

Causes and Consequences
of Public Service Motivation:
Governance Interventions and
Performance Implications

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PhD Dissertation

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ISBN: 978-87-7335-206-9

Cover: Svend Siune

Print: Fællestrykkeriet, Aarhus University

Layout: Annette Bruun Andersen

Submitted May 2, 2016

The public defense takes place June 14, 2016

Published June 2016

Forlaget Politica

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Acknowledgment

Completing a PhD dissertation is like settling in for a long road trip. You know (or at least you have an idea) where you want to go but not always how to get there. Sometimes your journey takes unforeseen turns and you will need to find another and maybe even better way to reach your destination. On my journey, a large number of people have accompanied me and offered immensely valuable guidance and advice. Some have endured the entire trip while others have joined in for parts. These people have all influenced my thinking about public management leading to – what I believe is now – a higher quality of theoretical propositions and methodological rigor presented in this dissertation. For that I am truly grateful.

Although many people have been kind to offer their feedback and suggestions along the way, I would like to highlight a few. First and foremost, a big thank you to Lotte and Søren for supervising my dissertation and showing by example what it means to be great scholars. I have learned so much from you and I could not have wished for better supervisors. Second, I am grateful to Christian. Although one does not formally get three supervisors, you have in many ways acted as a mentor. Whether it was crunching numbers in countless data sheets on LEAP managers and employees or co-authoring papers I have enjoyed our collaborations and I look forward to many more. A special thank you also goes to my co-authors and collaborators, Louise, Anne Mette, Christian Vestergaard, Anne Bøllingtoft, Ann-Louise Holten, Allan, Jacob Ladenburg, Niels Westergård-Nielsen, Poul Aaes Nielsen, and Tine Eriksen. I hope that our joint work presented here is but the start of many interesting research projects.

I have been fortunate to complete my dissertation in vibrant and highly productive research environments, and I want to extend my gratitude to fellow members of the section for Public Administration at Aarhus. It has been a pleasure to be member of a section where colleagues not only offer excellent suggestions on your work but also create an environment that always invites constructive discussions and a positive atmosphere. In this respect, the PhD group is no exception and I want to thank former and current members, Mette, Mogens, Jakob, Ulrik, Morten, Camilla, Marie, Thorbjørn, and Julian for great company during coffee breaks and conferences around the world.

Outside Aarhus, I extremely grateful to Ken Meier not only for hosting my research stay at Texas A&M University and providing detailed feedback on my work but also for going at length to help me navigate the US job market. A special thank you also goes to Nathan Favero and Justin Bullock, who offered excellent company during my stay in College Station and later at con-

ferences. Last but certainly not least I am grateful for the support of my family. They have endured more discussions on leadership, prosocial motivation and performance than anyone outside academia ever should but I am sure that they will happily endure many more in the years to come.

Ulrich Thy Jensen
Aarhus, May 2016

Chapter 1

Introduction

Findings ways to ensure high-quality and efficient provision of public services is a key concern for policymakers and scholars alike. With governments cutting back on public spending in the aftermath of the global financial crisis, however, this is a daunting task. Turning to the internal characteristics of public service organizations, scholars have devoted increased attention to central human resources such as employee values and motivation emphasizing their potential for improving public service performance in times of austerity. Metaphorically, motivation depicts the energy fueling individuals' actions while values entail conceptions of the desirable end states towards which effort is devoted (Andersen et al. 2013). In the context of public service, motivation to do good for other people and society – public service motivation (PSM) – thus represents the energy individual public service providers are willing to invest in such actions, whereas public values entail individuals' understanding of what “doing good” means in a particular context.

Indeed, the relationship with behavioral dispositions of public service providers constitutes the backbone of scholarly interest in PSM: If individuals value service to society they may engage in behaviors that benefit collective entities such as a community or society even if it is costly to them, and if they are motivated by a concern for others they may commit extra effort to such behaviors even in the absence of pecuniary incentives. While recent studies offer support for a positive relationship between PSM and outcome-based indicators of performance such as student academic performance (Andersen, Heinesen, and Pedersen 2014) and productivity (Bellé 2013), little research has investigated whether PSM affects output, that is, the actions of individual public service providers. This gap is important to address because knowing how PSM relates to the behaviors of public service providers can help managers and policymakers better capitalize on the potential of PSM in the specific empirical contexts. The first purpose of this dissertation is therefore to shed more light on the behavioral implications of PSM among individual providers of public services.

Provided that PSM shapes the actions of public service providers, lingering questions are how to stimulate individuals' PSM and how to ensure that the motivation of individual employees is used to pursue desirable end states that are compatible with the goals of their organization. As noted by Gilmard (2010), it can be problematic and result in agency loss if public service motivated employees' conceptions of what is desirable for others and society

are very different from their organization's conception. It is thus very important to shed light not only on ways to stimulate PSM and but also on ways to ensure that employees direct this motivation towards actions that are supportive of the organizational goals. Existing research has alluded to governance interventions as means for shaping motivation and directing effort in public services organizations (see for example O'Toole and Meier 2011) and it is thus relevant to consider governance interventions as potential antecedents of PSM. Two types of governance interventions are 1) internal management such as establishing a clear and compelling set of goals for the organization (Favero, Meier, and O'Toole 2016) and 2) national policies regulating the work of public service providers. Existing research points to the potential of organizational leadership – and in particular transformational leadership – for stimulating PSM (e.g., Bellé 2014; Paarlberg and Lavigna 2010; Wright, Moynihan, and Pandey 2012; Vandenabeele 2014), and recent theoretical work suggests that new national policies or amendments to existing ones hold the power to affect the PSM of individual public service providers (Soss and Moynihan 2014). In this sense, the dissertation distinguishes between external and internal governance interventions and focuses on policies operating at a national level and organizational leadership operating at the local level as levers for influencing individuals' PSM and directing the effort of public service providers.

First, national policies regulate the work of public service providers, and changes to such policies may alter the resources and motivation of public service personnel (Soss and Moynihan 2014). Policies thus not only specify “who gets what, when, and how” (Lasswell 1936), they also create opportunities and constraints by altering administrative practices and capacity, structures, and requirements in the job context. However, research has yet to investigate whether policies at the national level indeed constitute political forces with the capacity to change the PSM of individual public service providers. Focusing on a specific policy change in the context of Danish health care providers, the dissertation offers a first inquiry into the relationship between changes in national policies and the dynamics of public service providers' PSM.

Second, organizational leadership in the context of national policies potentially offers a lever for stimulating employees' PSM. The enduring mantra “management matters” not only continues to attract scholarly attention with a surge in the number of studies on leadership in the public sector (Van Wart 2013) but also prevails in the political arena. For example, the Danish Commission for Productivity recently reiterated “good and clear leadership as a fundamental premise for effectiveness and innovation in the public sector” (Danish Commission for Productivity 2013, 101). Yet important questions

remain unanswered: What constitutes “good” leadership in terms of stimulating PSM? Under what circumstances do particular kinds of leadership increase PSM and when is this not the case? These gaps critically limit scholars’ opportunities to make sound recommendations to policymakers and practitioners on ways to capitalize on leadership as a lever for stimulating PSM and ultimately improving performance in public service organizations.

Leadership can be seen as a set of actions that direct and target processes of transforming human effort and physical resources into services. As noted by Antonakis and House (2014), leaders engage in such behaviors by scanning the internal and external environment of their organization, charting strategic and task objectives, and providing feedback to employees. In the management literature (Antonakis, Avolio, and Sivasubramaniam 2003; Van Knippenberg and Sitkin 2013) and in the field of public administration (Vogel and Masal 2015) contemporary research pays immense attention to transformational leadership and suggests that it may align employee and organization values (e.g., Hoffman et al. 2011; Jung and Avolio 2000) and foster PSM (Paarlberg and Lavigna 2010; Wright, Moynihan, and Pandey 2012). Transformational leadership comprises behaviors that are closely linked to the strategic objectives of an organization in the sense that it revolves around the articulation and communication of a vision, that is, an idealized “verbal portrait” of what the organization aspires to one day achieve (Carton, Murphy, and Clark 2014, 1544). Specifically, transformational leadership can be seen as “behaviors that seek to develop, share and sustain a vision with the intent to facilitate that employees transcend their own self-interest and achieve organization goals” (Article A, 6).

In fact, transformational leadership may be particularly effective in stimulating PSM. Public service organizations have strong service- and community-oriented visions (Wright, Moynihan, and Pandey 2012) and PSM concerns individuals’ “orientation to delivering services to people with the purpose to do good for others and society” (Hondeghem and Perry 2009, 6). In other words, transformational leaders in public service organizations can capitalize on a match between the PSM of individual employees and the organizations’ social purpose. While transformational leadership has been emphasized as a lever for stimulating PSM, existing studies predominantly rely on cross-sectional research designs. This renders it difficult to assess whether transformational leadership indeed holds the potential to stimulate employees’ PSM over time. The second purpose of this dissertation is therefore to shed more light on governance interventions, that is, national policies and organizational leadership as levers for stimulating PSM of individual providers of public services. On this basis, the dissertation addresses the following research question:

Do governance interventions affect public service motivation and what are the implications of public service motivation for employee performance in public service organizations?

The dissertation consists of two elements: a summary report and 8 self-contained articles (see list below). The articles rely on different methodological approaches designed to mitigate central challenges of selection bias, omitted variable bias, and reverse causality. For example, organizations likely recruit managers and employees in non-random patterns and if selection into organizations is based on past performance, observed relationships are biased. Similarly, the contextual conditions for exerting particular types of leadership, such as transformational leadership, may be more advantageous in some organizations due to, for example, existing organizational culture. To remedy challenges of selection bias, reverse causality, and omitted variable bias, the dissertation combines independent data sources (e.g., surveys and register data), uses panel data methods to eliminate within subject time-invariant confounders, and exogenous variation in leadership induced by a field experiment among 504 Danish managers.

- A. Jensen, Ulrich T., Lotte B. Andersen, Louise L. Bro, Anne Bøllingtoft, Tine L.M. Eriksen, Ann-Louise Holten, Christian B. Jacobsen, Jacob Ladenburg, Poul A. Nielsen, Heidi H. Salomonsen, Niels Westergård-Nielsen, and Allan Würtz (2015). Conceptualizing and Measuring Transformational and Transactional Leadership. Under review.
- B. Jensen, Ulrich T. and Lotte B. Andersen (2015). Public Service Motivation, User Orientation and Prescription Behavior: Doing Good for Society or for the Individual User? *Public Administration* 93(3): 753-68.
- C. Jensen, Ulrich T. and Christian F. Vestergaard (2016). Public Service Motivation and Public Service Behaviors: Testing the Moderating Effect of Tenure. Conditional accept at *Journal of Public Administration Research and Theory*.
- D. Jensen, Ulrich T., Anne Mette Kjeldsen, and Christian F. Vestergaard (2016). Feeding Back to Motivation? A Longitudinal Study on Policy Change and Public Service Motivation. Revised version of paper presented at the Public Management Research Association Conference, 11–13 June 2015, Minneapolis, MN., USA.
- E. Jacobsen, Christian B., Ulrich T. Jensen, and Lotte B. Andersen (2016). Leadership and Public Service Motivation: How the Combination of Transformational Leadership and Contingent Verbal Rewards Can Motivate Employees. Under review.

- F. Jensen, Ulrich T. and Louise L. Bro (2016). How Transformational Leadership Fosters Intrinsic Motivation and Public Service Motivation: The Mediating Role of Basic Need Satisfaction. Under review.
- G. Jensen, Ulrich T. (2016). Transformational Leadership, Perceived Societal Impact, and Value Fit: Field Experimental Evidence. Revised version of paper presented at the Association for Public Policy Analysis and Management Conference, 10–12 November 2015, Miami, FL., USA.
- H. Jensen, Ulrich T. (2016). Unraveling the Relationship between Transformational Leadership and Employee Performance: Value Fit and Public Service Motivation as Mediators? Revised version of paper presented at the International Research Society on Public Management Conference, 13–15 April 2016, Hong Kong.

The remainder of the report is structured as follows: Chapter 2 considers how we can understand the key constructs of PSM, performance and transformational leadership. Chapter 3 provides an overview of the methodological approaches adopted in the articles and discusses the articles' designs, including measures and sample selection. Chapters 4-6 present the main findings of the dissertation. These chapters discuss whether PSM indeed seems to affect public service behaviors (chapter 4) and whether national policies and organizational leadership can affect PSM in public service organizations (chapter 5) and ultimately increase individual employees' performance (chapter 6). Chapter 7 connects the dots and discusses the theoretical and methodological contributions of the dissertation, examines the limitations of approaches adopted in the articles and outline implications for practice. Finally, the chapter offers some suggestions for future research on how to improve our understanding of the relationships between leadership, motivation and performance in public service.

Chapter 2

Theoretical Framework

This dissertation examines causes and consequences of PSM. In focusing on the causes, the dissertation distinguishes between *internal* and *external* governance interventions – organizational leadership and national policies, respectively – as antecedents of PSM and investigates the implications of PSM for the performance of individual providers of public services. These issues are warranted because they may explain how PSM as a central human resource develops in organizational contexts and affects the outputs of these organizations. Chapters 4 to 6 connect the theoretical constructs introduced in this chapter to form theoretical arguments about 1) the implications of PSM for service behaviors of individual public service providers (chapter 4) and 2) governance interventions as levers for altering individual public service providers' PSM and aligning values in public service organizations (chapter 5 and 6). However, before these theoretical arguments are discussed and empirically tested in chapters 4-6, an inquiry into the central theoretical constructs is needed. This chapter therefore delves into the issues of conceptualizing the key constructs of public service motivation, performance, national policies and transformational leadership. Despite abundant work on public service motivation and transformational leadership, they remain contested concepts (e.g., Bozeman and Su 2014; Van Knippenberg and Sitkin 2013). A crucial first step is therefore to present the dissertation's understanding of such concepts and discuss how these conceptualizations accommodate the important critiques voiced by existing studies.

2.1 Conceptualizing Public Service Motivation

Work motivation can be seen as the energy an individual is willing to invest in her job. As noted in the introduction, it is important to distinguish motivation as the energy or fuel behind actions and values as conceptions of the desirable that direct behaviors towards certain end states (see section 2.1.2 below). Furthermore, it is important to recognize that motivation is a complex construct that can take on a number of forms and originate from different sources. One critical distinction is between motivation fueled primarily by a desire to benefit oneself versus motivation fueled by a desire to do good for others, that is, prosocial motivation. The dissertation predominantly focuses on a particular type of prosocial motivation that is expected not only to prevail in the context of public service but also to predict behaviors and perfor-

mance of people providing public services – public service motivation (PSM) (Perry and Wise 1990).

As research on PSM has accumulated over the past decades, multiple definitions have been offered to capture its essence (e.g., Brewer and Selden 1998; Perry and Wise 1990; Rainey and Steinbauer 1999; Vandenabeele 2007). Following Hondeghem and Perry, the dissertation defines PSM as “an individual’s orientation to delivering services to people with purpose to do good for others and society” (2009, 6). This definition is useful for several reasons. First, it does not affiliate PSM with a particular sector (contrary to original definitions, see Perry and Wise 1990) and this is very relevant because public service may be a powerful motivator in public, non-profit as well as for-profit organizations. Second, it emphasizes the core purpose of this type of motivation: to do good for others and society. Despite its usefulness, critical voices have recently raised concern that the concept is difficult to distinguish from related concepts such as general service motivation (Bozeman and Su 2014). While PSM can be seen as specific kind of service motivation that is directed towards public service provision (Article E, 5), a similar issue concerns how PSM differs from other kinds of prosocial motivation. In other words, do *others* in Hondeghem and Perry’s definition include individual users of public services or only collective entities (such as groups of users)? Article B, “Prescription behavior”, distinguishes PSM from *user orientation* and argues that PSM should be seen as collectivistic motivation aimed at increasing the welfare of a group (such as particular groups of people, a community or society at large) through public service delivery, while user orientation captures the motivation to deliver public service with the purpose of doing good for the specific user (Article B, 754-56). This is important because the public interest is more than the sum of prevalent interests (Wise 2004), and promoting collective goods may be at odds with an aim to advance the interests of individual users (e.g., containing risks of bacteria resistance versus providing treatment to individual patients as illustrated in chapter 4).

PSM can be seen as consisting of four components: “commitment to the public interest”, “compassion”, “attraction to policymaking” and “self-sacrifice” (Perry 1996). The latter represents a fundamental willingness to substitute service to others and society for personal pecuniary rewards. Self-sacrifice is closely tied to the altruistic foundations for the other dimensions (Kim and Vandenbeelee 2010) and has consequently been described as “pure fuel behind prosocial actions” (Brænder and Andersen 2013, 468). The former three components are based on norm-based, affective, and instrumental motives for engaging in public service behaviors, respectively. Norm-based motives rest on a sense of duty and obligation to serve society. Affective mo-

tives concern motivation linked to emotional identification with specific groups (such as underprivileged groups) and research on empathy consistently emphasizes perceived welfare of other people as a powerful motivator (Batson 1987). Finally, instrumental or rational motives depict motivation aimed at improving welfare for the greatest number of people possible through participation in decision-making processes (Kjeldsen 2014).

As noted by Kim and Vandenbeeke (2010), PSM dimensions are distinct and can therefore have different antecedents and consequences. The dissertation consequently retains the multidimensionality of PSM and analyzes the effects of the individual dimensions whenever theoretical arguments justify expectations of differentiated antecedents or consequences (see for example article C, “PSM and public service behaviors”). However, in cases of uniform expectations for all dimensions, a composite PSM construct based on the dimensions is used to increase parsimony (see for example articles B, “Prescription behavior”, and E, “Leadership and PSM”).

2.1.1 State or Trait? The Dynamics of Public Service Motivation

A second critique raised by Bozeman and Su (2014) is that PSM is underdeveloped as a dependent variable. This is closely related to other calls for more research into the dynamics of PSM (e.g., Wright and Grant 2010). In other words, is PSM malleable or is it a stable trait? This is an important question in the sense that managers can only be expected to “manage” through PSM if it is indeed susceptible to socialization processes including leadership. If PSM is conceived as a trait, managers are constrained to “manage” PSM in the organization by using PSM as an indicator in selection (attraction and attrition) processes. Research on the changeability of PSM is still scarce, but recent longitudinal studies all suggest that PSM is indeed malleable to some extent. Investigating entry into the labor market for young physiotherapists, Kjeldsen and Jacobsen (2013) find evidence of a “shock” effect in the sense that PSM decreased after respondents entered their first full-time job. In a study of soldiers deployed in Afghanistan, Brænder and Andersen (2013) found substantive changes from before-to-after deployment. Finally, Ward (2014) found significant developments in PSM from participation in a public service training program. These findings highlight the potential of organizational processes, including leadership, in shaping individuals’ PSM (Paarlberg and Lavigna 2010). The premise of the dissertation is therefore that systematic changes to PSM can happen for two reasons. First, systematic time trends may occur once individuals are employed in organizations. Multiple studies thus find positive correlations between age and PSM (see for example review by Pandey and Stazyk 2008), which suggests that individuals become

increasingly motivated to do good for others and society as they age. Second, and of particular interest here, changes to PSM may occur from significant events in the organizational context such as changes to existing policies or leadership behaviors targeting employees' PSM. Before national policies and transformational leadership are conceptualized, it is useful to distinguish PSM from values in a public service context and introduce the concept of value fit.

2.1.2 Motivated, But to What End? The Importance of Values and Value Fit

As briefly touched upon in the introduction, it is useful to distinguish motivation and specifically PSM from values. The main reason is that PSM can spark actions aimed at fulfilling very different understandings of what is desirable for other people and society. From a managerial perspective, it is thus critical that public service employees and their organization have the same conceptions of what it means "to do good" for others and society. If this is not the case, public service motivated employees may invest energy in actions that do not necessarily support organizational goals and ultimately result in agency loss (Gailmard 2010). Hence, it is very important to distinguish between PSM and values in order to examine towards which end states (conceptions of the desirable) public service motivation is used and to be able to understand the relationships between governance interventions, PSM, and performance.

It is quite common but also highly problematic to conflate the two concepts (e.g., Vandenabeele 2007; Kim et al. 2013), because public service motivated individuals' conceptions of what it implies "to do good" for other people and society may differ from their organization's and/or the recipients' conceptions of the services. Value refers to "conceptions, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means, and ends of action" (Kluckhohn 1951, 395). Following this definition, values entail conceptions of what it means "to do good" for others and society in a particular empirical context, while PSM depicts the energy an individual is willing to invest in pursuing actions consistent with his or her understanding of the desirable (Andersen et al. 2013).

Values are not limited to the individual level; they can also be characteristic of a group such as an organization. Looking at the nexus of individual and organization values, scholars in industrial and organizational psychology, management (Chatman 1989) and public administration (Moynihan and Pandey 2008) point to the importance of a value "fit" and link it empirically

to desirable outcomes such as commitment, prosocial behaviors and performance (Boxx, Odom, and Dunn 1991; Hoffman and Woehr 2006; Kristof 1996). A fit is based on the compatibility of individual and organizational values (Kristof-Brown, Zimmerman, and Johnson 2005). This is also called a supplementary fit because it addresses the similarity between the two sets of values (Muchinsky and Monahan 1987). Hence, a value fit is important because public service motivated individuals are energetic in pursuing their understandings of what is desirable for other people and society. However, if the meaning of “doing good for others and society” is not aligned between the individual employee and the organization, employee PSM cannot readily be expected to translate into higher performance. Metaphorically speaking, the car’s gas tank can be loaded with high-octane fuel, but if the engine burns the fuel heading in the wrong direction, it will not reach the destination.

2.2 Performance: Output and Outcome

Few concepts have been subjected to as intense scholarly scrutiny as performance. Rainey notes that “virtually all of management and organization theory concerns performance and effectiveness, at least implicitly” (2009, 145). Yet, performance is an elusive construct consisting of multiple dimensions and there is no straightforward way to capture its complex nature. One central distinction, and the one that is relevant for this dissertation, is between performance as outputs or outcomes (Boyne 2002). Outputs concern “the actions performed in the production process” (Andersen, Boesen, and Pedersen 2016, 4) and refer to the quantity and quality of such actions. In the context of public service provision, outputs reflect the public service behaviors that bring about services that citizens receive. In primary health care, for example, outputs concern the quantity and quality of medical services provided to patients. Outcomes concern “changes in external units” (Andersen, Boesen, and Pedersen 2016, 4). Units can be individuals or organizations and outcomes therefore refer to such factors as goal attainment or impact on service users. In primary health care, for example, outcomes concern the impact of medical services on the patients’ health status.

While the distinction suggests a sequential order with outputs (public service behaviors) preceding outcomes (goal attainment), both are important to consider. Outcomes are often considered the gold standard and it is crucial to determine whether policies or governance interventions indeed affect the outcomes of public service organizations. Yet, a focus on outputs is equally warranted. PSM studies have thus shown a positive relationship between individuals’ motivation to do good for others and society through public service and outcome-based indicators of performance such as students’

academic achievement (Andersen, Heinesen, and Pedersen 2014; see chapter 4 for others studies) but this does not inform us about the more specific ways PSM affects the behavior of individual public service providers. Outcomes in many public service settings are affected by factors outside the control of public service providers (Ashworth, Boyne, and Entwistle 2010) and for this reason, outputs may also reflect the effort of public service organizations and its personnel more fairly.

2.3 National Policies as External Governance Interventions

Government policies can be seen as instruments for directing the outputs of public service organizations in two ways. First, policies include political aspirations and desires by specifying “who gets what, when, and how” (Lasswell 1936). Messages about which citizens are deserving or non-deserving are absorbed not only by citizens (Schneider and Ingram 1993), but also by the administration mandated with the task to provide public services to citizens: Which citizens are eligible for certain services? When? And how should such services come about? In this sense, policies entail prescriptions for actions in public service organizations.

However, policies are more than the letter of law in that they include administrative practices related to translation and implementation of specific political objectives. As argued by Soss and Moynihan (2014), new policies or changes to existing policies create opportunities and constraints for public service organizations and their personnel by altering administrative practices, structures or requirements in a particular job context. National policies can thus act as governance interventions by affecting the resources and motivation of the public service providers trusted with their implementation. As highlighted by motivation crowding theory (Frey and Jegen 2001), such interventions can have unintended effects on the performance of public service organizations by altering the motivation of its personnel. Specifically, if individual public service professionals perceive the policy or a subcomponent as controlling of their work, internalized kinds of motivation such as PSM risk being crowded out. This implies that individuals are willing to invest less energy in pursuing actions linked to their understanding of “doing good” for other people and society. In contrast, if a policy is perceived as supportive of one’s work, it may crowd in PSM. Policies that change the work conditions for providers of public services are frequent, and it is therefore important for researchers to investigate whether government policies indeed have the potential to alter the PSM of individual public service providers. Soss and Moynihan encourage scholars to use longitudinal data to construct before

and after observations related to policy change (2014, 330), and article D, “Policy change and PSM”. responds to this call. Chapter 4 presents the empirical case of policy change in the context of Danish general medical practitioners and assesses the short- and long-term effects on individual GPs’ PSM.

2.4 Transformational Leadership as Internal Governance Interventions: What Is It?

Transformational leadership originates in the seminal works by Burns (1978) and Bass (1985) and has attracted broad scholarly attention. However, critical voices of the theoretical and empirical underpinnings of transformational leadership research (e.g., Yukl 1999; Van Knippenberg and Sitkin 2013) express several concerns. For example, existing multidimensional conceptualizations see transformational leadership as composed of four dimensions: i) idealized influence, ii) inspirational motivation, iii) individualized consideration, and iv) intellectual stimulation (Bass 1985), but few studies describe how these dimensions differ or how a common factor unites each dimension in order to make up the composite transformational leadership construct (Van Knippenberg and Sitkin 2013). Moreover, multiple studies report high correlations between individual dimensions such as idealized influence and inspirational motivation (e.g., Lowe, Kroeck, and Sivasubramaniam 1996) and without clear theoretical guidance on their distinctiveness it is not evident that the concept is indeed multidimensional.

To accommodate these critiques, article A, “Conceptualizing and measuring transformational leadership”, defines transformational leadership as “behaviors that seek to develop, share, and sustain a vision with the intent to facilitate that employees transcend their own self-interest and achieve organization goals” (Article A, 6-7). This definition is useful for at least two reasons. First, transformational leadership reflects a leader’s systematic use of an organizational vision with the intention to transform employees’ individual values to be supportive of the collective vision. Transformational leaders thus engage in systematic efforts to achieve this transformation rendering transcendence of employees’ self-interest a product rather than a constituent part of transformational leadership itself. Second, transformational leadership is defined along a single dimension as a set of interrelated behavioral indicators: develop, share, and sustain an organizational vision. A one-dimensional conceptualization is less complex than previous conceptualizations (e.g., Bass 1985), but a narrow focus on visionary behaviors as the constituent component of transformational leadership is consistent with studies in the fields of management (e.g., Jung and Avolio 2000) and public admin-

istration (e.g., Wright, Moynihan, and Pandey 2012). Accordingly, this understanding of transformational leadership entails three interrelated behaviors.

Clarifying what the organization aspires to achieve (vision) is a fundamental first step for employees to become aware of designated outcomes, and transformational leaders therefore engage in behaviors that aim to develop a “picture” of the desirable end state for their organization. Second, transformational leaders share the vision with employees by articulating the direction in which the organization is heading and explicating how the daily work of individual employees contributes to the achievement of the collective goals. Third, transformational leaders engage in behaviors that aim to reinforce employees’ perception of task significance by sustaining attention to the vision short- and long-term and by continuously emphasizing how employees’ work tasks support this vision.

Chapter 3

Design

The aim of this dissertation is to assess the impact of governance interventions on PSM and examine the behavioral implications of PSM. Methodologically, this presents a number of specific challenges. At heart is the key challenge of various kinds of endogeneity and as discussed in greater detail below, for example, managers may self-select into organizations or adopt managerial practices based on past levels of employee motivation and performance. Latent employee traits (such as conscientiousness) may be related to both motivation and behavior and, if unobserved by the researcher, generate risks of false positives. To tackle selection bias, reverse causality, and omitted variable bias, the dissertation combines a number of independent data sources – survey, registry, and experimental – and follows the same individuals over time. Table 2 provides an overview of the methodological approaches adopted in the various articles. The dissertation makes comparisons 1) across subjects (i.e., individual public service providers) and 2) within subjects over time, and this section discusses the main strengths and weaknesses of these approaches in terms of assessing the effect of organizational leadership on PSM and investigating the behavioral implications of PSM. Next, the section explains why exogenous variation induced by experimental conditions improves our abilities to draw causal conclusions based on comparisons across and within subjects. Finally, the section discusses the specific challenges that surveys and perceptual measures pose for answering the research question, introduces the key measurement instruments that cut across the articles, and discusses issues related to sample selection and the empirical settings.

Table 3.1 : Article Overview

Independent variable(s)	Dependent variable(s)	Data	Design	Sample
A -	Transformational and transactional leadership	Survey and experiment	Panel with experimental intervention	Day care, schools, high schools, tax offices and banks
B PSM and user orientation	Output-based performance	Survey and register	Cross-sectional	GP
C PSM	Output-based performance	Survey and register	Panel	GP
D Policy change	PSM	Survey	Panel	GP
E Transformational and transactional leadership	PSM	Survey and experiment	Panel with experimental intervention	Day care, schools, high schools and tax offices
F Transformational leadership	PSM and intrinsic motivation	Survey	Cross-sectional	Schools
G Transformational leadership	Value fit	Survey and experiment	Panel with experimental intervention	Day care
H Transformational leadership	Outcome-based performance	Survey and experiment	Panel with experimental intervention	Day care

Notes: "PSM" refers to public service motivation. "GP" refers to general medical practitioners or family doctors, as they are also commonly known.

3.1 Comparing Across and Within Individuals

The dissertation makes comparisons across individuals (spatial variation) and within individuals over time (temporal variation). These approaches raise specific challenges to answering the dissertation's research question. For example, unobserved characteristics of individual employees (such as personality traits) may correlate with both PSM and behavior, and in this scenario we risk observing relationships that are in fact artificial. In addition to omitted variable bias, central problems in investigating the effect of governance interventions on PSM and the behavioral implications of PSM pertain to selection bias and reverse causality. To illustrate these challenges, and how the approaches used in the dissertation are implemented to address these challenges, consider the following example:

Scholars are keen to investigate if organizational leadership can stimulate employee PSM. In the literature there is a strong focus on transformational leadership because transformational leaders, it is argued, not only stimulate the PSM of individual public service providers by activating their higher-order needs (Wright, Moynihan, and Pandey 2012); they may be particularly effective in doing so because they can draw on the strong community- and service-oriented purpose of public service organizations – something that aligns perfectly with the nature of PSM. But does it deliver? To evaluate this, researchers could collect information on transformational leadership, PSM and different background characteristics among public service providers such as schoolteachers. Collecting this information at a single point allows researchers to reach a large number of teachers. The data reveals a positive relationship, but does this mean that transformational leadership in fact stimulates PSM? No. The result is conditional on the observed controls (background characteristics) but what about unobserved variables that correlate with teachers' perception of transformational leadership and their PSM? Omitted variable bias could stem from, for example, individual teachers rating both variables. If teachers are prone to provide reports that conform to social norms about what constitutes desirable attitudes and behaviors, it is likely that the positive correlation is in part driven by social desirability bias.

To tackle this challenge, one could distribute an identical survey to the same teachers at a later time. This is likely to yield a significantly smaller sample due to attrition, but teachers' accounts of transformational leadership and their PSM now capture any variation that occurs over time. Assessing the relationship between change in transformational leadership and change in PSM for individual teachers ensures a more rigorous control strat-

egy. Given that a tendency to provide survey reports in a way that conforms to social norms is a stable trait, the results now effectively control for this, even though the researcher does not directly observe it. In fact, results now control for all factors, observed or unobserved, that do not change over the one year. This applies to characteristics of the teacher, the school principal, the school and all higher-order entities. The data shows that teachers' PSM not only changes over the one year, it changes in a systematic way that is positively related to a change in their perception of the school principals' use of transformational leadership. Does it mean that transformational leadership stimulates PSM?

While the repeated measures allow for a more rigorous control strategy, potential endogeneity threats still lure. Does transformational leadership affect PSM or is it the other way around? It cannot be ruled out that school principals do not adjust their managerial practices in response to employee PSM. To establish the correct temporal order of variables and avoid potential confounding due to selection or time-varying unobservables, the researcher might attempt to induce exogenous variation in principals' transformational leadership behaviors via an experiment.

3.1.1 Experimental Variation

Experiments are a popular tool among scholars concerned with causation. The main reason relates to the establishment of a counterfactual through random assignment of subjects to treatment. Counterfactuals provide the reference point for what happens to subjects (e.g., individuals or organizations) if they are not exposed to changing circumstances (Angrist and Pischke 2009). Returning to the example, by exposing one group of school principals to a transformational leadership intervention (such as a training program) and comparing this group to a group of school principals that receives no stimulus, the researcher can estimate the average treatment effect as the difference between subjects in the treatment and the control group. The difference between groups reflects the average treatment effect because no school principal can both receive and not receive the transformational leadership training (also known as "the fundamental problem of causal inference", see Holland 1986). When school principals are randomly assigned to one of the groups, researchers can be confident that the experimental intervention is the only initial difference between the two groups. Provided that the randomization is successful (that is, the treatment and control groups do not differ on pretreatment outcomes) and school principals do not drop out of the experiment in systematic ways related to the treatment, any systematic

differences in teachers' PSM between the two groups after the training program can be attributed to the transformational leadership intervention.

Many of the articles in the dissertation draw on a cluster-level randomized experiment with public and private managers from day care, primary and upper secondary schools, tax offices, and banks. The experimental stimulus, a one-year training program on transformational leadership, transactional leadership, or a combination of the two, is assigned to managers of the organizations, and employees are expected to be subjected to the treatment indirectly by being nested in the organizations. Managers assigned to the control group did not receive any leadership training. All participating managers are direct managers of employees and heads of their respective organizations/units. Furthermore, it is important to note that managers and employees were surveyed before and after the training (also for organizations in the control group), and the experimental variation can therefore be used to make comparisons across and within subjects. Details on the design and structure of the experiment can be found in Jacobsen, Bøllingtoft, and Andersen 2015 and in two background reports at www.leap-project.dk. Teaching principles behind the leadership treatments are discussed at length in Holten, Bøllingtoft, and Wilms 2015.

Since the implementation of such a large-scaled field experiment requires the conjoint effort of multiple researchers, it is relevant to briefly clarify my specific responsibilities and contributions. Most importantly, I managed the “day care” part of the project (the single largest sector in the experiment) in terms of meeting with key stakeholders (such as the association for public day care managers) and directing the work of two student employees to coordinate and ensure prompt collection of data including contact information on all day care managers in Denmark, personal identification numbers of participating day care managers and day care workers, and staff lists for surveys.

3.2 Perceptions and Use of Surveys

Public administration researchers use surveys extensively to measure perceptual variables, and this dissertation is no exception. All articles in the dissertation draw on perceptual measures to some extent. In general, the main benefit of surveys is their flexible nature that allows scholars to measure a great variety of important variables at a fairly low cost. Surveys can be distributed to a large number of subjects, and this makes it a well-suited data collection method for large-N studies. The dissertation examines a number of attitudinal variables such as PSM and value fit, and surveys make it possible to measure these constructs through a number of indicators/items. Using

surveys and perceptual measures, however, also present some specific challenges for assessing the impact of governance interventions on PSM and examine the behavioral implications of PSM.

Importantly, biases, such as social desirability bias and common source bias, are particularly relevant to consider when relying on perceptual measures for answering the dissertation's research question. Public service providers may provide upward- or downward-biased responses if questions have positive or negative connotations and the individual is concerned about acting in ways that conform to social norms of appropriate behaviors and attitudes. This implies that the error attached to the true value of their attitude is larger than for questions that are not prone to social desirability bias. As shown by researchers this is very relevant to consider when studying PSM (Kim and Kim 2015). Consider, for example, one question from the measure of self-sacrifice: "I am prepared to make sacrifices for the good of society". If social norms dictate that altruism constitutes appropriate behavior (as we would expect in at least very collectivistic countries), then individuals may be inclined to exaggerate their commitment to this value. In other words, measurement error may be systematic and if we examine the relationship between two variables that are both susceptible to this kind of bias, a relationship may be driven in part by social desirability bias.

The latter case is one manifestation of common source bias and this kind of bias is particularly relevant to address for the dissertation. When survey reports are obtained from a single rater (e.g., a manager or an employee) at a single point in time, and some individuals rate both their PSM and their service behaviors in ways that conform to social norms while other individuals are not inclined to provide social desirable answers, biases affecting the way the rater responds to the questionnaire items may create spurious relationships (Meier and O'Toole 2012). The dissertation deals with the concern about common source bias in three ways. First and most effectively, the articles on output-based indicators of performance combine independent data sources (survey data for PSM and registry data for service behaviors), which is the preferred approach whenever possible (Favero and Bullock 2015). However, often we are interested in attitudinal variables on both sides of the equation. The second approach is therefore to utilize the longitudinal data. Given that individuals' latent tendency to answer the same survey questions in ways that conform to social norms is a stable trait, this bias can be controlled for by the person fixed effects estimations (see for example, article H, "Transformational leadership and performance"). Third and finally, several articles aggregate individuals' perceptual measures by organization (e.g., perceptions of transformational or transactional leadership). While shared

contextual conditions related to the organization may still induce some bias (Favero and Bullock 2015), individual-level bias is at least partly mitigated.

3.2.1 Measures

This subsection presents two perceptual measures that cut across many of the dissertation's articles: transformational leadership and PSM. Questions about other variables and discussions of their validity and reliability can be found in the individual articles.

Adding to the conceptual critique of the transformational leadership construct outlined in chapter 2, the widely used measure for transformational leadership – the Multifactor Leadership Questionnaire (MLQ) – is said to measure transformational leadership by its effect (Van Knippenberg and Sitkin 2013). A sample item from the MLQ reads “[my leader] instills pride in me for being associated with him/her”. However, if proposed effects of transformational leadership such as instilling pride or shifting motivation to collective interests become defining parts of the concept itself, then we are excluded from investigating the separate effects of transformational leadership on employee and organizational outputs and outcomes. Based on the one-dimensional conceptualization (cf. chapter 2), the dissertation advances a revised measurement instrument that captures each of the three behavioral indicators and does not confound transformational leadership with its proposed effects. Article A, “Conceptualizing and measuring transformational leadership”, describes how the survey items were selected based on a literature review, revised, and tested for their psychometric properties. A short four-item measure is validated across multiple groups (day care, primary and upper secondary schools, tax offices, and bank branches), different raters (managers and employees) and across time (repeated measures for the same managers and employees with one year between surveys). The four items are presented in table 3.2.

Table 3.2: Measure of Transformational Leadership

[My leader] concretizes a clear vision for the [organization's] future.

[My leader] seeks to make employees accept common goals for the [organization].

[My leader] strives to get the [organization's] employees work together in the direction of the vision.

[My leader] strives to clarify for the employees how they can contribute to achieving the [organization's] goals.

Note: Employee version. Leader version is identical except [My leader] is substituted for [I]. [Organization] is adjusted to the specific empirical context, e.g., 'school'.

While leadership is typically conceived of as behaviors enacted by a manager, researchers are often only able to observe such behaviors indirectly through the perceptions of managers themselves or their employees. Researchers should therefore be careful to consider the implications of relying on managers' or employees' assessment of (transformational) leadership. Numerous studies show that managers are prone to provide upward-biased accounts of their own transformational leadership behaviors compared to assessments made by their employees (e.g., Bass and Yammarino 1991, Jacobsen and Andersen 2015; Jensen and Jacobsen 2016). This is consistent with a recurring observation in the field of psychology that individuals tend to provide inaccurate and overly optimistic judgments of their own character and actions (Brown 1986; Carter and Dunning 2008). Indeed, a self-enhancement bias may be especially pronounced when one judges oneself on traits with very positive connotations such as transformational leadership. On this basis, researchers should be careful to consider the implications of relying on managers' or employees' assessments. The latter may be particularly useful because employees can only be expected to act on the leadership behaviors they perceive in the organization (Wright and Nishii 2007). However, using employees' assessments can also pose methodological challenges if researchers are interested in explaining employees' attitudes such as PSM. The dissertation mainly relies on employees' other-assessments of transformational leadership because such assessments are expected (on average) to resemble managers' transformational leadership behaviors more accurately and constitute better predictors of employee motivation, value fit, and performance (see previous section for a discussion on common source bias and strategies implemented in the articles to mitigate this type of endogeneity).

In line with the multidimensional conceptualizations of PSM, a measurement instrument reflecting the four dimensions “commitment to the public interest”, “compassion”, “attraction to policymaking” and “self-sacrifice” is used. The measure is based on the original instrument outlined by Perry (1996) and includes a few alterations of item wording to make the questions fit a Danish context. The measure has been validated in previous studies (e.g., Andersen, Heinesen, and Pedersen 2014), and article E, “Leadership and PSM”, performs psychometric tests to assess the properties of the measures on a large and heterogeneous on sample of 2,648 employees from day care, primary and upper secondary schools, and tax offices. This measure demonstrates both convergent and discriminant validity and reliability scores indicate that scales are internally consistent. The items are presented in table 4 below. While the dissertation has made a deliberate effort to synchronize the measures of PSM used across the articles, the reader should be attentive to the slight deviations from the measure presented below. This is relevant for articles using GPs as a sample. The overlap is large, however, and the small discrepancies should therefore not be too problematic.

Table 3.3: Measure of Public Service Motivation

Commitment to the Public Interest
It is important for me to contribute to the common good.
I consider public service my civ duty.
Meaningful public service is very important to me.
Compassion
It is difficult for me to contain my feelings when I see people in distress.
For me, considering the welfare of others is very important.
I am often reminded by daily events about how dependent we are on one another.
Attraction to Policymaking
I generally associate politics with something positive.
I do not care much for politicians.
Self-Sacrifice
I believe in putting duty before self.
I am willing to risk personal loss to help society.
I am prepared to make sacrifices for the good of society.

3.3 Sample Selection

The dissertation draws on samples and empirical settings that optimize opportunities to test the impact of governance interventions on PSM and examine the behavioral implications of PSM. For example, examining the behavioral implications of PSM presents several challenges. First, it is required that the empirical setting offers opportunities to improve the wellbeing of others and society through the provision of public services. Second, indicators of the service behaviors of *individual* public service providers should be registered in a manner that offers accurate and reliable accounts of the services delivered to users. While the first requirement can be met in a variety of settings (e.g., schools or nursing homes), the latter is much more challenging. For most public services it is very difficult to observe what people actually do, let alone ascribe service behaviors to single individuals. The articles on the behavioral implications of PSM (cf. articles B and C) overcome these challenges by focusing on general medical practitioners (GPs) in Denmark. GPs' service behaviors are extensively registered because GPs are remunerated (partly) on the basis of the services they provide. Moreover, GPs with single-owner clinics are sole supplier of public services and a unique clinic identifier allows me to link survey reports on PSM with objective indicators on GPs' service behaviors almost unambiguously. In this sense, GPs are selected because this empirical setting presents optimal conditions for examining the behavioral implications of PSM among individual providers of public services (see also chapter 4).

GPs are not only a highly suited setting for assessing the behavioral implications of PSM; they also provide a unique case for evaluating the effect of national policies on individual public service providers' PSM. Observing PSM in relation to actual changes to existing policies is an obvious challenge in evaluating the effects of national policies on PSM. Although changes to existing policies regulating the work of public service providers are not infrequent, predicting when such changes occur is a daunting task. This also means that researchers rarely have access to measures of PSM among the same public service providers before and after a change in national policies. Article D, "Policy change and PSM" takes advantage of a policy change that was implemented in the context of Danish GPs in the summer of 2013 combined with survey reports on the same set of GPs' PSM in the spring and fall of 2013, respectively. Additional survey reports on the same GPs in the spring of 2015 furthermore offer an opportunity to assess short- and long-term effects of the policy change on GPs' PSM.

When we investigate the effect of transformational leadership on PSM, two challenges emerge with respect to sample selection: Transformational leadership should be a commonly used leadership practice, and organizations should be comparable. For this purpose, the dissertation mainly relies on a sample of managers and workers from day care centers. Research shows that transformational leadership is indeed a widely used leadership practice in day care centers (Holm-Petersen et al. 2015) and this supports the notion that this particular kind of leadership is one way day care managers attempt to influence their staff's motivation and effort. Second, day care centers are very homogenous organizations in terms of work tasks and this eases comparison across a large number of day care centers. While transformational leadership is widely used in day care centers, other kinds of leadership (such as transactional leadership) are less prevalent. Hence, in order to examine the augmented effects of transformational leadership and contingent verbal rewards (cf. article E and chapter 5.2) the dissertation includes organizations from other large welfare service areas (primary and lower secondary schools) and administrative organizations (tax collection offices). This ensures the variation in transformational leadership and contingent verbal rewards needed to evaluate the augmented effects of these kinds of leadership on PSM.

While the specific samples are chosen to optimize the opportunities they present for testing the effect of governance interventions on PSM and examine the behavioral implications of PSM, they are not without drawbacks. One systematic difference between the various empirical settings concerns the level of professionalism (that is, the level of specialized theoretical knowledge) of the public service providers. GPs are highly specialized providers of public service with extensive formal training. In comparison, lower levels of professionalism characterize day care workers, and this may limit the opportunities to generalize the results for these samples to other groups of service providers characterized by other levels of professionalism. Andersen and Pedersen (2012) only report a weak correlation between professionalism and PSM, and this suggests that generalizability of the results for the behavioral implications of PSM may not be overly problematic (Article B, 765). However, as I will return to in the concluding discussion, this does not preclude that transformational leadership is differently related to PSM or value fit depending on the level of professionalism of the public service providers.

Chapter 4

Why Care About Public Service Motivation? Implications for Public Service Behaviors

PSM increases performance. Since Perry and Wise (1990) first set forth this hypothesis, the notion that PSM shapes the behaviors and performance of individual public service providers has been at the heart of scholarly interest in PSM. Theoretically, it is argued that when faced with an opportunity to increase the wellbeing of others and society through public service, public service motivated individuals experience a sense of meaning and task significance that spills over into extra job effort (Perry and Wise 1990, 371). In support of this argument, empirical studies have linked PSM to indicators of performance in various contexts (see Brewer 2008; Ritz, Brewer, and Neumann 2016). In their recent review, Ritz and colleagues (2016) find that PSM tends to be positively correlated with individual and organizational performance (across a total of 34 studies). While the bulk of these studies rely on subjective measures of performance, recent studies have started to use objective indicators of performance. This approach helps remedy concerns about common source bias and leniency bias haunting the many of studies on self-reported performance. In a study of Danish primary schools, Andersen, Heinesen, and Pedersen (2014) find teachers' PSM to be positively related to students' academic achievements. Bellé (2013) shows that a change in PSM partially mediates the positive effect of two experimental treatments (self-persuasion and beneficiary contact, respectively) on a range of performance outcomes, including productivity.

While these studies increase our understanding of the relationship between PSM and outcome-based indicators of performance, few studies have investigated whether and when PSM affects the actual public service behaviors of individuals. A focus on output-based indicators of performance in public service is warranted because it can help researchers make more informed recommendations for practitioners as to when PSM constitutes a potential for altering the behaviors of public service providers. Andersen and Serritzlew (2012) offer one recent inquiry into the relationship between PSM and public service behaviors among Danish physiotherapists. As noted by the authors, however, "the physiotherapists' values in general and their understanding of what actions they should take to do good for others and society are very similar" (Andersen and Serritzlew 2012, 22), and this begs the

question how PSM and public service behaviors are related in contexts characterized by conflicting values. Before I discuss the potential behavioral trade-offs involving PSM and other types of prosocial motivation, I first discuss why it can be difficult to study the PSM-behavior link and summarize how GPs constitute a well suited empirical context to overcome these difficulties.

So why is research on the relationship between PSM and public service behaviors so sparse? According to Wilson (1989), many public service tasks are esoteric in the sense that it is difficult to observe what service providers actually do. What takes place in the classroom once the teacher shuts the door and the class begins? How does a doctor behave when consulting a patient? One way to deal with the difficulties of observing actual service behaviors is to shift focus to the outcomes in part produced by behaviors such as student academic achievement or patient health status. Second, many public services are products of joint work by groups or teams of public service professionals. In hospitals, for example, patients' physical wellbeing is likely a product of various factors including correct diagnosis and treatment by doctors and analysts, while patient recovery is dependent on the care of nurses. Multiple doctors and multiple nurses may even be assigned to the treatment and care of individual patients, and this makes it difficult for researchers to pinpoint the relevant service behaviors to investigate and to attribute such behaviors to individual public service providers.

To shed light on the relationship between PSM and public service behaviors of individual public service providers, articles B, "Prescription behavior", and C, "PSM and public service behaviors", focus on general medical practitioners (GPs) and health care service provision in Denmark. This empirical setting is uniquely suited to study the behavioral implications of PSM for several reasons. First, GPs are remunerated on the basis of the specific health care services provided, and a multitude of services are categorized and registered. Second, approximately one-third of all GPs in Denmark work in single-owner clinics. This makes them the sole supplier of services and survey-based measures of PSM, and GPs' actual behavior mapped in the registries can therefore be linked almost unambiguously for this subpopulation. Moreover, using objective indicators of public service behaviors, the studies effectively eliminate concerns for common source bias (Favero and Bullock 2015).

Using a sample of 407 GPs with single-owner clinics, article B, "Prescription behavior", tests whether PSM is related to GPs' prescription of antibiotics. The results indicate that public service motivated GPs prescribe a relatively larger share of so-called narrow-spectrum antibiotics than their less public service motivated peers. This is consistent with the theoretical argu-

ment that PSM is concerned with doing good for society since excessive use of broad-spectrum antibiotics catalyzes the risk of bacteria resistance in the population, rendering existing substances ineffective in future treatment. However, PSM is not significantly related to the total number of antibiotic prescriptions. Further support for the claim that PSM can shape individuals' public service behaviors is found in a balanced two-wave panel on 235 GPs' PSM and use of home visits (i.e., consultations in the patient's home). Using the temporal variation, article C, "PSM and public service behaviors", finds differential effects of PSM on the use of home visits. Home visits are time-consuming services since GPs need to leave their clinic and travel to consult the patient. For this reason, home visits do not necessarily reflect the way to maximize the physical wellbeing of the greatest possible number of people and aspects of PSM linked to a commitment to serve the public interest is negatively correlated with the use of home visits. On the other hand, patients receiving home visits are in special need since they are too weak or otherwise unable to travel to the clinic for treatment. Their health status therefore depends heavily on GPs' willingness to sacrifice selfish considerations (e.g., the economic payoff linked to maximizing the number of regular consultations at the expense of home visits) and emotional identification with the special needs of this group of patients. Consistent with this reasoning, aspects of PSM tied to empathy (compassion) and altruism (self-sacrifice) are both positively related to GPs' use of home visits. One strongpoint of this study is that it examines the relationship between changes in PSM dimensions and changes in the number of home visits and therefore effectively controls for all time-invariant factors related to the GP, the clinic, patient composition and higher-order entities.

These results offer important contributions to the PSM literature by demonstrating 1) that PSM indeed seems to be related to actual service behaviors of individual public service providers, and 2) that it is important for future studies to carefully consider whether PSM is best studied as multidimensional constructs or if dimensions can be combined into a single construct. The results also speak directly to the second part of the dissertation's research question. Corroborating existing theoretical arguments, the dissertation showcases empirical links between PSM and objective output-based performance indicators in the context of health care provision, and this reinforces the notion that PSM indeed holds implications for the behaviors that individual public service providers pursue in their job.

To further nuance our understanding of the PSM-performance relationship and to further qualify an answer to the dissertation's research question, it may be necessary to also consider other kinds of prosocial motivation. While PSM concerns the motivation to do good for collective entities through

public service provision, user orientation depicts the motivation to do good for the individual user of the service (cf. chapter 2). If PSM is indeed collectivistic in scope, the two types of prosocial motivation should be differently linked to the same behaviors in social dilemma settings. Prescribing antibiotics offers such a scenario because treating the individual comes at collective costs in terms of higher risks of bacteria resistance. Article B thus includes user orientation and finds that it is indeed positively correlated with the total number of antibiotics prescriptions per patient – a result that differs from the findings for PSM. While the data does not offer strong evidence of a strict behavioral trade-off, it does suggest that PSM is indeed linked to doing good for collective entities such as society and that PSM can only be expected to shape behaviors targeting the wellbeing of such groups. As I return to the concluding discussion, this is important information for policymakers and managers who wish to capitalize on PSM as a resource for directing actions and effort in public service organizations.

Finally, article C further nuances our understanding of the PSM-performance relationship by drawing attention to an important contextual condition. Changeability of PSM is a prerequisite for managers to be able to “manage” performance through socialization processes targeting employee motivation. Article C and the following chapters all provide evidence that PSM is indeed malleable, but this does not imply that changes in PSM automatically translate into identical implications for performance across public service providers. Article C argues that workers will be less responsive to changes in their level of PSM as they accumulate extensive experiences and routines to guide decision-making in their job (Article C, 9-11). This implies that longer-tenured GPs will rely more extensively on prior experiences and routines when deciding whether to perform a medical service (and particularly when the decision is characterized by a high degree of discretion). Article C shows that the relationship between a change in three PSM dimensions and a change in the number of home visits provided by GPs is indeed attenuated by years of service (tenure). This is important because it suggests that “managing” individuals’ service behaviors through changes in PSM likely does not yield identical behavioral implications for different workers, and that we cannot readily assume that changes in PSM automatically translate into changes in individuals’ performance.

In sum, the two articles make important contributions to the dissertation’s research question and the literature more broadly. Speaking directly to the second part of the research question, articles B and C show that the PSM of individual public service providers relate to their service behaviors and this corroborates the theoretical argument that PSM matters for the behaviors of public service providers. However, the results also offer an additional

contribution by showing that the relationship between changes in PSM and changes in service behaviors is more pronounced among individuals with fewer years of service. These observations reinforce the notion that PSM may have behavioral implications in public service but also that scholars can benefit from theorizing and testing the potential contextual conditions of the PSM-performance relationship.

Chapter 5

“Managing” Public Service Motivation and Value Fit in Public Service Organizations

This dissertation is concerned with the implications of governance interventions for PSM and the consequences of PSM for employee performance. The previous chapter offered evidence of empirical links between PSM and the behaviors of individual public service providers. In light of the evidence from existing studies and the previous chapter on the positive relationships between PSM and output- and outcome-based performance, the central questions become whether PSM can be managed through governance interventions and if so, how? These questions relate directly to the first part of the dissertation’s research question. While governance interventions may come in many shapes, the dissertation focuses on two types of governance interventions that are particularly relevant in the context of public service provision: national policies and organizational leadership.

First, public services can be seen as “services ordered and/or (partly) financed by a government” (Kjeldsen 2012, 18) and provision of such services is therefore embedded in a political context. National policies represent the dominant instrument governments and policymakers can apply to direct and regulate the work of individuals and organizations that provide public services to citizens. For this reason, it is very important to consider whether national policies resemble governance interventions with the power to alter the resources and motivation of public service providers.

Second, organizational leadership, and transformational leadership in particular, is consistently emphasized as a lever for stimulating PSM (e.g., Paarlberg and Lavigna 2010; Wright, Moynihan, and Pandey 2012). Public service motivated individuals are concerned with improving the wellbeing of others and society and transformational leaders target such desires by emphasizing the social responsibility and societal contribution of public service organizations through a clear and compelling vision. For this reason, it is important to consider how transformational leadership can stimulate PSM in individual public service providers.

While PSM denotes the energy individuals are willing to invest in actions that pursue their understanding of what is desirable for others and society, values direct such action by explicating what “doing good” for others and society means in a specific context (cf. chapter 2). It is therefore important not

only to stimulate PSM but also to foster a fit between employee and organizational values. This chapter presents empirical findings on these issues and discusses whether national policies can influence individuals' PSM and whether transformational leadership indeed has the potential to stimulate employee PSM and foster a value fit in public service organizations. The results relate directly to the first part of the dissertation's research questions by shedding light on the implications of two core types of governance interventions for the PSM of individual providers of public services.

5.1 Policy Change and Public Service Motivation

Policies reflect political desires and aspirations as to “who gets what, when, and how” (Lasswell 1936) and a long stream of research suggests that front-line personnel play a key role in implementing specific policies and translating them into organizational outputs. However, policies are not only shaped by public service providers, they also hold the power to change the resources and motivation of public service organizations and their personnel by creating opportunities and constraints through altered administrative practices, structures, or job requirements (Soss and Moynihan 2014).

Unfortunately, research on the effects of national policies on the PSM of individual public service providers is limited. A recent study by Jacobsen, Hvitved, and Andersen (2014) suggests that PSM may be crowded out in the context of nation-wide requirements for Danish schoolteachers to make individual plans for each student. Specifically, the authors find a negative relationship between perceiving the student plans as controlling of one's work and PSM. However, this does not inform us about the changeability of PSM in response to national policies. It is not surprising that little research has surfaced so far. To assess whether policies have an effect on PSM, researchers have to observe the PSM of the same set of individual public service providers before and after the introduction of a new policy or amendments to existing policies. Predicting the timing of such events is extremely difficult, and article D, “Policy change and PSM”, presents a unique test using a three-wave panel of 105 GPs where a policy change occurred between the first two survey waves.

Article D sheds some first light on Soss and Moynihan's argument that policies constitute political forces with the potential to affect PSM by creating opportunities and constraints through altered administrative practices, structures, or job requirements (Soss and Moynihan 2014). The argument is evaluated using a before-and-after design. In this setup, the article utilizes the fact that the collective agreement regulating GPs' work was changed in the summer of 2013 (for more details on the specific policy change please

consult article D) and that survey measures of GPs' PSM were collected in the spring of 2013, the fall of 2013, and finally in the spring of 2015. This enables an investigation of the short- and long-term development of PSM in response to the policy change.

Article D estimates a series of fixed effects panel regressions and the results show that GPs' aspects of PSM linked to commitment to the public interest, self-sacrifice and attraction to policymaking all decreased in the aftermath of the policy change. This is particularly pronounced in the long-term effects (the coefficient is statistically significant for all three dimensions). While these results indicate that the effect of a policy change may be lower levels of motivation, the reverse trend is in fact observed for the PSM dimension based on empathy and emotional identification with underprivileged groups (compassion). Compassion increases in the aftermath of the policy change (the short-term coefficient is statistically significant, the long-term effect is not).

The results point to three important observations. First, national policies indeed seem to hold the power to shape the PSM of individual public service providers. As I discuss in the final chapter, this is important information for policymakers in light of the behavioral implications of PSM (cf. chapter 4). Second, it is important to be attentive to the multidimensionality of PSM since individual dimensions both decrease and increase in the aftermath of a single policy change. Combined with the results of article C, "PSM and public service behaviors" (see chapter 4), this study shows that PSM dimensions can indeed have different causes and consequences as suggested by scholars (Kim and Vandenabeele 2010; Perry 1996). Third, it can be relevant for researchers to consider both short- and long-term effects when we wish to understand the relationship between governance interventions and PSM.

5.2 Organizational Leadership: Visions as a Lever for Stimulating Public Service Motivation?

Organizational leadership is an often-mentioned lever in terms of motivating employees in public service organizations. Scholars claim that transformational leadership is particularly well equipped to stimulate PSM. Transformational leaders, it is argued, foster PSM by communicating and sustaining attention to public service oriented visions to activate the higher-order needs of public service employees (Wright, Moynihan, and Pandey 2012). In other words, transformational leaders capitalize on the social responsibility and societal contribution of public service organizations to visualize, through a vision, how public service motivated individuals contribute to the wellbeing of others and society. However, there are few studies of the mechanisms

through which transformational leaders stimulate PSM and whether transformational leadership works in combination with others kinds of leadership to augment the effects of leadership on PSM.

Scholars have suggested that satisfaction of the basic psychological needs for autonomy, competence, and relatedness is relevant for the transformational leadership-PSM relationship (e.g., Vandenberghe 2014). Article F, “Basic need satisfaction”, contributes to this issue in two ways. First, it theorizes on basic need satisfaction as a psychological mechanism by which transformational leaders stimulate PSM. Second, it tests a mediation model on a sample of Danish schoolteachers to assess whether the relationship between transformational leadership and PSM indeed seems to be mediated by basic need satisfaction.

Theoretically, autonomy refers to a sense of volition in choosing one’s actions; competence refers to a feeling of being capable of achieving designed outcomes; and relatedness refers to a sense of being connected to others in one’s work. In communicating and sustaining a vision, transformational leaders instigate a sense of being efficacious among individual employees by explicating how their work tasks tie into the vision and contribute to achieving designated outcomes. In other words, by making it vivid to employees how their work tasks connect to the broader organizational objectives, transformational leaders foster satisfaction of the basic need for competence, and satisfaction of a need to feel efficacious in one’s job is considered an antecedent of PSM (Vandenberghe 2014, 156). The latter part of the equation is also supported by research on goal setting, which demonstrates that individuals become more motivated when they feel capable of reaching designated goals (Wright 2001). Arguments for the mediating role of the basic needs for autonomy and relatedness can be found in article F.

Empirically, article F uses structural equation modeling to test satisfaction of the basic needs for autonomy, competence, and relatedness as mediators of the transformational leadership-PSM relationship on a sample of 1,481 Danish schoolteachers. Consistent with the theoretical arguments, the relationship between teachers’ perception of school principals’ transformational leadership behaviors and schoolteachers’ PSM is mediated by satisfaction of their needs to feel efficacious in their job and to feel connected to others. The data does not provide empirical support for satisfaction of the basic need for autonomy as a mediator.

While the article offers a theoretical account of one way transformational leaders can motivate others, the empirical tests are limited by the cross-sectional design of the study (cf. chapter 3). Moreover, the article does not consider whether other kinds of leadership can work in combination with transformational leadership to stimulate even higher levels of employee

PSM. To supplement article F, article E, “Leadership and PSM”, uses temporal and experimental variation to test the effect of transformational leadership and two types of transactional leadership (i.e., contingent use of verbal and pecuniary rewards).

Drawing on a two-wave balanced panel of 340 public managers (day care, primary and upper secondary schools, and tax offices) and their 2,648 employees, the article presents two tests. First, it examines whether the public managers’ leadership (as perceived by the employees) in one year is positively related to employees’ PSM the following year controlled for employees’ initial level of PSM. The results suggest that transformational leadership is indeed positively related to PSM but only when used in combination with contingent verbal rewards. Second, the article utilizes the fact that managers were (randomly) assigned to a leadership training program (transformational, transactional or a combined treatment) between the two survey waves (please consult article E for details on the intervention). Consistent with the abovementioned results, the experimental test shows a positive regression coefficient for PSM when comparing employees of managers assigned to the combined treatment group with employees of managers assigned to the control group (the latter serves as reference group). The regression coefficient is not statistically significant, however, as shown in Table 3 of article E, “Leadership and PSM”.

Taken together, the results indicate that transformational leadership can stimulate employee PSM as suggested in existing public administration research (e.g., Paarlberg and Lavigna 2010; Wright, Moynihan, and Pandey 2012) but that it may require that public managers also use contingent verbal rewards to signal to employees when they contribute to the organizational vision. Moreover, results are based on changes over the course of one full year, and it may therefore require a substantial time horizon for leadership to change employees’ PSM. The results need to be interpreted with some caution, however, because a very stringent test using only experimental variation in leadership does not show a statistically significant effect of a combined transformational and transactional leadership training program on employee PSM. While it cannot be rule out that this discrepancy may be explained by confounding in the case of the non-experimental findings, the experimental results “point” in the same direction as theoretically expected (that is, a positive relationship), and this suggests that future research can benefit from designing an experiment with more power to draw up more firm causal conclusions on the leadership-PSM relationship. I return to this issue in the concluding chapter and discuss in more detail potential explanations for the discrepancy between these empirical findings.

5.3 Organizational Leadership: Visions as a Lever for Aligning Values in Public Service Organizations?

To understand the relationship between organizational leadership and PSM, this dissertation argues, researchers need to also look at the content of the visions linked to the values of employees. While PSM denotes the energy individual public service providers are willing to invest in actions aimed at their understanding of what is desirable for others and society, values depict what “doing good” means more specifically. If employees hold conceptions of the desirable that differs from the values linked to their managers’ vision, transformational leaders may do more to align the employees’ values with those of the organization and less to increase their motivation. Returning to our metaphor from chapter 2, transformational leaders may not necessarily provide more high-octane fuel but rather ensure that the engine burns the existing amount of fuel heading in the right direction towards its designated destination. It is therefore not only important to look closely at the transformational leadership-PSM relationship, but also to investigate whether transformational leadership indeed holds the potential to foster a value fit by aligning values of individual employees and those of their public service organization.

Indeed, the notion that transformational leaders can align values of individual employees with those of the organization by engaging in behaviors that aim to articulate, communicate and sustain attention to a collective vision is not new (see for example Bass 1985 or Shamir, House, and Arthur 1993). Scholars of public management have argued that the link between transformational leadership and value fit is particularly salient in public service organizations because such organizations have strong service- and community-oriented visions (Wright, Moynihan, and Pandey 2012) and public service personnel value service to others and society (Perry and Wise 1990). Moreover, a distinctive feature of public organizations is the multiplicity of, sometimes vague or even conflicting, goals (Chun and Rainey 2005). Different – and even competing – understandings of what is desirable for other people and society thus likely exist in such organizations, and this increases the need to fill in the leeway in interpreting politically formulated goals, translating them to the organizational context and communicating the values linked to designated outcomes. For these reasons, transformational leadership may be particularly relevant when it is considered whether and when organizational leadership can align values of individual employees with those of their organization.

Article G, “Transformational leadership and value fit”, examines the relationship between transformational leadership and value fit. The main expectation in the article is that transformational leaders in public service organizations increase the value fit by articulating, sharing, and sustaining attention to a vision that emphasizes collectivistic norms such as social responsibility and service to others (Article G, 6-7). While the theoretical argument is not new, little empirical research have examined whether and when transformational leadership indeed affects the value fit in organizations. The bulk of existing studies rely on cross-sectional research designs (e.g., Hoffman et al. 2011; Pandey et al. 2016) and have generally neglected to explore the potential contextual conditions of the transformational leadership-value fit relationship in public service settings.

The article addresses these challenges in two ways. Drawing on the concept of perceived societal impact, it first argues that the effect of transformational leadership on value fit is strengthened when employees perceive that they can affect the wellbeing of others and society in their job (Article G, 7-9). Only if employees clearly see how their job contributes to society is a vision emphasizing social responsibility and societal contribution credible to the individual employee. If it is not vivid to employees how their jobs can make a difference in the lives of others and improve the wellbeing of society at large, a vision emphasizing social responsibility and societal contribution is easily perceived a “cheap talk”. Second, the article draws on a field experiment with 142 Danish day care managers (cf. chapter 3.1.1). The managers were randomly assigned to a transformational leadership training program or to a control group, and perceptual measures of value fit and perceived societal impact were obtained among the same 583 day care workers before and after the one-year leadership training program.

The results indicate that transformational leadership indeed positively affects value fit in the day care centers but only when day care workers’ initial perceived societal impact is high. The relationship between transformational leadership and value fit is positive as predicted by transformational leadership theory, but it does not achieve statistical significance at the 0.05 level. Hence, these results strongly indicate that managers in public service organizations should pay close attention to employees’ initial perceptions of societal impact of their job when they strive to align the values of individual employees and those of the organization. Transformational leaders may establish a sense of purpose and shared collective identity by emphasizing the social contributions of the organization, but if employees do not perceive that their job affects the wellbeing of others and society, promoting prosocial values as part of the organization’s vision may easily be perceived as simple rhetoric or “cheap talk” (Article G, 18-19).

In sum, the articles presented in this chapter contribute to the first part of the dissertation's research question and to the literature in several ways. Distinguishing between external governance interventions (national policies) and internal governance interventions (organizational leadership), the results suggest 1) that changes to existing policies may have the power to alter the PSM of individual public service providers, and 2) that the combination of transformational leadership and contingent verbal rewards can stimulate PSM over the course of one year. These results support the notion that governance interventions – both at the national and local level – hold the potential to alter the PSM of individual providers of public service. Taken together with the results presented in the previous chapter, these types of governance interventions thus seem to represent levers for “managing” not only the PSM of individual public service providers but also their service behaviors. Similar to chapter 4, this chapter highlights the importance of context by showing that transformational leadership can positively affect the fit between employees' values and the values of their organization but only when employees initially perceive that their job affects the wellbeing of others and society. In this sense, the results reinforce scholarly interest in investigating transformational leadership as a lever for stimulating PSM and aligning values in public service organizations, and highlight the value for scholars in considering the potential contextual conditions of these relationships.

Chapter 6

Disentangling the Effects of Transformational Leadership on Public Service Motivation, Value Fit, and Employee Performance

The aim of this dissertation is to shed light on the causes and consequences of public service motivation. So far, the previous chapters have demonstrated links between PSM and output-based indicators of performance in the context of health care provision (cf. chapter 4) and examined the dynamics of PSM in face of two types of governance interventions, changes in government policies and organizational leadership (cf. chapter 5). These results add important pieces to the puzzle of the relationships between governance intervention, motivation, and performance in public service but it is necessary to unravel the relationship between governance relationships and performance not only piecewise but also in comprehensive empirical models. This chapter aims to unravel the relationship between transformational leadership and employee performance by looking into PSM and value fit as distinct albeit related mediating factors. In addition to bringing together the theoretical arguments presented in earlier chapters, the chapter thus also offers empirical evidence directly linked to answering the dissertation's research question.

Article H, "Transformational leadership and performance" takes a starting point similar to the articles presented in earlier chapters: PSM depicts the energy individuals are willing to invest in actions aimed at their understanding of what is desirable for others and society, while values explicate what "doing good" for others and society means in a particular empirical context (cf. chapter 2). In this sense, fueling the PSM of public service employees may add little, or may even be detrimental, to performance if employees use this energy to pursue conceptions of what is desirable for others and society that are not supportive of the organization's goals (Gailmard 2010). Consequently, it is very important to consider PSM and value fit simultaneously to understand the relationship between organizational leadership, motivation and performance.

While scholars have pointed to both PSM (e.g., Paarlberg and Lavigna 2010) and value fit (e.g., Jung and Avolio 2000) as mediators of the transformational leadership–performance relationship, a comprehensive theoret-

ical account of their distinct effects has yet to be offered. In fact, it is not uncommon to conflate PSM and values (e.g., Vandenabeele 2007; Kim et al. 2013) as exemplified by Caillier (2014, 223), who argues that high-PSM employees “will be committed to mission-oriented goals in public agencies, for the reason that these goals are congruent with their values”. However, this is problematic because it assumes that high PSM and value fit go hand in hand, but as discussed throughout this dissertation, this is by no means a given conclusion. Article H therefore outlines “motivating others” (that is, stimulating PSM) and “convincing others” (that is, fostering a value fit) as two distinct but related ways transformational leaders can increase employee performance in public service organizations (see article H, 6-10).

Existing studies probing the relationships between transformational leadership and PSM and value fit respectively (e.g., Pandey et al. 2016; Vandenabeele 2014; Wright, Moynihan, and Pandey 2012) rely on cross-sectional research designs, which leads to two important questions. First, a single snapshot does not enable scholars to assess the temporal dynamics of these relationships: Does transformational leadership change PSM and value fit over time? Second, cross-sectional research designs are often not well equipped for drawing causal conclusions due to risks of endogeneity such as omitted variable bias or reverse causality (Wright and Grant 2010). Article H therefore presents the results of two tests.

Drawing on a multilevel balanced data set of 844 day care workers from 153 day care centers, first-difference regressions are estimated for a model with PSM and value fit as mediators of the transformational leadership-performance relationship. Analyzing change on change, the estimation controls for all time-invariant characteristics of the day care workers, the manager, the day care center, and higher-level entities (e.g., the municipality characteristics). The results indicate that changes in perceived transformational leadership (an organization mean score) indeed seem to be positively correlated with changes in employees’ value fit and that changes in value fit are positively correlated with changes in employees’ self-assessed performance (that is, an assessment of the degree to which they meet performance criteria in their job; see article H for more details). The joint indirect path is statistically significant with the bias-corrected confidence interval excluding zero.

In contrast, and against theoretical expectations, the article does not find any clear evidence of PSM as mediator of the transformational leadership-performance relationship (although changes in perceived transformational leadership are positively correlated with changes in PSM). Moreover, the article utilizes the fact that day care managers were randomly assigned to a one-year training program on transformational leadership, transactional

leadership or a combination of the two. Approximately one fourth of the managers were assigned to a control group that did not receive any leadership training. Using only the experimental variation, the article cannot detect any statistically significant results, however. A number of explanations may account for these insignificant findings as discussed below.

In sum, article H offers some evidence of transformational leadership as an antecedent of PSM and value fit in public service organizations and of value fit as a mediator of the transformational leadership-performance relationship. This is very relevant because it sheds important new light on the relationships between organizational leadership, motivation and performance in public service organizations, and offers both anticipated and unanticipated empirical evidence on the dissertation's research question. The next chapter picks up on this observation and discusses how the findings across the different articles contribute to an answer on the overall research question.

Chapter 7

Connecting the Dots: Contributions, Limitations and Implications

This dissertation sheds light on the causes and consequences of public service motivation (PSM). PSM is considered a central human resource in public service organizations with the potential to bring about public service improvements at little or no extra costs to managers and policymakers (Perry and Hondeghem 2008). Still, research on how PSM develops in organizations and how governance interventions may stimulate this kind of prosocial motivation is limited. Furthermore, sparse research has considered PSM alongside individual values and this is problematic because national policies and organizational leadership may be focused on aligning values to ensure that the effort of individual public service providers is supportive of political and organizational goals. These gaps critically limit our opportunities to make sound recommendations to policymakers and managers on ways to foster, or paths to avoid in order not to hamper, PSM and ultimately improve public service performance. The dissertation argues that governance interventions at the national level, i.e. policies, and at the local level, i.e. organizational leadership, hold the power to affect PSM of public service providers, and it adopts a number of methodological approaches to rigorous empirical tests of these assertions. While existing research in general demonstrates a positive relationship with outcome-based indicators of performance (e.g., Andersen, Heinesen, and Pedersen 2014; Bellé 2013), less attention has been devoted to the implications of PSM for individual public service providers' service behaviors. However, a strong focus on output-based indicators of performance is equally warranted because it offers concrete evidence for managers and policymakers on ways to capitalize on PSM to direct effort in public service organizations. The dissertation thus makes an important contribution to the literature by demonstrating empirical evidence on the links between PSM and objective indicators of public service behaviors. To address these gaps and answer the research question, the dissertation combines data sources – surveys, register, and experimental – and uses various methodological approaches to offer rigorous empirical evidence on the relationships between governance interventions, PSM, and performance. This chapter discusses the main contributions of the dissertation by connecting the dots and contributions of the individual articles and chapters in this report. Following this section, the chapter briefly discusses the recurring

theme of context. Next, the chapter highlights the methodological strongpoints of the approaches adopted in the studies and draws attention to some of the caveats. Finally, the chapter discusses implications for practice and scholarship.

7.1 Overview: Connecting the Dots and Contributions

In answering the research question: “Do governance interventions affect public service motivation and what are the implications of public service motivation for employee performance in public service organizations?”, the dissertation offers four main insights.

First, it corroborates existing studies on the PSM-performance relationship by demonstrating positive correlations between PSM and objective indicators of public service behaviors. These results reinforce the notion that PSM indeed has implications for performance in public service, and that it may constitute a(n) (untapped) resource for improving public service provision at little or no extra costs. These results not only speak directly to the second half of the research question, they also offer important contributions to existing research on motivation in public service organizations. Work motivation, and PSM in particular, keeps attracting immense scholarly attention. Much of this interest is grounded in PSM’s alleged effects on the behaviors and performance of public service providers, but few studies have been able to rigorously examine the link between PSM and objective indicators of public service behaviors. Using a uniquely suited empirical setting, the dissertation shows 1) that PSM is related to the provision of public services, and 2) that PSM and prosocial motivation concerned with the wellbeing of individual users (user orientation) may be differently related to the same behaviors in social dilemma situations.

Second, the dissertation offers a first inquiry into the potential effects of national policies on the PSM of individual public service providers. Policies resemble a key instrument for policymakers to regulate and direct the actions of public service providers, and it is therefore very important to evaluate whether policies indeed hold the power to alter the resources and motivation of public service providers as recently suggested by Soss and Moynihan (2014). However, assessing the effects of policy changes on PSM is a daunting task. Researchers can seldom predict the timing of policy changes and rarely have access to reports on PSM among the same public service providers before and after such events. The dissertation draws on a unique data set with three survey waves and a policy change implemented between the first two survey waves enabling an examination of both short- and long-term ef-

fects of a policy change. Results indicate that PSM dimensions both increased and decreased in the aftermath of the policy change suggesting that researchers should pay close attention to governance interventions stemming from the political level. This point is reinforced by the observation that three of four dimensions of PSM actually decreased in the face of the policy change and only one dimension increased. While the dissertation does not include measures on individuals' perception of the policy change as controlling or supportive of their work, the results seem to corroborate existing arguments and empirical evidence that national policies may crowd out autonomous kinds of work motivation such as PSM (see for example Jacobsen, Hvitved, and Andersen 2014).

Third, the dissertation contributes to existing calls to evaluate the effect of organizational leadership, and transformational leadership in particular, on PSM. Directly linked to the first half of the dissertation's research question, I argue that transformational leaders stimulate PSM by satisfying employees' basic needs for autonomy, competence and relatedness. Empirical support for satisfaction of the basic needs for competence and relatedness as mediators of the transformational leadership-PSM relationship is found on a sample of Danish schoolteachers. Similar to the bulk of existing studies (see Ritz, Brewer, and Neumann 2016 for a recent overview), however, these results rest on a cross-sectional research design, and this leaves the findings vulnerable to concerns about various kinds of endogeneity, such as omitted variable bias. To address these methodological shortcomings, the dissertation draws on longitudinal and experimental data. Corroborating the argument that transformational leaders can stimulate employee PSM by engaging in behaviors that seek to develop, share, and sustain attention to an organizational vision, results of the panel regressions indicate a positive relationship between changes in transformational leadership and changes in PSM (cf. article H) and potential augmented effects of transformational leadership in combination with contingent verbal rewards (one year) on PSM (the next year) (cf. article E). The experimental results do not show statistically significant results. In general, these results reinforce scholarly interest in organizational leadership as a potential lever for stimulating PSM but also highlight that transformational leadership cannot automatically be assumed to result in higher PSM in public service organizations. Changing PSM may require a substantial time horizon, and leadership interventions may require even higher intensity than the one provided in the experiment presented here (even though it is the most intense treatment to date, see Andersen et al. 2014 for comparisons with existing field experiments). Potential explanations for the insignificant experimental results and ways ahead for researchers are discussed in more detail below.

Fourth and finally, the dissertation includes values and compatibility between employees' individual values and those of their organization: value fit. The dissertation argues that it is very important to include values and distinguish values from PSM to understand the relationships between transformational leadership, PSM and performance. PSM depicts the energy individuals are willing to invest in actions aimed at their understanding of what is desirable for others and society, while values explicate what "doing good" for others and society means in a particular empirical context (Andersen et al. 2013). As noted in article E, "if the transformational leader applies a vision, which is not seen as desirable by the employee, it is very plausible that transformational leadership does not increase PSM, at least in the short run" (Article E, 21). Consistent with this notion, the dissertation shows that transformational leaders may do more to align values, at least in the short term. Transformational leadership, as induced exogenously by the experiment, is found to positively affect value fit when employees' baseline perception of the effect of their job on the wellbeing of others and society is high (article G), and changes in value fit are found to mediate the relationship between changes in transformational leadership and changes in employees' self-assessed performance (article H). This makes an important contribution to the existing literature, not only by demonstrating the importance of clearly distinguishing between PSM and value fit, but also by including both when we wish to understand the relationship between transformational leadership and PSM.

In sum, the four main insights all contribute to answering the question: "Do governance interventions affect public service motivation and what are the implications of public service motivation for employee performance in public service organizations?" Distinguishing between *external* and *internal* governance interventions, the dissertation provides empirical evidence to suggest 1) that changes to existing national policies have the power to alter individual public service providers' PSM, and 2) that the combination of transformational leadership and contingent verbal rewards can stimulate individual public service providers' PSM. Taken together these findings reinforce scholarly interest in these governance interventions as levers for affecting PSM and value fit in public service organizations. Second, the dissertation offers empirical evidence that PSM has implications for objective public service behaviors, at least in the case of health care provision by general medical practitioners, and this suggests that national policies and organizational leadership not only seem to represent levers for "managing" the PSM of individual public service providers but also their service behaviors. To further qualify the answer to the research question, the next section briefly discusses the role of context.

7.2 The Role of Context

A recurring theme in the dissertation is the role of context. In an evaluation of the behavioral implications of PSM in the context of health care provision, the relationship between a change in PSM and a change in the provision of a specific medical service (home visits, cf. article C) is attenuated by years of service. This observation is consistent with an argument that workers' decision-making is guided by past experiences and routines gathered in the job (see article C, 9–11) and as experiences and routines accumulate, public service providers become less prone to change their behavior in response to a change in their PSM. An emphasis on the situational factors responds to a call by Perry and colleagues for PSM scholars to look into the “contextual factors related to individual actors, situations, events, and organizations in which behavior occurs that influences the strength of PSM” (2010, 688) but also to a more general call to consider contextual conditions when examining the management-performance linkage (O'Toole and Meier 2015).

Further relevance of this call is presented in the study on the effects of transformational leadership on value fit. Examining only the main effect, one would be inclined to conclude that the transformational leadership treatment has no significant effect on the fit between the values of the employees and the values of their organization. Yet, considering employees' initial perception of the impact of their job on the wellbeing on others and society, the transformational leadership treatment kicks in for high levels of perceived societal impact. Hence, transformational leadership indeed seems to affect value fit positively as suggested by theory, but only when the public service providers perceive that their job contributes to the wellbeing of other people and society at large. Taken together, these results not only qualify the answer to the dissertation's research questions, they also contribute to a broader agenda in public management research that encourages researchers to consider potential moderators of the management-performance linkage.

7.3 Methodological Strengths and Caveats

In addressing the causes and consequences of PSM, the dissertation advances several methodological contributions. Most importantly, several articles are designed to mitigate concerns for endogeneity and ensure high internal validity of the empirical findings. Three core examples are the dissertation's use of experimental data, longitudinal data and the combination of independent data sources. Starting backwards, a common source may bias the relationship between variables on both sides of the equation (for example PSM and self-assessed performance) when both are obtained from a single

rater at one point in time (Meier and O'Toole 2012). As noted by Favero and Bullock (2015), however, an effective way to eliminate potential common source is by combining independent data sources for the independent and dependent variable, and this approach is adopted in the articles on the behavioral implications of PSM (cf. articles B and C).

If concerns for common source bias stem from questionnaire items being susceptible to response patterns that conform to social norms about appropriate behaviors and attitudes, a second, but also effective, way to eliminate this and all other time-invariant characteristics of the employee (such as stable personality traits), the manager, the organization, and all higher-order entities is to analyze temporal variation within individuals. Several of the articles draw on balanced panels with two survey waves, and estimating change on change in this scenario corresponds to estimating individual fixed effects (Allison 2009). In other words, these analyses adopt a more rigorous control strategy by eliminating all potential time-invariant – whether observed or unobserved – confounders related to the individual employees or any higher-order entity in which the employee is nested. Longitudinal data are still sparse in public administration and public management research, and the dissertation makes a methodological contribution by using such data and showcasing its importance for building strong empirical evidence on the relationships between governance interventions, PSM, and performance.

Third and finally, the field experimental evidence on the effects of organizational leadership on PSM and value fit represents a significant methodological contribution. Field experiments are still a rare guest in public administration research, but they hold enormous potential to address questions of cause and effect. Based on random assignment of managers to one of three treatment groups resembling a one-year leadership training program (on transformational leadership, transactional leadership, or a combination of the two) or a control group, the dissertation illustrates how field experimental approaches can be used to study the effects of leadership on PSM and circumvent concerns for endogeneity such as omitted variable bias or reverse causality. Due to its ways to deal with endogeneity, scholars have recently called for more research using experimental methods (Bouwman and Grimelikhuijsen 2016), and this dissertation further encourages scholars to pursue this kind of research to draw firm conclusions on the effects of governance interventions on PSM and the behavioral implications of PSM (see Bellé 2013 for one recent exemplary example).

Taken together, the articles are generally designed to ensure high internal validity. This is important because it offers a safeguard against drawing conclusions about relationships or correlations that are in fact artificial. However, it is also evident that all approaches presented above are not

equally equipped to serve this purpose. The experimental data ensures the highest degree of internal validity of the approaches adopted in the articles due to the randomization of subjects (managers) to treatment or control groups. Longitudinal data and fixed effects regressions allow for a rigorous control strategy, but it cannot clearly establish the temporal order of variables, and reverse causality is therefore a real concern here. Finally, articles relying on cross-sectional data are more prone to confounding due to unobservables, and this approach generally offers the lowest degree of internal validity. Hence, it is important for the reader to interpret the findings in light of the studies' designs and the emphasis on ensuring high internal validity of the empirical results.

In addition to questions of internal validity, the dissertation's findings are characterized by at least two caveats concerning external validity. First, it can be questioned whether results in the specific articles can be generalized to a broader population. For example, findings on the behavioral implications of PSM rest solely on GPs with single-owner clinics and this group of GPs may differ in systematic ways from the population of Danish GPs. Single-owner GPs are in charge of their own organization and their PSM can therefore be expected to affect outputs more than PSM in organizations with a team of GPs. Similar considerations of statistical inference can be raised for the other articles, and the individual articles therefore discuss this issue in more detail.

Second, all articles draw on public service areas (e.g., day care, primary and upper secondary schools, primary health care provision) in a single country: Denmark. Denmark has one of the highest levels of government spending as a share of GDP among OECD countries (OECD 2015) and may therefore not be representative of OECD and Western countries. Even within Denmark, it is not immediately clear that the empirical findings can be generalized to other functional areas. For example, one central distinction between occupational groups of public service providers is their level of professionalism. Public service providers characterized by high levels of professionalism are, at least in part, guided by specialized, theoretical knowledge and strong intra-occupational norms (Andersen and Pedersen 2012) and it may therefore be more difficult to change individuals' values in this setting (especially if the values espoused by the manager conflict with the professional norms). In article G, I find that transformational leadership positively affects value fit in the context of low professionalism (day care workers, cf. Andersen and Pedersen 2012, 50–52) when employees perceive that their job affects society, but it is likely that one may find smaller effects in contexts of high or very high professionalism (e.g., among GPs or upper secondary school teachers).

In sum, the articles are generally designed to ensure high internal validity and mitigate concerns about endogeneity, but questions remain whether the empirical findings extend beyond the specific samples and whether the findings are equally applicable in other functional areas and in other national contexts.

7.4 Implications for Practitioners

The dissertation has a number of implications for policymakers and managers. On the behavioral implications of PSM, the findings reinforce a notion of PSM as a central human resource in public service organizations. PSM is related to objective output-based indicators of performance and this suggests that policymakers and managers may consider PSM a motivational lever for improving public service performance. Given that PSM is a specific kind of prosocial motivation aimed at increasing the wellbeing of collective entities such as society, however, practitioners should be careful to consider potential dilemmas or trade-offs between the underlying values of PSM and other kinds of prosocial motivation, such as user orientation. In addition, changes to PSM may translate into changed patterns of service behaviors for some public service providers but not for others. Specifically, the empirical findings suggest that PSM change may be particularly powerful in changing behaviors among individuals with fewer years of service. Since public service organizations are typically staffed with workers of different tenure, managers may expect “managing” PSM to be most powerful in changing service behaviors among workers with little prior work experiences and few routines to guide their decision-making.

The empirical findings also imply that both policymakers and managers should be attentive to governance interventions as ways to influence individuals’ PSM. Specifically, policymakers may consider how changes to national policies that regulate the work of public service providers may alter the PSM of individual public service providers. Indeed, the results indicate that the same policy change can foster and dampen aspects of PSM. Importantly, however, three out of four PSM dimensions were shown to decrease in the short term and even more in the long term. In other words, policy changes can have lasting diminishing effects on individual PSM, and this is critical information since PSM is linked to output-based indicators of performance. While the dissertation cannot disentangle the mechanisms behind these developments, motivation crowding theory suggests that individuals’ perceptions of such policy changes as supportive or controlling of their work are crucial. Policymakers should therefore pay attention to how the contents of policy changes and their implementation are perceived by public service pro-

viders and whether such changes have unintended consequences by crowding out PSM.

Finally, the empirical findings reinforce the notion that transformational leadership may constitute a lever for stimulating PSM and aligning employee and organization values in public service organizations. This corroborates the notion that transformational leaders by engaging in behaviors to develop, share, and sustain attention to an organizational vision can capitalize on a match between employees' desire to serve other people and society and the service- and community-oriented visions of public service organizations. However, the findings also imply that managers cannot assume that transformational leadership automatically translates into higher PSM. Findings suggest that to stimulate PSM within one year, managers in public service organizations may benefit from combining transformational leadership behaviors with contingent use of verbal rewards to signal to employees when they contribute to the organizational vision. Similarly, managers cannot readily assume that engaging in transformational leadership behaviors aligns the values of individual employees with those of the organization. If employees cannot connect the social responsibility and societal contribution linked to the vision of a public service organization with the characteristics of their own job, articulating and communicating such a vision is likely to be perceived as "cheap talk". The findings thus imply that transformational leaders can foster a value fit in public service organizations but only when employees' perception of the societal impact of their job is high, and it is therefore warranted for managers to consider whether employees clearly see the contribution of their job to the wellbeing of other people and society at large.

7.5 Where Do We Go from Here? Implications and Directions for Future Research

Several implications for scholarship and future research follow from the dissertation. A recurring finding across several papers is a discrepancy between results based on the non-experimental data and on the exogenous variation in transformational leadership induced by a one-year leadership training program (cf. article E and H). Specifically, results based on the non-experimental data show positive relationship between transformational leadership and PSM and value fit, respectively, as expected by theory. However, relying on the experiment among Danish public and private managers, the articles do not find statistically significant main effects on PSM or value fit. In light of recent calls for more experimental research in public administration (e.g., Bouwman and Grimmelikhuijsen 2016), it is very relevant to scrutinize this observation and discuss its implications for future research.

First, it cannot be ruled out that this discrepancy is because of confounding in the case of the non-experimental results. Yet, the experimental results – while not statistically significant – do “point” in the expected direction in the sense, that they indicate positive relationships between transformational leadership and PSM and value fit, respectively. A different potential explanation is that PSM and values are stable bases for actions that do not change rapidly, or at least not within the year of the leadership intervention. While this is consistent with some understandings of PSM (Wright and Grant 2010), PSM and value fit show substantial temporal variation (cf. article H). Another explanation could be that managers do not interact sufficiently with employees to “pass on” the vision, but day care centers are small organizations compared to other public service organizations (such as schools), and other research shows that day care managers indeed interact extensively with their staff (Holm-Petersen et al. 2015). Finally, one may consider the intensity of the treatment. As discussed by Andersen and colleagues (2014), the field experiment in fact offers the most intense treatment to date in terms of length of treatment and number of participating managers. Yet, even in the case of the largest field experiment on transformational leadership to date, the dissertation is unable to detect main effects on PSM and value fit. Future research would therefore benefit from increasing the statistical power to draw firm conclusions on the relationship between transformational leadership, PSM, value fit and performance.

Another way for future research to approach these insignificant results is to examine both short- and long-term effects. As illustrated by article D, “Policy change and PSM”, the effects of governance interventions on PSM may be more pronounced in the long term, and it is plausible that the effect of transformational leadership kicks in later. Theoretically, this also seems as a plausible explanation. If transformational leaders articulate and communicate a different vision and emphasize different values, it can be expected that organizational changes may create uncertainty and frustration in the short term. Once transformational leaders have had time to visualize how the vision serves important societal purposes and connect the vision and affiliated values with the daily job of individual employees, however, positive effects may be detected. On this note, future research is strongly encouraged to start disentangling the potential long-term effects of transformational leadership by tracking managers and employees over longer periods.

Third, future research may benefit from further theorizing on and investigating the relationship between transformational leadership and PSM and the relationship between transformational leadership and value fit in the context of changing political goals. All public organizations examined in this dissertation are embedded in a political hierarchy, implying that transforma-

tional leaders may need to shift direction and vision in the case of changing political goals or new political principals altogether. It is a long-standing argument that transformational leaders align the values of individual employees with those of the organization. But what happens when employees have internalized a particular set of values, and managers need to promote a new and different set of values? Changing political goals are a defining feature of public organizations, and it is therefore highly relevant for future research to examine how well transformational leadership is suited for creating public service providers who are responsive to changing political and organizational goals.

Finally, future research can benefit from examining how well the findings presented in this dissertation extend to other empirical contexts. As noted, the articles generally prioritize internal validity to mitigate concerns for endogeneity but this also implies that it is uncertain whether the empirical findings generalize to other functional areas and other cultural or national settings. Taken together with the above recommendations, scholars may therefore especially benefit from designing experiments with high statistical power to draw causal conclusions on the relationships between governance interventions, motivation and performance in heterogeneous empirical settings such as across single functional areas in different countries.

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Summary

Pushes for better performance continue and findings ways to ensure high-quality and efficient provision of public services remains a key challenge for policymakers and scholars alike. With governments cutting back on public spending in the aftermath of the global financial crisis, this is a particularly daunting task. Turning to the internal characteristics of public service organizations, scholars have pointed to the potential of central human resources such as employee values and motivation for improving public service performance at little or no extra costs to managers and policymakers.

The dissertation contributes to this research agenda by examining the causes and consequences of public service motivation (PSM), that is, an individual's motivation to do good for others and society through public service delivery. If individuals value service to society and are motivated by a concern for the wellbeing of other people and society at large, research shows that they may commit extra effort in their job. It is therefore important to develop a deeper understanding of whether and how PSM may be stimulated and how it translates into specific service behaviors. The dissertation contributes to this agenda by focusing on the following research question: Do governance interventions affect PSM and what are the implications of PSM for employee performance in public service organizations?

To answer this question, the dissertation draws on a variety of methodological approaches and data sources. Methodologically, the dissertation is designed to ensure high internal validity and several articles utilize variation in individuals' PSM over time and variation in leadership behaviors induced by a large-scale field experiment with Danish public and private managers. Data consists of survey data and administrative records and includes respondents from different empirical settings such as day care centers, schools, tax offices and general medical practitioners.

The dissertation finds that two types of governance interventions – national policies and organizational leadership – hold the power to alter the PSM of individual public service providers. This is important information for policymakers and managers because the results offer some guidance on ways to stimulate individuals' PSM. This is reinforced by the dissertation's finding that PSM is related to objectively measured public service behaviors, and national policies and organizational leadership thus may not only affect the motivation of public service providers but also “manage” their behaviors and effort indirectly through PSM. To understand the relationship between governance interventions and PSM, however, it is beneficial for researchers and practitioners to also look at individuals' values. Values entail conceptions of

what it means “to do good” for others and society in a specific context. It is therefore necessary to not only stimulate PSM but also to shed light on ways to ensure that employees direct this motivation towards actions that are supportive of the organizational goals. The dissertation contributes to this important issue by demonstrating the potential of transformational leadership for fostering a fit between employees’ individual values and the values of their organization.

Der er stadig stigende krav til bedre performance, og det er derfor en central udfordring for politikere og forskere at finde måder at sikre så høj kvalitet og så effektiv en levering af offentlige ydelser som muligt. Dette er en særligt udfordrende opgave i lyset af regeringers besparelser som følge af den globale finansielle krise. Forskere har derfor vendt blikket mod centrale menneskelige ressourcer som for eksempel værdier og motivation og fremhævet deres potentiale for at sikre bedre performance i offentlige serviceorganisationer uden ekstra omkostninger for offentlige ledere og politikere.

Afhandlingen bidrager til denne forskningsdagsorden ved at undersøge årsager og konsekvenser af public service motivation (PSM); det er et individs motivation for at gøre godt for andre mennesker og samfundet via leveringen af offentlige serviceydelser. Eksisterende forskning peger på, at individer vil lægge en større indsats i deres job, såfremt de værdsætter at tjene samfundet og er motiveret at bidrage til andre menneskers velvære. Det er derfor vigtigt at udvikle en bedre forståelse af, om og hvordan PSM kan stimuleres, samt hvordan PSM omsætter sig i faktisk adfærd. Afhandlingen bidrager til denne dagsorden ved at besvare følgende forskningsspørgsmål: Påvirker governance interventioner PSM, og hvad er implikationerne af PSM for medarbejderes performance i offentlige serviceorganisationer?

For at besvare forskningsspørgsmålet benytter afhandlingen forskellige metodiske tilgange samt forskellige datakilder. Afhandlingen er designet på en måde som sikrer høj intern validitet, og flere af afhandlingens artikler udnytter tidslig variation i PSM og eksogen variation i ledelse induceret af et stort felteksperiment blandt danske offentlige og private ledere. Datakilderne består af surveydata og registerdata og indeholder respondenter fra forskellige områder heriblandt fra dagtilbudsområdet, grundskoler, den nationale skattemyndighed og praksisområdet (alment praktiserende læger).

Afhandlingen finder, at to typer af governance interventioner – nationale politikker og organisatorisk ledelse – kan påvirke PSM blandt individuelle leverandører af offentlige ydelser. Dette er vigtigt, fordi resultaterne er retningsvisende for politikere og ledere i forhold til at stimulere PSM. Vigtigheden af disse resultater forstærkes yderligere af afhandlingens andet hovedresultat; at PSM er forbundet til leveringen af faktiske offentlige serviceydelser. Nationale politikker og ledelse i en organisatorisk kontekst kan derfor ikke alene påvirke PSM men også adfærden blandt leverandører af offentlige serviceydelser indirekte via deres PSM. Det er endvidere nyttigt også at inkludere individers værdier, når forskere og praktikere ønsker at opnå en bedre forståelse af sammenhængen mellem governance interventioner og PSM. Vær-

dier udtrykker, hvad den enkelte ser som værende ønskværdigt for andre mennesker og samfundet, og det er derfor nødvendigt også at undersøge, hvordan man kan sikre, at medarbejdere investerer deres energi baseret på et ønske om at gøre godt for andre mennesker og samfundet på en måde, som understøtter målene i deres organisation. Afhandlingen bidrager til denne vigtige dagsorden ved at illustrere potentialet for transformationsledelse for at skabe et "fit" mellem medarbejderes værdier og organisationens værdier.