizations" (Antonsen & Jorgensen, 1997: 343).

Table 4.1: Leadership activities of top managers (based on Van Wart, 2012: 245)

Leadership activity	Definition
Scanning the	Careful monitoring of an organization's external environment to
environment	detect early signs of opportunities and threats that may influence
	its current and future plans
Strategic planning	Setting priorities and communicating the actions needed to
	achieve those priorities
Articulating the	Explaining why the organization exists (mission) and what
mission and the vision	defines its character and ethos (vision)
Networking and	Networking focuses on meeting external stakeholders and
partnering	benefiting from those relationships, while partnering implies
	working together with the goal of combining strengths in relevant
	domains.
Performing general	Functions including coordination, staffing and delegation
management functions	
Decision making	Selecting a logical choice from the available options by
	determining the positive and negative characteristics of each
	option and considering all the alternatives
Managing	Facilitating the transition of individuals, teams, and organizations
organizational change	to a desired future state

4.2.2 A climate for innovation in public organizations

Many scholars have argued the importance of climate dimensions for innovation, given that innovations are often unsuccessful or not implemented (e.g. Eisenbeiss et al., 2008; Sarros et al., 2008). More specifically, as argued by Baer and Frese (2003: 46), an organizational

climate is needed in which people feel safe to take interpersonal risks, are encouraged to develop new ideas and openly discuss problems in order to innovate. Therefore, the study in this chapter focuses on the organizational context of a climate for innovation (Anderson & West, 1998).

In line with scholars (Anderson & West, 1998; Schumpeter, 1942; Somech & Drach-Zahavy, 2013), an innovative climate refers to common perceptions about the desired practices, procedures, and behaviors that promote new combinations of existing resources. More specifically, an innovative climate is characterized by employees who help and support each other, teams and departments that work together, and the exchange of promising ideas (Isaksen & Akkermans, 2011). An innovative climate also encourages risk-taking behavior, as it helps to advance new ideas (Isaksen & Akkermans, 2011).

Several instruments have been designed for assessing the internal environment of an organization with regard to innovation. In a review, Mathisen and Einarsen (2004: 121) identify the following instruments: the Siegel Scale of Support for Innovation (SSSI; Siegel & Kaemmerer, 1978), KEYS (Amabile et al., 1996), the Creative Climate Questionnaire (CCQ; Ekvall, 1996), the Team Climate Inventory (TCI; Anderson & West, 1998), and the Situational Outlook Questionnaire (SOQ; Isaksen et al., 1999). In terms of quality, Mathisen and Einarsen conclude that the reliability and validity of the SSCI and the CCQ could be called into question (2004: 125-128). They further note that KEYS focuses specifically on a climate of creativity, and not of innovation (2004: 128), and that the TCI instrument is likely to be particularly useful for studies of a more quantitative nature (2004: 135). This research has therefore adopted the SOQ. To date, the application of the SOQ has been limited to the examination of private organizations (Mathisen & Einarsen, 2004: 123). To our knowledge, this study is the first to apply it within a public context.

Drawing on information obtained with the SOQ, Isaksen and Akkermans (2011) argue that a climate of innovation is characterized by several dimensions (see Table 4.2).

Table 4.2: Dimensions of an innovative climate (based on Isaksen and Akkermans, 2011: 171)

Dimension	Definition
Challenge /	The degree to which people are involved in daily operations, long-term
Involvement	goals, and visions
Freedom	The degree of independence and capacity for individual discretion
Trust/Openness	The degree of emotional safety in relationships (greater trust/openness
	makes people more comfortable sharing ideas)
Idea time	The amount of time people can and do use for elaborating new ideas
Playfulness /	The presence of a relaxed atmosphere and spontaneity, which is important
Humor	for developing new ideas
Conflicts	The presence of personal and emotional tensions, which implies
	discussing and confronting new insights
Idea support	The degree to which ideas and suggestions are received in an attentive and
	professional manner
Debates	The exchange of different voices and points of view in order to develop
	new ideas
Risk-taking	The extent to which people can make decisions even without certainty or
	all of the information desired

Even though developing a climate of innovation in public organizations is arguably a crucial factor for public organizations, it is not a foregone conclusion that public organizations will have such a climate, particularly given the turbulence and complexity in their environment. The 'publicness' of the environment generally demands high levels of accountability and control, thereby resulting in higher levels of centralization and formalization, as compared to organizations in the private sector (Antonsen & Jorgensen, 1997; Boyne, 2002; Bozeman & Bretschneider, 1994). Given that public organizations often face pressure to develop climates that are anything but innovative, insight is needed into how organizations in a public sector context can foster a climate for innovation.

This study explores and analyses how the leadership activities of top managers might bolster an innovative climate in a public sector context (Damanpour & Schneider, 2009: 499; Fernandez & Wise, 2010: 984; Van Wart, 2003). For example, scanning the environment entails the careful monitoring of the organization's external environment by detecting early

signs of opportunities and threats that may influence its current and future objectives (Van Wart, 2012). When top managers detect early signs of opportunities and threats, they are likely to create incentives for employees to develop new ideas for taking advantage of opportunities and coping with threats.

4.3 Findings

The findings in this chapter are based on semi-structured interviews with 20 public managers spanning the highest level in the hierarchy of the UWV Benefits division (for a discussion concerning the method used in this chapter, see Chapter 3). The interviews are transcribed verbatim. MAXQDA software is used in the systematic coding and analysis of the transcripts (see Table 4.3).

Table 4.3: The codes used in MAXQDA for exploring and examining the main concepts

Turbulence and complexity in the organizational environment		
Factor	Codes	
Variety of stakeholders	Numbers, roles, activities, tasks, responsibilities	
Instability	Pressure, policy changes, disturbances, interruption,	
	tumult, clash	
Openness	Influence, impact, effects, developments	
Innovation		
Dimension of a climate for	Codes	
innovation		
Challenge/Involvement	Meaningfulness, commitment, intrinsically motivated,	
Freedom	Independence, autonomy, discretion, individualism	
Trust/Openness	Mutual respect, sharing of credit, openness, frankness	
Idea time	Developing, elaborating, creating, thinking, exploring,	
	work on	
Playfulness/Humor	Spontaneity, ease, joking, laughing, relaxing, humor	
Conflict	Tension, slander, gossip, criticizing, interpersonal	
	warfare	
Idea support	Helping, backing up, assisting, sustaining	
Debate	Disagreement, discussion, conversation, dialogue, talk	

Risk-taking	Uncertainty, ambiguity, new initiatives, risks, failures,	
	unknown outcomes, gambling, mistakes	
Leadership activities of top man	nagers	
Activity	Codes	
Scanning the environment	Actors, representatives, monitoring, forecasting,	
	assessing	
Strategic planning	Direction, strategy, future, actions, long-term, values	
Articulating the mission and the	Purpose, view, mission, message, objectives, targets,	
vision	tactics	
Networking and partnering	Relationships, common goal, partnerships, collaboration,	
	exchanging	
Performing general	Needs of employees, empowering, encouraging, two-way	
management functions	communication patterns	
Decision making	Choices, opportunities, deciding, determining	
Managing organizational	Coordinating, managing, directing, controlling,	
change	regulating	

As shown in Table 4.3, the codes developed in MAXQDA relate to the main concepts addressed in this study, in addition to helping to explore and clarify possible relationships between these concepts.

The presentation of the findings starts by examining the ways in which top managers interpret their environment in terms of the variety of stakeholders, instability, and openness (Van Wart, 2012; 2013b). Then, interpretations about innovative climate, based on the dimensions proposed by Isaksen and Akkermans (2011), are discussed. Finally, considerations about the roles that top managers envision for themselves and the leadership activities they perform to foster a climate for innovation are showed. These considerations center on the leadership activities proposed by Van Wart (2012: 245).

4.3.1 Perceptions of top managers regarding turbulence and complexity in the organizational environment

This section investigates the ways in which top managers consider turbulence and complexity in the external environment with regard to the variety of stakeholders and the level of instability and openness.

Variety of stakeholders. The managers participating in this study noted that the UWV Benefits division currently interacts with a wide variety of stakeholders, including municipalities, trade unions, political entities, and organizations for employers and for employees. Each of these stakeholders pursues unique organizational goals with regard to the UWV Benefits division, and these goals are sometimes in conflict with each other. For example, the managers defined several stakeholders as competitors of the division, in that these stakeholders would also like to also offer public services that are currently performed by the UWV Benefits division. In this regard, one district manager noted:

However, you look at it, in the political arena there are competitors like social insurance banks and municipalities. In political discussions, it is always possible to find reasons for transferring tasks from the UWV Benefits division to these competitors.

This manager further expressed that the division must regularly cope with conflicting goals within its environment, due to the wide variety of external stakeholders.

Instability. Many of the managers referred to the instability that has emerged within the environment of the UWV Benefits division due to the continuous process of change in legislation and regulations on the part of the Dutch national government. These changes regularly affect the legislative domain of the division. As such, it must constantly cope with pressure to change in response to new legislation and regulations. As explained by one of the managers:

We are constantly changing. It is not our aim to change, but the legislature is forcing us to innovate. We are confronted with 100 legislative changes per year, some smaller and some larger. That's a lot. It's enormous. As a result, we are constantly having to come up with new initiatives.

As illustrated by this statement, the ongoing pressure caused by continuous change within the division's legislative domain makes it necessary to develop new skills and enhance the available expertise.

Buffer role. The UWV Benefits division must constantly manage environmental turbulence and complexity in order to avoid situations involving unacceptable demands. The UWV Executive Board of UWV mitigates the variety of stakeholders and instability, thus functioning as a 'buffer' between the external organizational environment and the UWV Benefits division. This buffer role limits the amount of turbulence and complexity confronting the division's top managers, essentially shielding them from the effects of the variety of stakeholders and instability. As indicated by one district manager:

In my opinion, we hardly ever deal with external stakeholders. The only thing I notice with regard to external stakeholders... In fact, we have only one stakeholder: the Ministry of Social Affairs and Employment.

This statement clearly illustrates the buffer role played by the UWV Executive Board in limiting the implications of external stakeholders for the UWV Benefits division, which essentially has only one important stakeholder.

Need for innovation. Despite the buffer role of the UWV Executive Board, the managers participating in this study emphasized the continuing need for innovation in order to accommodate environmental turbulence and complexity. This is necessary, as the UWV Benefits division is simultaneously facing massive cutbacks and increasing demands from political superiors and citizens. The ability to innovate is thus crucial to the division, as it could strengthen and facilitate the development of new insights, knowledge, and skills. As explained by a staff manager and a district manager:

We have to save money. These savings cannot be realized by incremental changes and improvements. We need to implement major changes in order to maintain our level of our service provision with less money.

The current political context is unstable as a result of many governmental changes. Furthermore, we are facing an economic crisis. Taken together, this results in a large number of legislative changes and a high level of pressure and demands on our organization.

These two statements underscore the need for major innovations in order to guarantee both the short-term success and the long-term survival of the UWV Benefits division.

At first sight, the qualitative data presented above appear to indicate that top managers must often cope with turbulence and complexity within their environments. The findings further demonstrate that the Executive Board of the public service agency addressed here acted as a buffer, thereby limiting the amount of environmental turbulence and complexity that these managers must face. The identification of this buffer role with regard to external environmental factors in the context of fostering a climate for innovation is a new contribution to the current literature on innovation in the public sector. According to Bernier et al. (2015: 852), environmental factors have a weaker influence on innovativeness than do either organizational characteristics or the attitudes of top managers. By emphasizing the specific impact of environmental turbulence and complexity on a climate of innovation, the results might offer an explanation for why innovative climate is less affected by environmental factors than it is by organizational characteristics or the role of top managers, at least in public service agencies. According to these findings, the buffer role can reduce the effects of environmental turbulence and complexity on a climate for innovation.

4.3.2 Interpretations of top managers with regard to fostering a climate for innovation

Based on Isaksen and Akkermans (2011), the study presented in this chapter investigates a particularly relevant aspect of the working context of top managers: an innovative climate. This aspect could be regarded as an important prerequisite for enhancing the ability to innovate (Walker, 2014).

Freedom. As indicated by the managers participating in this study, the role of freedom is important to developing a climate for innovation. Freedom means that employees have the ability and autonomy to organize and perform their own work, possibly resulting in creativity. The interviewees also noted that freedom can generate opportunities for employees to develop new ideas – and therefore innovation – as it allows them to express their creativity. In this regard, one district manager noted:

There is a lot of creativity within our organization. One important question concerns how we can spot this creativity. How can people recognize the autonomy that they have and actually use it? Nevertheless, not everyone has to use his or her autonomy. That's not my point. My point is that talented people should be given autonomy. These people are also the key initiators of the change process.

This manager's statement assumes that employee autonomy is an important pre-requisite for expressing creativity, with the condition that autonomy is in particularly suited to talented employees. Nevertheless, this manager regarded autonomy as crucial to the development of new ideas, which can provide an important condition for innovation.

Trust. Trust has been identified as an essential means of fostering a climate for innovation. According to the managers participating in this research, trust refers to a situation in which individuals feel comfortable confronting and sharing new ideas with others whom they do not yet know well and for whom they do not have full knowledge about their intentions or what they have to offer. With regard to trust, one manager referred to the relationship between managers and employees:

It all starts with trust. At first sight, trust appears to be a noun. In my opinion, however, it is a verb. You really have to foster trust, and that is an ongoing process. You must constantly ensure that there is a fundamental level of trust between managers and employees.

This district manager stressed the crucial role of trust to enhancing a climate for innovation, identifying trust as the starting point. Instead of being self-evident, this manager defined trust as a delicate and immediate task for upper management.

Risk aversion. The interviewees emphasized the necessity of minimizing risks within the context of fostering a climate for innovation. Risks could have harmful side effects for the primary task of the UWV Benefits division (i.e., implementing employee insurance policies and providing labor-market and data services). In this regard, the managers noted the importance of risk management, which entails the identification, assessment, and prioritization of risks in order to control the impact of unfortunate events. The most important aim of risk management is to mitigate risks. In other words, it is intended to lessen, reduce, decrease, or eliminate risks. In doing so, it is particularly important to identify potential risks in advance, as such risks could prevent the organization from achieving its primary task and objectives. As explained by a staff manager:

Risk management is aimed at prevention. I prefer it to be mainly preventive, because this ensures that risks will not occur. If something has already occurred, it is no longer a risk, but an issue – a problem.

According to this manager, the primary goal of risk management should be to prevent or avoid risks, rather than reducing or eliminating them, thus allowing them to be transformed into problems.

Organizational structures and processes. The managers participating in this study noted the importance of building an organizational infrastructure that can support innovativeness. As such, they regarded organizational structures and processes as important elements involved in developing a climate for innovation. They were thus particularly likely to rely on organizational procedures and the associated bureaucracy in order to foster an innovative climate. As explained by a district manager:

We have developed certain organizational structures in order to manage innovations. Direct supervisors are expected to register new improvement initiatives conceived by their employees on the "quality page." We have also developed procedures for district seeking to implement specific new initiatives.

As described by this manager, organizational structures and processes are important instruments for supporting and exchanging new initiatives and ideas between various districts

in the UWV Benefits division. These instruments help to enable districts to implement such new initiatives.

Decreased ability to innovation. The managers participating in this study nevertheless acknowledged that the focus on risk aversion and on organizational structures and processes can decrease the ability to innovate, which they recognized as dependent upon freedom and creativity. They thus regarded organizational structures and process as constraints on developing a climate for innovation. As indicated by one staff manager:

If I want to innovate, I should do everything I can. I must overcome formal organizational structures. I will also face all kinds of people who believe they have a say in the process, even though innovation is all about moving beyond structures.

As indicated by this manager, the focus on organizational structures and processes can result in formal discussions and arguments concerning how new initiatives should be initiated. They thus limit a climate for innovation, which requires moving away from formal structures.

As demonstrated by the qualitative data presented above, top managers are likely to associate freedom and trust with a climate for innovation. At the same time, they are likely to regard risk aversion and organizational structures and processes as important elements in this climate. This is surprising, given their acknowledgement of the potential of these elements to decrease the ability to innovate. Nevertheless, the balance between the need for risk aversion and standardized efficiency and the need for autonomy and creativity is a commonly cited feature of the public sector. For example, according to studies by Adler and Borys (1996) and by Adler et al. (1999), organizations within a dynamic and complex environment whose primary tasks are essentially repetitive (e.g., mass production) are particularly likely to attempt to enhance their efficiency by supporting a bureaucratic organizational form. Bureaucracy thus serves the purpose of enabling work systems, thereby implying a strong emphasis on organizational structures and formal processes (Adler & Borys, 1996; Adler et al., 1999). In contrast, however, Adler et al. (1999: 37-38) argue that the greatest challenge for these types of organizations consists of actually realizing innovative practices, as this requires them to "forgo the bureaucratic features of organizations that could ensure efficiency. More bureaucracy, we are told, means less motivating work characteristics and thus less innovation". The findings reflect this balance and suggest that it is ultimately necessary.

4.3.3 Perceptions of top managers regarding leadership activities that are likely to foster a climate for innovation

One purpose of this study is to investigate the roles that top managers envision for themselves and the leadership activities they perform in order to foster a climate for innovation, centering on the leadership activities proposed by Van Wart (2012: 245).

Managing the organizational direction. The UWV Benefits division has recently launched an organizational development program (entitled "Continuous Improvement"), with the goal of enhancing the ability to innovate. According to the managers who were interviewed, understanding the "whys and hows" of this development program requires explaining the division's current organizational situation to its employees. In order to understand the actual situation, the managers must identify what is occurring now and subsequently ensure that employees assign high priority to the development program. The managers further referred to the importance of managing employees based on the principles of the development program. As noted by a staff manager:

We have formulated a clear direction for how we should develop in the next few years. It is important for our employees to move in the same direction. Moreover, it is particularly important for me to try to ensure that our employees develop themselves to fit within our direction.

As emphasized by this manager, employees should be managed according to the principles of the development program. They should also align and develop themselves according to this program.

Being a role model. The managers participating in this study noted that they regularly provide and confront employees with experience-based examples of the content of the development program relating to the ability to innovate, thereby providing both clarification and prioritization. As the key initiators of the development program, the managers were convinced that their own behavior bore a major impact on their employees. As explained by a district manager:

It also concerns your own exemplary behavior. This is of major importance. I actually expect that from the entire management.

This manager argued that the exemplary behavior of a manager plays a decisive role in the success of the development program. Given the crucial role of exemplary behavior in effecting the intended development, the entire management should be aware of their status as role models.

Formulating the mission and vision. The managers who were interviewed argued the importance of stating the mission and the vision of the UWV Benefits division, as they illustrate and enforce the program of development with regard to enhancing the ability to innovate through concrete actions. They further indicated that the formulation of mission and vision statements can provide long-term direction for the organization with regard to additional innovativeness, while endowing the organization with a sense of purposeful action. As explained by two managers:

...and based on our vision, that's our direction. We have to move from our current situation to the desired situation. That's our direction for developing ourselves.

In my opinion, this was already included in our vision formulated in 2009. In our vision for 2018, we have defined the same goals as we did in 2009. Our aim for the next few years is to make a significant shift from our current situation to the desired situation, which is basically an expression of what was already articulated in 2009.

According to these managers, the vision that was formulated for the UWV Benefits division is a crucial condition for the intended direction of the development program. It therefore serves as the fundamental foundation for the organizational direction. Moreover, the basic assumptions of the development program are not completely new, as they had already been articulated several years before.

Top-down mechanisms. The managers participating in this study noted the importance of using monitoring and surveillance mechanisms for managing and constraining the behavior of employees, which should be based on the fundamental principles of the development program. They therefore arrived at the notion of a culture of blame: a set of attitudes that can

be characterized by an unwillingness to take risks, due to a fear of criticism or a lack of safety. Although the managers noted that there is no culture of blame within the UWV Benefits division, upper managers do use their formal positions of power and responsibility to sanction employees. The penalties for mistakes are intended to move employees in the intended direction of the development program. As explained by a staff manager and a district manager:

...and that a certain level of steering is included... It is not all about freedom and creativity. We are not dealing with an environment which that allows people to say, "Okay, I don't feel well, and I am therefore not going to do that.

People are obviously held accountable if they make major mistakes. It is important to have these types of mechanisms.

Both of these managers referred to elements of a culture of blame, indicating that mechanisms for sanctioning employees are crucial for those who make repeated mistakes. They thus identified error correction as an important instrument for top managers.

As demonstrated by the qualitative data presented above, top managers are likely to be aware that they play a crucial role in fostering a climate for innovation, referring to such leadership activities as managing programs aimed at achieving greater abilities to innovate, being a role model, and formulating the mission and the vision of the organization. The managers in this study also substantiated their leadership roles by effecting top-down mechanisms, including monitoring and controlling their employees. Because this leadership role limits freedom and trust, however, it may ultimately decrease the ability to innovate. One theoretical explanation for the effects of such top-down mechanisms (at least in public organizations) has been proposed in studies by Rainey (2009) and by Van der Voet et al. (2015). As indicated in these studies, perceptions of environmental turbulence and complexities lead top managers to adopt a more planned approach to change. This type of approach assumes that an organization can be moved away from an unsatisfactory current state and toward a desired future state, thus implying that the objectives of the change are formulated in advance (By, 2005; Van der Voet et al., 2015). As argued by Rainey (2009), planned change refers to initiatives that are driven from the top-down, centering on controlling, commanding, and directing employees from the highest hierarchical level. In this light, the perceptions of turbulence and complexity in the external environment investigated

in this study offer an important explanation for why top managers should engage in top-down leadership activities.

4.4 Conclusion and discussion

The ability to innovate is crucial for enabling public sector organizations to cope with their rapidly changing and challenging environment (Bysted & Hansen, 2015; Osborne & Brown, 2011). The role of top managers in fostering innovation is important, as "leaders of the organization help define and shape work contexts that contribute to organizational innovation" (Sarros et al., 2008: 146). The study in this chapter examines a specific aspect of the context of work in the UWV Benefits division: a climate for innovation, which could be regarded as an important prerequisite for enhancing the ability to innovate. This study is an exploration of the roles that top managers envision for themselves and the leadership activities they perform in order to foster a climate for innovation in one public-sector organization, thereby providing an answer to the first sub-question of this dissertation: Which roles do top managers envision for themselves, and which leadership activities do they perform in order to foster a climate for innovation in a public sector context?

One conclusion from this investigation is that the interpretations that top managers have of an innovative climate can both enhance and limit the ability to innovate in the UWV Benefits division. The managers interviewed referred to freedom and trust. For employees, freedom involves having the ability and autonomy to organize and perform their own work, which results in creativity and therefore innovativeness. Trust implies that employees feel comfortable confronting and sharing new ideas with others. Nevertheless, the managers also emphasized the need to minimize risks, as well as the need for organizational structures and processes, which tend to decrease the ability to innovate by limiting creativity and the development of new ideas.

A second conclusion is that the roles that top managers envision for themselves simultaneously strengthen and disturb the process of fostering the ability to innovate. On the one hand, top managers can foster a climate for innovation by serving as role models and by formulating and expressing the mission and the vision of the organization, thereby clarifying and enforcing the organizational direction toward increased innovativeness through concrete actions. On the other hand, they are likely to substantiate their leadership roles by using top-down mechanisms (e.g., monitoring and controlling) to manage their employees according to

the intended organizational direction. These mechanisms conflict with freedom and trust, thereby disrupting the process of fostering a climate for innovation.

These findings have important implications, especially for 'machine bureaucracies' in a public sector context (Mintzberg, 1992). First, as examined in this study, the roles played by top managers in fostering a climate for innovation within a public sector context can be ambiguous, as they can simultaneously encourage and disrupt such climates. This contradictory (or balancing) role could be considered in relation to the core values of public management (Hood, 1991: 11). When top managers act as role models and formulate the mission and vision of their organizations, their activities are consistent with 'lambda-type' values, which are based on robustness and adaptivity. As described by Hood (1991: 14) adaptivity is "the capacity to withstand and learn from the blows of fate, to avoid 'competency traps' in adaption processes, to keep operating even in adverse 'worst case' conditions and to adapt rapidly in a crisis." Acting as a role model and formulating mission and vision statements stimulate the processes needed in order to foster a climate for innovation. These leadership activities thus correspond to this type of values, which also emphasizes a climate for innovation. When top managers enact top-down mechanisms, their actions relate to 'sigma-type' values, which are expressed in control systems and "mechanistic" structures (Hood, 1991: 11-12). These values place a strong emphasis on controlling output, as opposed to process or input. They are thus reflected in top-down mechanisms, which are based on monitoring and controlling employees. One important implication is therefore that the process of fostering a climate for innovation reflects different and conflicting core values of public management. As indicated by the results of this chapter, the short-term success and long-term survival of the UWV Benefits division ultimately depend on the balance between these values. This finding might also explain why the ability to innovate is not always a given in organizations within a public sector context, particularly those resembling 'machine bureaucracies'.

Another implication of the findings has to do with the particular emphasis that top managers place on the external organizational environment (Van Wart, 2012; 2013b). The investigation of the ways in which top managers envision and conceptualize environmental turbulence and complexity demonstrate that these managers tend to make conscious efforts to mitigate turbulence and complexity in the external environmental, thereby fulfilling a 'buffer role'. This buffer role apparently allows the UWV Benefits division to have a certain level of 'choice' in the manner in which and the extent to which they will cope with turbulence and complexity in their environment. More precisely, the results imply that, when upper

management serves as a buffer, this tends to reduce the internal effects of dynamics in the environment of the UWV Benefits division. They are therefore able to manage and constrain environmental turbulence and complexity.

One important limitation of this chapter is that the interviews with top managers were aimed at investigating the characteristics of climate of innovation in order to examine the ability to innovate. As emphasized by various scholars, however, the characteristics of such a climate are particularly likely to be influenced by the perceptions and behaviors of managers and employees at lower levels in the organization (e.g., Anderson & West, 1998; Somech & Drach-Zahavy, 2013). The interpretations and factors explored in this chapter are thus restricted to the views of the upper-level managers who were interviewed. This research therefore recommends that future studies on the characteristics of an innovative climate in public sector organizations should focus on managers and employees at lower organizational levels.

Chapter 5

Linking Rule-Following Leadership to Team Innovation Performance in a Public Sector Context



Abstract

The discipline of public management has produced several important studies on the relationship between leadership and performance. However, most of these studies focus on transformational leadership and job performance at the individual level, thereby using the same source for collecting information about both leadership and performance. The study in this chapter contributes by 1) investigating the role that rule-following leadership plays in team innovation performance, 2) examining the moderating impact of team educational level on any relationship between rule-following leadership and team innovation performance; and 3) using multi-source data to reduce common source bias. The study is conducted within the UWV Benefits division, which can be considered a 'machine bureaucracy'. Results indicate that a strong focus on rules (i.e. strong rule-following leadership) plays an important role in enhancing team innovation performance, particularly for teams with lower levels of education. This chapter discusses these findings and suggests directions for future research.

5.1 Introduction

Leadership is considered a crucial resource for enhancing performance within the context of public organizations (Fernandez et al., 2010; Hassan & Hatmaker, 2015; Moynihan & Pandey, 2010; Orazi et al., 2013; Van Wart, 2013b). Many studies have demonstrated that leadership is positively related to performance (Andrews & Boyne 2010; Moynihan & Ingraham, 2004; Paarlberg & Lavigna, 2010). For example, in an experimental study, Bellé (2014) reports that nurses who had been randomly exposed to transformational leadership performed better than did nurses who had not encountered transformational leadership.

Although this evidence might seem convincing, it would be hasty to conclude that leadership and performance are related within the field of public administration. First, most studies focus on transformational leadership and job performance at the individual level in public sector organizations (Bellé, 2014; Breevaart et al., forthcoming; Moynihan et al., 2012a), thereby ignoring other potential relationships between leadership and performance at different organizational levels. For example, given that Wang et al. (2014) identify an overall positive relationship between shared leadership and team performance in the private sector, it could be interesting to replicate their study within a public sector context. Second, most public sector studies on leadership and performance are subject to common source bias (Podsakoff et al., 2012), which could possibly explain any positive relationships found (Van Loon, forthcoming). Common source bias arises when the same source is used for collecting information about both leadership and performance (Favero & Bullock, 2015). For example, employees who rate their supervisors as highly transformational might have a tendency to rate their own performance higher as well. Such biases thus call into question the validity of findings in many studies of leadership-performance within the field of public administration.

The study in this chapter addresses the gap in the public administration literature with regard to the relationship between leadership and performance in several ways. First, it investigates connections between rule-following leadership and team innovation performance, given the importance of this form of leadership for public leaders. Based on Tummers and Knies (2016: 436), this chapter defines rule-following leadership activities as "encouraging employees to carry out tasks in line with governmental rules and regulations". Its importance is emphasized by Oberfield (2010), who argues that ignoring or departing from governmental rules and regulations increases the likelihood of corruption and inconsistently implementation of policies. By addressing the potential impact of rule-following leadership on team innovation performance, this chapter responds to Jacobsen and

Andersen (2015: 837), who observe a need for public management studies examining the relationship between leadership and performance. A second contribution of this chapter has to do with its rigorous research design, with 2,148 employees measuring the rule-following leadership of their supervisors in January 2015, and 132 supervisors rating the innovation performance of their teams in May 2015. The use of multisource data significantly reduces the likelihood of common source bias (Favero and Bullock 2015; Jakobsen and Jensen 2015).

The purpose of the study conducted in this chapter is to examine the potential effects of rule-following leadership on team innovation performance in a public sector context. Therefore, the following research question is addresses in this chapter: *To what extent does rule-following leadership influence the innovation performance of teams in a public sector context?* With respect to this, studies argue that public leaders are not unconditionally successful in affecting performance (Bellé, 2014; Hassan & Hatmaker, 2015). Team context is a crucial factor in this regard, given its potential to moderate the relationship between leadership and team innovation performance (Eisenbeiss et al., 2008; Schippers et al., 2015). Team context can be defined as the differences between work groups in terms of specific personal attributes (Jackson et al., 2003). Following private management studies that have argued the appropriateness of addressing educational level in the examination of team context (Horwitz & Horwitz, 2007; Somech & Drach-Zahavy, 2013), this research analyses the extent to which the educational level of a team might moderate any relationship between rule-following leadership and team innovation performance.

5.2 Theoretical framework

The following sections discusses the theoretical framework and presents the hypotheses of this chapter.

5.2.1 Background on rule-following leadership

Rule-following is a topic of great interest in public administration (Bardach & Kagan, 1982; Weber, 1947; Wilson, 1989). Many studies have raised the question how employees can be encouraged to engage in rule-following. Some findings suggest that rule-following depends on how employees see themselves and how they understand their roles (DeHart-Davis, 2007; Herzfield, 1992; Merton, 1940). For example, employees may follow rules when they "see themselves as neutral, dispassionate cogs in a system that processes people" (Oberfield, 2010:

737). Following Tummers and Knies (2016), this chapter moves away from those findings and argue that how the role of leadership is exerted plays an important role in encouraging employees to act in accordance with governmental rules and regulations. For example, as noted by Terry (2002: 77), one important task of public leaders is to reduce violations of governmental rules and regulations, and thus to ensure rule-following.

Defining leadership has proven difficult, and definitions abound (Yukl 2008). One common feature of these varied definitions involves the description of leadership as the process of influencing others (Van Wart, 2013b: 554; Yukl, 2008: 26). This chapter focuses on particular *activities* that supervisors perform when trying to encourage employees to act in line with governmental rules and regulations. This is in line with the behavioral approach to leadership, which concerns what leaders should or actually *do* in their work (Yukl, 2008: 't Hart, 2014).

With a focus on leadership, this chapter analyses rule-following activities that emphasize: 1) following the law, 2) carrying out governmental policies properly; and 3) acting precisely in accordance with the rules and procedures (Tummers & Knies, 2016). Those leadership initiatives are of paramount importance for public sector administrations, as they relate to the traditional rational-legal authority of a bureaucratic system (Weber, 1978; Pollitt & Bouckaert, 2011). As noted by Lane (1994: 144), the rule of law is thus at the very heart of public administration. In this regard, Van der Wal et al. (2008) provide empirical evidence identifying accountability and following governmental rules as the most important public sector values.

5.2.2 Background on team innovation performance

Teams are defined as units of two or more members interacting interdependently to achieve a common objective (Bell, 2007). In line with Somech and Drach-Zahavy (2013: 685), team innovation performance refers to the extent to which a team introduces and applies "ideas, processes, products or procedures that are new to the team and that are designed to be useful". Accordingly, innovative teams generate creative ideas and process them critically so that useless ideas are discarded and promising ideas are implemented (Anderson & West, 1998). For example, innovative teams envision new ways to work together with citizens and novel ways of coping with accountability pressures (Voorberg et al., 2014).

The literature on management in the private sector contains a large number of studies on team innovation performance (Chen & Huang, 2009; Miron-Spektor et al., 2011). Many of

these studies emphasize the important role that team innovation plays in determining the success of organizations (Somech & Drach-Zahavy, 2013). Although the literature on innovation in the public sector has been growing (Borins, 2014; Bysted & Hansen, 2015; De Vries et al., 2016; Kim & Chang, 2009; Moore & Hartley, 2008), and although public administration researchers are increasingly seeking to explain innovative behavior (Damanpour & Schneider, 2009; Meijer, 2014; Walker, 2008), public management scholars have yet to devote specific attention to *team* innovativeness in the public sector.

One explanation for the aforementioned gap in the literature could be that, as observed by many scholars in the field of public administration, public organizations are not known for their innovativeness (Bekkers et al., 2011). According to Rainey (1999; 2014), important reasons include 1) the absence of economic market for output, 2) the presence of multiple, conflicting and vague goals; and 3) weak leadership and administrative authority. The field of public administration is nevertheless becoming more nuanced. For example, with regard to innovativeness, Bysted and Hansen (2015: 713) note "that it is not sector per se that important, instead it is the differences between subsectors/industries and job types". Moreover, scholars have recently argued that the ability to encourage innovation should be considered a core competence in the public sector, in order to improve governmental performance within a rapidly changing environment (Bysted & Hansen, 2015; Walker, 2014).

5.2.3 Relationships between rule-following leadership and team innovation performance

In theory, rule-following leadership activities could generally be expected to have a negative impact on team innovation performance. At least two arguments can be given for this assumption. First, as noted by Tummers and Knies (2016), such activities encourage "employees to follow governmental rules and regulations, and prevent them from rule-breaking". With respect to rule-breaking, Morrison (2006: 8) emphasizes that rule violation can be related to positively intended behaviors (e.g. innovation). Studies on such behaviors tend to focus on the likelihood of employees to address or solve problems pro-actively by stepping outside the boundaries of their own jobs (Nemeth, 1997), which has been proposed as a critical condition for innovation (Somech & Drach-Zahavy, 2013). Rule-following leadership activities might thus potentially limit incentives for employees to innovate, as they prevent them from breaking rules. Second, emphasis on following rules and regulations is often considered a part of controlling public employee life, because it could potentially

structure and discipline behavior (DeHart-Davis et al., 2015). Formal control refers to "direct attention, motivate, and encourage organizational members to act in ways desirable to achieving organization's objectives" (Cardinal et al., 2010: 56). As argued by DeHart-Davis et al. (2015: 854), control determines the level of discretion, such that high control limits and low control enables discretion in work. In this respect, Somech and Drach-Zahavy (2013) emphasize that employees who experience discretion in their work are increasingly inclined to do something exceptional and to generate new ideas, which have been regarded as crucial conditions for enhanced innovativeness (Anderson and West 1996). Rule-following leadership activities might thus potentially decline the likelihood of employees to innovate, as they are perceived as a strategy designed to control, leading to constrained discretion in work. Based on these observations, the study conducted in this chapter hypothesizes:

H1a: Rule-following leadership activities are negatively related to team innovation performance.

Conversely, rule-following leadership activities could arguably have a positive influence on team innovation performance in some contexts. Machine bureaucracies are currently facing increasing yet unpredictable demands on their services, in addition to public scrutiny regarding how taxes are spent. At the same time, public stakeholders (e.g. citizens, taxpayers, service users) are becoming increasingly vocal in their expectations regarding improvements in performance. For example, machine bureaucracies are forced to apply governmental rules properly to thousands of individual cases involving such issues as income support, registration and subsidies (Schillemans, forthcoming). Greater innovativeness has therefore become an important goal for machine bureaucracies, as a means of meeting the challenges with which they are confronted (Van Wart 2013b). In this context, it is important to mention one relevant mechanism from goal-setting theory, as developed by Locke and Latham (2004). As demonstrated by these authors, strategies designed to motivate and guide a person or group towards a specific goal are likely to increase performance. The theoretical argument behind this observation is that 'doing one's best' is not sufficient: having a goal is of vital importance in order to focus efforts in a specific direction (Locke & Latham, 2006). From a more pragmatic perspective, this chapter supposes that rule-following leadership activities provide effective directions and strategies, in addition to providing teams in machine bureaucracies with the energy that they need in order to achieve the goal of increasing their innovativeness, given its importance to the long-term survival and short-term

success of the organization. The emphasis that activities associated with rule-following leadership place on acting in accordance with governmental rules and regulations corresponds to the characteristics of machine bureaucracies, particularly with regard to formalized procedures and standardized work (Mintzberg, 1992; Schillemans, forthcoming). As such, in machine bureaucracies, rule-following leadership activities might be able to determine opportunities for teams, in addition to energizing them to innovate (e.g. as reflected in the practice of encouraging the development of alternative work procedures for reasons of efficiency). From a more theoretical perspective, as argued earlier, the emphasis on following rules and regulations is often related to strategies designed to control. Evidence suggest that an optimal level of control – neither too high nor too low (DeHart-Davis et al., 2015: 855) – helps employees to reach performance objectives (Bijlsma-Frankema & Costa, 2010: 409), as rules and regulations structure the way in which work is performed (Oberfield, 2010), leading to behavior toward organizational goals (Hall, 1999: 68). The following hypothesis is based on these observations:

H1b: Rule-following leadership activities are positively related to team innovation performance in machine bureaucracies.

5.2.4 Context of teams

Scholars have emphasized that leaders are often conditionally successful in influencing performance within public sector organizations (Bellé, 2014; Hassan & Hatmaker, 2015). As noted in the literature, team context is therefore a crucial factor to consider in any study conducted at the team level (Bowers et al., 2000; Joshi & Roh, 2009; Somech & Drach-Zahavy, 2013). Team context refers to differences between interdependent work groups with regard to specific personal attributes (Jackson et al., 2003). The context of a team could potentially moderate the relationship between leadership and team innovation performance (Eisenbeiss et al., Boerner 2008; Schippers et al., 2015). For example, in a study conducted in the private sector, Somech (2006) reports that, in highly heterogeneous teams, a participative leadership style is positively associated with team reflection, which in turn fosters team innovation. Conversely, a more directive leadership style tends to promote team reflection in less heterogeneous teams.

While acknowledging the possibility of other relevant moderators (e.g. the dominant type of tasks in teams; Keller, 2006), the study presented in this chapter focuses on team

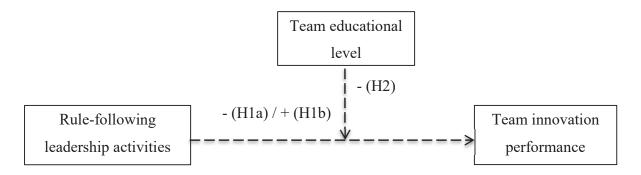
educational level as a potential moderator, as studies in the private management literature have argued the appropriateness of addressing this factor in the examination of team context (Horwitz & Horwitz, 2007; Simons et al., 1999; Webber & Donahue, 2001). According to Somech and Drach-Zahavy (2013), one important argument for this is that educational level can be considered a great example of a specific personal attribute of a team, which is a core feature in the definition of team context. For example, Joshi and Roh (2009: 600) associate educational level with skill-based and informational differences between teams, possibly explaining positive performance outcomes under specific conditions of education. From this perspective, the educational level of a team might have important moderating effects on the relationship between leadership and team innovation performance.

This chapter proposes that the potential impact of rule-following leadership activities on team innovation performance is less positive for highly educated teams in machine bureaucracies. The theoretical argument behind this assumption focuses on the job autonomy of teams. In the context of work, autonomy refers to "the relative freedom that [teams] experience in decision-making processes related to the inputs and processes of the organization" (Van der Voet & Van de Walle, forthcoming). Job autonomy is particularly important for teams with a high level of education (Buelens & Van den Broeck, 2007; Crewson, 1997; Morgeson et al., 2005), given the tendency of such teams to value freedom and discretion in their work (Shin & Zhou, 2007). It could nevertheless be argued that activities associated with rule-following leadership could limit the job autonomy of teams, as they are likely to force teams and their members to behave in accordance with governmental rules and regulations, rather than providing them with decision-making authority over their own work (Tummers & Knies, 2016). This situation suggests the following hypothesis concerning the moderating effect of team educational level:

H2: The impact of rule-following leadership activities on team innovation performance is less positive for highly educated teams in machine bureaucracies.

The conceptual model outlining the expected relationships is depicted in Figure 5.1.

Figure 5.1: Conceptual model



5.3 Results

This section depicts the results deriving from a multisource survey design conducted in the UWV Benefits division (for a discussion concerning the method used in this chapter, see Chapter 3). In this respect, 2,148 employees (42%) have measured the rule-following leadership of their supervisors in January 2015, and 132 supervisors (55%) rated the innovation performance of their teams in May 2015. To assess the potential relationship between rule-following leadership and team innovation performance, items regarding rule-following leadership activities are aggretated from the individual level to the team level in a justified manner (Geroge & James, 1993). The resulting data set comprised responses from 795 employees in 111 different teams.

5.3.1 Factor analysis

The study presented in this chapter conducts confirmatory factor analysis (CFA) in Mplus version 6.12 to test the factor structure of latent constructs. This technique has important advantages compared to exploratory factor analyses (EFA), including the ability to model measurement error and estimate latent constructs rather than only measured variables, thereby improving both validity and reliability (Brown, 2006). The data have a 'nested' structure, in which employees are 'nested' within teams, with supervisors rating team innovation performance. For this reason, the 'cluster' command is used for CFA within Mplus (TYPE = COMPLEX and ESTIMATOR = MLR) as a way of taking teams into account. To assess the overall model fit, this study examines the root mean square error of approximation (RSMEA), the comparative fit index (CFI) and the Tucker-Lewis index (TLI). Acceptable fit

is evidenced by a RSMEA of .08 or lower, and CFI and TLI scores of .90 or higher (Bentler, 1990). Results of CFA reveal acceptable fit indices (RMSEA = .04 CFI = .94; TLI = .92).

5.3.2 Descriptive statistics

The means, standard deviations and correlations of all the variables (as calculated in SPSS version 22) are displayed in Table 5.1. According to these results, rule-following leadership activities are not associated with team innovation performance, and team educational level is positively correlated with team innovation performance. With regard to the control variables, the age and tenure of teams are negatively correlated with team innovation performance, as is the educational level of supervisors.

Table 5.1: Descriptive statistics

Variable	М	SD	1 2 3	2	3	4	5	6	7	8	9
1 Age of employees of teams (aggregated)	41.52	6.03	1								
2 Tenure of employees of teams (aggregated)	2.93	0.92	.781** 1	1							
3) Gender of supervisors (1 = female)	0.38	NA	105**075*)75*	1						
4) Age of supervisors	46.94	8.88	.327** .215**243**	215** -	.243**	_					
5) Educational level of supervisors	3.88	0.81	046143** .251**	43**	.251**	211**	1				
6) Tenure of supervisors	3.30	1.74	.129** .206**314** .598**340**	206** -	.314**	.598**	340**	_			
7) Team educational level (aggregated)	3.41	0.43	432**586**051	586** -	.051	.075*	.108**	.002	_		
8) Rule-following leadership activities (aggregated)	5.05	0.84	146**045113**075*032)45 -	.113**	075*		.240**001	001	_	
9) Team innovation performance	4.44	1.06	159**228**065	228** -	.065	.014	.014085* .012 .376** .021	.012	.376**	.021	1
*: \ 05 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \											

^{*} p < .05, two-tailed

^{**} p < .01, two-tailed

5.3.3 SEM Results

Structural equation modeling (SEM) in Mplus is conducted to test the hypotheses. This research initially used TYPE = COMPLEX analysis and ESTIMATOR = MLR commands, which enabled the study to determine the extent to which our model and its main effects provided an acceptable fit for the data. The model had a good fit (RMSEA = .03; CFI = .93; TLI = .92), and it explained 20.4% of the variance (R^2) in team innovation performance. The TYPE = COMPLEX analysis and ESTIMATOR = MLR commands could not be used to investigate potential moderating effects. In order to compare a model with the main effects to a model that includes moderating effects, this dissertation uses TYPE = COMPLEX RANDOM analysis and MLR estimation. The results are displayed in Table 5.2. Model 1 includes the control variables and the main effects, while Model 2 contains the control variables, main effects, in addition to team educational level as a moderator. The results do not include the RMSEA, CFI and TLI fit criteria for the different models. The only available fit indexes are the Akaike Information Criterion (AIC) and the Bayesian Information Criterion (BIC), which are used to compare Model 1 with Model 2. Lower scores on the AIC and BIC indices mean that the model fits better (Schreiber et al. 2006). According to these results, Model 2 fits the data better than Model 1 does (Model 1: AIC = 11702.63; BIC = 11852.13, Model 2: AIC = 11682.64; BIC = 11836.82).

Table 5.21: Results of SEM analyses for team innovation performance

Model 1 –	Model 2 –
Overall model	Overall model
	with
	moderating
	effects
.006 (.009)	.004
.076 (.105)	.052
.036 (.050)	.064
003 (004)	006
167* (232*)	161*
069 (095)	052
.348** (.483**)	.297**
.067 (.088)	.081
-	120*
11702.63	11682.64
11852.13	11836.82
	.006 (.009) .076 (.105) .036 (.050)003 (004)167* (232*)069 (095) .348** (.483**) .067 (.088)

^{*} p < .05; ** p < .01.

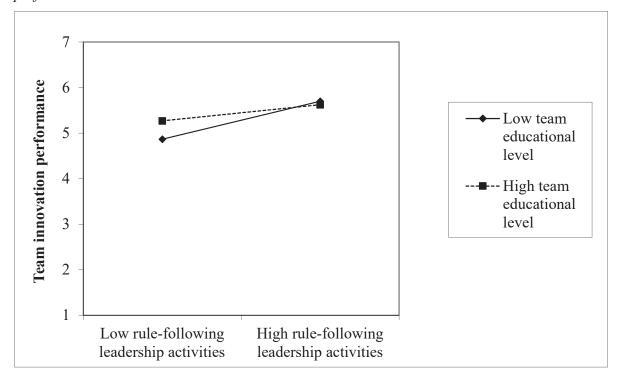
Model 1, which includes only the main effects, provides no evidence that rulefollowing leadership activities affect team innovation performance, thus providing no support

¹ Estimates (and standardized coefficients for Model 1 by using TYPE = COMPLEX analysis and ESTIMATOR = MLR commands) are presented based on the z-scores of the items used, as Mplus does not generate standardized coefficients when using TYPE = COMPLEX RANDOM analysis command and MLR estimation. The z-scores for the items are computed in SPSS before conducting structural equation modeling (SEM) in Mplus.

for H1a and H1b. The model further reveals that team educational level is positively related to team innovation performance. With regard to the control variables, the results indicate that higher education on the part of supervisors is negatively related to team innovation performance. No effects are found for the age or tenure of teams, of for the gender, age or tenure of supervisors.

In Model 2, the study conducted in this chapter investigates the extent to which team educational level moderates the relationship between leadership and team innovation performance. According to the results from this model, rule-following leadership activities are positively associated with team innovation performance, particularly for teams with lower levels of education (see Figure 5.2). This result provides support for the second hypothesis.

Figure 5.2: Rule-following leadership activities * team educational level on team innovation performance



5.4 Conclusion and discussion

The study conducted in this chapter contributes to understanding with regard to the leadership-performance relationship in a public sector context by developing an explicit theoretical model, and testing it according to multisource data with a large number of respondents. More specifically, this chapter analyses rule-following leadership activities as

potential predictors of team innovation performance in the UWV Benefits division, as well as examining the extent to which this relationship is moderated by team educational level. By doing so, this study provides an answer to the second sub-question of this dissertation, which is formulated as follows: *To what extent does rule-following leadership influence the innovation performance of teams in a public sector context?*

One conclusion is that rule-following leadership activities are positively related to team innovation performance in machine bureaucracies within a public sector context for teams with lower levels of education, but not for teams with higher levels of education. As indicated by the results, rule-following leadership activities involve the development of actions or strategies designed to foster team innovation performance in machine bureaucracies when teams are not highly educated. In other words, in machine bureaucracies, the efforts of supervisors to encourage teams to act according to governmental rules and regulations tend to provide direction to teams with lower levels of education, energizing them to innovate. Given the importance of providing direction, teams with lower levels of education could arguably benefit from limited autonomy over their work, as a means of enhancing innovativeness. Based on goal-setting theory (Locke & Latham, 2006), the results suggest that supervisors can increase the performance of teams with lower levels of education by motivating and guiding them in terms of behaving in accordance with governmental rules and regulations with regard to enhanced innovativeness. This finding highlights the vital importance of setting goals in order to focus efforts in specific directions (Latham et al., 2008).

The following practical example illustrates the conclusion stated above. In 2015, the public organization addressed in this study – the UWV Benefits division – was confronted by a new governmental rule requiring employees to call the calls of citizens (i.e., 'clients') with questions concerning their applications for unemployment benefits within two hours. Initially, the team supervisors within the UWV Benefits division implemented this governmental rule by assigning team members responsibility for specific numbers of clients. Under this system, individual team members were required to call their 'own' citizens back promptly if they had any questions. In practice, however, the goal of returning all client calls within two hours proved impossible (e.g. when particular team members were absent due to holiday or illness). In response, team members developed an alternative way of coping with this governmental rule by making teams as a whole (rather than individual team members) responsible for calling clients back within two hours. Throughout the day, team members collected call-back requests from citizens concerning applications for unemployment

benefits. These requests were subsequently divided amongst the team members available, thus making it possible to return the calls of citizens within two hours, regardless of the personal situations of individual team members.

As illustrated in this example, innovativeness in machine bureaucracies within a public sector context can take place within the framework of prevailing governmental rules and regulations (in this case, the requirement to return citizen calls within two hours). In this respect, strategies that are incremental and evolutionary in nature are more likely to enhance team innovation performance in machine bureaucracies than top-down, transformative strategies. Building upon the work of Bekkers et al., (2011: 212), this chapter offers three possible explanations: 1) evolutionary strategies are needed in order to cope with the many complex and 'wicked' governmental rules and procedures, 2) in some cases, conflicting interests in the public sector (e.g. rules focusing on legitimacy vs. rules focusing on effectiveness) can challenge support for innovation; and 3) the success of strategies for innovation depend upon specific leadership behaviors. As demonstrated in this chapter, rule-following leadership activities are positively related to team innovation performance in machine bureaucracies for teams with lower levels of education.

This chapter is concluded by discussing two important limitations of the research conducted. First, this study has addressed the context of teams by examining team educational level as a moderator for the relationship between rule-following leadership and team innovation performance. This research is nevertheless aware that this constitutes only a very small part of team context. Future research would therefore benefit from analysing team context in greater depth. For example, it would be worthwhile for future research to distinguish teams whose duties consist predominantly of providing services to citizens (i.e. 'clients') from those that are generally focused on regulations with regard to citizens (Jensen, forthcoming). Any connections between rule-following leadership activities and team innovation performance could arguably depend upon this distinction. Finally, this chapter can be regarded as responding to the call made by Jacobsen and Andersen (2015: 837) for public management studies investigating the leadership-performance relationship. Nevertheless, future studies would benefit from analysing additional studies of such relationships in order to fill the gap in the public administration literature on this topic. In this regard, one interesting avenue for future research could be to build upon the recent work of Tummers and Knies (2016), who developed an instrument for measuring public leadership, focusing specifically on the 'public' aspect of public leadership. For example, their instrument could be used to measure accountability leadership or governance leadership, in order to test relationships between public leadership and various indicators of team performance.

In conclusion, the research findings of this chapter indicate that activities associated with rule-following leadership are related to team innovation performance in machine bureaucracies within a public sector context, depending upon team educational level. These results emphasize the importance of leadership within a public sector context (Wright & Pandey, 2010: 86; Tummers & Knies, 2013: 866) and the necessity of considering the team context when analysing connections between rule-following leadership and team innovation performance.

Chapter 6

Examining the Relationship of Servant
Leadership to Employee Innovation Performance
and Employee Job Performance in a Public
Sector Context



Abstract

In this chapter, an important theory of leadership – servant leadership theory – is applied to analyse the relationship of leadership to employee innovation performance and employee job performance. It thus 1) responds to the call for more investigation of servant leadership in public sector organizations, 2) contributes to the field of public management by examining relationships between leadership and performance; and 3) moves beyond public management studies by analysing supervisor ratings of employee innovation performance (e.g. instead of focusing solely on innovative intentions) and employee job performance. The data for this study are collected through two surveys of 2,148 employees and 132 supervisors working in the UWV Benefits division. The results indicate that strong empowering leadership – a core dimension of servant leadership – is important for fostering both employee innovation performance and employee job performance. Directions for future research are discussed.

6.1 Introduction

In recent years, strong emphasis on approaching leadership as a more shared, relational and ethical process has emerged in response to studies focusing on leadership in its hierarchical form (Van Dierendonck, 2011: 1228). The interaction between leaders and followers is a key element of such people-centred perspectives on leadership (Avolio et al., 2009). Given the increased attention that is currently being devoted to people-oriented management, one theory of leadership may be of great value in this respect: servant leadership theory (Chiniara & Bentein, 2016; Van Dierendonck & Nuijten, 2011). Originally introduced by Greenleaf (1977), the theory of servant leadership has been rediscovered by scholars in more recent years (Liden et al., 2008; Walumbwa et al., 2010). More than any other approach to leadership, servant leadership is characterized by putting the needs of others first and helping people to achieve the greatest possible personal development (Mayer et al., 2008; Neubert et al., 2008; Patterson, 2003). Because servant leadership is a people-focused leadership style, a large amount of empirical evidence has demonstrated that servant leadership has positive effects on individual job attitudes (e.g. job satisfaction and organizational commitment) and various performance indicators (e.g. organizational citizenship behavior (OCB) and team effectiveness) (Van Dierendonck, 2011: 1249).

According to Miao, Newman, Schwarz and Xu (2014: 727), servant leadership theory may also be of great value to leaders in *public* organizations, which are facing a decrease in public confidence due to reports of corruption and other self-interested initiatives on the part of their employees (Miao et al., 2014). These developments have resulted in a call for public leaders who concentrate on the interest of society in general instead of engaging in self-serving tendencies (Han et al., 2010). The service orientation of servant leaders inside their organizations (e.g. providing employees with information that will help them do their work well), as well as outside (e.g. emphasizing the societal responsibility of work), responds to call for public leaders who are willing to forego practices focusing largely on their own self-interest. In addition, the tendency of servant leaders to serve others first (Greenleaf, 1977) is likely to correspond well to the attitude of self-sacrifice and the prosocial motivation that tend to characterize public employees (Brewer, 2003; Houston, 2006). In this context, self-sacrifice refers to the willingness to accept personal loss in order to provide services to others (Perry, 1996). Prosocial motivation refers to the motivation to make a positive difference in the lives of other people (Grant, 2007: 393).

Despite the potential advantages of servant leadership, there remains much to learn. As observed by Chiniara and Bentein (2016: 123), "servant leadership research is still in its early stages". Only in the past decade have studies started to clarify the processes that can explain how this leadership style affects outcomes. This is particularly true within the field of public administration field, as emphasized by Parris and Peachey (2013) in their systematic literature review of servant leadership theory. Similarly, Miao and colleagues (2014: 727) note that "limited research has examined the prevalence of servant leadership in the public sector, its effectiveness in promoting positive employee attitudes, and the exact mechanisms by which it exerts its effects".

The study in this chapter addresses this gap in the public management literature by analysing the ways in which servant leadership is related to employee innovation performance and employee job performance. Following Osborne and Brown (2011), employee innovation performance refers to the extent to which employees introduce and apply new ideas, processes, products or procedures that are designed to be useful. Employee job performance refers to work performance in terms of quantity and quality expected from each employee (Welbourne et al., 1998) in order to achieve organizational goals (Campbell et al., 1990: 314). These two performance concepts were selected for this study, given their potentially crucial role in determining the success of public organizations. Several authors (Bysted & Hansen, 2015; Walker, 2014) have recently emphasized that the ability to encourage innovation should be regarded as a core competence that public organizations need in order to cope with major environmental challenges (e.g. budget pressure). In addition, many scholars have argued that high employee job performance makes distinct contributions to the ability of public organizations to achieve their goals (Alonso & Lewis, 2001; Anderson & Stritch, 2016; Bellé, 2014).

The study conducted in this chapter makes three primary contributions to the literature. First, it investigates the extent to which servant leadership is related to employee innovation performance and employee job performance within a public sector context. These relationships have not yet been studied, as most public management studies on leadership and performance focus on transformational leadership (e.g. Bellé, 2014). By addressing the ways in which servant leadership is related to employee innovation performance and employee job performance, this chapter responds to the recent call by Jacobsen and Andersen (2015: 837-838) for public management studies examining potential relationships between leadership and performance that extend beyond the impact of transformational leadership.

A second contribution of this chapter has to do with its focus on servant leadership and innovation *performance*. Most public management studies on leadership-innovation examine the innovative *intentions* of employees (e.g. Bysted & Jespersen, 2014; Fernandez & Moldogaziev, 2013). As observed by Fernandez and Moldogaziev (2013: 178), the inclination to innovation does not automatically translate "into actual innovative proposals, whether or not those proposals are accepted". The extent to which innovative intentions directly result in actual innovations is thus unclear. By focusing on innovation performance, the study in this chapter moves beyond analyses focusing on the influence of leadership on innovative intentions.

Finally, in contrast to most public sector studies on leadership and performance, which are subject to common source bias (Podsakoff et al., 2012), the study presented in this chapter is based on a multisource design. Starting in January 2015, a survey is completed by 2,148 employees, measuring the leadership of their direct supervisors. A second survey is conducted in May 2015, in which 132 supervisors rated employee innovation performance and employee job performance. The use of multisource data in this chapter substantially reduces the likelihood of common source bias (Favero & Bullock, 2015; Jakobsen & Jensen, 2015; Meier & O'Toole, 2013).

The main purpose of this study is to investigate the relationship of servant leadership to employee innovation performance and employee job performance in a public sector context, based on the following research question: To what extent is servant leadership related to employee innovation performance and employee job performance in a public sector context?

6.2 Theoretical framework

The following sections provide a discussion of the theoretical framework of the study in this chapter, followed by a presentation of hypotheses.

6.2.1 Background on servant leadership

Following Van Wart (2013b: 555) and Yukl (2008: 26), one common theme across all definitions of leadership is that leadership is a social process intended to influence others (i.e. followers). This chapter focuses on particular *activities* that supervisors perform when attempting to influence others. This approach corresponds to the behavioral approach to

leadership, which concerns what leaders *do* (or that others perceive that they do) in their work (Yukl, 2008: 't Hart, 2014).

The focus of the investigation in this chapter is on activities associated with servant leadership. Greenleaf (1977) is regarded as the founder of servant leadership theory. Although he does not specify a precise definition of servant leadership, Greenleaf does identify 'going beyond one's self-interest' as the most important element. As such, Luthans and Avolio (2003) argue that the primary aim of servant leaders is to allow followers to experience personal growth. For example, servant leaders learn new skills and the art of dealing with difficult people. It is also important to mention that servant leaders are described as 'the *primus inter pares*' (Greenleaf, 1977). In this vein, Van Dierendonck (2011: 1229) notes that "servant leaders do not use *power* to get things done, but *persuasion* to convince their followers". Based on Greenleaf's ideas, Spears (1995) identifies 10 characteristics that are generally considered the core elements of servant leadership: listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment and community-building.

From a theoretical point of view, many characteristics have been attributed to leaders who could be identified as servant leaders. The concept of servant leadership should therefore be investigated from a multidimensional approach (Patterson, 2003). Building upon the work of Van Dierendonck and Nuijten (2011), the study in this chapter conceptualizes servant leadership as a multidimensional concept. In an attempt to develop a validated multidimensional instrument to measure servant leadership, Van Dierendonck and Nuijten (2011) note that: 1) most studies adopt a unidimensional approach to servant leadership, thereby ignoring the multidimensional nature of the concept; 2) studies that do distinguish different dimensions of servant leadership have difficulty capturing the solidity of the multidimensional structure; and 3) the only existing study to confirm a multidimensional model of servant leadership as the best-fitting model (Liden et al., 2008) neglects the important aspects of accountability and courage. The multidimensional approach to servant leadership developed by Van Dierendonck and Nuijten (2011) provides valid and reliable evidence on which to base investigations of the underlying premises of servant leadership theory in a public sector context. To illustrate, Table 6.1 presents the eight dimensions of servant leadership from Van Dierendonck and Nuijten (2011), which have been adopted and used in this study:

Table 6.1: Conceptualization of servant leadership (based on Van Dierendonck & Nuijten, 2011: 251-252

Dimension	Description	Example	
Empowering	Leaders enable and encourage the	Allowing employees time off to take	
	personal development of their	a course in order to learn new skills	
	followers		
Standing back	Leaders assign priority to the	Placing employees in the spotlight	
	interests of their followers and	after winning a bid instead of	
	provide support and credit to their	drawing all attention to themselves	
	followers		
Accountability	Leaders hold their followers	Measuring the quantity of the work	
	accountable for performance that	output of individual employees and	
	they can control	assessing whether they have met	
		their goals	
Forgiveness	Leader understand and experience	Allowing employees to make	
	the feelings of others, letting go of	mistakes in their work	
	perceived wrongdoings		
Courage	Leaders dare to take risks and try	Granting permission to an employee	
	new approaches to old problems	to implement a new way of providing	
		unemployment benefits	
Authenticity	Leaders are true to themselves,	Expressing personal sadness to an	
	accurately representing internal	employee after he or she has lost a	
	states, intentions and	family member	
	commitments		
Humility	Leaders dare to admit that they are	Learning from feedback received	
	not infallible and do make	from employees	
	mistakes		
Stewardship	Leaders take responsibility for the	Explaining to employees the	
	larger institution and strive for	importance of providing health	
	service instead of control and self-	insurance	
	interest		

The investigation in this chapter examines the extent to which these dimensions of servant leadership are related to employee innovation performance and employee job performance. In the following sections, the concepts of employee innovation performance and employee job performance are discussed, along with the dimensions of servant leadership that are associated with these concepts.

6.2.2 Background on employee innovation performance and employee job performance

This chapter addresses innovation performance. Definitions of innovation are based primarily on: 1) perceived novelty; and 2) the initial adoption of an idea by a given organization (De Vries et al., 2016). This research defines employee innovation performance as the extent to which employees actually introduce and apply ideas, processes, products or procedures that are new to the organization and that are designed to be useful (Osborne & Brown, 2011). As argued by Welbourne and colleagues (1998: 544), in addition to behaving in innovative ways with regard to their specific jobs, employees should "contribute to the effectiveness and adaptability of their organization as a whole". Accordingly, innovative employees develop creative ideas and process them critically, such that useless ideas are discarded and promising ideas are implemented (Chen & Huang, 2009). For example, innovative employees might implement new ways of cooperating with citizens and develop novel strategies for coping with pressures relating to accountability (Voorberg et al., 2014).

As often noted in the discipline of public management, public organizations are not known for their innovativeness (Bekkers et al., 2011). According to Rainey (1999; 2009), important reasons include 1) the absence of incentives, as there is no competition in terms of output, 2) multiple and in some cases, conflicting, goals; and 3) the absence of strong leadership and administrative authority. The field of public administration is nevertheless becoming more nuanced (Walker, 2008). For example, with regard to innovativeness, Bysted and Hansen (2015: 713) note "that it is not sector per se that important, instead it is the differences between subsectors/industries and job types". Moreover, it has recently been argued that the ability to encourage innovation can be regarded as of key importance for public organizations, as it helps in coping with economic and social challenges taking place within a rapidly changing environment (Bysted & Jespersen, 2014; Bysted & Hansen, 2015).

In addition to the concept of innovation performance, job performance is regarded as one of the most significant dimensions of performance because of its contribution to organizational goal achievement (Chiniara & Bentein, 2016). In other words, job performance represents the traditional view of employee performance. The job performance of employees has been defined as work performance in terms of quantity and quality expected from each employee within a standard interval of time (Welbourne et al., 1998) that is relevant to the goals of the organization (Campbell et al., 1990: 314). For example, job performance could refer to observable behaviors necessary to complete tasks that contribute to: 1) the core products or services produced by the organization (line functions); or 2) the servicing and maintenance of the technical core of the organization (staff functions) (Motowidlo et al., 1997). The study in this chapter analyses the quantity and quality of employee work output and evaluates the extent to which employees carry out tasks accurately.

6.2.3 Linking servant leadership activities to employee innovation performance and employee job performance

The first theoretical expectation of this chapter is that servant leadership activities are positively related to employee innovation performance. One theoretical argument for this expectation is that the focus of servant leaders on the growth and well-being of their followers generates positive emotions amongst followers (Yoshida et al., 2014). For example, activities associated with empowerment reflect the people-oriented focus of servant leaders, as they accelerate a pro-active, self-confident attitude among followers by encouraging personal development (Van Dierendonck & Nuijten, 2011: 251). In this respect, Fredrickson (1998: 304) emphasizes that positive emotions emerging from servant leadership (e.g. happiness, hope and gratitude) are likely "to pursue novel, creative, and often unscripted paths of thought and action", as they tend to broaden the momentary thought-action repertoires of individuals. The resulting positive emotions are therefore likely to foster employee innovation performance.

Another theoretical argument for expecting a positive relationship between servant leadership and employee innovation performance draws upon social exchange theory (Liden et al., 2008). As suggested in the literature, activities associated with servant leadership generate positive evaluations amongst followers with regard to servant leaders (Van Dierendonck, 2011: 1243). These positive evaluations result into a strong sense of

psychological safety in the relationship between servant leaders and their followers (Yoshida et al., 2014). Psychological safety refers to circumstances that lead employees to feel comfortable taking risks and developing novel ideas (Edmondson, 1999). Scholars have noted that a psychologically safe context provides an important foundation for innovation, as it allows employees to feel safe working on new and improved ways of carrying out tasks (Anderson & West, 1996; Baer & Frese, 2003). The following hypothesis is based on this line of reasoning:

H1: The dimensions of servant leadership are positively related to employee innovation performance in a public sector context.

The second theoretical expectation is that servant leadership activities are positively related to employee job performance. Scholars have noted that servant leadership is an employee-oriented style of leadership that facilitates such employee attitudes as organizational commitment (Liden et al., 2008), OCB (Ehrhart, 2004) and in-role performance (Neubert et al., 2008; Van Dierendonck & Nuijten, 2011). Servant leadership is expected to enhance employee job performance for at least two reasons. First, by focusing on putting the needs of others first, behaving with integrity, providing essential support and sharing information, servant leaders enact strategies that enhances the well-being and functioning of their followers (Ehrhart, 2004; Liao & Chuang, 2007; Walumbwa et al., 2010). Drawing on social exchange theory (Liden et al., 2008), servant leadership involves an exchange process in which leaders facilitate followers by affirming their strengths and potential capabilities, in addition to providing support for the development of followers (Hu & Liden, 2011: 853). Followers reciprocate the benefits that they have received in the form of positive job attitudes, including OCB and increased performance (Van Dierendonck, 2011: 1243). Walumba and colleagues (2010) provide evidence to support the existence of this proposed process of social exchange, reporting that team-level servant leadership is positively related to self-efficacy on the part of followers.

A second reason for expecting servant leadership to enhance employee job performance is that servant leaders enact strategies that are designed to increase goal clarity, as emphasized by Hu and Liden (2011). Goal clarity arises when employees are committed to the goal (Locke & Latham, 1990). In this context, the employee-centred focus of servant leaders is likely to increase the acceptance of and commitment to goals amongst followers (Hu & Liden, 2011: 854). This is because servant leaders, rather than engaging in

opportunistic behavior, put the needs of others first and help people to achieve as much personal development as possible, with the ultimate goal of achieving career success (Greenleaf, 1977; Neubert et al., 2008). As suggested by goal-setting theory, clear goals result into improved job performance, due to their role in directing and guiding attention and behavior, while encouraging persistence on the part of individuals or groups (Locke & Latham, 2004). As argued by Locke and Latham (2006), clear goals focus the efforts of individuals in specific directions, which consequently lead to improvement in performance. The following hypothesis is based on these observations:

H2: The dimensions of servant leadership are positively related to employee job performance in a public sector context.

Finally, the study conducted in this chapter investigates the extent to which some dimensions of servant leadership are more important than others in relation to employee innovation performance and employee job performance. In this vein, Van Dierendonck and Nuijten (2011: 265) identify five essential dimensions of servant leadership – empowerment, accountability, standing back, humility and stewardship - with authenticity, courage and forgiveness as secondary dimensions. This array of factors is based on 1) the results of confirmatory factor analyses in the development phase of servant leadership, 2) the results of exploratory factor analyses including other leadership scales (e.g. transformational leadership and ethical leadership) in addition to servant leadership; and 3) the results of the correlations between the eight dimensions of servant leadership and behaviors of followers (e.g. vitality, engagement, job satisfaction, organizational commitment and performance). In addition, Liden et al. (2008) identify the empowering dimension of servant leadership as the most important. By definition, servant leaders focus explicitly on the needs of their followers. In this sense, they help followers grow, thus maximizing organizational and career success (Greenleaf, 1977). The dimension of empowerment offers the best illustration of this primary focus of servant leadership, as it refers to concern that servant leaders show for the career growth and development of their followers by supporting and facilitating them in solving problems, such that they can do their work well (Liden et al., 2008: 162). The third hypothesis of this chapter is based on these insights:

H3: The empowerment dimension of servant leadership has the strongest positive relationship with employee innovation performance and employee job performance in a public sector context.

6.3 Results

This section presents the results deriving from a multisource survey design conducted in the UWV Benefits division (for a discussion concerning the method used in this chapter, see Chapter 3). Starting in January 2015, a survey was completed by 2,148 (42%) employees, measuring the servant leadership of their direct supervisors. A second survey was conducted in May 2015, in which 132 supervisors (55%) rated employee innovation performance and employee job performance. The data from the first survey were linked to those of the second survey to create a final data set comprising responses from 863 employees.

6.3.1 Factor analysis

Prior to testing the research hypotheses, this chapter conducts confirmatory factor analyses (CFA) in Mplus version 6.12 to assess validity of the measures for the eight dimensions of servant leadership, employee innovation performance and employee job performance. The data have a 'nested' structure: employees are 'nested' within teams, as supervisors rate the innovation and job performance of employees within their team. For this reason, the 'cluster' command for CFA within Mplus (TYPE = COMPLEX and ESTIMATOR = MLR) is used as a way of taking teams into account. Multiple indices are used to assess the fit of the measurement model. As suggested by Bentler (1990), an acceptable fit is evidenced by a root mean square error of approximation (RSMEA) of .08 or lower, a comparative fit index (CFI) of .90 or higher, and a Tucker-Lewis index (TLI) of .90 or higher. The values obtained for the RMSEA (.04), CFI (.95) and TLI (.94) from the CFA results reveal acceptable convergent and discriminant validity for the model.

6.3.2 Descriptive statistics

Means, standard deviations and correlation coefficients for the chapter measures (as calculated in SPSS version 22) are displayed in Table 6.2. As shown in this table, the mean score for employee innovation performance was lower than the mean score for employee job

performance. Servant leadership initiatives that corresponding to empowering, standing back, forgiveness and stewardship are positively correlated with employee innovation performance, while, servant leadership activities focused on empowering, standing back and forgiveness are positively associated with employee job performance. At this point, it is important to note that, of all dimensions of servant leadership, the empowering dimension is the most strongly correlated with employee innovation performance and employee job performance. With regard to the control variables, employee age and tenure are negatively associated with employee innovation performance, while the age of employees and the educational level of supervisors are negatively correlated with employee job performance. In contrast, the educational level of employees is positively correlated with employee innovation performance.

Table 6.2: Descriptive statistics

Variable	M	SD	I	2	S	4	S	6	7	∞	9	10	11	10 11 12 13 14 15 16 17 18	13	14	15	16	17	18
1) Gender of employees (1 = female)	0.61	N.A.	_																	
2) Age of employees	41.61	11.64	246**	1																
3) Educational level of employees	3.40	0.94	.031	435**	_															
4) Tenure of employees	2.91	1.76	122**	.755**500**	500**	1														
5) Gender of supervisors (1 = female)	0.38	N.A.	.029	038	010	022	1													
6) Age of supervisors	47.03	8.85	049	.162**	.013	.114**	.114**258**	1												
7) Educational level of supervisors	3.89	0.80	081*	012	.030	054	.228**	*205**	*											
8) Tenure of supervisors	3.31	1.75	041	.064	025	.110**	312**		.600**332**	1										
9) SL: Empowering	5.24	1.22	.028	021	.005	042	034	.002	.058	011	1									
10) SL: Standing back	4.62	1.37	045	.008	009	026	041	.128**	059	.091	.658**	1								
11) SL: Accountability	5.90	0.97	063	.084*	018	.053	.021	.014	.021	.040	.275**	.136** 1	_							
12) SL: Forgiveness	5.40	1.64	010	055	.086	114**111*	1111*	.063	006	.006	.523**	.456**062	062	-						
13) SL: Courage	4.46	1.55	.118**	066	008	030	.143**	003	.082	038	.530**		.080	.456** .080 .179**	1					
14) SL Authenticity	4.19	1.32	024	.054	.006	.059	.180**	.076	.040	.028	.422**		.129**	.485** .129** .193** .466** 1	.466**	_				
15) SL: Humility	5.24	1.21	.028	.121	.005	.068	.172*	025	.061	045	.716**		.295**	.617** .295** .528** .471** .548**	.471**	.548**	_			
16) SL: Stewardship	5.40	1.17	.096*	.014	004	004	020	042	.032	.019	.703**		.350**	.602** .350** .409** .467** .334** .782** 1	.467**	.334**	.782**			
17) Employee innovation performance	3.58	0.94	.015	270**	.239**	203**	031	.030	029	022	.215**	.150** .008	.008	.133** .065		.041 .048	.048	.113** 1	1	
18) Employee job performance	4.17	0.61	.058	102**	.024	.002	.003	045	135** .013	.013	.143**		.034	.141** .034 .142** .013	.013	.073 .019 .067 .520** 1	.019	.067 .5	20**	1

^{*} p < .05, two-tailed

^{**} p < .01, two-tailed

6.3.3 SEM Results

Structural equation modeling (SEM) is performed to assess whether servant leadership is related to employee innovation performance and employee job performance. These analyses are performed in Mplus, using the following commands: TYPE = COMPLEX analysis and ESTIMATOR = MLR commands. These commands demonstrate the extent to which the model and its main effects provided an acceptable fit for the data. The model had a good fit (RMSEA = .03; CFI = .94; TLI = .94), and explained 15.0% of the variance (R^2) in employee innovation performance and 11.9% of the variance (R^2) in employee job performance. The results are displayed in Table 6.3.

As indicated by the SEM results, servant leaders who engaged in empowering are positively related to employee innovation performance and employee job performance. These results provide limited support for the first and second hypothesis – only the empowering dimension of servant leadership is positively associated with ratings on employee innovation performance and employee job performance – and full support for the third hypothesis. The beneficial role that empowering leadership tends to play in employee innovation performance and employee job performance could be due to the increased likelihood of followers to take initiative to solve problems (Srivastava et al., 2006: 1243) and the reinforcement of the instrumental skills, abilities and associated efficacy beliefs of followers (Raub & Robert, 2010: 1748).

The results of this chapter further indicate that servant leaders who dare to take risks (e.g. strong courage servant leadership) are negatively related to employee job performance. Based on goal-setting theory (Locke & Latham, 2004), servant leaders who engage in courage might arguably be engaging in opportunistic behavior rather than directing the efforts of followers to the achievement of goals, thus leading to a decline in performance (Locke & Latham, 2006). Such an interpretation, however, should be approached with caution. As shown in Table 5.2, the courage dimension of servant leadership is not correlated with employee job performance. This result might be due to biases caused by multicollinearity – high correlations among the latent constructs (Grewal et al., 2004) – which might have affected the ways in which the various dimensions of servant leadership are connected with employee innovation performance and employee job performance. To detect multicollinearity in the data, this chapter employs *variance*

inflation factors (VIF). As the name suggests, VIF quantifies the extent to which the variance is inflated (Belsley, 1991). In general, VIF values between 5 and 10 indicate that multicollinearity problems are likely, with values that exceeding 10 confirming the presence of such problems (Belsley, 1991). None of the VIF values obtained in this study (as calculated in SPSS) is higher than 4 (the highest value found is 3.854 for the humility dimension of servant leadership), thus indicating no multicollinearity problems in the data.

With regard to the control variables, higher age on the part of employees is negatively related to employee innovation performance and employee job performance. In addition, higher education on the part of employees is positively related to employee innovation performance, while employee tenure is positively associated with employee job performance. Furthermore, higher education on the part of supervisors is negatively related to employee innovation performance and employee job performance. No effects are found for employee gender or for the gender, age or tenure of supervisors.

Table 6.3: Results of SEM analyses for employee innovation performance and employee job performance

En	ployee innovation performance	Employee job performance
	$(R^2 = 15.0\%)$	$(R^2 = 11.9\%)$
Control variables		
Gender of employees	088	.102
Age of employees	020**	013*
Educational level of employees	.160**	.007
Tenure of employees	.023	.084*
Gender of supervisors	084	.004
Age of supervisors	.009	014
Educational level of supervisors	125*	190**
Tenure of supervisors	050	040
Main effects		
Empowering	.222**	.196**
Standing back	058	.082
Accountability	.002	.068
Forgiveness	.012	001
Courage	099	145**
Authenticity	.069	.083
Humility	108	.042
Stewardship	.051	099

^{*} p < .05; ** p < .01. Standardized coefficients are presented.

6.4 Conclusion and discussion

The study in this chapter examines the role played by the full range of servant leadership dimensions (as developed by Van Dierendonck and Nuijten, 2011) in employee innovation performance and employee job performance in the UWV Benefits division. By doing so, this study provides an answer to the third sub-question of this dissertation, which is formulated as follows: *To what extent is servant leadership related to employee innovation performance and*

employee job performance in a public sector context? The results revealed in this chapter contribute to insight into relationships between leadership and performance in the field of public management by developing a distinct theoretical model and testing it according to multisource and large N data.

One conclusion is that servant leadership activities associated with empowerment are positively related to employee innovation performance and employee job performance. As indicated by the results, empowerment involves the development of actions or strategies designed to enhance employee innovation performance and employee job performance. In other words, within a public sector context, the efforts of servant supervisors to express confidence in the performance ability of their followers, to provide their followers with autonomy in their work, and to provide their followers with access to job-related knowledge (Fernandez & Moldogaziev, 2013) tend to accelerate employee innovation performance and employee job performance. This conclusion is consistent with Liden et al. (2008), who identify empowerment as the most important dimension of servant leadership. Similarly, in the context of public sector organizations, Fernandez and Moldogaziev (2011: 23) highlight the importance of empowerment for public leaders, arguing that facilitating and supporting public sector employees in work can enhance the quality of public services. In this respect, this chapter relies upon a multidimensional approach to servant leadership, given its potential to identify underlying premises of servant leadership theory in public organizations (in this case, the crucial role that empowerment plays in employee innovation performance and employee job performance within the UWV Benefits division), thus moving beyond studies based on unidimensional approaches to servant leadership (e.g. Miao et al., 2014).

A second conclusion that can be drawn from the results of this chapter is that many dimensions of servant leadership (e.g. standing back, accountability, forgiveness, authenticity, humility and stewardship) are unrelated to either employee innovation performance or employee job performance. There are at least two possible explanations for these findings. One has to do with the fact that the case selected for the study – the UWV Benefits division – could be regarded as a 'machine bureaucracy' (Mintzberg, 1992), as it is defined by its standardization. It is therefore logical to expect that activities associated with servant leadership activities could be more effective in 'professional bureaucracies', given that considerable importance is attached to individual development, training, expertise and specialism within this organizational context

(Mintzberg, 1992). From this perspective, professional bureaucracies would seem one of the most appropriate contexts within which to study connections between servant leadership and performance.

Another reason for the large number of non-significant findings in this chapter has to do with the use of multisource data. As argued by Meier and O'Toole (2013), the analysis of multisource data provides a more stringent and accurate test of relationships than does the analysis of common source data. In this regard, Favero and Bullock (2015: 303) emphasize that using a common source to measure both the independent and dependent variables can be problematic in terms of validity. For example, employees who rate their supervisors as highly forgiveness might have a tendency to rate their own innovation performance higher as well. Such biases may thus result into erroneously significant outcomes.

Two limitations to the study conducted in this chapter should be mentioned. First, despite the benefits associated with the use of multisource data, the data used in this study are also cross-sectional in nature, meaning that they are collected at a specific point in time. Cross-sectional designs can obscure the direction of causality (Jilke et al., 2016), which is assumed in this chapter to move from servant leadership to performance. For example, it could be that supervisors tend to allow greater job autonomy to employees who receive high ratings on job performance ('reverse causality'). In this regard, one interesting avenue for future research would be to conduct experimental or longitudinal studies, thereby significantly advancing knowledge about causality (Bellé, 2013; Perry, 2012). A second limitation of this chapter is that it is conducted within a specific public sector organization, which can be regarded as representative of machine bureaucracies (Mintzberg, 1992). This reduces the external validity of the results. To address this limitation, future studies could incorporate a great variety of public sector organizations in order to examine the extent to which the findings reported in this chapter can be generalized to other types of public organizations.

In conclusion, the findings of this chapter should be regarded as initial evidence of a relationship of servant leadership to employee innovation performance and employee job performance in a public sector context. More specifically, they indicate that servant leaders who engage in empowerment could be positively associated with enhanced employee innovation performance and employee job performance. Additional research is needed to confirm and generalize these findings.

Chapter 7

Conclusions and Reflections



7.1 Introduction

The overall aim of this research is to develop greater insight into the relationship between leadership and innovation in a public sector context. This is an important topic, as many examples indicate that governments around the world are currently facing major challenges, including cutbacks and increasing demands (see: Bartlett & Dibben, 2002; Bysted & Hansen, 2015; Bekkers et al., 2011). Shrinking budgets are pressuring governments to do more with fewer resources, and increasing community expectations and obligations have created a need to understand the leadership of innovation.

In this final chapter, the research questions of this dissertation are answered (Section 7.2), and its contributions are discussed in greater detail (Section 7.3). A reflection on this research is provided in section 7.4, followed by suggestions for a future research agenda and recommendations for practical implications (Section 7.5).

7.2 Answering the research questions of this study

This dissertation is aimed at answering the following main research question:

What role does leadership play in innovation within the context of the public sector?

The main research question can be broken down into three sub-questions:

- 1. Which roles do top managers envision for themselves, and which leadership activities do they perform in order to foster a climate for innovation in a public sector context?
- 2. To what extent does rule-following leadership influence the innovation performance of teams in a public sector context?
- 3. To what extent is servant leadership related to employee innovation performance and employee job performance in a public sector context?

Taken together, the answers to these three sub-questions generate an answer to the main research question. The answers to the research questions are shown in Table 7.1. This table is closely

linked to Table 1.2, which presents a schematic overview of the study based on the research questions.

Table 7.1: Brief answers to the three sub-questions

Chapter	Sub-question	Brief answer
Chapter 4	Which roles do top managers	On the one hand, top managers may foster a
	envision for themselves, and	climate for innovation by serving as role
	which leadership activities do	models and by formulating and expressing the
	they perform in order to foster a	mission and the vision of the organization. On
	climate for innovation in a	the other hand, they are likely to substantiate
	public sector context?	their leadership roles by using top-down
		mechanisms, which conflict with freedom and
		trust, which are regarded as important
		characteristics of a climate for innovation.
Chapter 5	To what extent does rule-	Strong rule-following leadership seems to
	following leadership influence	play an important role in enhancing team
	the innovation performance of	innovation performance, particularly for
	teams in a public sector context?	teams with lower levels of education.
Chapter 6	To what extent is servant	Servant leadership activities associated with
	leadership related to employee	empowerment are positively related to
	innovation performance and	employee innovation performance and
	employee job performance in a	employee job performance.
	public sector context?	

7.2.1 The role of top managers reflects different core values of public management in the context of fostering a climate for innovation (Sub-question 1)

The first sub-question concerns the roles that top managers envision for themselves, as well as which leadership activities they perform in order to foster a climate for innovation in a public sector context.

Based on academic literature ('t Hart, 2014), this study defines the leadership of top managers as a particular set of activities and interactions aimed at influencing others. This definition is in line with the behavioral approach to leadership (Yukl, 2008). Behavioral theories of leadership focus on what leaders actually *do* (behavior). As emphasized by Van Wart (2012; 2013b), top managers devote particular attention to the external organizational environment, as evidenced in their leadership activities of scanning the environment, networking, and partnering. For this reason, Chapter 4 of this dissertation devotes particular attention to the ways in which top managers envision and conceptualize turbulence and complexity in the external environment, given the influence that the environment influences on the management of public organizations (see Rainey, 2009). An innovative climate is further characterized by employees who help and support each other, teams and departments that work together, and the exchange of promising ideas (Isaksen & Akkermans, 2011). An innovative climate also encourages risk-taking behavior, as such behavior helps to advance new ideas (Isaksen & Akkermans, 2011).

As demonstrated in Chapter 3 of this dissertation, qualitative research methods were applied in order to obtain the data for this sub-question. Semi-structured interviews were held with 20 public managers spanning the highest level in the hierarchy of the UWV Benefits division. The interviews were transcribed verbatim, and MAXQDA software was used in the systematic coding and analysis of the transcripts.

As indicated by the results presented in Chapter 4, the leadership roles that top managers envision for themselves simultaneously strengthen and disturb the process of fostering a climate for innovation. On the one hand, top managers apparently foster a climate for innovation by serving as role models and by formulating and expressing the mission and the vision of the organization. These activities are consistent with "lambda-type" values, which are based on robustness and adaptivity. As described by Hood (1991: 14), adaptivity is "the capacity to withstand and learn from the blows of fate, to avoid 'competency traps' in adaption processes, to keep operating even in adverse 'worst case' conditions and to adapt rapidly in a crisis." Acting as a role model and formulating mission and vision statements stimulate the processes needed in order to foster a climate for innovation. These leadership activities thus correspond to this type of values, which also emphasize a climate for innovation. On the other hand, top managers are likely to substantiate their leadership roles by using top-down mechanisms, which conflict with freedom and trust. Such top-down mechanisms are related to "sigma-type" values, which are

expressed in control systems and "mechanistic" structures (Hood, 1991: 11-12), placing heavy emphasis on controlling output, as opposed to either process or input. They are thus reflected in top-down mechanisms, which are based on monitoring and controlling employees.

In summary, the role played by leadership on the part of top managers in fostering a climate for innovation reflects different and conflicting core values of public management (i.e., "lambda-type" values versus "sigma-type" values).

7.2.2 Rule-following leadership affects the innovation performance of teams, depending upon team educational level (Sub-question 2)

The second sub-question concerns the extent to which rule-following leadership influences team innovation performance in a public sector context.

Based on Tummers and Knies (2016), rule-following leadership activities are defined in this dissertation as "encouraging employees to carry out tasks in line with governmental rules and regulations." The importance of such activities has been emphasized by Oberfield (2010), who argues that ignoring or departing from governmental rules and regulations increases the likelihood of corruption and the inconsistent implementation of policies. In addition, and consistent with Somech and Drach-Zahavy (2013: 685), team innovation performance refers to the extent to which a team introduces and applies "ideas, processes, products, or procedures that are new to the team and that are designed to be useful". Accordingly, innovative teams generate creative ideas and process them critically, such that useless ideas are discarded and promising ideas are implemented (Anderson & West, 1998).

Although leadership is generally regarded as a crucial resource for enhancing performance within the context of public organizations (Fernandez et al., 2010; Hassan & Hatmaker, 2015; Moynihan & Pandey, 2010; Orazi et al., 2013; Van Wart, 2013b), various scholars have argued that public leaders are not unconditionally successful in affecting performance (Bellé, 2014; Hassan & Hatmaker, 2015). Team context is a crucial factor in this regard, given its potential to moderate the relationship between leadership and team innovation performance (Eisenbeiss et al., 2008; Schippers et al., 2015). Following private management studies that argue the appropriateness of addressing educational level in the examination of team context (Horwitz & Horwitz, 2007; Somech & Drach-Zahavy, 2013), this study includes an

analysis of the extent to which the educational level of a team might moderate any relationship between rule-following leadership and team innovation performance.

As demonstrated in Chapter 3, quantitative research methods were used to collect the data for this sub-question. Through an analysis of multisource data from two different surveys incorporating the views of 795 employees in 111 different teams working in the UWV Benefits division, several hypotheses were tested using structural equation modeling in Mplus.

As indicated by the results reported in Chapter 5, a strong focus on rules (i.e., strong rule-following leadership) plays an important role in enhancing team innovation performance, particularly for teams with lower levels of education. In other words, the efforts of supervisors to ensure that their teams following the law, carry out governmental policies properly, and act precisely in accordance with rules and procedures apparently provide direction to teams with lower levels of education, thereby encouraging them to innovate. These results thus suggest that supervisors might enhance the performance of teams with lower levels of education by motivating and guiding them with regard to behaving in accordance with governmental rules and regulations with regard to enhanced innovativeness.

In summary, activities associated with rule-following leadership are related to team innovation performance in a public sector context, depending upon team educational level.

7.2.3 Servant leaders who engage in empowerment influence employee innovation performance and employee job performance (Sub-question 3)

The third sub-question of this study concerns the extent to which servant leadership can be related to employee innovation performance and employee job performance in a public sector context.

Regarded as the founder of servant leadership theory, Greenleaf (1977) identifies "going beyond one's self-interest" as the most important element. Scholars have argued that the service orientation of servant leaders – both within and outside their organizations – may be of great value to leaders in public organizations, particularly in light of decreasing public confidence due to reports of corruption and other self-interested initiatives on the part of their employees (Miao et al., 2014). From a theoretical point of view, many characteristics have been attributed to leaders who could be regarded as servant leaders (Patterson, 2003). Building on the work of Van

Dierendonck and Nuijten (2011), servant leadership is thus developed as a multidimensional concept in this dissertation. In addition, employee innovation performance is defined as the extent to which employees introduce and apply new ideas, processes, products, or procedures that are designed to be useful (Osborne & Brown, 2011). Employee job performance is related to work performance in terms of the quantity and quality expected from each employee (Welbourne et al., 1998) in order to achieve organizational goals (Campbell et al., 1990: 314).

As reported in Chapter 3, quantitative methods were used in order to answer this subquestion. Starting in January 2015, a survey was completed by 2,148 employees, measuring the leadership of their direct supervisors. A second survey was conducted in May 2015, in which 132 supervisors rated employee innovation performance and employee job performance. The data from the first survey were linked to those of the second survey to create a final dataset comprising responses from 863 employees working in the UWV Benefits division.

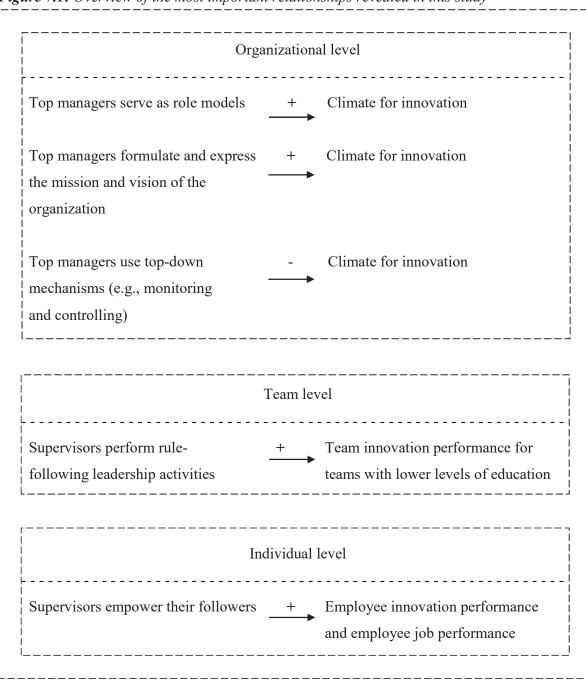
As indicated by the results reported in Chapter 6, servant leadership activities associated with empowerment are positively related to employee innovation performance and employee job performance. In other words, within a public sector context, the efforts of servant supervisors to express confidence in the performance ability of their followers, to provide their followers with autonomy in their work, and to provide their followers with access to job-related knowledge apparently accelerate employee innovation performance and employee job performance. Nevertheless, the findings also demonstrate that many dimensions of servant leadership (e.g., standing back, accountability, forgiveness, authenticity, humility, and stewardship) are unrelated to either employee innovation performance or employee job performance. One explanation for these findings could be that, within the case selected for the dissertation, less importance was attached to individual development, training, and expertise.

In summary, servant leaders who engage in empowerment could be positively associated with enhanced employee innovation performance and employee job performance in a public sector context.

7.2.4 Answering the central research question

Based on the answers to the sub-questions, as discussed above, this section provides an answer to the main research question of the study. The findings indicate that the manner in which the role of leadership is exerted plays an important role in innovation (i.e., a climate for innovation and innovation performance). As such, the results reported in this dissertation provide additional insight into the relationship between leadership and innovation in the field of public management. Figure 7.1 summarizes the most important relationships revealed in this research. The figure is closely related to Figure 3.1.

Figure 7.1: Overview of the most important relationships revealed in this study



The first conclusion has to do with leadership on the part of top managers and a climate for innovation. First, the results indicate that leadership activities (e.g., being a role model) play a decisive role in an innovative climate. In the case addressed in this study, the exemplary behavior of top managers was of great importance for fostering a climate for innovation. Second, the findings indicate that activities related to formulating and expressing the mission and vision of the organization both illustrated and enforced development with regard to developing a climate for innovation through concrete actions. In this case, mission and vision statements provided long-term direction for the organization with regard to a climate for innovation, while endowing the organization with a sense of purposeful action. The research results also demonstrate that top managers are likely to substantiate their leadership activities by enacting top-down mechanisms, including monitoring and controlling their employees. Because these leadership activities limit freedom and trust, however, they disrupt the process of fostering a climate for innovation (Anderson & West, 1998). Based on these findings, it can be concluded that, although top managers can be considered an important factor for fostering a climate for innovation, their tendency to use top-down activities diminishes the likelihood of such a climate in a public sector context.

The second conclusion of this dissertation focuses on rule-following leadership and team innovation performance. As demonstrated by the findings, strong rule-following leadership activities are likely to enhance team innovation performance for teams with lower levels of education, but not for teams with higher levels of education. According to Tummers and Knies (2016), rule-following leadership activities emphasize: 1) following the law, 2) carrying out governmental policies properly; and 3) acting precisely in accordance with the rules and procedures. In conclusion, strong rule-following leadership is likely to have a positive impact on team innovation performance for teams with lower levels of education in a public sector context.

The third conclusion of this dissertation has to do with the effects of servant leadership on employee innovation performance and employee job performance. According to the research results, strong **empowering leadership** – a core dimension of servant leadership – can be positively related to **employee innovation performance** and **employee job performance**. In other words, the efforts of servant supervisors to express confidence in the performance ability of their followers, to provide their followers with autonomy in their work, and to provide their followers with access to job-related knowledge (Fernandez & Moldogaziev, 2011) are likely to

accelerate the innovativeness and enhance the job performance of employees. In conclusion, servant leaders who engage in empowerment seem to enhance employee innovation performance and employee job performance.

7.3 Contributions of this dissertation

The previous section presents three main conclusions derived from this research in answer to the central research question. This section relates these conclusions to the appropriate bodies of literature, as presented schematically in Table 7.2. The results thus demonstrate the interdisciplinary character of the research, as depicted in Figure 1.2.

Table 7.2: Contribution of the dissertation

Sub-question	Contribution in short	Adds to the
		literature on:
Which roles do top managers	Empirical investigation of a climate	Public administration
envision for themselves, and	for innovation in a public sector	
which leadership activities do	context	
they perform in order to foster	Identification of a buffer role on the	Public administration,
a climate for innovation in a	part of top managers	innovation
public sector context?		
To what extent does rule-	Effect of rule-following leadership on	Public administration
following leadership influence	team innovation performance	
the innovation performance of		
teams in a public sector		
context?		
To what extent is servant	Multidimensional approach to servant	Public administration,
leadership related to employee	leadership in a public sector context	leadership
innovation performance and employee job performance in a public sector context?	Impact of servant leadership on employee innovation performance and employee job performance	Public administration

7.3.1 Empirical investigation of a climate for innovation in a public sector context

This dissertation investigates the roles that top managers envision for themselves, as well as the leadership activities they perform in order to foster a climate for innovation in a public sector context. The research findings reveal that the roles that top managers envision for themselves simultaneously strengthen and disturb the process of fostering a climate for innovation.

One way in which this study contributes to the public administration literature has to do with its focus on a climate for innovation, which has received considerable attention in the field of private management (e.g., Anderson & West, 1998; Somech & Drach-Zahavy, 2013). For example, Chen and colleagues (2013) report that support at the team-level for an innovative climate captures motivational impact that mediate between transformational leadership and the innovation performance of teams.

Despite the considerable body of literature on innovative climate, little attention has been paid to the empirical investigation of such a climate within a specific context of the public sector. One exception is a study by Moolenaar and colleagues (2010), investigating a climate for innovation in schools. The limited attention to innovative climate in the public administration literature is surprising, given the important role that it currently plays for public organizations. This dissertation addresses this gap, in addition to investigating an important antecedent of innovative climate by analyzing the impact of leadership activities performed by top managers in this regard. In conclusion, the research reported in this dissertation makes a theoretical contribution to an important topic within the field of public administration: the empirical investigation of a climate for innovation in a public sector context.

7.3.2 Identification of a buffer role on the part of top managers

Investigation of the roles that top managers envision for themselves and the leadership activities they perform in order to foster a climate for innovation in a public sector context has identified a buffer role on the part of top managers. More precisely, the findings of this study imply that, when upper management serves as a buffer, this tends to reduce the internal effects of dynamics in the external organizational environment. The identification of this buffer role is an important contribution to the literature on public administration and innovation.

Further justification of this claim is provided by Damanpour and Schneider (2006: 229), who conclude that environmental factors have a weaker influence on innovation than do either organizational characteristics or the attitudes of top managers in the public sector. In a recent study, however, Bernier and colleagues (2015) challenge this conclusion, arguing that it is aimed at demonstrating the more specific impact of environmental factors on innovation. Nevertheless, according to their results, only the rate of unemployment and type of government (majority government versus minority government) influence public sector innovation, while organizational size, strength of the economy, and investments in research and development (R&D) have no discernible effect. Such studies pay little attention to the identification of reasons why environmental factors have less impact on innovation than do the roles of top managers. By emphasizing the buffer role on the part of top managers, this dissertation provides an explanation for why innovation is less affected by environmental factors than it is by organizational characteristics or activities undertaken by top managers.

The identification of this buffer role also contributes to the literature on innovation. One assumption within this body of literature is that the external environment has a strong impact on the nature of innovation. Support for this claim is provided by Madjar and colleagues (2011), who argue that a lack of resources (e.g., materials, time, financial means) in the environment may limit radical ideas, which is an important prerequisite for innovation (Anderson & West, 1998). In a similar vein, Simsek (2009: 616) proposes that whether the external environment of an organization can be regarded as complex and dynamic, and that it determines the need for innovation. Nevertheless, top managers apparently play a buffer role that allows organizations to have a certain level of "choice" with regard to the manner in which and the extent to which they will cope with budget pressure, increasing demands, and other environmental factors. More precisely, when upper management serves as a buffer, this tends to reduce the effects of dynamics in the external environment on innovation. Another important contribution of this dissertation to the innovation literature is therefore the finding that the buffer role of top managers has the potential to mitigate environmental impact on innovation.

7.3.3 Effect of rule-following leadership on team innovation performance

As demonstrated in this dissertation, rule-following leadership activities are positively related to team innovation performance for teams with lower levels of education, but not for teams with higher levels of education. This finding is an important contribution to the public administration literature.

In contrast to the literature on private management (e.g., Chen & Huang, 2009; Somech & Drach-Zahavy, 2013), the public administration literature offers very little empirical evidence relating to innovation and its leadership at the team level in the public administration field. One recent exception is a study by Torugsa and Arundel (2016), who explore factors associated with complexity and examine how complexity affects innovation outcomes at the workgroup level. One conclusion of Torugsa and Arundel is that management interest plays a crucial role in supporting complex innovation in the public sector.

Despite the study by Torugsa and Arundel (2016), the relationship between rule-following leadership and team innovation performance has yet to be studied within the field of public administration. This is surprising, given that the importance of this form of leadership for public leaders is often emphasized. For example, Terry (2002: 77) notes that one important task of public leaders is to reduce violations of governmental rules and regulations, thus ensuring rule-following. By addressing the impact of rule-following leadership on team innovation performance, this research responds to Jacobsen and Andersen (2015: 837), who observe a need for public administration studies investigating the relationship between different forms of leadership and various performance indicators. This dissertation thus contributes to the public administration literature by investigating relationships between rule-following leadership and team innovation performance.

7.3.4 Multidimensional approach to servant leadership in a public sector context

The research conducted within the framework of this dissertation examines the extent to which servant leadership activities are related to employee innovation and employee job performance in a public context setting. Given the many characteristics that have been attributed to servant leaders (Van Dierendonck, 2011), a multidimensional approach was adopted in order to

investigate the concept of servant leadership. The use of this approach constitutes another contribution that this dissertation makes to the literature on public administration and leadership.

First, in recent years, scholars of public management have paid increasing attention to servant leadership theory. For example, Miao and colleagues (2014) examine the trust-based mechanisms by which servant leadership influences organizational commitment in the Chinese public sector. According to their results, affective trust (and not cognitive trust) is the mechanism by which servant leadership induces higher levels of trust. In a similar vein, Schwarz and colleagues (forthcoming) investigate the mediating effects of public service motivation (PSM) on the relationship between servant leadership and follower job performance. Their results demonstrate that the altruistic behavior demonstrated by servant leaders increases levels of the altruistic behaviors that characterize PSM, which in turn enhances job performance. Nevertheless, both of these studies rely upon a unidimensional approach in their analysis of servant leadership. In doing so, such studies neglect the multidimensional character of servant leadership theory (Patterson, 2003; Van Dierendonck & Nuijten, 2011). By adopting a multidimensional approach to servant leadership, this dissertation goes beyond public administration studies based on unidimensional approaches to servant leadership.

This multidimensional approach investigation of servant leadership is the first aimed at grasping the essence of this form of leadership in a public sector context. The research findings suggest that exerting empowering activities can be crucial for servant leaders in public organizations, as they are positively related to employee innovation performance and employee job performance. This is consistent with Fernandez and Moldogaziev (2011: 23), who highlight the importance of empowerment for public leaders, arguing that facilitating and supporting public sector employees at work can enhance the quality of public services. Similarly, the results of this study correspond to the literature on leadership in the private sector. For example, Liden and colleagues (2008) identify empowerment as the most important dimension of servant leadership, given its positive correlation with in-role performance and organizational commitment. This dissertation thus provides initial evidence that carrying out empowering activities could be regarded as essential for leaders of any organization, regardless of the context (i.e., public or private sector) in which these activities are performed. This study therefore adds to the leadership literature by demonstrating the same relevant underlying premises of servant

leadership theory in a public sector context that have been identified in studies conducted within the field of private management.

7.3.5 Impact of servant leadership on employee innovation performance and employee job performance

The results reported in this dissertation demonstrate that empowering leadership – a core dimension of servant leadership – has a positive effect on employee innovation performance and employee job performance. The identification of this relationship constitutes an important contribution to the public administration literature, although caution is advised in terms of causality.

In general, the literature on leadership in the private sector contains a large number of studies on servant leadership theory (Chiniara & Bentein, 2016; Neubert et al., 2008; Van Dierendonck, 2011; Walumbwa et al., 2010). Despite a growing body of literature on servant leadership in the public sector (Miao et al., 2014; Schwarz et al., forthcoming), scholars of public administration have thus far devoted scarce attention to servant leadership in a public context. This is surprising, given that servant leadership theory may also be of great value to leaders in public organizations (Miao et al., 2014).

More specifically, scholars within the field of public management have yet paid scarce attention to relationships of servant leadership to employee innovation performance and employee job performance. Most public management studies on leadership and performance focus on transformational leadership. For example, in an experimental study, Bellé (2014) reports that nurses who had been randomly exposed to transformational leadership performed better than did nurses who had not encountered transformational leadership.

This dissertation thus contributes to the field of public administration by addressing the ways in which servant leadership may influence employee innovation performance and employee job performance. In doing so, it responds to the recent call by Jacobsen and Andersen (2015: 837-838) for public management studies examining potential relationships between leadership and performance that extend beyond the impact of transformational leadership.

7.4 Reflections

In the process of answering the overall research question of this dissertation, several decisions were taken when conducting the research. This section presents a reflection on the dissertation, thereby focusing on the central choices, limitations, and dilemmas of this research.

7.4.1 The logic of appropriateness and the logic of consequence

The focus of this research is on leadership activities in innovation, with the objective of analyzing *how* leadership and innovation are related, rather than examining reasons *why* innovation is important for particular organizations.

As demonstrated by the qualitative study (see Chapter 4), top managers encounter turbulence and complexities in the external environment, and this leads them to engage in specific leadership activities when enhancing a climate for innovation. In this light, the results of this study reveal that, despite the importance of offering freedom and autonomy in work to promoting a climate of innovation, top managers have a strong preference for top-down initiatives in response to environmental turbulence and complexity, even though such initiatives ultimately hinder a climate for innovation. This does not mean that top managers should be regarded as incapable or incompetent with regard to fostering a climate for innovation. Instead, top managers are simultaneously concerned with developing a climate for innovation and coping with turbulence and complexities in the external environment. As argued, turbulence and complexities in the environment force top managers to engage in top-down leadership activities. The behavior of top managers should therefore be understood as a choice for the most effective strategy with which to foster a climate for innovation, as well as in terms of initiatives that are a result of the character of the external organizational environment.

As revealed by one of the quantitative studies in this dissertation (see Chapter 5), team supervisors who perform activities associated with strong rule-following leadership are likely to enhance the innovation performance of teams with lower levels of education. Results from another quantitative (see Chapter 6) demonstrate that supervisors who engage in activities associated with empowering leadership – a core dimension of servant leadership – may enhance employee innovation performance and employee job performance.

These findings distinguish two logics that can help to explain the role of leadership in innovation within a public sector context. First, the qualitative study emphasizes a logic of appropriateness, which refers to a view of action oriented toward the matching of situations, roles, rules, and demands (March, 1994). In this respect, the top managers participating in this study indicated that the use of top-down leadership activities can be an effective strategy when confronted with turbulence and complexity in the external environment. Although these activities disrupt the process of fostering a climate for innovation, they reflect a set of activities that can match a particular situation. In addition, the quantitative studies highlight a logic of consequence. In this logic, actions are a result of self-interested rational actors with fixed preferences and identities, whose behavior is determined by the calculation of expected returns from alternative choices (March, 1994). In this respect, enhanced team innovation performance can be regarded as a clear result of rule-following leadership activities, with enhanced employee innovation performance and employee job performance resulting from servant leaders engaging in empowerment. This result seems particularly applicable to servant leadership and employee innovation performance, as reflected in one theoretical argument for expecting a positive relationship between servant leadership and employee innovation performance. This argument draws on social exchange theory, which is based heavily on a process of negotiated exchanges between parties (Liden et al., 2008), thereby underscoring the importance of two-sided returns.

In conclusion, although the logic of appropriateness differs from the logic of consequence, it is important to emphasize that "both are logics of reason" (March, 1994: 101). In the field of public administration, most recent theories focus on consequences: developing effective or successful conditions for innovation within a public sector context. This research reveals that specific characteristics of the external environment of a given public sector organization lead to a unique set of activities on the part of top managers, while particular leadership activities at the team and individual levels within the organizational hierarchy tend to accelerate both innovation performance and job performance.

7.4.2 The concept of publicness

With the objective of contributing to theory about the role that leadership plays in innovation within a public context, this research proceeds from a dimensional approach to "publicness"

(Antonsen & Jorgensen, 1997; Bozeman & Bretchschneider, 1994). In this approach, the extent to which a given organization is "public" has consequences for the characteristics of the organization itself (Andrews et al., 2011). As argued throughout this dissertation, the presence of political constraints in the external environment, less agreement about the meaning of organizational goals, and similar characteristics are expected to be associated with organizations that are more "public."

The dimensional approach to publicness is accompanied by two important disadvantages. First, such an approach is unlikely to generate a clear, complete theory. In this respect, potential differences between public sector organizations could make it difficult to apply distinctive characteristics to all public organizations. For example, public organizations that are typically characterized by political constraints in their environments (e.g., professional autonomous administrative authorities) are likely to be fundamentally different from other types of public sector organizations (e.g., municipalities). Moreover, following a dimensional approach to publicness, distinct public sector characteristics can be applied to private organizations as well (Bozeman & Bretschneider, 1994). Second, as discussed in Chapter 2, organizations with a high level of publicness can be described according to four dimensions: the organizational environment, organizational goals, organizational structures and the values of the staff. Although these broad dimensions are operationalized by a single main public factor, the dimensions and factors that may capture specific characteristics of public organizations are potentially unlimited. For example, studies by Farnham and Horton (1996) and by Boyne (2002) mention many other distinct public sector characteristics, including task characterizations and job security. As noted throughout this dissertation, other important dimensions and related factors could obviously be important for studying specific public characteristics.

Unfortunately, the extent to which a high degree of publicness and its effects have been subjected to empirical investigation in this research is limited by the research methods used. The qualitative method allowed the analysis of the impact of a specific public sector characteristic. Qualitative methods have been used to explore the impact of turbulence and complexities (e.g., political constraints) in the external environment on the relationship between the leadership activities performed by top managers and a climate for innovation. The results of the qualitative study demonstrate that conflicting demands of external stakeholders can lead top managers to

The quantitative methods adopted in this study were not well equipped to assess any

adopt top-down leadership activities, which subsequently limits the likelihood of an innovative

influence that the distinct characteristics of a public sector context might have on innovation and its leadership. In line with Table 2.1 in Chapter 2, quantitative methods (see Appendix D) were used to gather information about goal ambiguity (organizational goals), red tape (organizational structures), and PSM (values of the staff) from 5,061 employees in January 2015. To assess the potential effects of these factors on any potential relationship between rule-following leadership and team innovation performance, attempts were made to aggregate items regarding goal ambiguity (Stazyk & Goerdel, 2011), red tape (Borry, forthcoming), and PSM (Wright et al., 2013) from the individual level to the team level. Such aggregation was not justified, however, as no significant differences were identified between teams with regard to their perceptions on goal ambiguity, red tape, and PSM. This made it impossible to examine the potential impact of a distinct public sector context at the team level. Second, although this dissertation aimed to examine the potential influence of goal ambiguity, red tape, or PSM on any relationship between servant leadership and employee innovation performance or employee job performance, the research results do not reveal any significant effects.

In conclusion, the qualitative methods used in this dissertation allowed the examination of a high degree of publicness and its effects, but the quantitative methods employed were not as well equipped to investigate the potential impact of a high degree of publicness.

Methodological concerns 7.4.3

climate.

Despite the benefits offered by the combination of qualitative and quantitative research methods, this dissertation is subjected to several methodological shortcomings.

First, the research design favors internal validity over external validity. As noted in the methodological chapter, only one case was selected, in order to maximize internal validity. This ensured that the research results of the three studies focusing on different hierarchical levels would be connected to each other, as all of the studies were conducted within the same organization (which could be regarded as a "machine bureaucracy;" see Mintzberg, 1992). Although this strategy enhanced the validity with which the research results could be attributed

to the central variables addressed in this dissertation, the examination of a single case poses disadvantages to external validity, as the central variables were investigated within only one specific organizational context. It is therefore not possible to generalize the findings of this research to other types of public sector organizations (e.g., schools or fire services).

A second methodological limitation has to do with the quantitative research methods used to gather information about team innovation performance, employee innovation performance, and employee job performance based on the perceptions of supervisors. In this respect, it is important to mention that the limited accuracy of perceptual measures of performance is likely to bias any relationship between performance and other variables (Meier & O'Toole, 2013). To reduce the potential impact of methodological biases, multisource data were collected with respect to leadership and performance. More specifically, the leadership activities of supervisors were rated by employees, while the supervisors of these employees measured the innovation performance of their teams, as well as the innovation performance and job performance of their followers. Fully acknowledging the limitations of using perceptual biases of performance in this dissertation, the use of multisource data substantially reduces the likelihood of common source bias (Favero & Bullock, 2015; Jakobsen & Jensen, 2015; Meier & O'Toole, 2013). Moreover, a comparison of the research results obtained with the quantitative methods reveals a relationship between leadership and performance, regardless of whether the study was conducted at the team or individual level. Given that objective data on performance are generally regarded as less biased (Jacobsen & Andersen, 2015), however, the replication of this research using objective performance indicators of team innovation performance, employee innovation performance, and employee job performance could be an interesting avenue for future research.

Third, this study combines qualitative and quantitative research methods, thus allowing for methodological triangulation. In the social sciences, methodological triangulation involves the use of two (or more) methods to examine a potential relationship between different variables (Robson, 2002). Triangulation thus facilitates the internal validation of research through cross-verification from two or more methods (Greene et al., 1989). Nevertheless, the application of methodological triangulation in this research is limited. Although leadership and innovation (i.e., a climate for innovation or innovation performance) are addressed as central concepts in each of the three empirical studies, a single method was used to examine each sub-question. The study presented in Chapter 4 is based solely on information obtained from semi-structured interviews.

Rather than testing the findings of the qualitative research with quantitative methods, the quantitative studies in Chapter 5 and 6 test and explain other relationships with respect to leadership and innovation. Moreover, the various studies were conducted at different levels within the hierarchy of the organization than was the case for the qualitative study. The cross-verification of results in this research is therefore limited. Nevertheless, one important advantage of combining qualitative and quantitative research methods in this dissertation is that these methods are complementary. As such, this study should be understood as a first attempt to uncover particular relationships of leadership to innovation in a public sector context.

7.5 Future research agenda and practical implications

This section discusses a number of future research recommendations, along with the implications of this dissertation for practitioners.

7.5.1 Future research directions

The results of this research suggest several interesting avenues for future research, focusing on the generalization of the research findings, methodological triangulation, and connections between leadership and innovation.

First, the main purpose of this research is to contribute to theory about the role that leadership plays in innovation within a public context. In analyzing the effects of the distinct public character (i.e., a high degree of publicness), however, the quantitative methods used in this research were less appropriate for investigating the potential impact of public sector characteristics. One important explanation for this result has to do with the research design developed for the dissertation. For the sake of internal validity, a single public sector organization was selected for investigation in this research. It is nevertheless interesting to note that the respondents, all of whom were employed in the same organization, apparently had nearly identical perceptions concerning the characteristics of their organization in terms of ambiguity of goals, red tape, and PSM. For example, according to the research results obtained with data aggregation, a large number of employees rated the extent to which their organization had clearly defined goals in a manner similar to that of other members in the same organization. As a result,

no differences emerged in the responses of employees aggregated to the teams in which they were nested in terms of goal ambiguity, red tape, or PSM. One interesting avenue for future research could therefore involve incorporating a wide variety of public sector organizations when examining the impact of the public character of an organization on innovation and leadership. Differences could be expected between the organizational and team levels with regard to the ambiguity of organizational goals, the prevalence of red tape, and/or levels of PSM, as the participants would be employed in different public organizations. Moreover, the examination of the characteristics of various public sector organizations could enhance the external validity of the research results found in this dissertation. As discussed previously, the case selected for this study is only representative of machine bureaucracies, thus limiting the generalization of findings.

Second, as noted above, methodological triangulation was applied to only a limited extent in this study, as a single method was used to answer each sub-question. As a result, it was not possible to cross-check research results with different research methods. One interesting avenue for future research could therefore be to replicate and cross-check the results found in this dissertation using multiple methods. As argued previously, qualitative research methods would be appropriate for the further exploration or description of the relationship of leadership to innovation that has been revealed in this dissertation. Furthermore, quantitative research methods are very useful for in-depth testing relationships uncovered. One important consideration in this regard concerns the use of objective performance indicators. Two conditions should be addressed. First, it is important to collect objective innovation performance data on as many teams and employees as possible, in order to allow the statistically testing of their relationship to leadership. A second condition would be to collect longitudinal or experimental data on innovation performance and leadership, thus allowing causality to be addressed (Jilke et al., 2016).

Finally, in contrast to the field of private management (e.g. Anderson et al., 2014; Bass & Avolio, 1994; Elkins & Keller, 2003), scholars of public administration have paid limited attention to determining the role that leadership plays in innovation. In this regard, Ricard and colleagues (forthcoming) have recently suggested that additional research is needed on the relationship between leadership and innovation in the public sector. This dissertation can be regarded as a response to calls for public management studies investigating leadership-

7.5.2 Recommendations for practice

As stated in the introductory chapter, this research focuses explicitly on connecting theory to practice. Practitioners should therefore benefit from this research as well. The results of this dissertation could enable practitioners (e.g., public leaders, managers, or trainers) to determine the leadership roles needed to promote innovation. More specifically, several recommendations for practice can be given with respect to: 1) the beneficial role that the leadership of top managers could potentially play in fostering a climate for innovation at the organizational level; 2) the support that rule-following leadership activities tend to provide in enhancing the innovation performance of teams with lower levels of education; and 3) the stimulating impact that supervisors who engage in empowerment might have on the innovation performance and job performance of their followers. The most important practical recommendations of this research are presented in Table 7.3.

 Table 7.3: Recommendations for practice

Hierarchical	Fostering a climate for	Examples	
level	innovation		
Organizational	Top managers model their own	Taking risks in work by introducing a	
level	exemplary behavior to members	new strategy for addressing	
	of the organization	complaints from citizens	
	Top managers explain the	Organizing a meeting to emphasize the	
	mission and vision of the	importance of innovation for the	
	organization to members	organization	
Hierarchical	Enhancing innovation	Examples	
level	performance		
Team level	Supervisors ensure that teams	Encouraging teams with lower levels	
	with lower levels of education	of education to develop a new way of	
	follow governmental laws	sanctioning citizens who engage in	
		fraud, based on the legal framework	
	Supervisors ensure that teams	Challenging teams with lower levels	
	with lower levels of education	of education to create a new, fixed	
	act in accordance with rules and	manner of task completion that	
	procedures	consists of a sequence of steps that	
		must be followed	
Individual	Supervisors express confidence	Expressing belief in the capabilities of	
level	in the performance ability of	employees that job duties are not	
	their followers	beyond their grasp	
	Supervisors provide autonomy	Allowing employees the opportunity	
	in the work of their followers	to set their own deadlines	

One practical recommendation emerges from the fact that this research provides evidence that the leadership of top managers could offer a strategy for developing a climate for innovation

within a public sector context. Based on this study, managers at the highest hierarchical level in public organizations – particularly those organizations that could be regarded as machine bureaucracies – should use their own exemplary behavior, along with mission and vision statements, to foster an innovative climate. As also revealed in this study, however, environmental turbulence and complexity can cause top managers to have a strong tendency to engage in top-down activities (e.g., surveillance mechanisms for managing and constraining behaviors of employees), which ultimately disrupts the process of bolstering a climate for innovation. The roles played by top managers in developing an innovative climate are thus ambiguous. In this respect, it is important for top managers to be aware of their contradictory or balancing role.

Second, it seems advantageous for public sector organizations to ensure that teams with lower levels of education act in accordance with governmental rules and regulations. In this light, the results of this research indicate that rule-following leadership activities are beneficial to the innovation performance of teams in machine bureaucracies for teams that are not highly educated. To illustrate, governmental rules and regulations tend to provide direction to teams with lower levels of education, thus energizing them to innovate. Given the importance of providing direction, teams with lower levels of education could arguably benefit from having limited autonomy over their work as a means of enhancing their innovativeness. As such, another important recommendation is that supervisors should increase the performance of teams with lower levels of education by motivating and guiding them in terms of behaving in accordance with governmental rules and regulations with regard to enhanced innovativeness. For example, supervisors could challenge teams to develop a new, fixed manner of task completion that consists of a sequence of steps that must be followed.

Third, although the results of this study indicate that many activities of servant leaders are unrelated to employee innovation performance, activities associated with empowerment – a core dimension of servant leadership – are positively related to employee innovation performance. As indicated by the results, empowerment involves the development of actions or strategies designed to enhance employee innovation performance. Important recommendations for practice are therefore that supervisors should: 1) express confidence in the performance ability of their followers; 2) provide their followers with autonomy in their work; and 3) provide their followers with access to job-related knowledge. When supervisors "go beyond self-

interest," it thus leads to improvements in employee innovation performance in public sector organizations, particularly in those that are representative of machine bureaucracies. The findings reported in this dissertation also indicate that the job performance of employees could be improved through leadership activities corresponding to empowerment. More generally, therefore, supervisors stand to benefit from the positive effects of empowering their followers.

In conclusion, despite the substantial practical relevance of this research, this section should not be understood as step-by-step plans for fostering public sector innovation (i.e., a climate for innovation and innovation performance). Instead, the leadership roles proposed at either the organizational, team, or individual level should be taken as important considerations for increased innovativeness in public sector organizations, particularly those resembling "machine bureaucracies."

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Appendices



Appendix A: Full interview questions used in Chapter 4

A climate for innovation

- 1. How familiar are you with the organizational development entitled "Continuous Improvement" of the UWV Benefits Division?
- 2. Why do you think it might be important for the UWV Benefits Division to enhance its ability to innovate?
- 3. In your view, what does a climate for innovation mean with regard to the UWV Benefits Division?
- 4. What do you think are the most important features of an organizational setting that fosters innovation within the UWV Benefits Division?

External organizational environment

- 1. In your opinion, what are the most relevant characteristics of the external organizational environment of the UWV Benefits Division?
- 2. What influence do these characteristics actually have on the functioning of the UWV Benefits Division?
- 3. Are you taking efforts to control those characteristics and, if so, which strategies have you adopted in this regard?
- 4. To what extent do you think that these characteristics of the external environment of the UWV Benefits Division stimulate and/or limit the ability to innovate?

Leadership on the part of top managers

- 1. In your view, what does leadership mean with regard to the UWV Benefits Division, particular with regard to leadership on the part of top-level managers?
- 2. As a top-level manager, which concrete activities are involved in fulfilling your task responsibilities?
- 3. Which efforts are you taking to affect an organizational setting that accelerate innovation within the UWV Benefits Division?
- 4. To what extent are your activities as a top-level manager determined by the aforementioned characteristics of the external environment of the UWV Benefits Division?

Appendix B: Full measures used in Chapter 5

Items used for measuring rule-following leadership activities (Tummers & Knies, 2016) – answers ranging from strongly disagree (1) to strongly agree (7)

Rule-following leadership (CA .975)

- 1. My team manager emphasizes to me and my colleagues that it is important to follow the law.
- 2. My team manager gives me and my colleagues the means to properly follow governmental rules and regulations.
- 3. My team manager emphasizes that my colleagues and I should carry out government policies properly.
- 4. My team manager ensures that we accurately follow the rules and procedures.

Items used for measuring team innovation performance (Anderson & West, 1998) – answers ranging from strongly disagree (1) to strongly agree (7)

Team innovation performance (CA.816)

- 1. My team often implements new ideas to improve the quality of our products and services.
- 2. Team tim gives little considerations to new and alternative methods and procedures for doing their work (reverse coded).
- 3. Members of my team often produce new services, methods, or procedures.
- 4. My team is an innovative team.

Appendix C: Full measures used in Chapter 6

Items used for measuring servant leadership activities (Van Dierendonck & Nuijten, 2011) – answers ranging from strongly disagree (1) to strongly agree (7)

Servant leadership: Empowering (CA .924)

- 1. My team manager gives me the information I need to do my work well.
- 2. My team manager encourages me to use my talents.
- 3. My team manager helps me further develop myself.
- 4. My team manager encourages his/her staff to come up with new ideas.
- 5. My team manager gives me the authority to take decisions which make work easier for me.
- 6. My team manager enables me to solve problems myself instead of just telling me what to do.
- 7. My team manager offers me abundant opportunities to learn new skills.

Servant leadership: Standing back (CA .871)

- 1. My team manager keeps him-/herself in the background and gives credit to others.
- 2. My team manager is not chasing recognitions or rewards for the change the things he/she does for others.
- 3. My team manager appears to enjoy his/her colleagues' success more than his/her own.

Servant leadership: Accountability (CA .917)

- 1. My team manager holds me responsible for the work I carry out.
- 2. I am held accountable for my performance by my team manager.
- 3. My team manager holds me and my colleagues responsible for the way we handle a job.

Servant leadership: Forgiveness (CA .909)

- 1. My team manager keeps criticizing people for the mistakes they have made in their work (reverse coded).
- 2. My team manager maintains a hard attitude towards people who have offended him/her at work (reverse coded.
- 3. My team manager finds it difficult to forget things that went wrong in the past (reverse coded)

Servant Leadership: Courage (CA.875)

- 1. My team manager takes risks even when he/she is not certain of the support from his/her own manager.
- 2. My team manager takes risks and does what needs to be done in his/her view.

Servant leadership: Authenticity (CA .873)

- 1. My team manager is open about his/her limitations and weaknesses.
- 2. My team mnager is often touched by the things he/she sees happening around him/her.
- 3. My team manager is prepared to express his/her feelings even if this might have undesirable consequences.
- 4. My team manager shows his/her true feelings to his/her staff.

Servant leadership: Humility (CA .951)

- 1. My team manager learns from criticism
- 2. My team manager tries to learn from criticism he/she gets from his/her superior.
- 3. My team manager admits his/her mistakes to his/her superior.
- 4. My team manager learns from the different views and opinions of others.
- 5. If people express critisim, my team manager tries to learn from it.

Servant leadership: Stewardship (CA .856)

- 1. My team manager emphasizes the importance of focusing on the good of the whole.
- 2. My team manager has a long-term vision.
- 3. My team manager emphasizes the societal responsibility of our work.

Items used for measuring employee innovation performance (How would you assess employee XXX on the following dimensions?) (Welbourne et al., 1998) – answers ranging from needs much improvement (1) to excellent (5)

Employee innovation performance (CA.948)

- 1. Coming up with new ideas.
- 2. Working to implement new ideas.
- 3. Finding improved ways to do things.
- 4. Creating better processes and routines.

Items used for measuring employee job performance (How would you assess employee XXX on the following dimensions?) (Welbourne et al., 1998) – answers ranging from needs much improvement (1) to excellent (5)

Employee job performance (CA .869)

- 1. Quantity of work output.
- 2. Quality of work output.
- 3. Accuracy of work.
- 4. Services provided to colleagues (internal) and/or to citizens (external).

Appendix D: Full measures used for publicness

Items used for measuring goal ambiguity (Stazyk & Goerdel, 2011) – answers ranging from strongly disagree (1) to strongly agree (7)

Goal ambiguity (CA .820)

- 1. The organization's mission is clear to almost everyone who works here (reverse coded).
- 2. It is easy to explain the goals of this organization to outsiders (reverse coded).
- 3. The organization has clearly defined goals (reverse coded).

Items used for measuring red tape (How would you describe policies and procedures in your work division between the following opposite characteristics?) (Borry, forthcoming) – the characteristics below are presented along with five choices between either extreme

Red tape (CA .723)

- 1. Not burdensome to burdensome.
- 2. Necessary to unnecessary.
- 3. Effective to ineffective.

Items used for measuring public service motivation (Wright et al., 2013) – answers ranging from strongly disagree (1) to strongly agree (7)

Public Service Motivation (CA.819)

- 1. Meaningful public service is very important to me.
- 2. I am often reminded by daily events about how dependent we are on one another.
- 3. Making a difference in society means more to me than personal achievements.
- 4. I am prepared to make enormous sacrifices for the good of society.
- 5. I am not afraid to go to bat for the rights of others even if it means I will be ridiculed.

Appendix E: List of translations and abbrevations

AIC Akaike Information Criterion

B Beta coefficient

BIC Bayes Information Criterion

CA Cronbach's Alpha

CCQ Creative Climate Questionnaire
CFA Confirmatory Factor Analyses

CFI Comparative Fit Index

EFA Exploratory Factor Analyses

ICC Intra-Class Correlation

LPC Least Preferred Coworker

MAXQDA MAX Qualitative Data Analysis
MLR Maximum Likelihood Robust

N Number of respondents

NA Not Applicable

NPM New Public Management

OCB Organizational Citizenship Behavior

P Probability

PSM Public Service Motivation

R² Coefficient of determination

RMSEA Root Mean Square Error of Approximation

Rwg Rater agreement Within Groups

SD Standard Deviation

SEM Structural Equation Modeling

SL Servant Leadership

SOQ Situational Outlook Questionnaire

SPSS Statistical Package for the Social Sciences

SSSI Siegel Scale of Support for Innovation

TCI Team Climate Inventory

TLI Tucker-Lewis Coefficient

UWV Uitvoeringsinstitutt Werknemersverzekeringen (the Dutch Employee Insurance

Agency)

VIF Variance Inflation Factors

Samenvatting (Summary in Dutch)



Aanleiding en doelstelling van het onderzoek

Publieke organisaties worden geconfronteerd met grote uitdagingen op dit moment. Enerzijds moeten publieke organisaties omvangrijke bezuinigingen doorvoeren als gevolg van de economische crisis. Ter illustratie, de Nederlandse overheid dient zijn uitgaven met ongeveer 10 tot 18 miljard euro te verminderen in 2016 en 2017. Tegelijkertijd worden aan publieke organisaties steeds hogere eisen gesteld. Zo verwachten burgers en media in toenemende mate dat publieke organisaties transparent moeten zijn over de wijze waarop belastinggeld wordt besteed. Kortom, publieke organisaties moeten steeds meer gaan doen, maar ze krijgen daarvoor minder middelen ter beschikking.

Een van de manieren om met deze uitdaging om te gaan is te innoveren. Diverse onderzoekers hebben geconcludeerd dat innovatie van crucial belang kan zijn voor publieke organisaties, omdat het oplossingen kan bieden voor toenemende en conflicterende eisen vanuit de samenleving. Zo heeft bijvoorbeeld digitale dienstverlening het inmiddels mogelijk gemaakt dat burgers veel sneller sociale uitkeringen van de overheid ontvangen. Echter, publieke organisaties staan niet bekend om hun innovativiteit. Verschillende redenen kunnen daarvoor gegeven worden. Allereerst zijn bepaalde publieke organisaties vaak de enige aanbieder van een specifieke voorziening. Dat zorgt er voor dat publieke organisaties weinig druk ervaren om te innoveren. Ten tweede, burgers en media hebben een sterke neiging om fouten van de overheid uit te vergroten. Dit maakt dat publieke organisaties minder snel bereid zijn om risco's te nemen. Tot slot worden publieke organisaties vaak gekenmerkt als 'logge' en bureaucratische organisaties als gevolg van de behoefte om nauwkeurig en consistent te werk te gaan. Deze kenmerken staan op gespannen voet met het geven van ruimte en vrijheid om te innoveren. Concluderend, hoewel publieke organisaties niet bekend staan om hun innovativiteit, kan het stimuleren van innovatie binnen deze organisaties als een cruciale strategie worden beschouwd om antwoord te geven aan toenemende eisen vanuit de maatschappij.

Uit onderzoek blijkt dat veel verschillende factoren van invloed zijn op innovatie, denk hierbij aan een bepaalde organisatiecultuur, vormen van organisatiestructuren en elementen uit de omgeving van organisaties. In deze studie wordt geanalyseerd wat de rol van leiderschap is om innovaties te stimuleren. Verschillende onderzoeken laten zien dat hoe leiderschap wordt ingevuld, invloed heeft op innovatie. Zo blijkt dat leidinggevenden die veel vertrouwen en vrijheid geven aan hun medewerkers, medewerkers prikkelen om met nieuwe manieren te komen hoe taken anders uitgevoerd kunnen worden. Ook laten onderzoeksresultaten zien dat leidinggevenden die medewerkers belonen als er een nieuwe werkwijze is ontwikkeld, er voor zorgen dat medewerkers eerder bereid zijn om te innoveren dan medewerkers die geen erkenning krijgen.

De doelstelling van deze studie is om meer inzicht te geven in de rol die leiderschap lijkt te spelen bij innovatie in de publieke sector. De centrale onderzoeksvraag luidt dan ook:

Welke rol speelt leiderschap bij innovatie in de publieke sector?

Door het beantwoorden van deze vraag draagt dit onderzoek op drie verschillende manieren bij aan de bestaande literatuur:

- 1) Dit onderzoek vult bestuurskundige literatuur aan over *leiderschap*. Hoewel er de laatste jaren steeds meer aandacht is gegeven aan publiek leiderschap, stellen verschillende wetenschappers dat er nog steeds weinig bekend is over hoe leidinggevenden in publieke organisaties hun rol precies invullen;
- 2) Dit onderzoekt vult bestuurskundige literatuur aan over *innovatie*. Recentelijk is er een toename te zien van het aantal studies dat gericht is op publieke innovatie. Echter, deze studies concluderen ook dat er nog steeds veel onbekend is over verschillende aspecten van innovatie;
- 3) Dit onderzoek vult bestuurskundige literatuur aan over *relaties tussen leiderschap en innovatie*. Wetenschappers hebben tot nu toe beperkte aandacht gegeven aan welke effecten publieke leiders mogelijk kunnen hebben op innovatie.

In de volgende paragraaf wordt een theoretische verkenning gegeven van de belangrijkste concepten van dit onderzoek.

Theoretische verkenning

In dit onderzoek staan drie concepten centraal: *innovatie, leiderschap* en *de publieke sector*. Deze paragraaf zal op hoofdlijnen deze concepten bespreken.

Innovatie wordt vaak gedefinieerd als de eerste pogingen om een nieuw idee, nieuwe praktijk of nieuw object te introduceren binnen de organisatie. Op basis van deze definitie onderscheidt innovatie zich van verandering. Innovatie gaat altijd over iets nieuws, terwijl dat bij verandering niet noodzakelijkerwijs zo hoeft te zijn. In dit onderzoek worden de volgende twee aspecten van innovatie nader geanalyseerd: Een innovatief organisatieklimaat en innovatieprestaties. Een innovatieklimaat wordt in dit onderzoek beschreven als de gewenste praktijken, procedures en gedragingen die zorgen voor nieuwe ideeën, processen of uitkomsten. Het is interessant om een innovatief klimaat te analyseren, omdat is aangetoond dat bepaalde beelden van medewerkers over de organisatie van belang zijn om innovaties succesvol te laten zijn. Zo blijkt dat wanneer medewerkers het gevoel hebben dat ze fouten mogen maken in hun werk, innovaties eerder ontstaan. Innovatieprestaties gaat over de daadwerkelijke introductie van een nieuw idee, nieuwe praktijk of nieuw object door de organisatie, verschillende afdelingen van de organisatie of de medewerkers. Het belangrijkste doel van innovatie is om uitkomsten van de organisatie te verbeteren. Daarom zijn ook innovatieprestaties onderzocht.

Met betrekking tot *leiderschap* is er aangesloten bij een veel gebruikte definitie: In dit proefschrift is de focus op wat leiders daadwerkelijk doen om anderen te beïnvloeden. Deze focus past bij de gedragskundige benadering van leiderschap, omdat deze benadering concrete activiteiten van leiders analyseert. Onderzoeken hebben aangetoond dat wat leiders doen, afhankelijk is van het hiërarchische niveau van de organisatie waarop deze activiteiten plaatsvinden. Vandaar dat deze studie gericht is op drie verschillende hiërarchische niveaus: Het organisatieniveau, het teamniveau en het individuele niveau. Het organisatieniveau kan beschouwd worden als het hoogste niveau van de organisatie, het teamniveau als het middelste niveau en het individuele niveau als het laagste niveau.

Tabel 1 laat zien welke activiteiten van leidinggevenden en aspecten van innovatie worden bestudeerd, afhankelijk van een hiërarchisch niveau.

Tabel 1: De focus van dit onderzoek op leiderschap en innovatie afhankelijk van verschillende hiërarchische niveaus

Hiërarchisch	Leiderschapsactiviteiten	Aspect van
niveau		innovatie
Organisatieniveau	ganisatieniveau In kaart brengen van de externe omgeving	
	Strategisch planning	organisatieklimaat
	Verwoorden van de missie en visie van de	
	organisatie	
	Netwerken en samenwerken	
	Uitoefenen van algemene managementtaken	
	Nemen van besluiten	
	Uitvoeren en beheersen van	
	organisatieveranderingen	
Teamniveau	Aanmoedigen om taken uit te voeren in lijn met	Innovatieprestaties
	overheidsregels en –reguleringen	
Individueel	Voorzien in de behoefte van anderen en hen helpen	Innovatieprestaties
niveau	bij persoonlijke ontwikkeling	

Bovenstaande tabel maakt duidelijk dat afhankelijk van een bepaald hiërarchisch niveau verschillende activiteiten van leiderschap en aspecten van innovatie worden onderzocht.

Mogelijke relaties tussen enerzijds verschillende leiderschapsactiviteiten en anderzijds aspecten van innovatie worden geanalyseerd in *de publieke sector*. Het is van groot belang om deze sector te onderscheiden van de private sector, omdat deze twee sectoren fundamenteel van elkaar verschillen. Ten eerste, organisaties in de publieke sector worden in feite gecontroleerd door de politiek, terwijl organisaties in de private sector veel meer te maken hebben met economische controlemechanismen (bijvoorbeeld of een bedrijf voldoende winst maakt teneinde levensvatbaar te zijn). Daarnaast wordt van publieke organisaties verwacht dat zij hun diensten of producten beschikbaar te stellen aan alle burgers in de samenleving. Private organisaties richten zich alleen op bepaalde groepen mensen (een 'markt') waarvan verwacht wordt dat zij producten daadwerkelijk gaan kopen. Tot slot, belasting betaalt door burgers vormt de

belangrijkste inkomstenbron van publieke organisaties, terwijl directe betalingen door klanten bedrijven financieren.

In de volgende paragraaf wordt besproken hoe de mogelijke relatie tussen leiderschap en innovatie in de publieke sector is onderzocht.

Onderzoeksopzet en onderzoeksmethoden

Om de centrale onderzoeksvraag te beantwoorden zijn er drie verschillende empirische studies uitgevoerd. Als casus is het Uitvoeringsinstituut Werknemersverzekeringen (UWV) bestudeerd. Het UWV is een zelfstandig bestuursorgaan (ZBO). De belangrijkste taak van het UWV is het uitkeren van grote aantallen werknemersverzekeringen op een rechtmatige wijze, zoals bijvoorbeeld de werkloosheidsuitkering. In totaal werken er ongeveer 20.000 mensen bij het UWV. De drie empirische studies hebben allemaal plaatsgevonden bij het UWV. Hierdoor zijn de drie studies vergelijkbaar in termen van leiderschap, innovatie en de organisatiecontext.

De eerste empirische studie (Hoofdstuk 4) is gebaseerd op kwalitatieve onderzoeksmethoden, gericht op het organisatieniveau. Er zijn diverse interviews gehouden met topmanagers van het UWV. Deze studie heeft als doel het verkennen van: 1) Kenmerken die gerelateerd worden aan een innovatief organisatieklimaat; 2) Leiderschapsactiviteiten die van belang geacht worden voor een innovatief klimaat; en 3) De wijze waarop omgegaan wordt met turbulentie en complexiteit in de externe omgeving.

De tweede empirische studie (Hoofdstuk 5) is gebaseerd op kwantitatieve onderzoeksmethoden, gericht op het teamniveau. Enerzijds is onder medewerkers van het UWV een online vragenlijst uitgezet om informatie te verzamelen over het leiderschap van hun directe leidinggevenden. Anderzijds is er onder direct leidinggevenden van het UWV een online vragenlijst uitgezet om de innovatieprestaties van teams te meten. De doelstelling van deze studie is te analyseren welke rol regelgeoriënteerd leiderschap speelt bij innovatieprestaties van teams.

De derde empirische studie (Hoofdstuk 6) is gebaseerd op kwantitatieve onderzoeksmethoden, gericht op het individuele niveau. Er is een online vragenlijst uitgezet onder medewerkers van het UWV waarin is gevraagd hoe ze het leiderschap van hun direct leidinggevenden karakteriseren. Vervolgens is door middel van een online vragenlijst onder

direct leidinggevenden van het UWV gevraagd om de innovatieprestaties en werkprestaties van hun medewerkers te beoordelen. De doelstelling van deze studie is analyseren welke rol dienend leiderschap speelt bij de innovatieprestaties en werkprestaties van medewerkers.

Studie 1: Organisatieniveau

De doelstelling van de eerste studie is om te verkennen welke leiderschapsactiviteiten topmanagers voor zichzelf zien weggelegd om een innovatief organisatieklimaat te stimuleren in de publieke sector. In deze studie is leiderschap gedefinieerd als een bepaalde set van activiteiten om anderen te beïnvloeden. Omdat topmanagers vaak te maken hebben met stakeholders en actoren buiten de eigen organisatie, is in deze studie ook onderzocht hoe topmanagers omgaan met de externe omgeving van de organisatie.

Enerzijds laten onderzoeksresultaten zien dat topmanagers een innovatief organisatieklimaat positief kunnen beïnvloeden door programma's gericht op meer innovativiteit actief te ondersteunen, te fungeren als een rolmodel en het uitdragen van de organisatiemissie. Anderzijds geven analyses aan dat topmanagers een sterke neiging hebben om medewerkers te monitoren en te controleren. Deze leiderschapsactiviteiten staan haaks op het geven van autonomie en vertrouwen aan medewerkers met als gevolg dat een innovatief klimaat beperkt zal worden. Een verklaring voor de behoefte van topmanagers om medewerkers te monitoren en te controleren op basis van dit onderzoek is dat de aanwezigheid van dynamiek en complexiteit in de externe omgeving van de organisatie resulteert in een directieve manier van het aansturen van medewerkers.

De leiderschapsactiviteiten van topmanagers ten aanzien van een innovatief klimaat vertegenwoordigen verschillende publieke waarden. Aan de ene kant reflecteren de activiteiten van topmanagers die een innovatief klimaat stimuleren waarden zoals robuustheid en aanpassingsvermogen ("lambda-type waarden"). Aan de andere kant past het monitoren en controleren van medewerkers bij meer mechanische en systeemgeoriënteerde waarden ("sigma-type waarden").

Studie 2: Teamniveau

De doelstelling van de tweede studie is om relaties te analyseren tussen regelgeoriënteerd leiderschap en innovatieprestaties van teams in de publieke sector. Deze studie heeft regelgeoriërenteerd leiderschap gedefinieerd als het aanmoedigen van medewerkers om taken uit te voeren in lijn met overheidsregels en –reguleringen. De innovatieprestaties van teams gaan over de daadwerkelijke introductie van een nieuw idee, nieuwe praktijk of nieuw object door een afdeling van de organisatie.

Leiderschap wordt vaak beschouwd als een cruciale factor om prestaties van publieke organisaties te verbeteren. Echter, veel studies beargumenteren dat publieke leiders daarbij rekening moeten houden met uiteenlopende factoren teneinde prestaties succesvol te beïnvloeden. Zo blijkt dat medewerkers vaak op diverse manieren gemotiveerd kunnen worden. Een effectief leider houdt rekening met deze verschillende motieven. Op basis van verschillende onderzoeken kan gesteld worden dat de wijze waarop leidinggevenden innovatieprestaties van teams kunnen beïnvloeden afhankelijk is van het opleidingsniveau van teams. Daarom heeft deze studie gekeken in hoeverre het opleidingsniveau van teams van invloed is op welke rol regelgeoriënteerd leiderschap speelt bij innovatieprestaties van teams.

Op basis van statistische analyses laten resultaten zien dat het leggen van een sterke nadruk op overheidsregels en -reguleringen door leidinggevenden een belangrijke rol speelt in het verbeteren van innovatieprestaties van teams. Dit geldt alleen voor teams met een laag opleidingsniveau en niet voor teams met een hoog opleidingsniveau. Kortom, pogingen van leidinggevenden om teams bepalingen in de wet te laten volgen, overheidsbeleid juist uit te laten voeren en in lijn met regels en procedures hun werk te laten doen, geven teams met een laag opleidingsniveau een prikkel om te innoveren. Het lijkt dus aannemelijk dat laagopgeleide teams gaan innoveren als er een bepaalde structuur aanwezig is.

Studie 3: Individueel niveau

De doelstelling van de derde studie is te analyseren welke rol dienend leiderschap speelt bij innovatieprestaties en werkprestaties van medewerkers in de publieke sector. Er worden veel verschillende eigenschappen gerelateerd aan dienend leiderschap, zoals bijvoorbeeld het tonen van moed en vergevingsgezind zijn. Het meest kenmerkende element van dienend leiderschap is dat niet het eigen belang centraal staat, maar belangen van medewerkers de hoogste prioriteit genieten. De innovatieprestaties van medewerkers gaan over de daadwerkelijke introductie en toepassing van nieuwe ideeën, processen, producten of procedures door medewerkers. De werkprestaties van medewerkers verwijzen naar de kwantiteit en kwaliteit van de uitgevoerde taken door medewerkers.

Statistische analyses hebben aangetoond dat dienende leiders die medewerkers vooral ondersteunen en faciliteren in hun werk een positief effect hebben op de innovatieprestaties en werkprestaties van medewerkers. Met andere woorden, inspanningen van leidinggevenden die gericht zijn op het geven van vertrouwen, het bieden van autonomie in werk en het verschaffen van aanvullende informatie zorgen ervoor dat medewerkers meer gaan innoveren en beter gaan presteren.

Resultaten laten echter ook zien dat veel elementen van dienend leiderschap geen effect hebben op de innovatieprestaties en werkprestaties van medewerkers. Zo blijkt dat op de achtergrond treden, verantwoordelijkheid geven, vergevingsgezind zijn, authenticiteit, menselijkheid en richting geven niet gerelateerd kunnen worden aan de mate waarin medewerkers innoveren en presteren. Een verklaring hiervoor kan zijn dat de bestuurdeerde organisatie weinig aandacht schenkt aan deze elementen van dienend leiderschap.

Conclusies: De relatie tussen leiderschap en innovatie in de publieke sector

De eerste conclusie van dit onderzoek is dat het leiderschap van topmanagers van groot belang is voor een innovatief organisatieklimaat. Enerzijds laten onderzoeksresultaten zien dat bepaalde leiderschapsactiviteiten van topmanagers een innovatief klimaat positief kunnen beïnvloeden, zoals het voorbeeldgedrag van topmanagers en het uitdragen van de organisatievisie door topmanagers. Anderzijds hebben de uitkomsten van deze studie laten zien dat sommige activiteiten van topmanagers een innovatieklimaat negatief beïnvloeden. De neiging van topmanagers om medewerkers te monitoren en te controleren, beperkt de autonomie in werk en het vertrouwen van medewerkers. Dit zijn belangrijke kenmerken van een innovatief klimaat.

De tweede conclusie is dat een hoge mate van regelgeoriënteerd leiderschap innovatieprestaties van teams met een laag opleidingsniveau verbeteren. De bevindingen van dit

onderzoek hebben aangetoond dat leidinggevenden die benadrukken aan medewerkers dat het belangrijk is om de wet te volgen, overheidsbeleid op de juiste manier uit te voeren en te handelen in lijn met regels en procedures, innovatieprestaties van laagopgeleide teams verhogen. Onderzoeksresultaten hebben ook laten zien dat er geen verband is tussen regelgeoriënteerd leiderschap enerzijds en innovatieprestaties van hoogopgeleide teams anderzijds.

De derde conclusie van dit onderzoek is dat leidinggevenden die medewerkers ondersteunen en faciliteren in hun werk, de innovatieprestaties en werkprestaties van medewerkers verhogen. Ter illustratie: De pogingen van leidinggevenden om te vertrouwen op de competenties van medewerkers, vrijheid te geven in het werk van medewerkers en aanvullende informatie te verschaffen over het werk dat medewerkers doen, zorgen er voor dat medewerkers meer gaan innoveren en beter hun werk gaan doen.

Op basis van deze drie conclusies levert dit onderzoek zowel een aantal theoretische bijdragen als ook praktische handvatten voor leidinggevenden in de publieke sector. Ten eerste vult dit onderzoek bestaande wetenschappelijke kennis aan over hoe leidinggevenden invloed kunnen uitoefenen op innovatie in de publieke sector. Zo zijn de ontdekte relaties tussen bepaalde leiderschapsactiviteiten van topmanagers en een innovatief organisatieklimaat nieuw. Ook het significante effect van regelgeoriënteerd leiderschap op innovatieprestaties van laagopgeleide teams is niet eerder gevonden. Ten tweede geeft deze studie praktische aanbevelingen hoe leidinggevenden op verschillende niveaus in de organisatie de bereidheid om te innoveren kunnen verhogen. Dit onderzoek adviseert leidinggevenden bijvoorbeeld om medewerkers de vrijheid te geven zelf deadlines vast te stellen wanneer bepaalde werkzaamheden afgerond moeten zijn. Deze vorm van autonomie in het werk resulteert in meer innovativiteit bij medewerkers.

<u>Portfolio</u>



PhD training			
Tutorial 1: Academic Writing in English for PhD Students (EUR)			
Core themes and the PhD research experience (NIG)			
Formulating the research problem (NIG)	2013		
Operationalization (NIG)	2013		
General Methodology (NIG)	2013		
Case study research (NIG)	2013		
Interviewing (NIG)	2014		
Presenting your research (NIG)	2014		
Gettting it published (NIG)	2014		
Philosophy of Science (NIG)	2015		
Tutorial 2: Multilevel analyses in Mplus, Dr. Brenda Vermeeren (EUR)	2015		
Integrity and Social Responsibility in Resarch and Advice	2016		
Teaching	l		
Bachelor 1: Qualitative Methods, Organization and Management, General Law	2010-2011		
Bachelor 2: Political Science, Quantitative Methods, Operating in the Public	2012-2016		
Sector, Policy and Politics, Coordinating tutorial groups			
Master: Leadership and Motivation, Supervising master students	2013-2015		
International conferences	I		
33 rd Annual Conference of the European Group for Public Administration (EGPA),	2011		
Bucharest, Romania			
Paper: 'Commons knowledge oand the definition of risks in policy-making			
processes'			
9th Annual Workconference Netherlands Institute of Goverance (NIG), Leuven,	2012		
Belgium			
Paper: 'The 'Publicness-puzzle' in public leadership: A theoretical exploration of			
leadership in public organizations'			
18th Annual Conference of the International Research Society for Public	2014		
Management (IRSPM), Ottawa, Canada			
Paper: Fostering an innovative climate in public organizations: Exploring the role			

of strategic leadership'			
International Conference on Next Steps for Public Administration in Theory and	2014		
Practice: Looking Backward and Moving Forward (PAR), Guangzhou, China			
Paper: 'How to foster innovative capacity in public organizations? Exploring the			
role of top managers' leadership activities'			
19th Annual Conference of the International Research Soceity for Public	2015		
Management (IRSPM), Birmingham, UK			
Paper: 'Understanding public sector innovations: The role of leadership activities			
for a climate for innovation			
Seminar Leadership, Management and Motivation in Public Service Organisations,	2015		
Cardiff, Wales			
Paper: Fostering the capacity for innovation in public organizations: Examining			
relationships between leadership, a climate for innovation and performance			
9th International Dutch HRM Network Conference, Utrecht, The Netherlands	2015		
Paper: 'The impact of servant leaderslhip on a climate for innovation and			
performance'			

Curriculum Vitae



Stephan Dorsman (1987) studied Public Administration at Erasmus University Rotterdam (EUR) (Bachelor's and Master's degree – graduating in 2010). During his study at EUR, he has worked as a student assistent for two years in the Department of Public Administration. After graduation, he joined the staff at EUR as a junior lecturer for two years. In August 2012, he started as a PhD student investigating potential relationships between leadership and innovation in a public sector context. Next to his PhD research, he has worked as a researcher and advisor for the UWV Benefits division, where he participated in leadership and management development programs. Finally, Stephan has also been occasionally involved in the Center for Strategy and Leadership (CSL) of PBLQ ROI during his PhD study, thereby contributing to the topic of public leadership based on expertise obtained with his research.

During his PhD study, Stephan has presented his research at several national and international public administration and management conferences (e.g., EGPA, IRSPM, NIG, PAR). In addition, he published some work in academic and professional journals. These publications are a result of research projects alongside his PhD study. Moreover, he has been involved in several public management journals as a reviewer (e.g. *Public Administration, Public Management Review*).

As of September 2016, Stephan works as a strategic policy advisor at the UWV (the Dutch Employee Insurance Agency). The UWV is commissioned by the Ministry of Social Affairs and Employment (SZW) to implement employee insurances and provide labour market and data services.

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