

Capitalizing on the Forces within Us:  
Public Employee Motivation and  
Commitment at Work



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PhD Dissertation

Capitalizing on the Forces within Us:  
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Commitment at Work

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# Glossary

This dissertation uses a crowd of different concepts and terms. Throughout the dissertation, I define, elaborate, and discuss the meaning of most of them. Still, to give the readership a clear understanding of arguments and statements, this glossary presents some of the main concepts and frequently used terms:

**Bias:** In statistics, the term refers to the tendency of a measurement process to over- or underestimate the value of a population parameter; a systematic as opposed to a random distortion of a statistical result due to a factor not allowed for in its derivation.

**Confounding:** A situation in which the effects of two or more processes on results are not separated. In statistics, the term refers to interference by a third variable so as to distort the association being studied between other variables.

**Contextual factors:** Certain characteristics of circumstances, forces, or situations which affect an entity.

**Ecological validity:** A property of research studies that reflects the extent to which the finding of a study can be generalized to real-world settings.

**Endogeneity:** A change or variable that arises from within a model or system. In statistics, a statistical model, a parameter, or variable is said to be endogenous if there is a correlation between the parameter or variable and the error term.

**Experimental design:** A study in which the treatment is consciously manipulated by the researcher and in which units are randomly assigned to treatment and control groups.

**External extrinsic motivation:** A type of extrinsic motivation that refers to taking some action as to satisfy an external demand or obtain an externally imposed reward contingency; doing something out of external pressure.

**External validity:** A property of research studies that reflects the extent to which the result of a study can be generalized beyond the domain of the actual units, spatial and temporal setting, and specific variables that are examined.

**Extrinsic motivation:** A form of motivation that refers to taking some action in order to obtain a reward or outcome; doing something because it leads to a separable consequence.

Frontline public service employees: The employees in public organizations who are interacting directly with citizens in implementing public policies and delivering the public services.

Goal commitment: The degree to which an individual is attached to a goal, considers it significant or important, is determined to reach it, and keeps it in the face of setbacks and obstacles.

Goal difficulty: The extent to which an individual's goal is discrepant (either positively or negatively) from that individual's capacity to achieve the goal.

Heterogeneity: The quality or state of being heterogeneous; different in kind.

HRM-related interventions: Interventions that relate to the basic content of distinct types of real-life HRM policies (but do not mirror them exactly).

Identified extrinsic motivation: A type of extrinsic motivation that refers to taking some action because of personal identification with the action's value; doing something because it is personally meaningful or judged to be important.

Integrated extrinsic motivation: A type of extrinsic motivation that refers to taking some action because of a full sense that the action is an integral part of who a person is. It occurs when identified regulations have been fully assimilated to the self.

Internal validity: A property of research studies that reflects the extent to which a causal conclusion based on a study is warranted, i.e., given the actual units, spatial and temporal setting, and specific variables that are examined.

Intrinsic motivation: A form of motivation that refers to taking some action for the sake of enjoyment or the satisfaction that one receives from that action; doing something because it is inherently interesting or enjoyable.

Introjected extrinsic motivation: A type of extrinsic motivation that refers to taking some action as to obtain an internal reward or avoid internal punishments; doing something out of internal pressure.

Observational study: A nonexperimental study in which the treatment is not consciously manipulated by the researcher. Rather, researchers record and analyze the values of variables as they naturally occur.

Public service motivation: A type of motivation that refers to an individual's orientation to delivering services to people with the purpose of doing good for others and society.

Service user capacity: A concept that relates to the feeling of competence to understand and affect the provision of the public services among the public services users.

Task performance: The effectiveness with which job incumbents perform activities that contribute to the organization's technical core.

Work motivation: The psychological process that influences how personal effort and resources are allocated to actions pertaining to work, including the direction, intensity, and persistence of these actions.

## Abbreviations and Acronyms

GST	Goal setting theory
HRM	Human resource management
IV	Instrumental variable
NPM	New Public Management
OLS	Ordinary least squares
PSM	Public service motivation
SDT	Self-determination theory
SLB	Street-level bureaucracy



# Chapter 1: Introduction

The welfare state, a cornerstone of the European social model, is under pressure. Policymakers face new challenges created by an ageing population, an increasingly competitive global labor market, and the aftermath of the financial crisis of 2007-2008 (Eißel, Rokicka, and Leaman 2014; IMF 2014; Karger 2014; Russo and Katzel 2011; Taylor-Gooby 2005; Wahl 2011). Perhaps now more than ever, public service performance is under constant scrutiny by a variety of stakeholders including politicians, citizens, service users, and public managers (Boyne et al. 2006). In light of the New Public Management reform movement, decision makers around the globe are investing attention and effort toward higher levels of performance in public organizations (Dunleavy and Hood 1994; Hood 1991; Hood and Peters 2004; Kettl 2005; Pollit and Bouckaert 2011). Modern public service organizations are therefore not facing fewer or more easily achievable performance goals and expectations. To the contrary, public officials continue to establish task objectives and benchmarks requiring the public organizations to improve the quantity and quality of the public services while spending less.

In an era of economic austerity, knowledge of how to sustain and improve public service performance is a theme at the heart of public administration research. However, and though researchers are increasingly turning their attention to public service performance (Boyne and Walker 2005), evidence on the determinants of public organizations' performance remains incomplete (Boyne 2003a; O'Toole and Meier 1999) and important questions persist about the performance of public bodies (Boyne 2004; Boyne et al. 2006).

This dissertation examines routes to higher public service performance from the perspective of the intersection of public administration, human resource management (HRM), and the allied fields of organizational behavior and industrial-organizational psychology. With a focus on the frontline employees who staff the public service organizations, the dissertation shows how different HRM-related interventions and contextual factors may support and enforce the ways in which individuals' work motivation and commitment reflect positively on their behavioral choice, work effort, and task performance.

Street-level bureaucracy literature has long emphasized the critical position that the frontline public service employees occupy in welfare state soci-

eties (Lipsky 1980). The frontline public service employees are pivotal actors in the delivery of the public services, because their work decisions and behaviors *become* the policy they carry out; the effective expression of the policy (Lipsky 1980; Maynard-Moody and Musheno 2003; Riccucci 2005). Moreover, scholars have long emphasized how effective management of human resources is essential to the success of any organization (Collings and Wood 2009; Guest, Paauwe, and Wright 2013; Legge 2005; Storey 2007) and that public management matters! (Boyne 2004; Meier and O'Toole 2002, 2003; Meier et al. 2006; O'Toole and Meier 1999, 2011; Rainey 2014). Based on these premises, this dissertation adds to the solving of long-standing and enduring public administration puzzles: How can we sustain and improve public employees' delivery of public services? What HRM practices and contextual factors may direct and stimulate individuals' work motives and efforts to accomplish public service goals and missions? In particular, with a unifying focus on the constructs of work motivation and commitment, this dissertation asks: *How can we capitalize on employees' work motivation and commitment to support and improve their efforts and task performance at work?*

The report is part of the doctoral dissertation *Capitalizing on the Forces within Us: Public Employee Motivation and Commitment at Work* at the Department of Political Science and Government, Aarhus University, and SFI-The Danish National Centre for Social Research. This report summarizes the dissertation's articles and describes their combined contribution to theory and practice.

Each article contributes to research and practice in terms of theory expansion and advancement, new empirical evidence, or both. Overall, the dissertation contributes with novel insights on how HRM-related interventions and contextual factors may engage and enhance the positive effect of employees' work motivation and commitment on their work effort and task performance. Such research focus is highly warranted. Much evidence suggests that greater work motivation and commitment relate to higher levels of behavioral effort and performance at work (Bellé 2013; Burton et al. 2006; Deci and Ryan 1985a, 2004; Gagné and Deci 2005; Grant 2008b; Klein et al. 1999; Locke and Latham 1990a, 2013; Perry and Wise 1990; Selden and Brewer 2000). Organizational attention to employee work motivation and commitment may thus be a key ingredient for promoting the performance of the public services. In this context, extant research has examined organizational and especially personal antecedents of employee work motivation and commitment (Baard, Deci, and Ryan 2004; Bénabou and Tirole 2003; Deci 1971; Deci and Ryan 1985b; Hollenbeck and Klein 1987; Klein et al. 1999; Knippenberg 2000; Pandey and Stazyk 2008; Rost, Weibel, and Oster-

loh 2010; Wofford, Goodwin, and Premack 1992; Wright 2007). However, only little research attention has yet been directed at how to make active use of (capitalize on) the organizational resources of employee work motivation and commitment in public service environment. This dissertation contributes to this end.

The dissertation uses a range of different research designs, estimators, and data. Its findings suggest that public managers may, in fact, direct their employees' work behavior and improve their task performance via use of HRM behaviors and policies. In particular, it identifies a set of specific means and contexts, both relating to how public service organizations may actively capitalize on the behavioral forces of employee work motivation and commitment to the benefit of service users and society at large.

Chapter 2 clarifies the dissertation's research focus and provides context via a review of the research fields that motivate it and frame its contributions. Chapter 3 explains the theoretical grounding and offers conceptual clarification. Chapter 4 outlines the articles and their general connection. Chapters 5 through 8 review the motivation, theoretical basis, and findings of the individual articles. Chapter 5 focuses on how external HRM-related interventions may directly engage the behavioral forces of individuals' work motivation, while chapter 6 examines how contextual factors may moderate the relationship between individuals' work motivation and their behavior or task performance. Chapter 7 focuses on the potential for capitalizing on the forces of work motivation via attraction and recruitment of employees who are highly public service motivated. Whereas chapters 5 through 7 look at work motivation, chapter 8 examines commitment. Chapter 9 discusses main limitations and caveats in relation to the dissertation's findings. Chapter 10 summarizes and discusses the dissertation's focal contributions and its implications for research and for practice.



## Chapter 2: Delineating the Research Focus and Field Context

To contextualize the dissertation's research focus, the report takes as its starting point the following scenario: Assume that John is a newly appointed school principal at Median, a prototypical municipal primary and lower secondary school in terms of size, organizational structure, and school district demographics. Productive external networking relationships and a friendly work atmosphere characterize Median. Moreover, the teachers at Median are relatively homogeneous *and get along well with each other*. They are different in gender and age, but most are alike in terms of upbringing and family status. Furthermore, most have similar education and credentials and all are fairly well qualified for the teacher job in terms of subject matter knowledge and pedagogical knowledge.

Nevertheless, the teachers at Median differ in two important respects. First, even though most of the classes are similar in student composition, some teachers' students perform consistently better academically than other teachers' students. Second, though most teachers are guided by work motives that go beyond immediate self-interest and organizational interest, some of the teachers exhibit a relatively lower public service orientation and commitment to the task goal of educating the students than others.

As the newly appointed school principal, John has to improve the performance of the public service that the school delivers to the students and the students' parents. This responsibility includes ensuring that the teachers work diligently in alignment with the school's task goals and mission, and that the teachers execute their teaching task to the best of their ability and volition. The critical question facing John is how to accomplish his managerial objective. What can John do to direct and energize the teachers' work behavior to improve their task performance in teaching and educating the students?

In response to this question, the dissertation expands our knowledge on how public managers like John may affect employees' work efforts and task performance by engaging and enforcing their work motivation and commitment. With a focus on the constructs of employee work motivation and commitment, the dissertation examines ways to capitalize actively on the

forces of individuals' work motivation and commitment to support and improve their efforts and task performance at work.

The main sub-questions characterizing the dissertation's articles are: To what extent may HRM-related interventions activate the behavioral forces of individuals' work motivation? Are the effects of such HRM-related interventions contingent on the type of motivation that the particular intervention serves and seeks to engage? What is the role of employee commitment to task performance in a frontline public service setting? Do different contextual factors moderate the motivation-performance and commitment-performance relationships?

For the purpose of this dissertation, 'HRM-related interventions' refers to interventions that relate to the basic content of distinct types of real-life HRM policies (but do not mirror them exactly). For example, an experimental intervention that incentivizes behavior by a monetary reward relates to the basic content of real-life HRM policies that seek to guide employees' work behavior via employee payment systems linking compensation to measures of work quality or goals.<sup>1</sup> Moreover, note that the dissertation employs a broad definition of what may constitute a 'contextual factor.' Broadly referring to characteristics of circumstances, forces, or situations that affect an entity (e.g., motivation-outcome and commitment-outcome relationships), contextual factors may involve organizational variables but can also involve individual-level characteristics such as gender and education.

## 2.1 Review, Explanation, and Conceptual Clarification

Before proceeding to the meat of this report (i.e., the property and findings of the separate articles) some review, explanation, and conceptual clarification is necessary. First, a *review* of the research fields that ground and frame this dissertation's attention to work motivation and commitment is a key ingredient for understanding the literatures to which this dissertation contributes. Second, an *explanation* of the main theories that guide the articles is crucial for understanding the dissertation's theoretical advances and developments. Third, a *conceptual clarification* of the work motivation and commitment constructs is important for accurately delineating the dissertation's conceptual domain and contribution. The remainder of this chapter is devoted to the

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<sup>1</sup> I recognize that the dissertation's HRM-related interventions may not reflect the exact function of actual HRM policies in real-life public organizations. This limitation is thoroughly elaborated and discussed later (especially in section 9.3).

review, while chapter 3 explains the main theories and provides conceptual clarification.

## 2.2 Review of Literature

What is the scope and character of the territory that the work motivation and commitment constructs occupy in social science research? By a brief review of literature, sections 2.2.1 to 2.2.3 demonstrate the role of employee work motivation and commitment in the research fields of HRM, organizational behavior, industrial-organizational psychology, and public administration. By substantiating the broader academic context of the dissertation, the review serves to explain the general literatures that simultaneously motivate the dissertation's research focus and frame its contributions, i.e., why attention to work motivation and commitment is of scholarly relevance and interest.

### 2.2.1 Human Resource Management

The salience of a research focus on employee work motivation and commitment is given emphasis by HRM as the field is conceptualized and operationalized early in the twenty-first century (Legge 2005; Storey 2007). Although the term 'HRM' has been in vogue for decades, its definition remains controversial (Collings and Wood 2009; Price 2011). For example, HRM has been described as a little else than a renaming of personnel management (Armstrong 1987, 2000; Torrington 1989), and several scholars suggest that the conceptual differences between personnel management and HRM are few and largely a matter of emphasis and approach (Armstrong 2006; Hendry and Pettigrew 1990; Keenoy 1990; Legge 1989).

Per definition, HRM has to do with the management of the employees comprising an organization's workforce (its human resources). However, some scholars define the concept broadly, i.e., in terms of all aspects of managing people in organizations. For example, Boxall and Purcell (2011, 1) suggest that 'HRM refers to all those activities associated with the management of work and people in organizations' (see also Beer et al. 1984; Prowse and Prowse 2010). Another class of approaches views HRM as a strategic approach to managing employees; a specific recipe for people management (Wilton 2011) emphasizing the prospects of improving organizational performance while simultaneously improving employees' experience of employment; their personal development, trust, motivation, commitment, and job satisfaction. For example, Storey (2007, 7) defines HRM as 'a distinctive approach to employment management which seeks to achieve competitive

advantage through the strategic deployment of a highly committed and capable workforce, using an array of cultural, structural and personnel techniques" (see also Armstrong 2006; Price 2011). A narrower HRM definition in line with sub-labels such as 'high commitment HRM' (Guest 2001; Walton 1985; Wood and de Menezes 1998), 'high involvement management' (Wood 1999), and 'human capital-enhancing practices' (Youndt et al. 1996).

Whatever the terminology, HRM scholars generally agree that successful management of the available human resources is a key component in the performance of any organization (Guest, Paauwe, and Wright 2013). Since the 1990s, much HRM research has thus revolved around identifying HRM practices that effectively foster the direction and effort of employees' work activity toward improved organizational performance (Appelbaum et al. 2000; Arthur 1994; Becker and Gerhart 1996; Delery and Doty 1996; Huselid 1995; Katou 2008; Paauwe 2004; Pfeffer 1998; Purcell et al. 2003; Wright, Gardner, and Moynihan 2003; Wright et al. 2005). In relation to influences on employees' work motivation and commitment, areas of HRM include—among many others—personnel recruitment and retention, professional development and support, compensation and benefits, communication of expectations and mission, and performance evaluation and feedback.

The attention to work motivation and commitment is especially significant in one of the field's predominant approaches to HRM: the Harvard model associated with the founding work of Beer and colleagues (Beer and Spector 1985; Beer et al. 1984). This approach views employees as valuable human assets, rather than production variable costs, and sources to organizational success through their work diligence, commitment, adaptability, and quality (Legge 2005). It emphasizes gaining employee engagement and commitment through the use of a congruent set of HRM policies (Collings and Wood 2009). Moreover, a central tenet within the approach is human growth, a concept that resonates with classic motivation needs theories, from McGregor's *Theory Y* to Maslow's *Hierarchy of Needs* (Legge 2005).

## 2.2.2 Organizational Behavior and Industrial-Organizational Psychology

Employee work motivation and commitment also take a center stage in the fields of organizational behavior and industrial-organizational psychology. A look at the basic theory on determinants of individuals' performance illustrates this point. Sometimes referred to as a 'skill-and-will' model of performance, classic industrial-organizational theory (Fleishman 1958; French 1957; Maier 1955; Porter and Lawler 1968; Vroom 1964) suggests that indi-

viduals' performance is essentially a function of an interactive relationship between ability and motivation:

$$\text{Performance} = f(\text{ability} \times \text{motivation})$$

'Ability' includes the natural aptitudes and learned capabilities (competencies, knowledge, skills) required to perform a task, while 'motivation' involves all psychological processes that cause the discretionary efforts put forth for the completion of a task (Mitchell 1982). Importantly, commitment is thus conceivable as a subcomponent of the 'motivation' model term. For example, Whetten and Cameron (2011, 327) describe how the 'motivation' component of 'skill-and-will' performance models involves the combination of desire and commitment demonstrated by effort (see also Whetten, Cameron and Woods 2000, 661). Empirical research has confirmed that both 'ability' and 'motivation' have to be operative for performance to result (Borman et al. 1991; O'Reilly and Chatman 1994) and the model's validity is widely accepted (Latham 2012; Locke and Latham 2004). As noted by Pinder (2008, 20), 'the necessity for both ability and motivation seems obvious. There is now sufficient evidence and impressive theory to put an end to the debate.'

During the last three decades, however, individuals' performance has been increasingly conceptualized and explained through the lens of an extended three-factor performance equation (Appelbaum et al. 2000; Bauer and Erdogan 2010; Gould-Williams and Gatenby 2010; McShane and Von Glinow 2013; Mitchell 1982):

$$\text{Performance} = f(\text{ability} \times \text{motivation} \times \text{situation})$$

Based on the work of Campbell and Pritchard (1976), this performance model suggests that individuals' performance is a product of 'skill' and 'will' as well as 'situation' (sometimes referred to as 'opportunity'), i.e., conditions beyond the individual's immediate control that constrain or facilitate behavior and performance (Bacharach and Bamberger 1995; Johns 2011). The work of established organizational behavior and industrial-organizational psychology scholars reflects a general recognition of this line of thought. For example, Locke and Latham (1990a, 2013) and their 'high performance cycle' model (Locke and Latham 1990b) describe how work motivation and commitment explain variation in employee performance that is not owed to ability or situation. Similarly, Rainey (2014, 251) explains the rival influences on individual performance as follows:

Motivation alone does not determine performance. Ability figures importantly in performance ... The person's training and preparation for a certain task [ability], the behaviors of leaders or coworkers, and many other factors [situation] interact with motivation in determining performance.

With its focus on work motivation and commitment and these constructs' interaction with HRM-related interventions and contextual factors in predicting behavioral choice, work effort, and task performance, this dissertation is conceptually situated within the 'motivation × situation' part of the three-factor performance equation. In alliance with HRM, organizational behavior and industrial-organizational psychology literature thus frames and motivates the dissertation's focus and findings.

### 2.2.3 Public Administration

Employee work motivation and commitment also occupy a central position in the field of public administration. To fully understand this affiliation, one should start by first considering the longstanding role of work motivation and commitment in political and moral philosophy. In particular, attention to public employees' work motivation and commitment is inherent to the notion of 'public service ethos'—a sweeping ideology (Caiden 1981) applied to the character of public administration (Plant 2003) and providing the foundation for considerations of the common good and public service in Western democracies (O'Toole 2006). With reference to public employees as 'public servants,' the essence of the idea is that those in official positions of public authority set aside their personal, class, or group interests when exercising public discretion. Instead, the guiding influence on all public decision-making relates to a higher order of commitment that is subordinated to the interests of society and a perceived duty to serve the public (O'Toole 2006).

The idea is traceable as far back as the ancient Greek philosophers. In Plato's *Republic* (trans. 1941), the Guardians (i.e., ideal-type public servants) pursue the public interest without private interest (Plant 2003). Rulers set aside their personal interest and rule for the common good of those over whom they are set to rule (O'Toole 2006). Similarly, in Aristotle's *Politics* (trans. 1946), the best ordered state is structured around a system of government ensuring that the affairs of society are managed in the best interests of all; 'the greatest influence in the assembly should go to those greatest in civic virtue, those with the best political judgment and the deepest commitment to the common good' (Critchley 1995, 5).

The same idea resonates throughout the work of later philosophers (Horton 2008; O'Toole 2006). For example, Aquinas (trans. 1954) argues that poli-

tics as a practice (public service) involves a moral obligation to act in pursuit of the common good. Government becomes unjust when the personal aims of the rulers are sought to the detriment of the common welfare. Likewise, Rousseau (trans. 1968) acknowledges the existence of group interests in society, but reasons how those committed to the public service of the state are responsible for discovering the general will and acting in its best interest. Similarly, Hegel (trans. 1976) sees the public servants as mediators of constitutional norms and concrete situations, tasked with subsuming the particular into the universal and concretizing universal public interest norms (Shaw 1992). Green also stresses the role of government, and especially public administrators, in safeguarding and facilitating the common good (Green-garten 1981). Finally, Rawls (1971) suggests that the actions of governments and public servants should be guided by basic principles ensuring that the public interest is served; a notion of commitment to the common good that is fully consistent with the idea of 'public reason' (Rawls 1997).

Attention to the work motivation and commitment of the public employees has thus permeated the history of political and moral philosophy. Primarily in the form of a general prescriptive or idealistic idea suggesting that all public employees should be motivated and committed to act out of a duty to serve the common good; to set aside their personal interest in the pursuit of the public interest. Given the underlying influence of political and moral philosophy on postindustrial *welfare state formation*, *it is perhaps unsurprising, then, that the public employees' work motivation and commitment are a focal point of attention in the discipline of public administration.*

Public administration research often treats work motivation and commitment as important but unobserved 'black box' variables, and scholars encourage empirical research that more directly tests their causes and effects (Behn 1995; Horton and Hondeghem 2006; Perry, Mesch, and Paarlberg 2006; Selden and Brewer 2000; Stazyk, Pandey, and Wright 2011; Wright 2001, 2004). Nevertheless, the importance of public employees' work motivation and commitment are widely reflected and recognized in seminal public administration literature and paradigms—in relation to democratic accountability concerns and questions about the performance of the public services.

The work of some of the discipline's founding fathers demonstrates this point. In *The Study of Administration*, Woodrow Wilson (1887) answers the following question: What can government successfully do and how can it do it most effectively? Wilson suggests that 'politics' and 'administration' should be separate spheres of government (thus founding the politics-administration dichotomy): 'Administrative questions are not political questions. Alt-

though politics sets the tasks for administration, it should not be suffered to manipulate its offices' (210). Moreover, he calls for a technically schooled civil service, emphasizing how:

The ideal for us is a civil service cultured and self-sufficient enough to act with sense and vigor, and yet so intimately connected with the popular thought, by means of elections and constant public counsel, as to find arbitrariness or class spirit quite out of the question (217).

Wilson's work is thus concerned with the public employees' motivation and commitment. In line with the idea of 'public service ethos,' the people who staff the public organizations should be motivated and committed to act in service of the public interest. A thought inspiring and defining later well-known scholars' view on public service as a calling to service one's fellow citizens; a moral enterprise in which the public employees are agential leaders whose authority is derived from their civic virtue—e.g., Wamsley, Goodsell, Rohr, White, and the remaining authors of the Blacksburg Manifesto (Wamsley et al. 1990), as well as Appleby (1952), Buchanan (1975), Mosher (1982), and Waldo (1984).

Attention to public employees' motivation and commitment is also an implicit yet non-trivial feature in the work of Max Weber, Frederick Taylor, and Herbert Simon. In *Economy and Society*, Weber (trans. 1978; original work published 1922) studies the bureaucratization of society. He argues that the ideal bureaucracy is marked by a hierarchical organization and formal chain of command, with authority and directives flowing from the top down. Within this bureaucracy, the ideal-type public servant is serving the supervisor's instructions and goals in a loyal, professional, and politically neutral manner. Work motivation and commitment thus play a noteworthy role. Bureaucratic effectiveness presupposes that the public servants are motivated and committed to obey uncritically the instructions and decisions of their political subordinates.

Similarly, Taylor's principles of 'scientific management' (1911) are based on the belief that most employees are deliberately 'soldering' (i.e., working slowly) to protect their own interests—interests that, according to Taylor, are necessarily antagonistic to those of the employer. Inspiring a 'hard' approach to HRM, i.e., a view of the employees as production variable costs as opposed to human assets (Collings and Wood 2009; Legge 2005; Storey 2007), Taylorism thus involves the use of a management system in which management establishes the best method to ensure that the employees are skilled and motivated and committed to maximum production effectiveness and efficiency.

Likewise, Simon (1997; original work published 1947) suggests that organizations provide the general stimuli and attention-directors that channel the behaviors of employees and provide them with intermediate objectives stimulating action. Thus, a basic challenge for all organizations is 'inducing their employees to work hard toward organizational goals' (Simon 1991, 28). In answering why most employees exert more than minimal effort, Simon suggests that people are strongly motivated by organizational loyalty, even when expecting no 'selfish' rewards from it (Simon 1990). Pride in work and organizational loyalty are widespread phenomena in organizations (Simon 1997), and the 'willingness of employees at all levels to assume responsibility for producing results—not simply 'following the rules'—is generally believed to be a major determinant of organizational success' (Simon 1991, 37).

Attention to employee work motivation and commitment also forms the basis of prominent public administration developments and theory assumptions. For example, a wave of public management reforms have swept Western societies over the past three decades with the aim of modernizing and rendering the public sector more efficient. Under the heading of New Public Management (NPM) (Hood 1991), the reform movement has been global, both across and within countries. Most welfare states 'have sought to replace traditional rule-based, authority-driven processes with more market-based, competition-driven tactics' (Kettl 2005, 3). While empirical research on the effects of NPM is relatively sparse and leaves many questions unanswered (Boyne 2003a), the general results appear modest (Pollit and Bouckaert 2011) and paradoxical at times, i.e., research finds unintended adverse side effects and reverse effects of NPM initiatives (Hood and Peters 2004).<sup>2</sup> Clear indicators of the success of the NPM revolution are thus hard to find (Kettl 2005). In part because of the apparent failure of NPM to substantially and visibly improve governments' performance, some scholars find that the era of NPM is over and will not return (Dunleavy et al. 2006). Other scholars agree that NPM has 'middle-aged' but dismiss that the movement is waning (Hood and Peters 2004). Regardless, the influence of NPM on public sector governance is undeniable.

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<sup>2</sup> Hood and Peters (2004) fault reformers for the modest and at times paradoxical NPM results. They suggest that reformers have embraced an un contemplated 'one-size-fits-all' approach with little—at best selective—attention to evidence on what works, and an active resistance to learning. Other research suggests that some of the basic assumptions underlying the content of many NPM reforms are simply inaccurate, erroneous, or apply only in certain contexts (Lyons and Lowery 1989; Meier and O'Toole 2009).

Both supporters and critics have debated the jurisdiction of NPM, i.e., what it is and encompasses (Stark 2002) and what is new about it (Friedrickson 1996). Broadly speaking, Kettl (2005) suggests that NPM captures a range of reform efforts converging on a single driving theme: A search for better government performance and accountability. Dunleavy et al. (2006) find that NPM revolves around three integrating themes: disaggregation, competition, and incentivization. Ferlie et al. (1996) suggest that NPM involves the introduction into public services of the 'three Ms': markets, managers, and measurement. In general, however, most NPM research agrees that identifying main features involve administrative decentralization (e.g., formation of autonomous agencies and devolution of budgets and financial control), use of markets and competition (e.g., contracting out and other market-type mechanisms) in the public services provision, and emphasis on performance management and customer orientation. NPM is thus implicitly preoccupied with cleaning out bureaucratic dilemmas relating to work motivation and commitment, i.e., how to manage the performance of the public services so that the work efforts and performance of the employees are best aligned with higher order public service goals and mission (Kettl 2005).

This connection is especially clear considering the basic theory underlying NPM reform efforts, i.e., agency theory and public choice theory (deLeon and Denhardt 2000; Gruening 2001). Essentially, agency theory explains how the manager-employee relationship is often marked by a 'principal-agent problem', which occurs (1) because the employees' work desires and goals are often conflicting with those of the manager and (2) because manager oversight over what the employees' are actually doing is difficult (Pratt 1985). Founded on the notion that all individuals are primarily motivated to act based on self-interest, agency theory highlights the difficulties in ensuring that employees act in the agency's best interests (Eisenhardt 1989; Miller 2005). In a public service setting, agency theory thus concerns the managerial hardship in aligning the public employees' work motivation and commitment with the public service goals and mission of the organization—while simultaneously referring to the inefficiency (agency cost) that may arise when the employees are not work motivated and committed to the organizational goals and mission.

Similarly, public choice theory, as formulated by Vincent Ostrom and colleagues (Ostrom 2007; Ostrom and Ostrom 1971; Ostrom, Tiebout, and Warren 1961), is based on the notion that all individuals are primarily self-interested; voters, politicians, managers, and employees alike. Accordingly, to accommodate the public interest, public choice theory advocates for the introduction of market ideology to public administration. Specifically, the

theory suggests that 'polycentrism' (multiple, formally independent decision-making centers with a system of government) and quasi-market conditions<sup>3</sup> provide the best administrative structure for ensuring flexibility, responsiveness, and cost-efficiency in public service (Ostrom 2007; Ostrom, Tiebout, and Warren 1961). In replacing traditional hierarchical structures with a market-based 'bottom-up' approach, the theory aims to remove government as the focal point of authority and minimize the influence of state actors' personal discretion and motives (Ostrom 2007). Assuming that all people are inherently driven by self-interest, public choice theory and its normative recommendations are thus founded on a general profound distrust that public decision-makers and actors at all levels (i.e., politicians, public managers, and public employees) are motivated and committed to act in the public interest.

Moreover, several other public administration scholars emphasize the importance of employee work motivation and commitment. Kaufman (1960), in his now classic study on administrative behavior in the U.S. Forest Service, thus describes and explains the importance of 'organizational culture' in the public sector—a concept closely connected to employee work motivation and commitment. For example, in line with the notion of 'public service ethos,' Barnard (1938) defines the 'moral factor' in strong-culture organizations as 'the process of inculcating points of view, fundamental attitudes, loyalties, to the organization ... that will result in subordinating individual interest ... to the good of the cooperative whole' (72-74). In other words, a strong organizational culture characterizes organizations 'in which the behavior of workers is predicated more on social and moral rewards than on any narrow definition or calculation of self-interest' (Dilulio 1994, 283). Likewise, J. Q. Wilson (1989) emphasizes the importance of a 'sense of mission' in public agencies and suggests how 'figuring out how best to define tasks and motivate workers to perform those tasks is often described as creating the right organizational culture' (31).

Employee mission valence and work motivation (task motivation, mission motivation, and public service motivation) are key component in Rainey and Steinbauer's (1999) theory of government effectiveness. Similarly, Le Grand (2003; 2010) finds that no 'best' model exists for delivery of a high quality public service. The success of any model for public service delivery depends on the kind of motivation marking public service professionals and workers. In the same vein, situational leadership theory (Hersey and Blanchard 1996;

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<sup>3</sup> That is, competition between these decision-making centers and *de facto* user-choice; feasibility for citizens to 'vote with their feet' (Tiebout 1956).

Hersey, Blanchard, and Johnson 2007) stresses the absence of any single 'best' leadership style. Rather, successful leaders adapt their practices to the 'maturity' of the individual or group they are seeking to manage—with 'maturity' referring to the employees' ability and in particular their work motivations and commitment.

The prominence of public employees' work motivation and commitment is especially prevalent in street-level bureaucracy (SLB) literature (Lipsky 1980). With a focus on the frontline public service employees interacting directly with citizens in the course of their job (e.g., nurses, police officers, social workers, and teachers), a central SLB tenet is that the frontline practitioners' discretionary implementation of policy effectively *becomes* the policy. In line with agency theory's notion of 'information asymmetry and 'adverse selection' (Eisenhardt 1989; Miller 2005), frontline public service employees experience high levels of discretionary authority and autonomy in performing their job (Lipsky 1980).

As government agencies' democratic accountability and responsiveness may suffer if the frontline employees' discretion and work actions are misaligned with the goals and mission prescribed by the democratic publics, SLB research has been widely preoccupied with examining the determinants of the frontline public service employees' work effort and behavior. SLB findings highlight the role of personal work motives and commitment to the delivery of the public services. For example, Brehm and Gates (1997) find that bureaucrats' behavior is primarily attributable to their own and their peers' work preferences. The supervisors' coercive capacities matter little. Other studies find that bureaucrats' behavior is influenced not by bureaucratic rules and regulations, but rather by their own moral judgments (Maynard-Moody and Musheno 2003) and values (Mackey 2008). Similarly, scholars investigating the impact of political and managerial factors on frontline employee behavior find mainly muted influences (Langbein and Jorstad 2004; May and Winter 2009; Riccucci 2005).

At first glance, there seems to be a conflict between SLB and general public management literature. On the one hand, SLB research suggests that managerial rules and regulations have limited influence on public employees' work behavior. On the other hand, prominent public management scholars find that the actions of managers shape the output and outcomes of public policy (Boyne 2004; Meier and O'Toole 2002, 2003; Meier et al. 2006; O'Toole and Meier 1999, 2011; Rainey 2014), i.e., that public management matters!—also in relation to the frontline personnel's work behavior and performance.

However, this perceptual discrepancy may be bridgeable. Similar to other SLB studies (Brodkin 1997; Lipsky 1980; Maynard-Moody and Musheno 2003; Mackey 2008), Soss, Fording, and Schram (2011, 225) thus finds that 'frontline discretion is endemic, cannot be eradicated by supervision or procedure, and functions to rewrite policy on the ground as street-level bureaucrats select, interpret, and adapt the broad rules they inherit.' However, this point does not necessarily entail that managerial action is altogether unimportant (Brodkin 2007, 2011). As Soss, Fording, and Schram (2011) furthermore note:

The fact that frontline workers are weakly constrained by rules does not mean they are free to act as they wish. Their uses of discretion are not 'ad hoc, unsystematic, or incomprehensible' ... nor are they mere reflections of individual preference and decision making ... Indeed, a central point of the literature on street-level bureaucracy has always been that organizational routines, tools, norms, incentives, information systems, and categories of understanding function as mechanisms of social control that shape the use of discretion in predictable ways (225).

In this context, the dissertation seeks to strike a middle ground between SLB and more general public management literature. Given that the SLB literature is correct that rules and regulations are largely ineffective in managing frontline employees, identifying particular managerial interventions and contexts that may successfully guide and stimulate individuals' self-regulatory work preferences becomes especially important. With a focus on how HRM-related interventions and contextual factors may affect the ways employee work motivation and commitment reflect positively on behavioral choice, work effort, and task performance, the dissertation contributes to this end. This reasoning is largely consistent with O'Toole and Meier's (2015) more recent work: With focus on context, 'it is now past the time to ask, simply, whether management matters. Rather, the important questions are when does management matter? And what factors affect how much it matters?' (253).

## 2.3 Recap of Review

'If we are to see further, it is by standing on the shoulders of giants.' This notion reflects the philosophy of social sciences in terms of research progress and accumulation of knowledge. Consequently, to understand both the foundation and contribution of this dissertation, a salient question is: Who are the communities of 'giants' to whom this dissertation is indebted? As illustrat-

ed by the review, the constructs of employee work motivation and commitment play a substantial role in several research literatures. Overall, whether based on recognized importance or more societal concerns, attention to work motivation and commitment has been (and is) seminal to the research fields of HRM, organizational behavior, industrial-organizational psychology, and public administration. In examining how to capitalize on work motivation and commitment as to support and improve individual work effort and task performance, this dissertation simultaneously draws on and contributes to these research communities.

# Chapter 3:

## Theory and Conceptual Clarification

While substantiation of the dissertation's broader academic context is important, an equally imperative issue relates to the particular theories that found and explain the dissertation's focus, hypotheses, and findings. What are the main theories on work motivation and commitment that guide the dissertation's articles? Similarly, conceptual clarification of the work motivation and commitment constructs is crucial for understanding and evaluating the dissertation's findings and contributions.

The present chapter explains the main theories founding the dissertation's articles and provides conceptual clarification. Section 3.1 presents the dissertations' theoretical work motivation framework, section 3.2 its theoretical commitment perspective. Section 3.3 highlights some main areas of convergence and divergence across the two theoretical frameworks, and section 3.4 provides conceptual clarification in relation to the constructs of work motivation and commitment.

### 3.1 Work Motivation Theory

Work motivation literature is marked by a bewildering display of theories, concepts, and approaches (Latham 2012; Pinder 2008; Porter, Bigley, and Steers 2003).<sup>4</sup> While scholars have sought to develop integrative models bringing together multiple work motivation theories (Grant and Shin 2012; Katzell and Thompson 1990; Mitchell and Daniels 2003; Steel and König 2006), 'motivation theory remains a body of interesting and valuable, but still

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<sup>4</sup> Major content theories include Maslow's hierarchy of needs theory (Maslow 1954), Alderfer's existence-relatedness-growth (ERG) theory (Alderfer 1972), Herzberg's motivation-hygiene theory (Herzberg, Mausner, and Snyderman 1959), and McClelland's achievement motivation theory (McClelland 1971). Predominant process theories include expectancy theory (Porter, Lawler, and Hackman 1975; Vroom 1964), equity theory (Adams 1963, 1965), organizational justice theory (Greenberg 1987), goal setting theory (Locke and Latham 1990a, 2013); job characteristics theory (Hackman and Oldham 1976, 1980); social cognitive theory (Bandura 1997, 2001); self-determination theory (Deci and Ryan 1985a, 2004; Gagné and Deci 2005; Ryan and Deci 2000a); and attribution theory (Heider 1958; Kelley 1973).

fragmented, efforts to apprehend a set of phenomena too complex for any single theory to capture' (Rainey 2014, 292).

For the most part, however, the theories—though defective or limited in various respects (Miner 2002)—do not so much contradict one another as focus on different parts of the motivation process (Locke and Latham 2004). Parallels can be drawn between the state of work motivation research and the tale of *The Blind Men and the Elephant*.<sup>5</sup> Like the blind men, work motivation researchers face the task of giving shape to something not directly observable. In addition, work motivation researchers have idiosyncratic approaches to the work motivation construct and therefore conceptualize the construct differently. Kanfer, Chen, and Pritchard (2008, 7-8) suggest that:

Motivation theories are like shoes. A few pairs seem to work well for most occasions, but no one pair works for all situations. Some shoes are elegant but only work with certain outfits; other shoes are elegant but do not fit the feet well. Yet other shoes are ideal for specific purposes, like hiking. Great-fitting everyday shoes wear down and occasionally need repair; at some point, styles change and such shoes may be discarded in favor of newer styles.

In line with the shoe analogy, this dissertation wears and puts to use some of the proven, well-established, and still fashionable 'shoes' in the closet of work motivation theories. In particular, for treatment of the work motivation construct, the dissertation employs self-determination theory (SDT) (Deci and Ryan 1985a, 2004; Gagné and Deci 2005; Ryan and Deci 2000a). A widely used theory of human motivation and personality spanning more than three decades of research (Gagné and Deci 2005; Ryan and Deci 2000a) that is 'consistent with various elements of other leading work motivation theories' (Pinder 2008, 91), and whose applicability is increasingly recognized and encouraged by public administration scholars (Chen and Bozeman 2013; Fernandez and Moldogaziev 2013; Jacobsen, Hvitved, and Andersen 2014; Kuvaas 2008; Perry and Vandenabeele 2008).

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<sup>5</sup> An abbreviated version of the tale goes like this: Some blind men heard of the animal called the elephant. To find out what one was like, they decided to use their sense of touch. However, as each man touched a different part of the elephant, the men could not agree on its true appearance. Each man was convinced that he alone understood its true nature (Saxe 2008). The moral of the story is, of course, that all of the men were right; they were simply touching different parts of the elephant.

### 3.1.1 Self-Determination Theory

An individual feeling no impetus or inspiration to act can be characterized as unmotivated, whereas someone who is energized or activated toward an end can be described as motivated. Reflecting this notion, most motivation theories view motivation as a one-dimensional construct; a phenomenon ranging from very little or no motivation to a great deal. However, SDT (Deci and Ryan 1985a, 2004; Gagné and Deci 2005; Ryan and Deci 2000a) emphasizes how even brief reflection suggests that motivation is, in fact, a multidimensional phenomenon:

People have not only different amounts, but also different kinds of motivation. That is, they vary not only in *level* of motivation (i.e., how much motivation), but also in the *orientation* of that motivation (i.e., what type of motivation) (Ryan and Deci 2000b, 54).

Orientation of motivation refers to the underlying, individual attitudes, motives, and goals that give rise to action. For example, an employee can be motivated to work out of excitement or interest, because he or she believes that the work is of public importance, or because he or she wants to be in good standing with management and increase the likelihood of earning a promotion. In these example, the amount of motivation may remain constant, but the nature of the motivation differs (i.e., the 'why' of action).

The core of SDT is the distinction between autonomous motivation and controlled motivation (Deci and Ryan 2004). *Autonomous motivation* involves 'acting with a sense of volition and having the experience of choice' (Gagné and Deci 2005, 333). Intrinsic motivation is an example of autonomous motivation. In particular, activities based on intrinsic motivation are enjoyable for the persons involved; they engage in them entirely based on voluntary choice and desire (e.g., 'I work because it is fun'). In contrast, *controlled motivation* involves 'acting with a sense of pressure, a sense of *having* to engage in the actions' (Gagné and Deci 2005, 334). Autonomous and controlled motivations thus differ in terms of their underlying regulatory processes, i.e., the extent to which motivation is entirely volitional and self-determined as opposed to less so. Moreover, SDT emphasizes that behaviors are definable in terms of the degree to which they are autonomous or controlled.

Extrinsic motivation may be an example of controlled motivation. I say 'may,' because SDT identifies a variety of extrinsic motivations—one being a prototype of controlled motivation, another being widely autonomous, and some being somewhere in between. I will get to this distinction shortly.

In sum, three broad categories of motivation exist in SDT: (1) amotivation, (2) extrinsic motivation, and (3) intrinsic motivation. *Intrinsic motivation* relates to doing something because it is inherently interesting or enjoyable for the person. Intrinsic motivation is thus inherently autonomous (self-determined). *Extrinsic motivation* relates to doing something because it leads to a separable consequence. Extrinsic motivation may vary in the degree of autonomy versus control it entails for the individual. Intrinsic and extrinsic motivation are both intentional and thus stand in contrast to *amotivation*, which involves a lack of motivation and an absence of intentionality (Deci and Ryan 2004; Gagné and Deci 2005; Ryan and Deci 2000a).

Early motivation research (deCharms 1968; Deci 1971) suggests that extrinsic motivation is an impoverished (even if powerful) form of motivation that contrasts with intrinsic motivation. However, SDT proposes that extrinsic motivation comprises four different levels, some of which represent active, agentic states (Ryan and Deci 2000b) and are widely autonomous (self-determined). Figure 3.1 illustrates the various forms of motivation and their placement along a self-determination continuum indexing the degree to which each represents autonomous motivation.

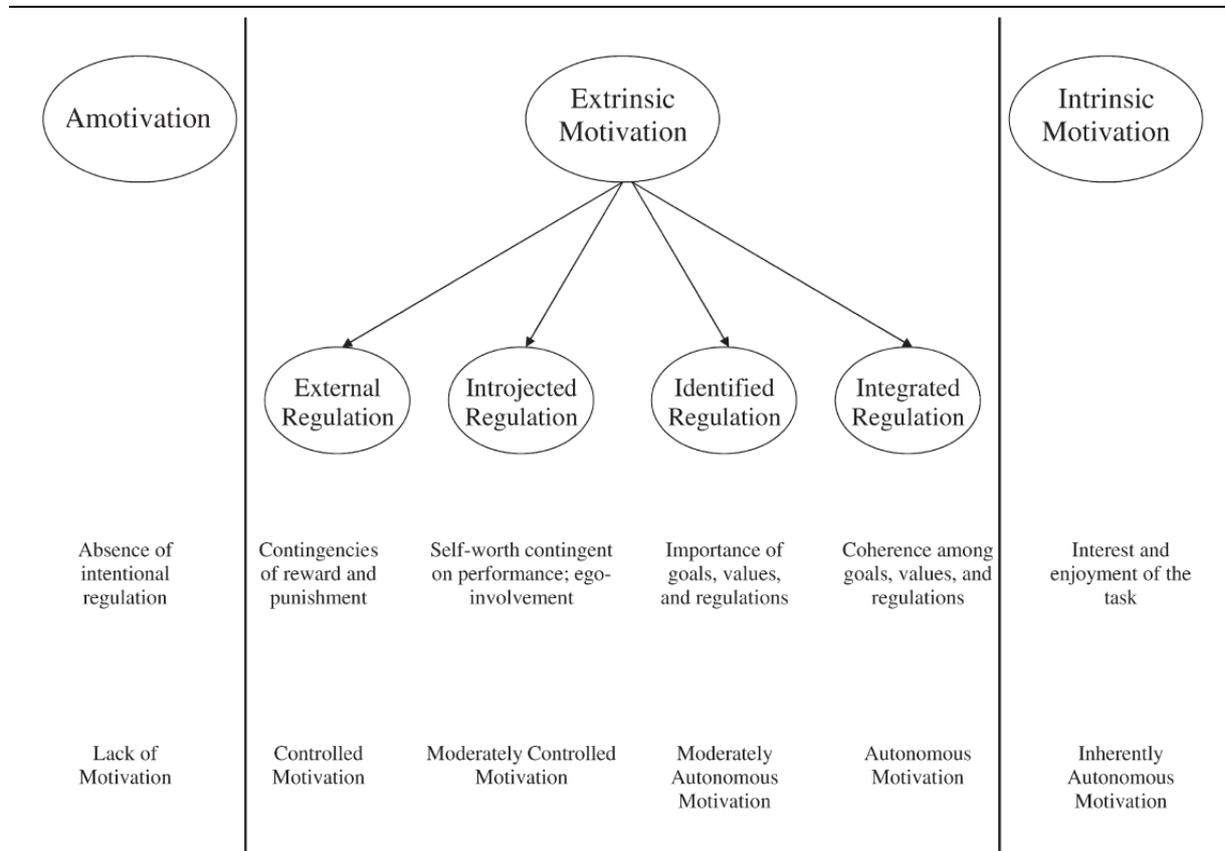
From least to most self-determined, the four extrinsic motivations are external regulation, introjected regulation, identified regulation, and integrated regulation. *External regulation* is the classic type of extrinsic motivation, i.e., the type considered when extrinsic motivation was first contrasted with intrinsic motivation. As a prototype of controlled motivation, behavior is guided by external regulation when a person's actions are based on contingencies external to that person. For example, when externally regulated, employees may act with the intention of obtaining an external reward (money, promotion) or avoid an external constraint (demotion, dismissal). This type of motivation is in essence the only type of regulation recognized in operant theory (Skinner 1953) and is the focus of research examining how external incentives and regulations serving extrinsic motivation may undermine intrinsic motivation (Deci, Koestner, and Ryan 1999a, 1999b; Frey and Jegen 2001).

The three other types of extrinsic motivation result when a behavioral regulation and the values and norms associated with it are internalized—i.e., when external contingencies are no longer required because external regulation is transformed into internal regulation. The greater this internalization is, the more autonomous will be the subsequent, extrinsically motivated behavior (Deci and Ryan 2004; Gagné and Deci 2005).

Thus, *introjected regulation* refers to when a regulation is internalized but has not been accepted as the person's own. Whereas external regulation refers to external pressure, introjected regulation refers to internal pressure. In

other words, it is as if the regulation controls the person. Examples include contingent self-esteem, pressuring people to behave in certain ways in order to feel worthy, and ego involvement, pressuring people to behave in order to support their egos (deCharms 1968; Nicholls 1984; Ryan 1982).

Figure 3.1 Self-Determination Continuum



Source: Gagné and Deci (2005).

Autonomous extrinsic motivation occurs when people identify with the values of a behavior. *Identified regulation* refers to actions that individuals carry out because of congruence with personal values, goals, and identities. As an individual chooses to go about a given activity, it is not a product of either external or internal pressure. For example, say that a public service employee values the clients' well-being and believes that performing his or her work tasks will improve it. Because of value identification, that employee may feel relatively autonomous while performing the daily work tasks—even if these activities are not intrinsically interesting or enjoyable.

Finally, extrinsic motivation may be wholly autonomous if identification with the value of a given activity becomes fully internalized. *Integrated regulation* refers to such full assimilation of identified regulation into a person's habitual functioning and self-identity, i.e., when a behavior is an integral part of a person's sense of self. Integrated regulation is as autonomous as intrinsic

motivation, but it is still an extrinsic form of motivation: Activities are not done for the activities' own sake, but for the instrumental value they represent.

More than three decades of research suggests that work performance may differ inasmuch as individuals behave based on intrinsic versus external extrinsic motivation (Deci and Ryan 2004). Moreover, research shows that the degree of autonomy (self-determination) in extrinsic motivation has behavioral consequence. For example, studies find that more autonomous extrinsic motivation is associated with greater work engagement and behavioral persistence (Connell and Wellborn 1990; Kasser, Davey, and Ryan 1992; Valleraud and Bissonnette 1992), job satisfaction and well-being (Baard, Deci, and Ryan 2004; Blais and Brière 2002; Deci et al. 2001; Reis et al. 2000; Ryan, Kuhl, and Deci 1997; Sheldon and Kasser 1995; Ilardi et al. 1993), and performance (Baard, Deci, and Ryan 2004; Burton et al. 2006; Grolnick, Ryan, and Deci 1991; Miserandino 1996) among other outcomes.

Why does more autonomous (self-determined) motivation reflect positively on outcomes? In short, SDT suggests that the 'perceived locus of causality' (deCharms 1968; Heider 1958)—i.e., a person's felt autonomy for behavior—is external (outside the person) for controlled motivations, internal (inside the person) for autonomous motivations (Ryan and Connell 1989). Because perceptions of autonomy are lower for controlled motivations, individuals may experience lower task satisfaction and expend lower effort. In contrast, perceptions of autonomy under autonomous motivations may make people perceive a behavior as more important and meaningful, in turn energizing positive emotions, such as joy and excitement, and promoting focus, effort, and commitment (Gagné and Deci 2005; Ryan, Kuhl, and Deci 1997). Moreover, more autonomous motivation reduces the potential for interpersonal conflict (i.e., contrasting behavioral goals and preferences) and provides greater access to personal resources (Ryan and Deci 2000b). In addition, doing something based on autonomous motivation may have a positive effect on an individual's self-efficacy (Gagné and Deci 2005; Ryan, Kuhl, and Deci 1997), i.e., 'beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations' (Bandura 1995, 2).

### 3.1.2 Public Service Motivation

While SDT constitutes the primary foundation of this dissertation's approach to work motivation, SDT is not its only workhorse. With an integrative approach, the dissertation also draws on public service motivation (PSM) literature, especially institutional PSM theory (Perry 2000; Perry and Vandenberg)

2008; Vandenabeele 2007). PSM research was initially exclusively situated in the field of public administration, but PSM is now a multidisciplinary and multi-sectoral issue, characterized by a dramatic growth in research attention and publications since the 2000s (Perry, Hondeghem, and Wise 2010; Ritz, Brewer, and Neumann 2013).

At its core, PSM research relates to the idea of 'public service ethos' permeating the history of political and moral philosophy and underlying the work of early authors in the field of public administration (Appleby 1952; Barnard 1938; Mosher 1982; Waldo 1984; Wilson 1887). Recognizing how 'the motivation of public servants has long been a topic of public concern, debate, and scholarly interest' (Perry and Hondeghem 2008, 1), PSM research thus focuses on a theorized motivational attribute transcending an individual's immediate self-interest; a motivational desire to the serve public.

Initial formalization of the PSM concept began in the late 1970s and early 1980s (Buchanan 1975; Perry and Porter 1982; Rainey 1982). However, a piece from 1990 by Perry and Wise (1990) is widely considered *the* seminal article on PSM. Using a motivational typology by Knoke and Wright-Isak (1982), the article defined the PSM construct and explained its multidimensional nature (that PSM comprises several sub-dimensions). The article moreover derived three empirically testable propositions: (1) The greater an individual's PSM, the more likely the individual is to seek membership in a public organization; (2) in public organizations, PSM is positively related to individual performance; and (3) public organizations that attract members with high levels of PSM are likely to be less dependent on utilitarian incentives to manage individual performance effectively.

Another important PSM article is Perry (1996). Building on Perry and Wise (1990), this article developed a 24-item scale measure capturing four main dimensions of PSM: *Attraction to policy making*, a rational motive referring to the attraction to participate in the formulation of public policy (Kelman 1987). *Commitment to the public interest*, a norm-based motive reflecting the desire to serve the public interest as a result of feeling a duty to society. *Compassion*, an emotional response relating to a 'patriotism of benevolence' (Frederickson and Hart 1985)—a feeling of a responsibility *toward* the well-being of *others*. *Self-sacrifice*, an affective attachment involving the willingness to substitute service to others for personal rewards.

*These two articles, Perry and Wise (1990) and Perry (1996), constitute a significant reference point for most PSM research and are a likely main cause of both the numerical growth and the particular focus of published PSM studies since the 2000s.* Both articles were published in leading public administration journals (*Public Administration Review* and *Journal of Public Admin-*

*istration Research and Theory*), and whereas Perry (1996) provided a tool for measuring and thus examining individual's PSM, *Perry and Wise (1990) specified three tangible PSM hypotheses*.

Besides substantial research effort to improve the reliability and validity of PSM measurement (Coursey and Pandey 2007; Coursey et al. 2008; Kim 2009a, 2009b, 2011; Kim and Vandenabeele 2010; Kim et al. 2013; Vandenabeele 2008a; Wright, Christensen, and Pandey 2013; Wright and Pandey 2005), much PSM research has examined especially the first two of Perry and Wise's (1990) propositions. In relation to the notion that PSM is positively related to individual performance, numerous studies thus find an association between greater PSM and higher performance (Alonso and Lewis 2001; Andersen, Heinesen, and Pedersen 2014; Andersen and Serritzlew 2012; Brewer and Selden 2000; Frank and Lewis 2004; Kim 2005; Leisink and Steijn 2009; Naff and Crum 1999; Ritz 2009; Vandenabeele 2009). In addition, a recent field experiment finds a positive causal impact of PSM on performance (Bellé 2013). In this context, this dissertation conceptualizes PSM as a particular form of work motivation and thus contributes with insights on how HRM-related interventions and contextual factors may directly engage (capitalize on) the positive relationship between PSM and performance to improve employees' work efforts and performance. This particular contribution is a focal point of chapters 5, 6, and 7.

Similarly, several studies have, directly or indirectly, examined Perry and Wise's (1990) proposition that individuals with greater PSM are more likely to seek membership in a public organization. However, the empirical findings are somewhat mixed and confounded by a limitation relating to the survey samples used. Wright (2008) and Wright and Grant (2010) thus note how the bulk of research examining how PSM predicts individual preferences for public versus private sector work use samples of experienced employees (Crewson 1997; Gabris and Simo 1995; Lewis and Frank 2002; Naff and Crum 1999; Rainey 1982; Steijn 2008; Wright and Christensen 2010). This approach is problematic, because organizational membership may affect personal attributes, such as PSM, through organizational socialization and adaptation processes (Cable and Parsons 2001; Moynihan and Pandey 2007). In other words, observed preferences among high-PSM employees for public employment (Lewis and Frank 2002; Rainey 1982; Steijn 2008; Wright and Christensen 2010) are possibly the consequence of organizational PSM socialization rather than attraction to public sector employment.

A few studies therefore examine PSM and sector preferences among students (Christensen and Wright 2011; Kjeldsen and Jacobsen 2013; Vandenabeele 2008b). One of this dissertation's articles examines Perry and

Wise's (1990) selection proposition among students of economics, political science, and law. Settlement of the linkage between PSM and attraction to public versus private sector employment contributes directly to the dissertation's focus, i.e., identification of possible ways to capitalize on employees' work motivation to support and improve their efforts and task performance at work. Whereas use of HRM-related interventions that activate the behavioral forces of individuals' work motivation is one potential way to increase public service performance, use of HRM attraction and selection policies that look to recruit a highly public service motivated workforce (Leisink and Steijn 2008) is another, potentially complementary approach. Besides empirical validation of Perry and Wise's (1990) selection proposition, research is also needed on 'whether public service motivation is an important recruitment motive for all public sector workers, or whether it is more important for some than others' (Leisink and Steijn 2008, 131). In line with this call for research, and consistent with the dissertation's focus on how contextual factors moderate the effects of work motivation, the article shows how the relationship between PSM and sector employment preferences differs across academic fields of study. The article and its contributions and relevance are further explained in chapter 7.

### 3.1.3 Public Service Motivation in a Self-Determination Theory Framework

How does the PSM concept relate to general work motivation theory? Despite substantial attention to PSM in public administration literature, surprisingly little research has sought to articulate a theory on PSM that integrates the construct into extant work motivation theory.

In line with a call for more SDT-based public administration research on the effects of different forms of motivation (Chen and Bozeman 2013), this dissertation advances a full conceptual embedding of PSM into an SDT understanding of human motivation. In particular, building upon Perry and Vandenberg's development of an institutional PSM theory (Perry 2000; Perry and Vandenberg 2008; Vandenberg 2007), the dissertation suggests that PSM reflects a particular form of motivation relating to the identification with, or full internalization of, public service values and motives. In terms of SDT, PSM is thus an example of an internalized and autonomous form of ex-

trinsic motivation—i.e., a reflection of *identified* or *integrated* regulation (Deci and Ryan 2004; Gagné and Deci 2005).<sup>6</sup>

Classic PSM literature supports this notion. For example, Perry and Wise (1990) describe PSM in terms of predispositions to respond to a specific set of public service motives that an individual feels an inner compulsion to satisfy, thus implicitly underlining the role of value identification and internalization to the PSM construct. Perry and Vandenberg (2008) enforce this argument by stating how PSM originates from the public content of institutions—social structures infused with public values and rules that individuals internalize into a public service identity. Similarly, Vandenberg (2007) notes how PSM can be understood as a public service identity.

Conceptual integration of PSM into an SDT framework represents a significant contribution to PSM theory. Inasmuch as PSM refers to autonomous extrinsic motivation, SDT provides a well-evidenced theoretical framework explaining *why* PSM is associated with increased work effort, performance, and other outcomes. As another upshot, future PSM research may—in relation to both theoretical anchoring and hypotheses development—benefit substantially from SDT insights on main factors facilitating and promoting greater internalization of extrinsic motivation (i.e., in terms of PSM, factors feasibly supporting and stimulating greater personal internalization of institutional public service values and thus promoted PSM). For example, SDT suggests that internalization of extrinsic motivation relates to the satisfaction of three basic psychological needs within social environments: competence, autonomy, and relatedness (Baumeister and Leary 1995; Deci and Ryan 1985a, 2000; Fisher 1978; Ryan 1982). These basic needs comprise essential nutrients for human development and integrity (Ryan et al. 1996). Moreover, they provide an SDT basis for identifying social contexts yielding greater internalization of extrinsic motivation. In particular, the most important factor for identification and integration is ‘autonomy support’ (Black and Deci 2000; Deci and Ryan 1987; Grolnick and Ryan 1989; Williams and Deci 1996; Williams, Deci, and Ryan 1998)—which in organizational settings concerns the general interper-

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<sup>6</sup> Although widely volitional and self-determined, PSM is an extrinsic and not intrinsic type of motivation in terms of SDT: PSM-related behavior does not relate to doing an activity because the activity is inherently interesting or enjoyable for the person (intrinsic motivation). Rather, PSM-related behavior refers to the importance or value that the separable consequences of the activity represent to the individual (extrinsic motivation). In line with this notion, Perry, Hondeghem, and Wise (2010, 682) note how PSM ‘is conceptually distinct from self-interest, which is rooted in self-concern (De Dreu 2006), and from intrinsic motivation (Grant 2008a).’

sonal orientation of one's manager or work-group supervisor (Deci, Connell, and Ryan 1989). Among specific autonomy support variables, the following may yield greater internalization of extrinsic motivation: (1) meaningful rationale for doing a task, (2) acknowledgement that an activity may not be particularly interesting, and (3) emphasis on choice rather than control (Deci et al. 1994; Joussemet et al. 2004). In turn, these variables may also be significant factors for organizational cultivation of greater PSM (Cable and Parsons 2001; Moynihan and Pandey 2007).

## 3.2 Commitment Theory

Public sector research on employee commitment has focused primarily on employee commitment to the organization (Wright 2007). Though scholars have identified a range of employee commitment types (Morrow 1983), little public administration research is preoccupied with employee goal commitment, i.e., commitment to a course of behavior in line with the goals of the organization. However, more public administration research on public service employees' goal commitment is warranted (Wright 2007). First, because organizational commitment and goal commitment are distinct constructs. Organizational commitment may affect other types of employee commitment (Cohen 2003; Locke and Latham 1990a), but high organizational commitment does not equal high goal commitment (Wright 2007); an employee 'may be committed to his job or task but not necessarily to his organization and vice versa' (Wiener and Vardi 1980, 82). Second, because research suggests that goal-committed individuals tend to perform better (Hollenbeck and Klein 1987; Klein et al. 1999; Latham and Locke 2006; Locke and Latham 1990a, 2013; Seijts and Latham 2000a).

This dissertation therefore prioritizes a focus on goal commitment. A germane choice not least in light of meta-analyses of commitment consequences: Organizational commitment is primarily associated with employee absenteeism and retention (Mathieu and Zajac 1990), whereas goal commitment relates more to work efforts and performance (Brown 1996; Klein et al. 1999).

For treatment of the goal commitment construct, the dissertation draws on goal setting theory (GST) (Locke and Latham 1990a, 2013)—arguably *the* most frequently used and tested theory of all motivation theories (Kanfer, Chen, and Pritchard 2008; Locke and Latham 2002; Mitchell and Daniels

2003; Pinder 2008).<sup>7</sup> In particular, GST emphasizes and helps explain the critical role of goal commitment to individual behavior and performance. Prior to presenting the dissertation's theoretical goal commitment approach—to form an understanding of the construct's theory basis and context—the following section gives a brief introduction to GST.

### 3.2.1 Goal Setting Theory

In 1974, Locke and Latham began their career-long collaboration on developing and conducting research on GST (Latham 2012). Locke did his PhD under the supervision of T. A. Ryan, who, in contrast to the doctrine of behaviorism (Skinner 1974; Watson 1913), proposed that behavior is regulated by intentions. Once formed, intentions are the immediate antecedents for predicting and explaining behavior (Ryan 1970; Ryan and Smith 1954). Locke's dissertation (1964) examined Ryan's hypothesis and involved a set of laboratory experiments and propositions (Locke 1968) that subsequently founded the development of goal setting theory in the 1990s (Latham and Locke 1991; Locke and Latham 1990a, 1990b).

The fundamental tenet of GST is that goals and intentions are precursors of human behavior. A goal is something that a person tries to attain, achieve, or accomplish. Being a situational specific form of one's values (Locke 2000), it is the object or target of intentional behavior (Locke and Latham 2002). In contrast, intentions refer to an individual's relationship with an action that he or she will undertake in order to achieve the goal in question (Locke and Latham 2002). In a workplace setting, examples of goals include a level of task performance, a quota, a work norm, or a deadline (Locke et al. 1981).

Irrespective of whether goals are assigned by others, jointly set, or self-set (Latham, Erez, and Locke 1988; Latham, Winters, and Locke 1994; Locke and Latham 1990a, 2006), goals are related to affect in four ways (Locke and Latham 1990a, 2004; Locke et al. 1981). First, goals regulate the direction of attention and action. Identifying the target of intended behavior, they focus 'behavior on value-goal-relevant behavior at the expense of nongoal-relevant action' (Latham 2012, 194). Second, goals can appeal to people's emotions, thus mobilizing energy and intensifying effort. Third, goals affect persistence to attain them, thus prolonging effort over time. Finally, goals stimulate individuals to develop task-relevant strategies for goal attainment.

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<sup>7</sup> Mitchell and Daniels (2003, 231) conclude that GST 'is the single most dominant theory in the field [of work motivation]'. Similarly, the metaphor of an 800-pound gorilla has been used to describe the ubiquitous presence of GST in HRM, organizational behavior, and industrial-organizational psychology literature (Latham 2012).

GST is perhaps best known for emphasizing the importance of goal difficulty and goal specificity (also referred to as goal clarity) to performance (Locke and Latham 1990a, 1990b, 2002, 2006, 2013). In relation to *goal difficulty*, GST suggests that high or hard goals lead to greater performance than easily accomplishable goals.<sup>8</sup> Goal difficulty regulates performance, as high or hard goals stimulate people's effort and persistence in terms of attaining them (e.g., reduce inattention, sloppiness, and slack). Moreover, a sense of challenge is the basis for feelings of accomplishment when a goal is achieved—an independent source to sustained behavioral effort. In relation to *goal specificity*, GST holds that specific goals result in greater performance than vague goals. In other words, clearly specified goals are better at regulating the direction of behavior than poorly specified goals.

However, different factors condition the goal effect of clear and challenging goals. In line with the previously mentioned 'skill-and-will' model of performance (Fleishman 1958; French 1957; Maier 1955; Porter and Lawler 1968; Vroom 1964), GST recognizes that performance is a function of both motivation and ability. Goal effects thus relate to individuals' task knowledge and ability required for goal attainment performance (Locke and Latham 1990a, 1990b, 2002). For goal setting to be effective, individuals must have the ability to reach or approach the goals (Locke 1982), i.e., the positive relationship between goal difficulty and performance levels off when individuals reach the limits of their abilities (Locke 1982; Seijts and Latham 2000a; Seijts, Meertens, and Kok 1997). Similarly, goal setting is more effective when (1) 'feedback allows performance to be tracked in relation to one's goals' (Locke and Latham 1990b, 241; see also Locke et al. 1981; Latham and Locke 1991), (2) when the novelty or complexity of a task (task complexity) is at a low to moderate level (Locke and Latham 2002; Wood, Mento, and Locke 1987), and (3) when situational constraints do not inhibit goal attainment (Locke and Latham 1990b, 2006; Peters et al. 1982), e.g., organizational 'role

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<sup>8</sup> Goal difficulty can be defined as 'the extent to which an individual's goal is discrepant (either positively or negatively) from that individual's capacity to achieve the goal' (Wright 1992, 283). Importantly, GST notes how the expectation of a positive effect of increasing goal difficulty presumes that goal attainment is 'realistic' and 'feasible' (Locke and Latham 1990a; 2002). As noted by Wright (2001, 2004), employees may expend little effort if goals are too high or hard to accomplish, simply because such goal attainment efforts may be viewed as futile. In other words, the goal difficulty-performance relationship refers to an inverted U-shape association. As goals become extraordinarily difficult to accomplish, the positive marginal effect of goal difficulty diminishes and, at some point, becomes negative.

overload' (excess work without the necessary resources to accomplish a task) (Brown, Jones, and Leigh 2005). Ability, feedback, task complexity, and situational constraint are thus moderating factors of goal setting effects (Locke and Latham 1990a, 1990b, 2002).

### 3.2.2 Goal Commitment

'It is virtually axiomatic that a goal that a person is not really trying for is not truly a goal and therefore has little or no effect on subsequent performance' (Seijts and Latham 2000a, 315; see also Locke 1968; Locke and Latham 1990a, 2013; Locke et al. 1981). In line with this statement, goal commitment has been a central concept in GST since its inception. In fact, Locke and Latham have proclaimed that goal commitment is the *sine qua non* of goal setting (Locke and Latham 2004, see also Latham, Borgogni, and Pettita 2008); that goal setting can have no effect unless there is goal commitment (Latham and Locke 2007).

Despite its central role in GST, several scholars (Hollenbeck and Klein 1987; Locke, Latham, and Erez 1988) have pointed out how the examination of goal commitment is largely absent from early goal-setting research, i.e., the 25 years following the first appearance of GST in the mid-1960s (Locke 1968). Since then, however, much research has examined the consequences of goal commitment (Donovan and Radosevich 1998; Klein et al. 1999; Seijts and Latham 2000a).

Goal commitment relates to work behavior and performance in two ways. First, research finds that goal commitment may affect work behavior and performance by moderating the goal difficulty-performance relationship, i.e., by interacting with goal difficulty (Locke and Latham 2013). In particular, the positive effects of goal difficulty appear higher among individuals with higher relative to lower goal commitment (Erez and Zidon 1984; Heimerdinger and Hinsz 2008; Hollenbeck, Williams, and Klein 1989; Klein et al. 1999; Seijts and Latham 2011; Tubbs 1993). Consequently—because interactive relationships are symmetrical in nature (Cohen and Cohen 1983)—goal commitment thus appears to have a positive effect on work behavior and performance that is stronger with more difficult relative to easier goals. While GST studies often state the effects of goal commitment-goal difficulty interaction in terms of goal commitment moderation, the conclusion that goal commitment moderates the goal difficulty-performance relationship

necessarily substantiates that goal difficulty moderates the goal commitment-performance relationship (Klein et al. 1999, 887).<sup>9</sup>

Second, goal commitment has main effects on work behavior and performance (Hollenbeck and Klein 1987; Locke and Latham 1990a; Seijts and Latham 2000a)—‘even when a significant interaction is present’ (Klein, Cooper, and Monahan 2013, 71). Some studies thus find a positive association between goal commitment and work effort or performance regardless of the level of goal difficulty (Klein et al. 1999; Wright 2007), while several other studies find that individuals who are highly committed to a moderately difficult or difficult goal perform at higher levels than individuals who are not committed to the same goal (Erez and Judge 2001; Harrison and Liska 1994; Hollenbeck et al. 1989; Johnson and Perlow 1992; Klein and Kim 1998; Latham and Locke 1991; Latham, Seijts, and Crim 2008; Locke and Shaw 1989; Piccolo and Colquitt 2006; Schweitzer, Ordóñez, and Douma 2004; Seijts and Latham 2011).<sup>10</sup>

Higher goal commitment is expected to reflect positively on goal attainment—e.g., high performance—through mechanisms similar to those of goal setting (Klein, Molloy, and Brinsfield 2012; Locke and Latham 1990a, 2013). In particular, goal commitment binds an individual to a course of actions, i.e.,

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<sup>9</sup> The notion that interactive relationships—and thus empirical results in relation to interaction effects—are symmetrical (Cohen and Cohen 1983) may be trivial to some people. For the purpose of clarity, I nevertheless want to stress this logic. Say that two studies, A and B, test the basic ‘skill-and-will’ model of performance (Fleishman 1958; French 1957; Maier 1955; Porter and Lawler 1968; Vroom 1964). Study A examines the moderating effect of motivation on the ability-performance relationship; study B the moderating effect of ability on the motivation-performance relationship. Essentially estimating two sides of the same coin, the finding of a stronger positive ability-performance association at higher levels of motivation (A) implies a stronger positive motivation-performance association at higher levels of ability (B), and vice versa.

<sup>10</sup> The exact interaction effect of goal commitment and goal difficulty refers to an *uncrossed interaction* (Stone and Hollenbeck 1984), i.e., high performance may come about only when goal commitment and goal difficulty are both high. As explained by Klein et al. (1999, 886): ‘Difficult goals do not lead to high performance when commitment is low and high levels of commitment to easy goals also fail to generate high performance ... Because of the uncrossed nature of this interaction, main effects rather than the interaction can be expected under certain operational conditions [high goal difficulty]. In such situations, the failure to observe a significant interaction does not mitigate or refute the critical role of goal commitment.’ See also Klein, Cooper, and Monahan (2013, 71).

directs individual behavior and attention (Fishbach and Dhar 2005; Lindberg and Wincent 2011; Mathieu 1992; Meyer and Herscowitch 2001; Parish, Cadwallader, and Busch 2008; Seijts and Latham 2000b; Vance and Colella 1990). Similarly, highly goal committed individuals exert greater effort and are more persistent toward goal attainment than individuals who are less committed to the goal (Chang, Johnson, and Lord 2010; Erez and Judge 2001; Latham and Locke 1991, 2006; Seijts and Latham 2000a; Slocum, Cron, and Brown 2002; Wright 2007). Finally, goal commitment is positively related to the development of task-relevant strategies for goal attainment (Earley, Shalley, and Northcraft 1992).

In sum, GST-based research—in terms of theory and findings—thus offers strong evidence for the importance of employee goal commitment to work behavior and performance. However, little empirical research has examined the tenets of GST in public sector settings, i.e., among public employees. While some scholars suggest that GST ‘is applicable in the public as well as private sector’ (Latham, Borgogi, and Petitta 2008, 398), evidence on the validity of such claim is empirically unsubstantiated at large (exceptions include Chun and Rainey 2005a, 2005b; Selden and Brewer 2000; Wright 2004, 2007). Public administration scholars have thus called for greater research attention to goal setting processes and effects in public organizations (Perry, Mesch, and Paarlberg 2006) and the cause and effects of public employees’ goal commitment (Wright 2007). Additionally, Klein, Cooper, and Monahan (2013, 81) call for more research ‘examining the central hypothesis that goal commitment and goal difficulty interact in relation to task performance, assuming sufficient variance in both variables.’

In this context, this dissertation contributes with insights on the effect of goal commitment on task performance in a frontline public service setting. In particular, one of the articles examines the effect of teachers’ goal commitment on their task performance in educating their students. Moreover, in line with the dissertation’s focus on how contextual factors moderate the effect of employee commitment on performance, this article shows how the relationship between goal commitment and task performance differs across the average socio-economic background of the teachers’ students. In light of the article’s research design and theoretical definitions of ‘service user capacity’ and goal difficulty, the average socio-economic background of the teachers’ students represents a simultaneous indicator of service user capacity and goal difficulty.<sup>11</sup> Among other qualities, the article thus operates with sub-

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<sup>11</sup> While I elaborate the content and contributions of the article later on, I want to explain briefly two things. First, ‘service user capacity’ relates to the citizens who use

stantial empirical variance in its service user capacity/goal difficulty measure while keeping constant both the job goal task and task performance indicator. The article and its contributions and relevance are further explained in chapter 8.

### 3.3 Self-Determination Theory and Goal Setting Theory

SDT and GST are both process theories of work motivation. Viewing work motivation from a dynamic perspective, both emphasize the actual process of motivation, how behavior is directed, energized, and sustained, and thus 'attempt to understand the thought process that people go through in determining how to behave in the work place' (Steers, Mowday, and Shapiro 2004, 381). Among their main similarities—besides the underpinning of the role of motivational processes to human behavior and performance—both theories stress the importance of intentionality (that behavior is regulated by intentions) and individual self-regulation. Self-determination and self-regulation are synonymous concepts in SDT (Deci and Ryan 1985a, 2004; Gagné and Deci 2005), while self-regulation is at the core of goal setting and feedback seeking in relation to goals in GST (Latham and Locke 1991; Latham and Pinder 2005). As another point of theory convergence, Gagné and Deci (2005) note how a 'meaning rationale' facilitates internalization of extrinsic motivation in SDT (Deci et al. 1994), goal acceptance in GST (Latham, Erez, and Locke 1988).

That said, SDT and GST are distinct theories, and they clearly differ in some respects. Primarily, GST and SDT differ in their perspective on work motivation. Whereas GST treats motivation for action as a unitary concept that

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a public service organization's services, i.e., their 'feeling of competence to understand and affect the provision of the public services' (Kristensen, Andersen, and Pedersen 2012, 947). The second comment concerns the article's operationalization of service user capacity/goal difficulty. In the area of schooling, the average socio-economic background of the teachers' students represents a proxy of service user capacity, but may simultaneously comprise a context-specific indicator of goal difficulty. The basic intuition is that students' attainment of subject learning is a main teacher job goal, but that the teacher goal task of ensuring students' subject learning becomes increasingly difficult, *ceteris paribus*, when the socio-economic background (service user capacity) of a teacher's class is weaker. Importantly, as elaborated in chapter 8, the particular research design of the article plays a significant role for the face validity of the conceptual linkage between service user capacity and goal difficulty.

varies in extent rather than kind, SDT focuses on the relative strength of autonomous versus controlled motivation, i.e. variation in kind rather than total extent of motivation. Gagné and Deci (2005, 341) thus note how GST fails to account for 'the fact that different goal contents and different types of regulation of goal pursuit lead to different qualities of performance' (e.g., see Sheldon and Elliot 1999; Sheldon et al. 2004).

Another difference is that GST emphasizes that 'self-set goals are as effective, but not more effective' (Locke and Latham 2013, 10) in bringing about goal attainment than goals assigned by others or jointly set goals (Latham, Erez, and Locke 1988; Latham, Winters, and Locke 1994; Locke and Latham 1990a, 2006). This finding is contrary to SDT, i.e., more autonomous extrinsic motivation is associated with outcomes such as greater work engagement and behavioral persistence (Connell and Wellborn 1990; Kasser, Davey, and Ryan 1992; Vallerand and Bissonnette 1992) and performance (Baard, Deci, and Ryan 2004; Burton et al. 2006; Grolnick, Ryan, and Deci 1991; Miserandino 1996).

In line with the implications of Kanfer, Chen, and Pritchard's (2008) shoe analogy, however, the fact that SDT and GST clearly differ in some respects does not necessarily imply that one theory is more right than the other is. Some of the dissimilarities may simply stem from a focus on different parts of the motivation process (Locke and Latham 2004). In addition, very substantial bodies of research evidently support both theories. At the very least, no empirical evidence thus exists for falsifying or establishing the superiority of either theory.

Very little research has attempted to develop a theory integration of SDT and GST. Meyer, Becker, and Vandenberghe (2004) is one exception. Based on a GST-based model by Locke (1997) and a workplace commitment model by Meyer and Herscovitch (2001), they develop a highly intricate model of the work motivation process. Among other things, this model introduces the concept of 'goal regulation'—a multidimensional concept derived from SDT and regulatory focus theory (Higgins 1997, 1998). However, as noted by Latham (2012, 198), the validity of Meyer, Becker, and Vandenberghe's (2004) model remains to be tested empirically—and their integrative model constitutes, at best, only a partial integration of SDT and GST.

In general, robust test of highly intricate models of motivation, such as Meyer, Becker, and Vandenberghe's (2004), is a Herculean task. For example, besides requiring reliable and valid measurement of a wide display of latent constructs (i.e., data on a great quantity of relevant variables), such tests would have to handle a combination of simultaneous mediation processes, interactions, simultaneities, and feedback loops—all while minimizing

usual threats to internal validity (e.g., omitted variable bias, reverse causation bias, selection bias). At the very least, 'it thus remains to be seen whether an integrative model of motivation is desirable, or even possible' (Grant and Shin 2012, 515).

That said, I do not mean to suggest that scholarly efforts toward a theory integration of SDT and GST are altogether futile. However, full theory integration of SDT and GST is not necessarily feasible or particularly fruitful—and such attempt is certainly beyond both the scope and purpose of this dissertation.

Before proceeding to a conceptual clarification of the work motivation and goal commitment constructs, however, I want to make the following point clear: While the dissertation conceptualizes work motivation and goal commitment through different lenses (SDT and GST, respectively), each article focuses exclusively on either work motivation or goal commitment and thus draw exclusively on either SDT or GST (the articles are presented in chapter 4). In other words, the dissertation draws on SDT when examining work motivation and GST when examining goal commitment. Consequently, any theory discrepancy between SDT and GST should not confound the validity of theory underlying the dissertation's articles and hypothesis developments. In relation to theory discrepancy between SDT and GST, future research may (or may not) establish the superiority of one of the two theories. However, the dissertation's articles draw on and contribute to the current 'state of the art' in both SDT and GST.

### 3.4 Conceptual Clarification

Knowledge about the main theories that guide the dissertation's articles is imperative for understanding the theoretical advances and developments that the dissertation provides. However, clarification of the dissertation's construct conceptualizations of work motivation and commitment is equally important, not least for accurately delineating the dissertation's conceptual domain. In brief, work motivation is an 'invisible, internal, hypothetical construct' (Ambrose and Kulik 1999, 231). Examining causes and effects of work motivation is thus problematic from the outset (Pinder 2008; Selden and Brewer 2000). The same is true for goal commitment (Klein, Becker, and Meyer 2009; Seijts and Latham 2000a). As latent variables (Borsboom, Mellenbergh, and van Heerden 2003), work motivation and goal commitment are theoretical in nature, being neither directly observable nor measurable in any objective way. However, a main precept for empirical research is that the observational manifestations of phenomena (data) are reliable and con-

sistent with the theoretical definition of the constructs under scrutiny. Conceptual clarification of the work motivation and goal commitment constructs is therefore crucial for understanding and assessing the dissertation's findings and contributions.

### 3.4.1 Work Motivation Defined

Most people have an idea of the implied meaning of 'work motivation.' Deriving from the Latin word for movement (Steers, Mowday, and Shapiro 2004), it somehow refers to that which moves (i.e., drives and fuels) our work-related behaviors. In its broadest definition, work motivation is thus an underlying element in all we do in relation to a given work task, at home or at the workplace.

Work motivation researchers have long sought to provide a more accurate and less all-embracing definition. However, the absence of a general definition is evident. As with the 'motivation' term, there have been almost as many definitions of work motivation offered over the years as there have been work motivation scholars (Pinder 2008, 10). However, while work motivation has been defined in numerous ways (Wright 2001), the various definitions appear to have some common denominators. Perry and Porter (1982, 89) define motivation as 'that which energizes, directs and sustains behavior.' Accordant with this broad definition, the majority of work motivation definitions appear to converge in terms of an emphasis on work motivation as a psychological process manifested in three related but distinct aspects: direction (choice), intensity (effort), and persistence (duration). *Direction* refers to the focus of a person's thoughts, attentions, and actions at work. It thus involves the choices people make and their attention to activities promoting goal attainment. *Intensity* involves the magnitude or amount of mental and physical resources devoted to some task or set of tasks at work. It thus involves how hard a person works (effort). *Persistence* represents sustained direction and effort over time. Examples of scholars emphasizing how work motivation involves the processes that account for what a person attends to (direction), how much he or she acts on it (intensity), and for how long (persistence) are numerous (Campbell and Pritchard 1976; Ford 1992; Grant and Shin 2012; Kanfer 1990; Katzell and Thompson 1990; Locke and Latham 2004; Pinder 2008; Porter, Bigley, Steers 2003; Rainey 2014; Steers, Mowday, and Shapiro 2004; Wright 2004).

Overall, this dissertation's *theoretical* work motivation conceptualization is in line with these scholars and the common denominators characterizing their concept definitions. In particular, as to not create yet another work mo-

tivation definition, I summarize my definition of work motivation by referencing Kanfer, Chen, and Pritchard (2008, 5), who explain how 'work motivation is a psychological process that influences how personal effort and resources are allocated to actions pertaining to work, including the direction, intensity, and persistence of these actions.'<sup>12</sup>

In relation to the *operational* definition of work motivation, this dissertation follows SDT (Deci and Ryan 1985a, 2004; Gagné and Deci 2005; Ryan and Deci 2000a) and thus conceptualizes work motivation as a multidimensional construct involving separate forms of motivation that differ in the extent to which they are autonomous versus controlled, i.e., subject of individual self-determination (self-regulation). SDT identifies five distinct forms of motivation: intrinsic motivation and four types of extrinsic motivation (external, introjected, identified, and integrated). I presented and discussed the individual forms of motivation in section 3.1.1. For the purpose of clarity, however, I want to summarize briefly their content domain: *Intrinsic motivation* refers to 'doing an activity for its inherent satisfactions rather than for some separable outcome' (Ryan and Deci 2000b, 56). *External extrinsic motivation* denotes behavior intended 'to satisfy an external demand or obtain an externally imposed reward contingency' (Ryan and Deci 2000b, 61), while *introjected extrinsic motivation* represents 'doing something out of inner pressures, whether it is obtaining an internal reward (e.g., boosting one's self-worth) or avoiding internal punishments (e.g., avoiding guilt)' (Forest et al. 2014, 336). *Identified extrinsic motivation* represents 'doing something because it is personally meaningful or judged to be important' (Forest et al. 2014, 336); because of personal identification with a behavior's value (Deci and Ryan 2000). Finally, *integrated extrinsic motivation* occurs 'when identified regulations have been fully assimilated to the self' (Ryan and Deci 2000b, 62); when 'people have a full sense that the behavior is an integral part of who they are' (Gagné and Deci 2005, 335).

Specifically, to examine how HRM-related interventions may activate the behavioral forces of individuals' work motivation, some of the dissertation's articles rely on an experimental treatment targeting external extrinsic motivation (i.e., a cash prize lottery incentive). Similarly, I employ other experimental treatments targeting peoples' need for feelings of self-importance

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<sup>12</sup> Supplementary to this definition, work motivation can be conceptualized as that which explains variation in individuals' performance at work that is owed to neither ability nor situation (Locke & Latham 1990b, 2004), confer the aforementioned three-factor performance equation in organizational behavior and industrial-organizational psychology:  $\text{Performance} = f(\text{ability} \times \text{motivation} \times \text{situation})$ .

and approval from the self or others, and thus their introjected extrinsic motivation.<sup>13</sup> In addition, this dissertation conceptualizes PSM as a reflection of identified and integrated extrinsic motivation (see the previous discussion in section 3.1.3). Some of the dissertation's articles use experimental treatments targeting individuals' PSM, and other articles study this particular aspect of identified and integrated extrinsic motivation using survey measures of PSM. Given the relative centrality of the PSM construct in this dissertation's examination of ways to capitalize actively on the forces of work motivation, some elaboration of the PSM definition provided in section 3.1.2 seems appropriate before moving on.

### 3.4.2 Public Service Motivation Defined

The core of the PSM construct was initially narrower than what it is today. Building on Rainey's work (1982), Perry and Wise (1990, 368) originally defined PSM as 'an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations.' Subsequent scholars, however, offered broader PSM conceptualizations. In particular, Brewer and Selden (1998, 417) redefined the concept as 'the motivational force that induces individuals to perform meaningful public service (i.e., public, community, and social service).' Similarly, Rainey and Steinbauer (1999, 23) defined PSM as 'a general altruistic motivation to serve the interests of a community of people, a state, a nation or humankind,' while Vandenberg (2007, 547) defined PSM as 'the beliefs, values and attitudes that go beyond self-interest and organizational interest, that concern the interest of a larger political entity and that motivate individuals to act accordingly whenever appropriate.' In contrast to Perry and Wise (1990), these definitions all provided an untangling of the PSM construct from the public sector workforce. In other words, PSM is not a concept specific to the public sector. While PSM may prevail in public sector organizations (Brewer and Selden 1998), PSM can be found among individuals in any sector of employment (Wise 2000), and PSM is associated with potential benefits and gains in both the private and public sector (Steen 2008). PSM is thus distinct from public *sector* motiva-

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<sup>13</sup> Introjected extrinsic motivation is often manifested as ego involvements (Gagné and Deci 2005); internal pressure making individuals' act as to enhance and maintain their self-worth and self-esteem in order to support their egos (deCharms 1968; Nicholls 1984; Ryan 1982). A person's need for feelings of self-importance and approval from the self or others is thus a significant representation of introjection in SDT.

tion and public *employee* motivation (Brewer 2002; Pandey, Wright, and Moynihan 2008; Perry and Hondeghem 2008).

In line with the notion of 'public service ethos,' this dissertation conceptualizes PSM following Hondeghem and Perry (2009). Capturing a common focus on motives and actions that are intended to do good for others and shape the well-being of society, they define PSM broadly as 'an individual's orientation to delivering services to people with the purpose of doing good for others and society' (Hondeghem and Perry 2009, 6; see also Perry and Hondeghem 2008, vii).

The PSM construct thus converges with other concepts such as altruism and prosocial motivation (Perry and Hondeghem 2008). According to Perry, Hondeghem, and Wise (2010), altruism can be defined as 'considerations of another's needs rather than one's own' (Piliavin and Charng 1990, 30), whereas prosocial motivation refers to a 'desire to expend effort to benefit other people' (Grant 2008a, 49). PSM, altruism, and prosocial motivation are thus characterized by common emphasis on orientation toward others that accords with our long-held understandings of 'public service ethos' and research identifying the role of such other orientation in explaining organizational behavior (De Dreu 2006; Meglino and Korsgaard 2004). Still, PSM diverges from altruism and prosocial motivation in one important respect. While altruism and prosocial motivation are cast in general terms regarding objects of motivation, the PSM concept is more particular. By defining PSM as an 'individual's orientation to delivering services to people' (Hondeghem and Perry 2009, 6), the PSM construct's content domain is clearly more restricted in scope than that of altruism and prosocial motivation. PSM is thus conceptualizable as 'a particular form of altruism or prosocial motivation that is animated by specific disposition and values arising from public institutions and missions' (Perry, Hondeghem, and Wise 2010, 682).

### 3.4.3 Goal Commitment Defined

For the *theoretical* definition of goal commitment, this dissertation follows Latham and Locke (1991): Goal commitment is definable as 'the degree to which the individual is attached to the goal, considers it significant or important, is determined to reach it, and keeps it in the face of setbacks and obstacles' (Latham and Locke 1991, 217). Goal commitment thus refers to the intention to extend effort toward goal attainment, persistence in pursuing that goal over time, and an unwillingness to lower or abandon that goal (Hollenbeck and Klein 1987). This definition is consistent with current construct conceptualizations within task goal theory (Klein et al. 2001) and re-

flects several common themes in previous definitions (Campion and Lord 1982; DeShon and Landis 1997; Kernan and Lord 1988; Locke, Latham, and Erez 1988; Naylor and Ilgen 1984; Wright et al. 1994).

As this definition incorporates both attitudinal and behavioral components, goal commitment 'can be measured attitudinally or behaviorally' (Seijts and Latham 2000a, 318). Either approach is satisfactory (Locke and Latham 1990a; Tubbs 1993). Among the most widely used measures of goal commitment is a nine-item scale developed and validated by Hollenbeck and colleagues (Hollenbeck et al. 1989; Hollenbeck, Williams, and Klein 1989). This scale operationalizes goal commitment as a self-report of an attitudinal reaction to a goal, with individual scale items reflecting cognitive, affective, and behavioral components. In relation to the *operational* definition of goal commitment, this dissertation uses a self-report measure comprising scale items matching the content domain of those of Hollenbeck's scale.

While Hollenbeck's scale does not inform the researcher of the actual goal that the individual is trying to attain, it constitutes a general, flexible measure that can assess goal commitment regardless of goal origin or timing. The scale has been used to analyze commitment to self-set, assigned, and participative-set goals, and to examine both initial and ongoing commitment when striving to attain a goal (Seijts and Latham 2000a). Moreover, the scale has been used for analyses at both the individual and group level (Seijts and Latham 2000b; Tubbs 1993; Weingart 1992; Weingart and Weldon 1991)

#### 3.4.4 Work Motivation and Goal Commitment

GST conceptualizes work motivation and goal commitment as separate constructs (Locke and Latham 1990a, 1990b, 2013). The same is true for SDT. Gagné and Deci (2005) note how several studies find that more autonomous motivation (i.e., internalization of extrinsic motivation) facilitates both organizational commitment and goal commitment. However, work motivation and goal commitment are clearly similar concepts in some respects. Both play an important role in the scholarly efforts to understand, predict, and influence employee behavior and performance. Similarly, both constructs relate to energizing forces with implications for behavior. In terms of the aforementioned three-factor performance equation (performance =  $f(\text{ability} \times \text{motivation} \times \text{situation})$ ) in organizational behavior and industrial-organizational psychology, both work motivation and goal commitment may influence perfor-

mance directly<sup>14</sup>—e.g., by reducing the negative impact of low ‘ability’ or ‘situation’ factors that otherwise impede performance. So what is really the essential difference between the two constructs?

A look at the theoretical construct definitions suggest that work motivation is a somewhat broader concept than goal commitment. While work motivation refers to the psychological process that affects the direction, intensity, and persistence of work behavior (Kanfer, Chen, and Pritchard 2008, 5), goal commitment refers to the force that binds an individual to a course of action; i.e., makes an individual strive to reach a set goal, even in the face of setbacks and obstacles (Latham and Locke 1991, 217). In addition to the focus on goal-specific behavior, this ‘binding’ feature distinguishes goal commitment from work motivation. In some ways, goal commitment is conceivable as a relatively more stable phenomenon. For example, while an individual’s work motivation may be high in general (on average), it is likely to oscillate on a daily basis; even the most work motivated individual is rarely ‘fully’ motivated all of the time. In contrast, goal commitment represents a relatively more long-term and stable individual trait. Goal commitment can thus make individuals stick to goal accomplishment when they experience occasional dips in their work motivation. While work motivation may ebb in the face of setbacks or obstacles, goal commitment entails a determination to reach a goal in the face of such setbacks or obstacles (Locke and Latham 1990a). Importantly, this distinction does not imply that goal commitment is more important than work motivation for individual behavior and performance at work. Goal commitment may be pointless without some level of work motivation. Similarly, higher work motivation may yield, *ceteris paribus*, higher levels of performance. Both work motivation and goal commitment are thus essential components to the quantity and quality of an individual work behavior and performance.

### 3.5 Recap of Theory and Conceptualizations

The present chapter has presented and discussed the main theories on work motivation and commitment that guide the dissertation’s articles. Moreover, the chapter has elaborated the dissertation’s conceptualization of the work

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<sup>14</sup> As previously mentioned, the ‘motivation’ equation term involves all those psychological processes that cause the discretionary efforts put forth for the completion of a task (Mitchell 1982). Commitment is thus conceivable as a subcomponent of the term (Whetten and Cameron 2011; Whetten, Cameron, and Woods 2000).

motivation and the goal commitment constructs. Table 3.1 provides a summary of theory, construct definitions, and operational research focus.

Table 3.1 Summary of Theory, Construct Definitions, and Operational Research Focus

	Work motivation	Goal commitment
Main theory	Self-determination theory (SDT) and public service motivation (PSM) research	Goal setting theory (GST)
Construct definition	'... a psychological process that influences how personal effort and resources are allocated to actions pertaining to work, including the direction, intensity, and persistence of these actions'	'... the degree to which the individual is attached to the goal, considers it significant or important, is determined to reach it, and keeps it in the face of setbacks and obstacles'
Operational research focus	Various forms of extrinsic motivation: - Identified or Integrated (PSM) - Introjected (ego involvement) - External (money)	Self-reported attitudinal reaction to set organizational goals

In sum, the dissertation conceptualizes and examines work motivation through the lens of SDT, supplemented by institutional PSM theory. In an SDT framework, the dissertation focuses on variations in extrinsic motivation. In particular, to examine how HRM-related interventions may activate the behavioral forces of individuals' work motivation, some of the dissertation's articles employ experimental treatments targeting specific aspects of external, introjected, and identified or integrated extrinsic motivation. The dissertation's operational definition of external extrinsic motivation relates to pecuniary motivation (money); introjected extrinsic motivation to a need for feelings of self-importance and approval from the self or others (ego involvement); identified or integrated extrinsic motivation to PSM. Moreover, to examine how different contextual factors moderate the motivation-performance relationship, some of the dissertation's other articles focus exclusively on variation in individuals' PSM, i.e., identified or integrated extrinsic motivation.

In contrast, the dissertation conceptualizes and studies goal commitment through the lens of GST. To examine the role of goal commitment to employee task performance and how contextual factors moderate this relationship, one of the dissertation's articles employs a self-report attitudinal scale measure capturing attributed goal importance, goal adherence, and goal compliance intent—three subcomponents of goal commitment.

The next chapter presents and elaborates on the content, connection, and contributions of the separate articles comprising this dissertation.

## Chapter 4: Articles

This dissertation's core ambition is to add to an answer of the following general question: How can we capitalize on employees' work motivation and commitment to support and improve their efforts and task performance at work? As mentioned, the main sub-questions are: To what extent may HRM-related interventions activate the behavioral forces of individual's work motivation? Are the effects of such HRM-related interventions contingent on the type of motivation that the particular intervention serves and seeks to engage? What is the role of employee commitment to task performance in a frontline public service setting? Do different contextual factors moderate the motivation-performance and commitment-performance relationships?<sup>15</sup>

Overall, with its focus on employees in public service organizations, the dissertation aims to show how different HRM-related interventions and contextual factors may support and enforce the ways in which individuals' work motivation and goal commitment reflect positively on behavioral choice, work effort, and task performance. Unified by this purpose, the dissertation comprises the following six articles:<sup>16</sup>

- A. Pedersen, Mogens J. (2015a). Activating the Forces of Public Service Motivation: Evidence from a Low-Intensity Randomized Survey Experiment. *Public Administration Review*.
- B. Pedersen, Mogens J., and Christian V. Nielsen (2014). Improving Survey Response Rates in Online Panels: Effects of Low-Cost Incentives

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<sup>15</sup> As mentioned (chapter 2, introduction), 'HRM-related interventions' refer to interventions that relate to the basic content of distinct types of real-life HRM policies (but do not mirror them exactly). Remember also that the dissertation employs a broad definition of what may constitute a 'contextual factor.' Broadly referring to characteristics of circumstances, forces, or situations that affect an entity (i.e., motivation-outcome and commitment-outcome relationships), contextual factors may involve organizational variables but can also involve individual-level characteristics such as gender and education.

<sup>16</sup> The full references of the published articles appear in References. Note that this report will occasionally reference findings of additional research conducted during 2013-2015 that are not a part of the dissertation (e.g., Pedersen 2015d; Pedersen and Nielsen 2015; Pedersen et al. 2015; Stritch, Pedersen, and Taggart 2015; Winter et al. 2015).

- and Cost-Free Text Appeal Interventions. *Social Science Computer Review*.
- C. Pedersen, Mogens J. (2015b). More Similar Than Different: Experimental Evidence on the (In)Significance of Gender for the Effect of Different Incentives on Compliance Behavior. *Administration & Society*.
  - D. Lynggard, Mikkel, Mogens J. Pedersen, and Lotte B. Andersen (2015). Exploring the Context Dependency of the PSM-Performance Relationship. Invited for revise and resubmit at *Public Administration Review*.
  - E. Pedersen, Mogens J. (2013). Public Service Motivation and Attraction to Public versus Private Sector Employment: Academic Field of Study as Moderator? *International Public Management Journal*.
  - F. Pedersen, Mogens J. (2015c). A 'Heart of Goal' and the Will to Succeed: Goal Commitment and Task Performance among Teachers in Public Schools. *Public Administration*.

Table 4.1 provides an overview of the articles' construct focus, data, research design, method of analyses, and sample population. While unified by an overall focus on how HRM-related interventions and contextual factors moderate the effect (1) of work motivation on behavioral choice and effort, task performance, and sector employment preferences, and (2) of goal commitment on task performance, the articles use a diverse selection of data, research designs, statistical methods, and sample populations.

The use of conventional and framed survey experiment designs (Harrison and List 2004) and within-student fixed effects panel designs yields more rigorous than normal hypotheses tests (Schlotter, Schwerdt, and Woessman 2011; Wooldridge 2009). Nevertheless, the articles are not without limitations or caveats. Paraphrasing Wright and Grant (2010) and McGrath (1981), most empirical research is marked by a trade-off between the ability to make causal statements (internal validity), the ability to generalize those statements to other settings (external validity), and the ability of a broader audience to directly apply them (ecological validity). In this context, I review and discuss the limitations of the findings in chapter 9 with main focus on internal validity concerns in the observational studies and external and ecological validity concerns in the experimental studies.

Table 4.1 Overview of the Dissertation's Articles

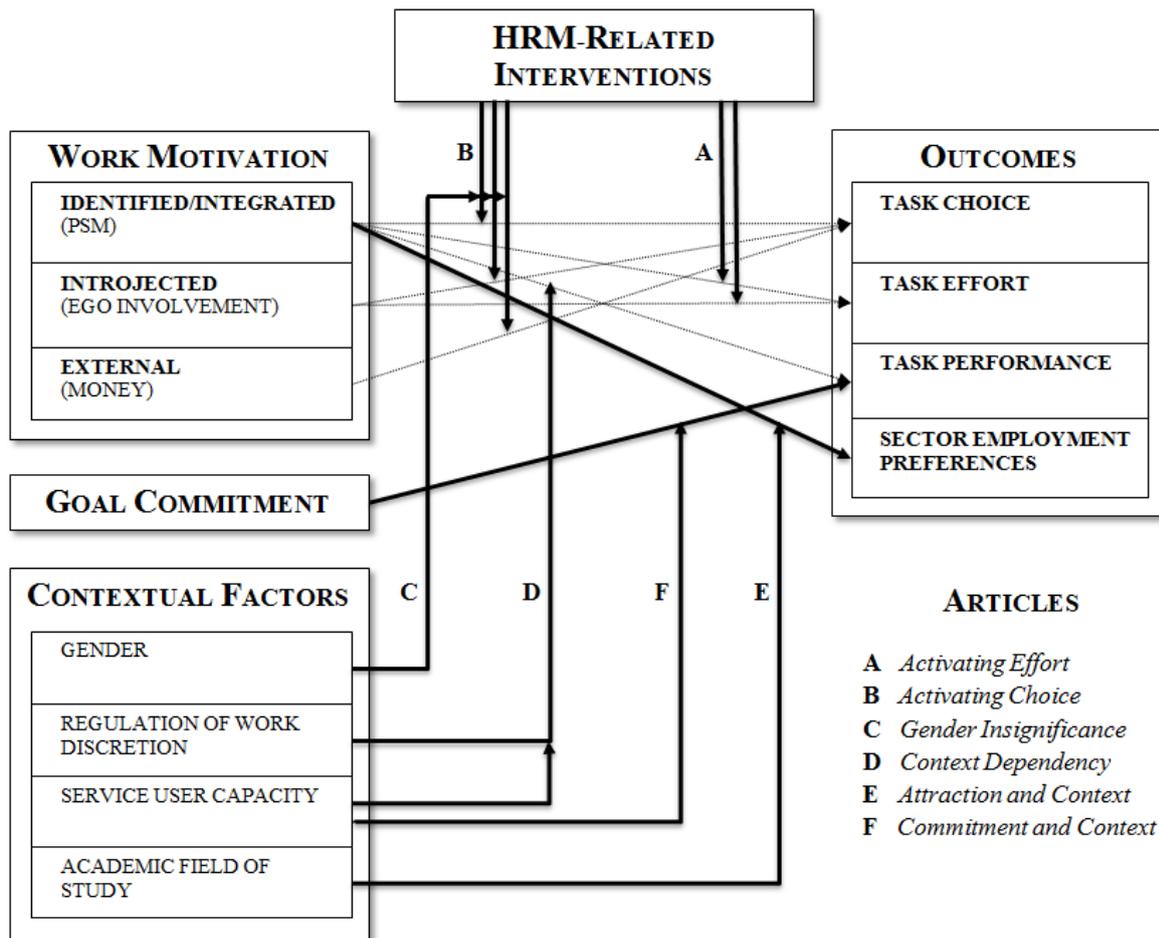
	Short title	Construct focus <sup>a</sup>	Data	Design	Method	Sample <sup>b</sup>
A	Activating Effort	Work motivation (PSM, IEM)	Experimental	Conventional survey experiment	Multivariate OLS regression	University students
B	Activating Choice	Work motivation (PSM, IEM, EEM)	Experimental	Framed survey experiment	Multivariate logit regression	Citizens (age 18+)
C	Gender Insignificance	Work motivation (PSM, IEM, EEM)	Experimental	Framed survey experiment	Multivariate logit regression	Citizens (age 18+)
D	Context Dependency	Work motivation (PSM)	Observational (survey, registry)	Panel study	Within-student fixed effects regression	School teachers
E	Attraction and Context	Work motivation (PSM)	Observational (survey)	Cross-sectional study	Multinomial logit regression	University students
F	Commitment and Context	Goal commitment	Observational (survey, registry)	Panel study	Within-student fixed effects regression	School teachers

Notes: a. The denotations in parentheses mark the specific SDT forms of extrinsic motivations subject to examination: 'PSM' refers to identified or integrated extrinsic motivation in the form of PSM, 'IEM' to introjected extrinsic motivation in the form of a need for feelings of self-importance and approval from the self or others (ego involvement); 'EEM' to external extrinsic motivation in the form of pecuniary motivation (money). b. All the data are Danish (i.e., comprise individuals with some proficiency in reading Danish who are currently living in Denmark).

## 4.1. Overview: Connection and Contributions

Figure 4.1 illustrates the connection and contributions of the articles comprising the dissertation. Arrows pointing from one variable to another represent expected variable relationships, e.g., see the arrow from 'goal commitment' to 'task performance.' Arrows pointing from a variable to another arrow indicate potential moderation (or interaction; that a variable may affect the direction and/or strength of the relationship between two other variables), e.g., see the arrow from 'service user capacity' pointing to the arrow going from 'goal commitment' to 'task performance.' The individual letters (A to F) signify the research focus of the separate articles, while boldfaced arrows denote the core research question and contribution. For example, article A examines how HRM-related interventions moderate (activate) the effects of identified/integrated extrinsic motivation (PSM) and introjected extrinsic motivation (ego involvement) on individual efforts in relation to a task.

Figure 4.1 Illustration of the Connection of the Dissertation's Articles



In brief, articles A ('Activating Effort') and B ('Activating Choice') show how different HRM-related interventions—seeking activation of different forms of work motivation—may affect individuals' task choice and effort. Based on and contributing to SDT and PSM research, the articles bring new knowledge on how HRM interventions may influence the effect of work motivation on behavioral outcomes via activation of individuals' work motivations. Article A examines activation effects in relation to task effort. Article B looks at activation effects in relation to task choice. Article A focuses on interventions targeting internalized extrinsic motivation (i.e., identified or integrated extrinsic motivation in the form of PSM and introjected extrinsic motivation relating to a need for feelings of self-importance and approval from the self or others). Article B employs interventions targeting the same aspects of internalized extrinsic motivations as well as external extrinsic motivation in the form of pecuniary motivation.

Building on article B's research design, article C ('Gender Insignificance') examines if the activation effects of different HRM-related interventions are different across male and females. Article C thus provides some indication

about whether certain HRM ‘motivation activation’ interventions may be more effective than others in specific types or sections of public service organizations, i.e., organizations or sections with a preponderance of either female or male employees.<sup>17</sup> As I will elaborate in chapter 6, gender role and stereotype theory and findings (Basow 1992; Eagly 1995; Eagly, Beall, and Sternberg 2005; Eagly and Wood 2013) support that gender may moderate the effectiveness of different HRM-related interventions in affecting individual’s task choice via work motivation activation.

Article D (‘Context Dependency’) demonstrates how the relationship between employee work motivation (i.e., identified or integrated extrinsic motivation in the form of PSM) and task performance may be simultaneously moderated by two contextual factors: extent of regulation of employee work discretion and level of ‘service user capacity’ (Kristensen, Andersen, and Pedersen 2012). Le Grand (2003, 2007, 2010) provides the basis for focusing on these two particular factors as potential moderators of the relationship between (public service) motivation and task performance.

Article E (‘Attraction and Context’) shows (1) how work motivation (again identified or integrated extrinsic motivation in the form of PSM) predicts pre-entry preferences for public versus private sector employment, and (2) how this relationship differs among students of economics, political science, and law. In addition to a test of Perry and Wise’s (1990) proposition that individuals with greater PSM are more likely to seek membership in a public organization, this article thus examines whether differences in individuals’ academic field of study may moderate the association between high PSM and preferences for public sector employment. As mentioned (section 3.1.2), this particular research focus contributes directly to the dissertation’s main purpose, i.e., identification of ways to possibly capitalize on employees’ work motivation to support and improve their efforts and task performance at work. Attraction, recruitment, and selection of high-PSM employees may improve public service performance (Leisink and Steijn 2008), i.e., inasmuch as PSM is positively associated with productive work behavior and performance. However, the design and use of appropriate HRM attraction, recruitment, and selection policies necessitate knowledge on whether high-PSM employees are inherently attracted to public sector jobs and ‘whether public service motivation is an important recruitment motive for all public sector workers, or

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<sup>17</sup> While horizontal gender segregation has diminished over time, some service occupations remain dominated by (fe)male personnel (Beskæftigelsesministeriet 2013; Blau, Brummund, and Liu 2013; Emerek and Holt 2008).

whether it is more important for some than others' (Leisink and Steijn 2008, 131).<sup>18</sup>

Finally, article F ('Commitment and Context') tests the impact of goal commitment on task performance among frontline public service employees and provides some evidence on the moderating role of service user capacity. That commitment is a likely contributing factor to public service effectiveness is not a new idea (see section 2.2.3). However, empirical public administration research that specifically examines the linkage between goal commitment and task performance in the area of frontline public service is sparse and warranted (Wright 2007). Similarly, whether the task performance effect of goal commitment differs across similar public service organizations that are different in terms of their service users' user capacity has not been tested. The focus on service user capacity as a contextual factor that potentially moderates the goal commitment-task performance relationship is relevant in perspective of GST and its notion of goal commitment-goal difficulty interaction (see section 3.3.2). In particular, the article employs a combination of teacher survey data (e.g., for measurement of employee goal commitment) and administrative school data (e.g., for measurement of teacher task performance). Based on Kristensen, Andersen, and Pedersen (2012)—and in the same vein as article D—service user capacity is operationalized by the average socio-economic background of the teachers' students; a measure simultaneously serving as a context-specific indicator of goal difficulty. As I will elaborate in chapter 8, this approach to goal difficulty measurement is, despite its novelty, marked by 'face validity' (Bornstein 2004) in perspective of the article's research design.

Chapters 5 to 8 provide an elaborated summary of the dissertation's articles. The main purpose is to give an overview of the articles' motivation, research design, and findings. See the individual articles for more detailed information on theory and methods.

Before moving on, I want to tie a few comments to the articles' analytical outcome measures; how the measures relate to one another and fit the dissertation's overall research aim and purpose.

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<sup>18</sup> It is important to examine whether the relationship between PSM and sector attraction differs substantially across individuals' clustering in different academic fields of study. Attraction, recruitment, and selection of high-PSM individuals in relation to different job positions—i.e., positions calling for graduates from different academic disciplines—could call for different HRM policies and procedures if such moderation effects are at play.

## 4.2 Analytical Outcomes

The dissertation focuses on four distinct outcome constructs: task effort (article A), task choice (articles B and C), task performance (articles D and F), and sector employment preferences (article E). Task effort and task choice are both behavioral measures. While task effort captures individuals' expenditure (or allocation) of time and energy to a task, task choice involves the focus (or attention) of peoples' task effort; the choice that people make in relation to the task. Importantly, hypotheses and empirical research on the association between work motivation and either task effort or task choice does not involve tautology. Per definition, work motivation is a psychological process (Kanfer, Chen, and Pritchard 2008, 5). In contrast to behavior, work motivation is a latent construct that cannot be observed directly (Borsboom, Mellenbergh, and van Heerden 2003). While the construct's domain is demarcated further by emphasizing how work motivation 'influences how personal effort and resources are allocated to actions pertaining to work, including the direction, intensity, and persistence of these actions' (Kanfer, Chen, and Pritchard 2008, 5), it is distinct from actual behavior in the physical world. An analogy can be drawn to blood donation and altruism. Blood donation is often described as archetypal altruistic behavior (Ferguson, Farrell, and Lawrence 2008; Healy 2000, Otto and Bolle 2011), and recruitment/retention campaigns for blood emphasize altruism. However, while altruism may correlate with blood donation inclinations and be the driving cause of blood donation behavior, altruism is a psychological construct that is distinct from blood donation.

Task performance refers to 'the effectiveness with which job incumbents perform activities that contribute to the organization's technical core' (Borman and Motowidlo 1997, 99). The two articles (D and F) that have employee task performance as outcome measure employ a context-specific indicator, i.e., they operationalize teacher task performance by the test score achievements of the teachers' students. This approach is used in other studies (Aaronson, Barrow, and Sander 2007; Andersen, Heinesen, Pedersen 2014; Aslam and Kingdon 2011; Dee 2007; Klaveren 2011; Pitts 2005; Rivkin, Hanushek, and Kain 2005; Rockoff 2004; Schwerdt and Wuppermann 2011). The operational intuition is that students' attainment of subject learning (as reflected in their test score achievements) is a significant teacher task performance goal. I return to discuss the consequences of the fact that public service performance is complex and multidimensional in practice (section 10.3).

Task performance and behavioral task effort and choice are conceivable as two sides of the same coin—or, to the very least, two currency notes of the same currency. To the extent that employees increasingly (1) choose to focus on a particular work task and (2) exert effort to accomplish that task, employees are, *ceteris paribus*, more likely perform that task more effectively and efficiently. While distinct phenomena, behavioral task effort and choice are highly correlated with task performance. In line with Locke and Latham (2013), behavioral direction, intensity, and persistence are conceivable as a behavioral mediator between work motivation/goal commitment and task performance. In addition to expectancy theory (Porter, Lawler, and Hackman 1975; Vroom 1964), research supports this basic notion across a range of academic fields (Ajzen 2011; Bonner and Sprinkle 2002; Hannan et al. 2013; Johnson, Joyce, and Sen 2002; Katerberg and Blau 1983; Lavy 2009; Metcalfe, Burgess, and Proud 2011; Paas et al. 2005).

The fourth and final outcome measure, sector employment preferences, captures attraction to public versus private sector employment. Examination of the relationship between identified/integrated extrinsic motivation in the form of PSM and sector employment preferences is clearly not *directly* associated with task effort, choice, or performance. Still, PSM research provides the basis for a conceptual bridging between sector employment preferences and these behavioral outcome measures. As mentioned, much research supports that greater PSM yields higher performance (Alonso and Lewis 2001; Andersen, Heinesen, and Pedersen 2014; Andersen and Serritzlew 2012; Bellé 2013; Brewer and Selden 2000; Frank and Lewis 2004; Kim 2005; Leisink and Steijn 2009; Naff and Crum 1999; Ritz 2009; Vandenabeele 2009). On this basis—and inasmuch as high-PSM individuals hold preferences for public versus private sector employment—sector employment preferences are linked, albeit indirectly, to variation in behavioral task effort, choice, and performance in the public sector.

# Chapter 5: HRM-Related Interventions and Work Motivation Activation

This chapter focuses on how HRM-related interventions—seeking activation of different forms of work motivation—may activate the behavioral forces of individuals' work motivation. Can we capitalize on the positive impact of work motivation on behavioral task choice and task effort by means of external activation efforts, i.e., HRM-related interventions aimed at engaging an individual's extrinsic motivations? Can even low-intensity intervention activate the forces of work motivation? How does the effect of efforts aimed at activating certain types of extrinsic motivation compare with that of comparable efforts to activate other forms of extrinsic motivation?

This chapter provides a summary of the motivation, research design, and findings of articles A ('Activating Effort') and B ('Activating Choice'). See the individual articles for more detailed information on theory and methods.

## 5.1 Motivations

As discussed in chapter 1, public administration practitioners and scholars have long been concerned with the following questions: How can we sustain and improve the public employees' delivery of public services? What HRM practices and contextual factors may direct and stimulate individuals' work motives and efforts to accomplish public service goals and missions?

Articles A and B converge with respect to provision of new knowledge on how HRM-related interventions may influence the effect of individuals' work motivation on behavioral outcomes. Article A examines activation effects of interventions targeting internalized extrinsic motivation—i.e., identified or integrated extrinsic motivation in the form of PSM and introjected extrinsic motivation relating to a need for feelings of self-importance and approval from the self or others (ego involvement)—in relation to task effort. Article B examines activation effects of interventions targeting the same aspects of internalized extrinsic motivations as well as external extrinsic motivation in the form of pecuniary motivation in relation to task choice.

Importantly, however, the two articles diverge in their theoretical framing and operate with slightly different research designs. In addition to their common research contribution (findings on how HRM-related interventions may activate the behavioral forces of individuals' work motivation), the indi-

vidual articles contribute with *field-specific* theory advancements and insights. Before the articles' research design is presented, the following paragraphs summarize the field-specific contributions of each article.

Article A is framed in the perspective of PSM research. Based on the fact that employee PSM appears to contribute to performance, a salient research question relates to how public managers might take advantage of and profit from this knowledge. Addressing this question, the article presents a novel conceptual distinction between PSM *cultivation* (how to foster and sustain high PSM) and PSM *activation* (how to actively engage an individual's present level of PSM). As far as the notion of PSM cultivation, some scholars emphasize the role of work environments and how organizational features may potentially promote employee PSM by organizational socialization and adaptation processes (Cable and Parsons 2001; Moynihan and Pandey 2007). Other scholars suggest the use of organizational attraction and selection policies that look to recruit a high-PSM workforce (Leisink and Steijn 2008). However, research with focus on PSM activation is strikingly absent. As the article discusses, research on how to foster, promote, and sustain employee PSM is commendable, but examining how PSM can be actively engaged is equally beneficial. Ultimately, public managers may stimulate the performance of their organization using a combination of PSM-related practices—some directed at PSM cultivation, others at activating the human resource of employee PSM already present in the work environment.

Building on prior efforts to develop an institutional PSM theory (Perry 2000; Perry and Vandenabeele 2008; Vandenabeele 2007), article A moreover contributes to PSM literature by advancing a theory integration of the PSM construct into a broader SDT framework—i.e., by presenting how PSM can be conceptualized as an aspect of identified or integrated extrinsic motivation in SDT (see section 3.1.3).

Article B is framed in perspective of survey research literature, i.e., research on how to maximize the response rate to surveys. This article thus contributes directly with field-specific insights on how survey practitioners and researchers may increase the proportion of individuals in a sample population that participates in a survey. In brief, survey non-responses reduce the effective sample size and may easily involve that an obtained survey sample is unrepresentative of a larger population (White, Armstrong, and Saracci 2008). A high survey response rate is thus important because it diminishes sampling bias concerns and promotes the validity of survey-based research findings (Dillman, Smyth, and Christian 2009; Groves et al. 2009; Singer 2006). Moreover, we have witnessed a general decline in the response rate to surveys in recent decades (Curtin, Presser, and Singer 2005; de Leeuw and

de Heer 2002; Hansen 2006). Identifying strategies that efficiently maximize the response rate to surveys is thus important. To this end, article B examines how low-cost incentives and cost-free text appeal interventions in the invitation letter to participate in a survey may improve the survey response rate in online panels. More specifically, survey researchers have examined a range of 'survey invitation letter' strategies to increase survey response rates (for an overview, see Edwards et al. 2002, 2009; Fan and Yan 2010; Yammarino, Skinner, and Childers 1991), for example the response rate effect of cash prize lotteries (Leung et al. 2002; Göritz and Luthé 2013a, 2013b; Kalantar and Tally 1999; Marrett et al. 1992; Whiteman et al. 2003), the effect of charity donation incentives (Brennan, Seymour, and Gendall 1993; Deehan et al. 1997; Deutskens et al. 2004; Faria and Dickinson 1992; Furse and Stewart 1982; Gattellari and Ward 2001; Hubbard and Little 1988; Skinner, Ferrell, and Pride 1984; Warriner et al. 1996), and the effect of altruistic text appeal interventions that stress the public benefit of survey participation (Bachman 1987; Cavusgil and Elvey-Kirk 1998; Dillman et al. 1996; Houston and Nevin 1977; Kropf and Blair 2005; Linsky 1965; Roberts, McGory, and Forthofer 1978; Thistlethwaite and Finlay 1993). However, the findings concerning donation incentives and altruistic text appeals are mixed. In addition, only a few older studies have examined the response rate effect of text appeal interventions that seek to engage a person's ego-related need for approval from the self or others (Champion and Sear 1969; Childers, Pride, and Ferrell 1980; Houston and Nevin 1977; Linsky 1965), and their results are also inconclusive. In this perspective, this article offers new evidence on how two types of low-cost incentives (cash prize lottery and charity donation) and two types of cost-free text appeal interventions (altruistic and egotistic)—relating to the different forms of extrinsic motivation in terms of SDT—may affect the survey response rate in online panels.

Moreover, article B contributes with evidence on the *relative* response rate effects of these four types of strategies. This field-specific contribution relates to a sample heterogeneity problem that impedes the potential to infer conclusions about relative effects of these particular strategies on the basis of existing survey response studies.<sup>19</sup>

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<sup>19</sup> The sample heterogeneity problem is a critical but relatively technical issue. See the article for a full explanation and discussion of the issue.

## 5.2 Research Designs

Articles A and B both employ a randomized survey experimental research design. Article A exposes a sample of law students to a conventional survey experiment, and article B exposes a sample of adults of all ages to a framed survey experiment.<sup>20</sup> The following paragraphs summarize research design and statistical estimators.

### 5.2.1 Article A

The analyses and findings of article A are based on survey experimental data comprising 528 law students. In agreement with Department of Law faculty members at Aarhus University, a survey was administered to the students in mid-April 2013, at the beginning of a 15-minute break between two-hour lectures.<sup>21</sup> The survey was administered at four lectures covering separate law subjects. For each subject, the students were visited at the last lecture before the summer exam. This timing helps ensure that the greatest possible number of students received the survey in each subject. 89 percent of the present students returned a completed questionnaire.

As mentioned, the article examines activation effects of HRM-related interventions targeting internalized extrinsic motivation—i.e., identified or inte-

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<sup>20</sup> In line with Harrison and List's (2004) terminology, a 'conventional experiment' employs a standard subject pool of students, an abstract framing, and an imposed set of rules. A 'framed experiment' employs a subject pool of non-students and involves some extent of field context in the commodity, task, or information set. Relative to article A, article B's findings are thus (1) more directly generalizable to a broader population and (2) less susceptible to observation bias—e.g., Hawthorn effect (Landsberger 1958; Mayo 1949), a phenomenon whereby individuals modify an aspect of their behavior in response to their awareness of being observed (i.e., part of a research study). More specifically, article B's subject pool receives an invitation to participate in a survey on a regular basis. They should therefore be unaware that they are subjects in an academic research study. In contrast, the sample students in article A know that they, by answering the survey, participate in an academic research study (though they do not know about the experimental nature of the study). The experimental findings of article B are therefore less likely to be confounded by Hawthorn effect than those of article A.

<sup>21</sup> To minimize item non-response, the length of the survey (number of items) gave the students sufficient time to complete it during the lecture break (e.g., Dillman et al. 2002). The survey items and completion time were tested in a pilot study in early April 2013. The students were asked to complete the survey during the break and not talk among themselves about their survey responses.

grated extrinsic motivation in the form of PSM and introjected extrinsic motivation relating to a need for feelings of self-importance and approval from the self or others (ego involvement). Specifically, the sample students were asked the following question toward the end of the survey: 'In the near future, you will be invited to participate in a survey about your daily life. How many minutes are you at most willing to spend on completing this survey?' By random assignment, each student was exposed either to this exact item or to one of three variations. The students receiving the above question constitute the control group. The students receiving one of the three item variations constitute three separate treatment groups. In particular, the treatment groups received the same text as the control group but were additionally exposed to text respectively targeting activation of (1) identified or integrated extrinsic motivation in the form of PSM 'public interest,' (2) identified or integrated extrinsic motivation in the form of PSM 'compassion,' and (3) introjected extrinsic motivation relating to ego involvement.<sup>22</sup>

For both control and treatment groups, the students' response (i.e., the number of minutes they were willing to spend on completing a future research survey) constitutes the dependent variable of the article. This measure captures the time and effort an individual is willing to invest completing a survey and serves as an indicator of task effort, i.e., individuals' expenditure (or allocation) of time and energy to a task (see section 4.2).<sup>23</sup>

One-way analysis of variance estimations and Bonferroni-Dunn tests support that the four experimental groups are 'balanced.' Treatment effects are identified using multivariate OLS regression. As a construct validity check, I perform a test providing some evidence on whether the effects of the PSM treatments are, in fact, the result of PSM activation. Additional robustness

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<sup>22</sup> The two PSM treatments refer to the PSM dimensions 'public interest' and 'compassion' identified by Perry and Wise (1990) and Perry (1996) (see section 3.1.2)—the two most commonly studied PSM dimensions (Wright 2008, 93)

<sup>23</sup> The article tests the activation effects of HRM-related interventions in relation to task effort inclinations rather than actual task effort (i.e., self-reported time expenditure willingness rather than actual time expenditure). I recognize that treatment effects in relation to individuals' task effort inclinations may differ from treatment effects in relation to actual task effort. However, while the effect estimates for actual task effort may (i.e., possibly, but not necessarily) be smaller than those for task effort inclinations, several factors suggest that the treatment effects for actual behavior are likely greater than zero (i.e., factors referring to the experimental design, the effect size estimates, and some social psychology research; see the article for a more detailed discussion).

analyses suggest that the results are not driven by outlier responses that vary systematically across the four experiment groups.

### 5.2.2 Article B

The analyses and findings of article B are based on survey experimental data comprising 6,101 members of a non-probability online panel maintained and used for survey purposes by Kompas Kommunikation.<sup>24</sup> The survey experiment was conducted in early August 2013. The panel comprises Danish adults (18+) of all ages. Relative to 2013 population statistics from Statistics Denmark, the panel has a slight preponderance of women, individuals geographically located in the Capital Region of Denmark, and individuals below age 60. This sample skewness does not confound the internal validity of the results, but the generalized inferences from the article's findings should be interpreted through the lens of this minor caveat. Usually, panelists receive an email invitation to participate in an online survey on a monthly to bi-monthly basis. The typical response rate is relatively low at 15-20 percent.<sup>25</sup>

As mentioned, the article examines activation effects of HRM-related interventions targeting the same aspects of internalized extrinsic motivations as article A as well as external extrinsic motivation in the form of pecuniary motivation. Specifically, the panelists received an email encouraging them to participate in a brief online survey. As the email did not reveal the specific content of the questions in the survey, the survey content should not affect the validity of the results. The panelists received the following invitation text: 'Dear participant in the Kompas Panel, We kindly ask you to participate in a brief survey.' As in article A, each panelist was exposed—by random assignment—either to this exact text (control group) or to one of five variations (treatments). The five treatment groups received the same text as the control group but were additionally exposed to text respectively targeting activation of different forms of extrinsic motivation. One treatment group thus received

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<sup>24</sup> Kompas Kommunikation is a Danish full-service communications and PR agency for healthcare, finance, education, and organizations. Its organizational profile and setup are typical for a medium-size communications firm. Kompas Kommunikation sponsored the survey experiment costs.

<sup>25</sup> Response rates under 20 percent are not uncommon in non-probability online panels (Tourangeau, Couper, and Steiger, 2003). As elaborated later on, the survey response rate constitutes the article's independent variable. Thus, a low survey response rate should not directly reduce the potential to extrapolate the article's results—and there is no apparent reason to suspect that the treatments would work differently in online panel populations with higher average response rates.

a monetary response incentive targeting activation of external extrinsic motivation (i.e., entry into a cash prize lottery upon survey completion), while another treatment group received a text appeal intervention targeting introjected extrinsic motivation in the form of ego involvement. A third group received a text appeal intervention targeting activation of identified or integrated extrinsic motivation in the form of PSM. Finally, two other treatments rewarded survey participation with a monetary donation to a good cause, thus testing the effect of a monetary incentive directed at altruistic motivation (the two treatments differ in size of donation).<sup>26</sup>

The panelists' survey response (i.e., whether the solicited panelists call up the first page of the online survey) constitutes the dependent variable of the article. This binary measure captures individuals' choice to participate in a survey and thus serves as an indicator of task choice—the choice people make in relation to a task; the focus of (or attention) of individuals' task effort (see section 4.2).

As in article A, one-way analysis of variance estimations and Bonferroni-Dunn tests support that the experimental groups are 'balanced.' Because the task choice measure is binary, treatment effects are identified using multivariate logit regression. As a robustness test, results are checked in a linear probability framework. Moreover, the data are weighed and reanalyzed using Coarsened Exact Matching, a non-parametric matching procedure (Iacus, King, and Porro 2012). The results of both tests confirm the main results.

### 5.3 Findings

Differences in outcome across the experiment groups are attributable to effects of work motivation action in both articles. Because of the random treatment assignment, only the treatments should differ systematically across

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<sup>26</sup> In terms of SDT, treatments in the form of monetary donations to a good cause are likely associated with identified or integrated extrinsic motivation in the form of altruism. However, other factors possibly confound the behavioral effects of donation interventions, e.g., *quid pro quo* perceptions (Hubbard and Little 1988). In addition, individuals may disapprove of linking survey participation with a monetary donation, i.e., respondents may perceive such strategies as 'hostage-taking' or 'control'; as inappropriate survey incentives. In line with motivation crowding theory (Frey and Jegen 2001), such feelings may 'crowd out' their motivation to respond to a survey. In contrast to PSM-related text interventions, donation treatments may thus yield counterproductive effects (Gattellari and Ward 2001).

the experimental groups.<sup>27</sup> Given an equal distribution of characteristics affecting students' or panelists' responses across the groups, the treatment estimates are unbiased.

Both articles suggest that HRM-related interventions targeting introjected extrinsic motivation relating to a need for feelings of self-importance and approval from the self or others (ego involvement) may activate the behavioral forces of work motivation. Relative to the control group, an 'ego involvement' treatment improves individuals' time expenditure willingness (task effort) by .28 of a standard deviation in article A. Similarly, an 'ego involvement' treatment increases the predicted probability of survey response (task choice) by 4.5 percent in article B.

Article B also examines how an HRM-related intervention targeting external extrinsic motivation in the form of pecuniary motivation and two donation treatments engages the forces of individuals' work motivation. In line with previous findings (Leung et al. 2002; Göritz and Luthe 2013a, 2013b; Kalantar and Tally 1999; Marrett et al. 1992; Whiteman et al. 2003), a cash prize lottery incentive appears to have a positive effect on the predicted probability of survey response (2.7 percent). As to the effects of monetary incentives in the form of donations to a good cause, one of the two treatments appears to decrease the predicted probability of survey response by 3.5 percent (the other donation treatment does not appear to have a statistically significant effect in relation to the control condition at  $p < .1$ ). While arguably puzzling, these results are in line with other survey research studies on effects of charity donations (Gattellari and Ward 2001; Hubbard and Little 1988). As previously noted, one explanation is that the behavioral effects of donation interventions are possibly confounded by other factors, e.g., *quid pro quo* perceptions (Hubbard and Little 1988). A complementary explanation is that people disapprove of linking survey participation with a monetary donation incentive. For example, the respondent may perceive such strategies as 'hostage-taking' or 'control'; as inappropriate survey manipulation incentives. In line with motivation crowding theory (Frey & Jegen, 2001), such feelings may 'crowd out' the motivation to respond to a survey.

Importantly, the findings of articles A and B differ with respect to the activation effect of HRM-related intervention targeting identified or integrated extrinsic motivation in the form of PSM. The two PSM treatments in article A both appear to yield a positive effect on individuals' time expenditure will-

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<sup>27</sup> Balancing checks and comparison of estimates across regression models without and with inclusion of covariates support this notion for both articles (see Angrist and Pischke 2009, 18-24).

ingness (.40 of a standard deviation for the PSM 'public interest' treatment; .44 of a standard deviation for the PSM 'compassion' treatment). In contrast, the sign of the coefficient estimate for the PSM treatment in article B is positive (as expected), but the estimate is not statistically significant at  $p < .1$ .

These effect differences may be a product of several factors. For example, the two articles employ different survey experimental research designs. In article A, the experimental treatments occur at the end of a survey questionnaire and the treatment effects relate to time expenditure willingness. In article B, the experimental treatments occur in the survey invitation and the treatment effects relate to survey response. I am unable to test if the difference in PSM treatment effects across the articles is a consequence of these design discrepancies. However, since no apparent theory or studies support such expectations either, I suggest sample heterogeneity as a likely main reason for the differing PSM activation results. The basic intuition of this potential explanation is as follows: Article A employs a sample of law students, article B a sample of citizens of all ages, occupations, and educations. Importantly, the PSM distribution of law students is likely characterized by a higher mean score (and a greater negative skew) than the PSM distribution of a broader sample of citizens. The experimental data sets do not allow a direct empirical test of this notion, but several studies find a positive association between higher level of education and PSM (Bright 2005; Naff and Crum 1999; Perry 1997; Vandenabeele 2011). This relationship is partly explainable by educational socialization processes, partly by self-selection of individuals with high PSM into higher education (Kjeldsen 2012; Pandey and Stazyk 2008). On this basis, heterogeneity in mean PSM across the articles' samples may explain the different findings:<sup>28</sup> A positive average activation effect of a PSM treatment may only occur if the sample individuals hold some level of PSM (i.e., PSM activation effects necessitate some level of PSM). Relative to article A, the PSM pool of the sample subjects in article B may thus be insufficient for the PSM treatment to yield a statistically significant *average* effect estimate. In other words, the activation effect of HRM-related intervention targeting identified or integrated extrinsic motivation in the form of PSM may activate the behavioral forces of work motivation—but only for individuals with a certain amount of PSM. Article B may not identify a statistically signifi-

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<sup>28</sup> Law students differ from the general population on other observable and unobservable characteristics. Heterogeneity in mean PSM across the articles' samples is thus only one potential explanation for the different findings: Differences in other sample characteristics that systematically correlate with the PSM treatments' effect on outcome may also explain the estimated effect differences.

cant average effect of PSM treatment because a relatively large proportion of the sample individuals do not hold the minimum level of PSM required for statistically detectable PSM activation effects.

In sum, sample heterogeneity may potentially explain the observed difference in PSM treatment effects across articles A and B. Still, empirical substantiation of this notion is beyond this dissertation's scope. Evidencing the reasons for the difference in the article's findings in relation to PSM activation is a task for future research.

As mentioned, none of the dissertation's articles are exempt from limitations and caveats. Despite articles A's and B's experimental research design, their findings should be interpreted with a conscious mind on potential threats to external and ecological validity. I review and discuss the consequences of these caveats in sections 9.2 and 9.3.

## Chapter 6: Contextual Factors

This chapter focuses on how contextual factors moderate the relationship between individuals' work motivation and their work behavior or task performance. In particular, the chapter provides a summary of articles C ('Gender Insignificance') and D ('Context Dependency'). Conceiving of gender as a potential individual-level contextual moderator, section 6.1 presents the motivation and research design of article C. Focusing on two potential contextual moderates at the organizational level, section 6.2 reviews the motivation and research design of article D. Section 6.3 describes the findings of both articles.

### 6.1 Gender

Article C examines whether the activation effects of different HRM-related interventions are different for males and females, thus providing some indication to whether certain HRM 'motivation activation' interventions may be more effective than others in specific types or sections of public service organizations. The article employs the same experimental data as article B (i.e., the survey experiment among members of the Kompas Kommunikation panel). Because of the panel setting, gender information is available for both responders and non-responders. Estimating whether some response treatments induce greater behavioral compliance than others among males relative to females (and vice versa) is thus feasible.

The particular focus on gender as a potential moderator of the effectiveness of different HRM-related interventions in affecting individuals' task choice via work motivation activation is pertinent for two reasons. First, gender role and stereotype theory suggests that a set of socially shared beliefs prescribes and designates men and women with different needs and desires (e.g., Basow 1992; Eagly 1995; Eagly and Wood 2013), i.e., that males and females may hold different constellations of work motivation (Bigoness 1988; Bright 2005, 2009; Cross and Markus 1993; DeHart-Davis, Major and Konar 1984; Marlowe, and Pandey, 2006; Gooderman et al. 2004; Hofstede 2001; Meece, Glienke, and Burg 2006). Such gender differences provide a sociocultural explanation for instances of gender-differentiated work behavior (Eagly, Beall, and Sternberg 2005), but also suggest that gender may moderate the effectiveness of different HRM-related interventions.

Second, while horizontal gender segregation has diminished over time in some service occupations, others remain dominated by either males or females (Beskæftigelsesministeriet 2013; Blau, Brummund, and Liu 2013; Emerek and Holt 2008). Examining the moderating role of gender on HRM-related interventions' 'motivation activation' effect may therefore yield important insights for practitioners. For example, say that treatment interventions targeting an individual's external extrinsic motivation in the form of pecuniary motivation mostly affect the behavior of males. In this case, public service organizations or sections with a preponderance of female employees (e.g., schools) may benefit from employing HRM practices serving other types of motivation (e.g., identified or integrated extrinsic motivation in the form of PSM).

But why is gender a potential moderator of different HRM-related interventions' effectiveness? In brief, person-environment fit theory (Kristof-Brown, Zimmerman, and Johnson 2005), in particular the notion of supplementary fit (Kristof 1996; Kristof-Brown and Guay 2011), suggests that value congruence between person and organizational dimensions may translate into organizational benefits and gains, e.g., reduced turnover, increased citizenship behaviors and organizational commitment (Andrews, Baker, and Hunt 2011; Bretz and Judge 1994; Boxx, Odom, and Dunn 1991; Chatman 1991; Da Silva, Hutcheson, and Wahl 2010; Lauver and Kristof-Brown 2001), and improved performance (Bretz and Judge 1994; Goodman and Svyantek 1999; Lauver and Kristof-Brown 2001; Ostroff and Schulte 2007).

In line with the notion, the extent of fit between the specific type of extrinsic motivation targeted by a given HRM-related intervention and an individual's specific work motivation composition is predictive of the effect of that intervention on the individual's behavior. For example, an individual's level of external extrinsic motivation conditions the behavioral effect of a treatment targeting activation of external extrinsic motivation.

Within this framework, gender role and stereotype theory (Basow 1992; Eagly 1995; Eagly, Beall, and Sternberg 2005; Eagly and Wood 2013) supports that the extent of fit between a given HRM-related intervention and individuals' work motivation composition may differ systematically between males and females. In particular, the formation of gender stereotypes begins in early childhood (Best and Williams 2001; Eccles, Jacobs, and Harold 1990; Meece, Glienke, and Burg 2006; Parsons, Adler, and Kaczala 1984; Simon and Nath 2004). Gender stereotype beliefs and norms socialize men and women towards different values and roles from an early age and thus translate into different preferences and work motivations among males and females (Meece, Glienke and Burg 2006). Gender research finds that males

are more concerned with financial rewards and external aspirations and achievements than females (external extrinsic motivation), whereas females are more preoccupied with interpersonal relationships, communal concerns, and task significance (e.g., identified or integrated extrinsic motivation in the form of PSM) (Bigoness 1988; Bright 2005, 2009; Cross and Markus 1993; DeHart-Davis, Marlowe, and Pandey, 2006; Gooderman et al. 2004; Hofstede 2001; Major and Konar 1984; Meece, Glienke, and Burg 2006). Given that males and females, on average, hold different extents of different types of extrinsic motivation, gender may possibly moderate the behavioral effect of HRM-related interventions targeting different types of extrinsic motivation.

Importantly, however, some researchers suggest that individual differences within groups of males and females are more pronounced than differences between the two groups (Wigfield et al. 2002), while a few other studies emphasize that males and females are more marked by work motivation similarities than differences (Dubinsky et al. 1993; Pearson and Chatterjee 2002). Inasmuch as these authors are correct, gender differences in work motivation may not be pronounced enough to significantly condition the behavioral effects of different HRM-related interventions.

As article C employs the same experimental data as article B, the research design is largely identical to article B (see section 5.2.2)—e.g., in terms of sample population (Kompas Kommunikation panelists), experimental survey treatments (one control and five treatments), and outcome measure (response rate, i.e., task choice indicator). However, the effective sample size is slightly smaller in article C (5,982 versus 6,101). Panelists enter gender information upon panel enrollment, but the provision of this data is optional, and gender information is clearly necessary for testing the moderating role of gender. 119 observations were dropped because of 'missing' gender data.<sup>29</sup>

One-way analysis of variance estimations and Bonferroni-Dunn tests support that the experimental groups are 'balanced.' Because the task choice measure is binary, treatment effects are identified using multivariate logit regression. I test whether gender moderates the 'motivation activation' effect of the individual HRM-related interventions by model inclusion of simple interaction terms, one for each of the five treatments (i.e., treatment  $\times$  gender). I employ post-estimation marginal effect analyses for each treatment, for the full sample and by gender. To test the robustness of the results,

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<sup>29</sup> Importantly, dropping these 119 observations from the sample does not appear to induce bias: one-way analysis of variance estimations reveal no significant difference in the distribution of the 'missing gender' observations across the six experiment groups at  $p < .1$ .

all models are estimated on various subsamples and using alternate specifications and statistical estimators.<sup>30</sup>

## 6.2 Work Regulation and Service User Capacity

Article D demonstrates how the relationship between employee work motivation—i.e., identified or integrated extrinsic motivation in the form of PSM—and task performance may be simultaneously moderated by two contextual factors: (1) extent of regulation of employee work discretion and (2) level of service user capacity. The article thus advances an answer to the following question: What contextual factors may direct, stimulate, and sustain individuals' work motivation to accomplish public service goals and missions, e.g., high employee task performance? Whereas article C examines whether gender is a contextual factor that moderates the 'motivation activation' effect of HRM-related interventions relating to different types of extrinsic motivation, article D focuses on two contextual factors pertaining to the organizational level (i.e., do not relate to an individual-level characteristic). Moreover, article D focuses strictly on moderation in relation to the relationship between PSM and task performance, not the full range of SDT types of extrinsic motivation and their associations with task effort or task choice.

Overall, the article's research focus is motivated by the fact that that public employees' PSM appears to have a direct and positive effect on public service performance (Alonso and Lewis 2001; Andersen, Heinesen, and Pedersen 2014; Andersen and Serritzlew 2012; Bellé 2013; Brewer and Selden 2000; Frank and Lewis 2004; Kim 2005; Leisink and Steijn 2009; Naff and Crum 1999; Ritz 2009; Vandenabeele 2009). Given this positive association, research is warranted on how to actively capitalize on the forces of PSM, e.g., by HRM-related 'motivation activation' interventions (articles A and B) or attraction, recruitment, and selection of high-PSM personnel (article E). In addition, scholars call for research attention to the potential context dependency of the PSM-performance relationship (Wright and Grant 2010). Considering our limited knowledge about how organizational settings influence the PSM-performance relationship, the salient questions are: Is the PSM-performance

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<sup>30</sup> Robustness tests include estimations (1) on subsamples (i.e., excluding panelists below age 30, above age 60, both groups, and using listwise deletion for 'missing' data on age and regional location); (2) with inclusion of interaction terms for gender and age, gender and regional location, age and regional location, and gender, age, and regional location; (3) and using linear probability modeling and probit regression. In all cases, the results are qualitatively the same, both for the average treatment effects and the gender moderation findings.

relationship stronger in some workplace settings than in others? If so, what are the organizational context factors that moderate this relationship?

In terms of person-environment fit theory (Kristof 1996; Kristof-Brown and Guay 2011; Kristof-Brown, Zimmerman, and Johnson 2005), we know that 'PSM fit'—i.e., the correspondence between an individual's PSM and organizational values and missions (PSM-organization fit) and the provision of job tasks that complement or fulfill an individual's PSM (PSM-job fit)—is important (Bright 2007, 2008; Christensen and Wright 2011; Kim 2012; Leisink and Steijn 2009; Wright and Pandey 2008). The strength of the PSM-performance relationship may also differ across public service organizations with similar values, missions, and job tasks. In particular, Le Grand's (2003, 2007, 2010) work implies that the PSM-performance relationship may depend on both the extent of an organization's regulation of employee work discretion and the level of service user capacity marking the citizens who use the organization's services. 'Regulation of work discretion' refers broadly to the extent of delegated work autonomy that a public service organization allows its individual service providers, whereas 'service user capacity' relates to a public service organizations' users—their 'feeling of competence to understand and affect the provision of the public services' (Kristensen, Andersen, and Pedersen 2012, 947).

Based on Le Grand (2003, 2007, 2010), article D thus contributes with knowledge on whether organizational regulation of work discretion and service user capacity are contextual factors that moderate the effect of employee PSM on task performance. No empirical research has yet examined whether and how the PSM-performance relationship differs across public organizations that provide the same type of service but differ in terms of their regulation of work discretion and service user capacity.

The article's research focus is not only of scholarly interest. By expanding and nuancing our understanding of the PSM-performance relationship, the article contributes directly to PSM research. However, knowledge about organizational settings that moderate the PSM-performance relationship is also important to practitioners. In other words, the article's findings may guide public managers in how to best capitalize on the forces of their employees' PSM. Given the capacity of organizations' service users, to what extent should public managers seek to regulate their employees' discretionary autonomy? What constellation of discretionary regulation and service user capacity is most effective for capitalizing on the positive effect of employee PSM on task performance?

The article examines how differences in regulation of work discretion and service user capacity moderate the PSM-performance relationship in a Dan-

ish school setting. Danish schools are marked by within-organizational variation in both employee PSM and task performance and by between-organizational variation in regulation of work discretion and service user capacity. Moreover, a study by Andersen, Heinesen, and Pedersen (2014) supports the existence of a direct and positive average effect of employee PSM on task performance in this particular setting.

Article D's analyses and findings are based on a combination of teacher survey data and administrative school data. The teacher survey data were collected in spring 2011. It contains information on a range of teacher characteristics, including indicators on teachers' PSM. The administrative data hold information on all Danish lower secondary schools, including the individual students' test scores at the ninth grade exams in summer 2011 and indicators on their socio-economic status.

Teachers' PSM is measured by a scale comprising commonly used PSM items. Similar to other studies, the article operationalizes teacher task performance by the test score achievements of the sample teachers' students (Aaronson, Barrow, and Sander 2007; Andersen, Heinesen, Pedersen 2014; Aslam and Kingdon 2011; Dee 2007; Klaveren 2011; Pitts 2005; Rivkin, Hanushek, and Kain 2005; Rockoff 2004; Schwerdt and Wuppermann 2011). The article operationalizes regulation in teacher work discretion by between-school variation in working hour agreement. In brief, the teachers at the sample schools were subject to one of two working hour agreements: A05 or A08. Relative to A05, A08 gives the teacher greater discretionary autonomy in terms of how they spend their working time (Kamp et al. 2011). Whether teachers were subject to A05 or A08 is likely exogenous to the individual teachers and the school where they work.<sup>31</sup> Variation in the working hour agreement thus serves as a reasonable indicator for estimating the moderating effect of difference in discretionary regulation, both in terms of face validity and from a causal inferences perspective. Kristensen, Andersen, and Pedersen (2012) suggest that education may serve as a proxy for service user capacity. In line with this notion, the article operationalizes service user

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<sup>31</sup> The working hour agreement is negotiated at the municipal level between the municipality and the local chapter of the Danish Union of Teachers. Schools within a given municipality thus operate under the same working hour agreement, and the individual teachers have very limited, if any, influence on the working hour agreement. For the individual teachers, allocation of working hour agreement can thus be said to approach an 'as good as random' treatment assignment—a circumstance that adds to the internal validity article D's results.

capacity by between-school variation in the average length of education of the students' parents.

To enhance the internal validity of the statistical findings, the article employs a within-student between-teachers fixed effects estimation strategy that yields more rigorous than normal tests and more robust results (Schlotter, Schwerdt, and Woessman 2011; Wooldridge 2009). In technical terms, this approach is based on a data structure resembling that of the typical longitudinal panel design (i.e., time series data containing observations of multiple phenomena for the same individuals over multiple time periods, thus allowing for fixed effects models that account for time-invariant confounding). However, in contrast to panel data involving variation *across time*, the articles' panel data involve variation *across subjects*. In brief, survey data for both the Danish teacher and the math teacher of student *i* are matched onto administrative data for that student's test score achievements in Danish and math. Using within-student fixed effects, the article implicitly estimates whether differences in PSM between the math teacher and the Danish teacher of student *i* affect that student's test score achievement in math relative to Danish, and whether this relationship is moderated by between-school variation in regulation of employee work discretion and service user capacity. Because the article's fixed effects approach accounts for subject-invariant confounding at the student, class, and school level, internal validity concerns relating to selection bias and omitted variable bias are reduced (although not fully eliminated). The basic intuition of the within-student between-teachers fixed effects approach is identical to that of research on monozygotic twins (Ashenfelter and Krueger 1994). Several recent educational studies employ a similar design (Aslam and Kingdon 2011; Dee 2007; Kingdon and Teal 2010; Klaveren 2011; Schwerdt and Wuppermann 2011).<sup>32</sup>

Article D's analyses and findings are based on a sample comprising 316 teachers and 2,838 students.<sup>33</sup> Between-school moderation effects are iden-

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<sup>32</sup> See articles D and F for an elaborated explanation of the within-student between-teachers fixed effects estimation strategy (although article F focuses on goal commitment instead of PSM, its data and research design are similar to that of article D).

<sup>33</sup> The within-student between-teachers fixed effects approach necessitates a complete survey response from both the Danish teacher and the math teacher of a given student. Otherwise valid teacher observations were therefore dropped if they could not be matched to another (opposite-subject) teacher observation in relation to a given student. This procedure could harm the representativeness of the sample. However, analyses of sample attrition suggest that the 316 sample teacher observations are not systematically different from the excluded teacher observations:

tified using multivariate within-student fixed effects regression with model inclusion of interaction terms (for PSM  $\times$  regulation of work discrimination, PSM  $\times$  service user capacity, and PSM  $\times$  regulation of work discrimination  $\times$  service user capacity). Post-estimation marginal effect analysis shows the task performance effect of teacher PSM for different regulations of employee work discretion (A05 versus A08) at different levels of service user capacity. As a significant robustness check, the article tests (and more importantly corroborates) the replicability of these results via within-student between-teachers fixed effects analyses on another data set, i.e., the data sample used by Andersen, Heinesen, and Pedersen (2014) for testing the relationship between teacher PSM and student achievements. While the two data sets are alike in many respects—e.g., both comprise survey data on teachers at Danish lower secondary schools and administrative data on their students—Andersen, Heinesen, and Pedersen's (2014) sample involves relatively fewer schools, substantially more teachers at each school, and a measurement of PSM by other PSM items. Nevertheless, despite these and other differences, the moderation results are qualitatively identical across the two data sets.

### 6.3 Findings

So what did the data analyses show? Is gender a contextual factor that moderates the 'motivation activation' effect of HRM-related interventions relating to different types of extrinsic motivation? Do organizational regulation of employee work discretion and service user capacity condition the relationship between identified or integrated extrinsic motivation in the form of PSM and task performance and if so, how?

As to the moderating role of gender, article C's findings do not support that gender is a statistically significant moderator to the effectiveness of different types of HRM interventions. Similar to article B, three of five experimental treatments appear to have a significant average treatment effect on task choice relative to the control group (i.e., the cash prize lottery incentive, the 'ego involvement' text appeal intervention, and one of the two donation incentives)—but none of the three treatments appear to have a different effect for males versus females. Likewise, the effects of the two treatments that do not engender any average treatment effect (i.e., the other of the two donation incentives and the altruistic text appeal intervention) do not appear to differ by gender either. Article C's results are thus in line with some gender

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Two-group *t*-tests for gender, age, education, tenure (years), and teaching experience (years) reveal no significant differences in means at  $p < .05$ .

research suggesting that males and females may hold different constellations of work motivations, but that male and female motivation at work is more similar than different (Dubinsky et al. 1993; Pearson and Chatterjee 2002; Wigfield et al. 2002).<sup>34</sup>

As to the moderating role of organizational regulation of employee work discretion and service user capacity, article D's findings suggest that the PSM-performance relationship is moderated by the extent of delegated work autonomy that a public service organization gives its individual service providers. In particular, teachers' PSM appears to correlate more positively with their task performance (in educating their students) for teachers facing *greater* regulation in terms of how they spend their working time—i.e., under working hour agreement A05 as opposed to A08 (Kamp et al. 2011). This is especially the case at schools with lower service user capacity (i.e., where the average length of education of the students' parents is relatively lower).

These findings are theoretically explainable as follows: On the one hand, greater discretionary regulation (A05) may demotivate some public service motivated employees, and thus result in lower task performance (Le Grand 2010).<sup>35</sup> On the other hand, Le Grand (2003, 2007, 2010) suggests that pub-

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<sup>34</sup> The aforementioned range of robustness tests confirms the gender moderation null-finding. Article C discusses some of the results' caveats. In brief, I cannot reject that the null-finding is a consequence of a lack of statistical power (though the use of a greater than normal sample size minimizes this concern) or a partial product of insufficient treatment intensity. Moreover, the article identifies and discusses a methodological challenge facing all gender moderation research—including even the best experimental study: While the experimental groups are balanced with respect to gender (i.e., because of the random treatment assignment), gender is, per laws of nature, not randomly assigned across panelists. Essentially, random assignment of gender is unfeasible. I suggest, however, that this circumstance is more of a boundary condition for gender moderation research than a deterrent. As I write in the article:

The study of gender moderation is interesting *exactly* because gender is a likely proxy for unobserved individual differences. Eliminating all gender differences in individual characteristics from a given sample thus devalues research on gender moderation effects *per se*. In other words, the unobserved ways in which males and females may differ are the very reason why gender moderation studies are of scholarly and societal interest.

<sup>35</sup> Put differently, less discretionary regulation (A08) may provide greater possibilities for teachers to pursue and fulfil their PSM, and thus result in higher task performance.

lic service employees may be ‘paternalistic’ (i.e., their work behaviors are widely guided by their own personal understandings of desirable means and work goals). Translated to a Danish school setting, most teachers are likely to think that student attainment of subject learning is a main goal of schooling, but they may assign a higher priority to ensuring the students’ social development and well-being. If so, public service motivated teacher may use extended levels of discretionary autonomy (e.g., A08) to attend to their personal understandings of how to best deliver services to people ‘with the purpose of doing good for others and society’ (confer the definition of PSM, section 3.4.2) (Andersen et al. 2013; Gailmard 2010)—potentially at the expense of extended attention to task performance related to students’ attainment of subject learning. From this perspective, greater discretionary regulation (A05) may direct teachers’ public service motivated work attention toward greater task performance in terms of student test score achievements, because greater discretionary regulation reduces the likelihood that teachers follow other goals as ‘runaway agents’ (Gailmard 2010; Kiewiet and McCubbins 1991).

Another theoretical explanation is that the allocation of greater discretionary autonomy to the individual teachers (A08) restricts both municipal agents and school managements’ decision-making authority and support capacity. For example, less regulation of employee work discretion (A08) may diminish, *ceteris paribus*, managerial capability and capacity in terms of organizational cohesion, responsiveness, and external buffering, in turn suppressing and counteracting the effects of teacher PSM on task performance.<sup>36</sup>

As to the moderating effect of service user capacity, the article’s findings are in line with the results of Andersen and Serritzlew (2012). Using a sample of Danish physiotherapists, they find a positive association between service providers’ PSM and a prioritization of relatively weaker and more disadvantaged service users. Part of the PSM construct relates specifically to people in need, e.g., service users with weak socio-economic background/low service user capacity.<sup>37</sup> The PSM-performance relationship may thus be especially

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<sup>36</sup> Both theoretical explanations may explain the article’s findings, but empirical validation of either explanation is beyond this dissertation’s scope. The provision of evidence about the exact mechanisms underlying the article’s results is a task for future research.

<sup>37</sup> For example, common measurement of PSM ‘compassion’ includes items explicitly referring to ‘the underprivileged’ or people in distress or need—i.e., see Perry (1996); items PSM2, PSM4, and PSM24.

pronounced for employees facing users with less service user capacity. In the area of lower secondary schooling, students with relatively less service user capacity may struggle more (Jackson et al. 2007; Mostafa 2010; OECD 2011; Woessmann 2004). Public service motivated teachers at schools marked by lower service user capacity may therefore exert additional work focus and effort toward assisting the students' attainment of subject learning than comparable public service motivated teachers at schools with higher service user capacity.



## Chapter 7: Capitalizing on Attraction?

One potential way of capitalizing on employees' work motivation to support and improve their efforts and task performance at work involves the use of HRM-related interventions that activate the behavioral forces of individuals' work motivation, including their PSM (chapter 5). Similarly, public practitioners may benefit from knowledge on contextual factors that moderate the PSM-performance relationship (chapter 6). For example, given the capacity of an organization's service users, to what extent should public managers regulate their employees' discretionary autonomy to best capitalize on the association between employee PSM and task performance?

However, another potential way of capitalizing on employees' PSM involves the use of HRM attraction and selection policies that look to recruit a highly public service motivated workforce. Motivated by salient research questions relating to this particular issue, article E ('Attraction and Context') examines (1) how identified or integrated extrinsic motivation in the form of PSM predicts pre-entry preferences for public versus private sector employment, and (2) how this relationship differs among students of economics, political science, and law.

### 7.1 Motivation and Research Design

As mentioned (section 3.1.2), several studies have, directly or indirectly, examined Perry and Wise's (1990) proposition that individuals with greater PSM are more likely to seek membership in a public organization (Crewson 1997; Gabris and Simo 1995; Lewis and Frank 2002; Naff and Crum 1999; Rainey 1982; Steijn 2008; Wright and Christensen 2010). However, the empirical findings are somewhat mixed and confounded by the use of data involving experienced employees (Wright 2008; Wright and Grant 2010). Organizational membership may affect personal attributes, such as PSM, through organizational socialization and adaptation processes (Cable and Parsons 2001; Moynihan and Pandey 2007). Existing findings of a positive association between PSM and preferences for public versus private sector employment (Lewis and Frank 2002; Rainey 1982; Steijn 2008; Wright and Christensen 2010) may thus be the consequence of organizational PSM socialization rather than attraction to public sector employment.

To this end, article E contributes with added evidence on the validity of Perry and Wise's (1990) selection proposition. Based on the notion that PSM is positively associated with productive work behavior and performance, Leisink and Steijn (2008) suggest that attraction, recruitment, and selection of high-PSM employees into public service jobs may improve public service performance. However, the design and use of appropriate HRM attraction, recruitment, and selection policies require knowledge on whether high-PSM employees are inherently attracted to public sector jobs. In addition, article E heeds a call for research on 'whether public service motivation is an important recruitment motive for all public sector workers, or whether it is more important for some than others' (Leisink and Steijn 2008, 131). In particular, article E examines whether the relationship between PSM and sector attraction differs between individuals' clustering in different academic fields of study (i.e., economics, political science, and law). Such examination of contextual moderation is important: Attraction, recruitment, and selection of high-PSM individuals in relation to different job positions—i.e., positions calling for graduates from different academic disciplines—could call for different HRM policies and procedures if such moderation effects are at play.<sup>38</sup>

Like other studies (Christensen and Wright 2011; Kjeldsen and Jacobsen 2013; Vandenabeele 2008b), the article seeks to disentangle the association between PSM and sector employment preferences from the potentially confounding effect of organizational socialization mechanisms by the use of data comprising students. In particular, article E's analyses and findings are based on survey data comprising 718 BSc and MSc students of economics, political science, and law at Aarhus University and University of Copenhagen.<sup>39</sup> The survey data was collected in February 2010. To minimize item

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<sup>38</sup> For example, say that high-PSM graduates in certain academic fields are not inherently attracted to public employment. To attract these high-PSM individuals, public agencies may have to exert extra effort in the job advertisement process. In contrast, for high-PSM individuals who are inherently attracted to public employment, public agencies may employ simple screening procedures to identify job applicants with high PSM.

<sup>39</sup> The following considerations guide the particular focus on the academic fields of economics, political science, and law: First, other studies have examined the association between PSM and sector employment preferences using student samples, but the findings are mixed. For example, using a sample of law students, Christensen and Wright (2011) found that PSM neither increases the likelihood that individuals would accept a public sector job nor decreases the likelihood that they would accept a private sector job. In contrast, using a sample of students in a variety of academic fields, Vandenabeele (2008b) finds that PSM is positively associated with

non-response, the length of the survey (number of items) allowed the students sufficient time to complete it during the lecture break (Dillman et al. 2002). For all visited class lectures, most to all students agreed to participate and returned a completed questionnaire, either at the end of the lecture or at a specified campus location.

The article measures attraction to public versus private sector employment by the following survey item: 'Please think of the job to come once you graduate. Now imagine that this job is readily available in both the private and the public sector, and that wages are similar. Where would you prefer to work?' The options were: (1) private sector preferences, (2) public sector preferences, and (3) no substantial preference for one sector over another. The article measures students' PSM 'public interest' and PSM 'compassion' by a revised version of a set of PSM items developed by Vandenberg (2008a).<sup>40</sup>

The item capturing students' sector employment preference is a nominally scaled variable. Article E therefore uses multinomial logit regression to examine the association between PSM and attraction to public versus private sector employment. Neither Hausman-McFadden (Hausman and McFadden 1984) nor Small-Hsiao (Small and Hsiao 1985) tests reject the assumption of 'independence of irrelevant alternatives' (IIA). I use marginal effects analyses to show sector employment preference correlates (in terms of predicted probabilities and odds ratios) with a standard deviation increase in PSM.

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preferences for public versus private sector employment. By a focus on economics, political science, and law, article E's moderation analyses allow for a potential reconciliation of the mixed results, i.e., indications as to whether the contrasting results are the product of simple sample selection. Moreover, the selected academic fields of study fulfill important selection criteria, e.g., graduates in these fields find subsequent employment in both the public and private domain and face similar work tasks irrespective of sector of employment. Finally, the three examined academic disciplines are social science fields of study in Denmark. The sample students are thus likely more similar to one another than to students in most other fields and types of education, in turn providing a 'conservative' test of the moderating effect of academic field of study.

<sup>40</sup> Two of Vandenberg's (2008a) PSM 'compassion' items relate to welfare attitudes that are, arguably, describable as public 'nonissues' in Denmark (Andersen 1995, 2008; Loftager 2007). I substituted these items with two of Perry's (1996) original PSM 'compassion' items.

## 7.2 Findings

The article's findings support Perry and Wise's (1990) proposition that individuals with greater PSM are more likely to seek membership in a public organization. In line with Vandenabeele (2008b), the PSM dimension of 'public interest' is positively associated with attraction to public sector employment; negatively associated with attraction to private sector employment (i.e., a one unit increase on the PSM 'public interest' scale measure relates to an increase in the predicted probability of public employment preference by .13; a decreases in the predicted probability of private employment preference by .14). PSM 'compassion' is not a statistically significant predictor of sector employment preferences at  $p < .05$ . However, the signs of the 'compassion' estimates are identical to those for PSM 'public interest'—and the (negative) estimate for private sector preference is significant at  $p < .1$ .

Moreover, the moderation analyses indicate that academic fields of study moderate the association between students' PSM and sector employment preference. The observed association between PSM and sector employment preference appears stronger and is only statistically significant (at  $p < .05$ ) for political science and law students (i.e., not for economics students).

In sum, the findings thus suggest that public managers may capitalize on the forces of PSM by relatively low-cost HRM selection policies, e.g., PSM screenings during the job interview process. Inasmuch as highly public service motivated individuals are inherently attracted to public versus private sector employment, public managers may improve public service performance by employing job applicants with high PSM.<sup>41</sup> I am not proposing that job applicants' PSM should be the only or principal hiring criterion of public

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<sup>41</sup> The positive PSM-performance relationship implies that public managers may potentially benefit from paying attention to job applicants' PSM irrespective of whether Perry and Wise's (1990) selection proposition is correct. However, the article's findings are—at a minimum—important for public service organizations in terms of optimization and cost-effectiveness: Job seekers with high PSM are inherently inclined to apply for public versus private sector jobs inasmuch as the article's findings are valid. To capitalize fully on the forces of PSM by means of HRM strategies seeking recruitment of a highly public service motivated workforce, public managers may thus focus on the job interview and screening process. In the counterfactual case, i.e., if high-PSM individuals were not attracted to public sector employment, a public service organization would have to initiate additional and extra-cost procedures to ensure that its job applicant pool contains a selection of high-PSM job applicants.

service organizations, but article E's findings suggest that screening of job applicants' PSM may be one useful tool among others when public service organizations hire new employees. In addition, article E suggests that the attraction to public sector employment among individuals with high PSM may not be universal to all types of public sector jobs. The significance of PSM to public versus private sector preference appears to differ across individuals in different academic fields of study.



# Chapter 8: Goal Commitment

In contrast to chapters 5 through 7's focus on work motivation, this chapter examines the construct of employee goal commitment. Overall, what is the role of employee commitment to task performance in frontline public service? Specifically, what is the effect of frontline public service employees' goal commitment on their task performance? To what extent does the contextual factor of service user capacity (similar to article D) moderate the goal commitment-task performance relationship?

The present chapter provides a summary of the motivation, research design, and findings of article F ('Commitment and Context'). As previously discussed (section 3.4.4), work motivation and goal commitment are related but separate constructs—and theory suggests that both variables are likely significant components to the quantity and quality of individual work behavior and performance. Moreover, a part of this dissertation's general research aim and purpose relates directly to the identification of ways to capitalize actively on the forces of employees' commitment. In this context, some particular research questions about the role of goal commitment to task performance in real-life public service settings are in need of empirical research attention and answers.

## 8.1 Motivation and Research Design

That goal commitment is a likely contributing factor to public service effectiveness and efficiency is not a new idea in public administration research and theory (see section 2.2.3). Moreover, numerous studies in the fields of HRM and general work motivation emphasize the importance of goal commitment for employee work behavior and performance (reviews include Donovan and Radosevich 1998; Hollenbeck and Klein 1987; Klein et al. 1999; Latham and Locke 2007; Locke and Latham 1990a, 2013; Seijts and Latham 2000a. Examples of individual studies are Erez and Judge 2001; Harrison and Liska 1994; Hollenbeck et al. 1989; Johnson and Perlow 1992; Klein and Kim 1998; Latham and Locke 1991; Latham, Seijts, and Crim 2008; Locke and Shaw 1989; Piccolo and Colquitt 2006; Schweitzer, Ordóñez, and Douma 2004; Seijts and Latham 2011).

Yet empirical evidence on the role of goal commitment for task performance in real-life public service organizations is sparse and largely un-

marked by use of more rigorous than normal methodological approaches. Overall, far more GST research—including GST research focusing on goal commitment—has been conducted in the private than in the public sector (Latham, Borgogni, and Pettita 2008); i.e., empirical studies that test the general assertions of GST in public service settings are relatively few (exceptions include Chun and Rainey 2005a, 2005b; Selden and Brewer 2000; Wright 2004, 2007). As mentioned (section 3.2), commitment research within public administration scholarship (Balfour and Wechsler 1990, 1996; Buchanan 1974; Moon 2000) has focused primarily on the degree to which individuals are committed to the organization, i.e., organizational commitment (Wright 2007). Public administration scholars have thus called for greater research attention to goal setting processes and effects in public organizations (Perry, Mesch, and Paarlberg 2006; Selden and Brewer 2000) and the cause and effects of public employees' goal commitment (Wright 2007).

In particular, two main factors appear to limit the potential for extrapolating the results of extant goal commitment studies to the area of frontline public service provision. First, nontrivial methodological issues mark the vast majority of goal commitment studies. For example, several studies use cross-sectional data and estimation procedures providing limited safeguard against endogeneity biases (e.g., omitted variable bias and reverse causation bias),<sup>42</sup> and many studies measure goal commitment by a single item, task performance by self-reported measures, or both—in turn raising concerns about measurement error and especially common source bias (Favero and Bullock 2015; Jakobsen and Jensen 2015; Meier and O'Toole 2013). In addition, most studies use relatively small samples and may therefore struggle with statistical power issues. In Klein et al.'s (1999) review, sample sizes range from 20 to 406 observations; mean  $n = 105$ .

The second limitation relates to data sample heterogeneity. The vast majority of goal commitment-task performance studies use private sector data (e.g., see Klein et al. 1999). Because both employees and jobs may differ across the private and public service sphere, the results may not be directly generalizable to frontline public service settings. Specifically, in line with the notion of 'public service ethos' (Caiden 1981; O'Toole 2006; Plant 2003) and Perry and Wise's (1990) selection proposition, public service and private sec-

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<sup>42</sup> While general GST literature comprises numerous experimental studies (e.g., see Latham and Locke 2007), experimental research that focuses specifically on goal commitment appears to be somewhat sparse. This author has not been able to find an experimental study that operates with random (or 'as good as' random) variance in goal commitment.

tor employees may differ in terms of personal characteristics, i.e., predispositions, preferences, and motivation. For other differences between public and private sector employees, see Buelens and Van den Broeck (2007), de Graaf and van der Wal (2008), Lyons, Duxbury, and Higgins (2006), and Willem, de Vos, and Buelens (2010). Similarly, SLB literature emphasizes how frontline public employees experience relatively high levels of discretionary authority and autonomy in performing their job (Lipsky 1980). Compared with private sector employees, some studies find that a large part of the frontline employees' work behavior is a product of their personal work preferences (Brehm and Gates 1997) and moral judgment (Maynard-Moody and Musheno 2003). Moreover, public administration scholars have emphasized for a long time that employees in public organizations operate in different structural settings than employees in private firms (Allison 1983; Lynn 1981; Rainey 1989, 2014; Wilson 1989). For example, some studies suggest that public employees face multiple and relatively more vague, hard-to-measure, and ambiguous goals (Chun and Rainey 2005a; Rainey 2014). Similarly, other studies emphasize how public organizations are subject to more red tape; more elaborate bureaucratic structures (Baldwin 1990; Boyne 2002a; Bozeman 1993; Bozeman, Reed, and Scott 1992; Feeney and Bozeman 2009; Lan and Rainey 1992).

Inasmuch as public service employees and/or their work contexts differ from private sector employees and/or their work contexts in one or more of the abovementioned respects, the results of extant goal commitment studies—the vast majority based on private sector data—may not be directly generalizable to frontline public service. At the very least, the potential for cross-sector inference remains empirically unsubstantiated.

In light of the limitations for extrapolating the results of extant goal commitment studies to frontline public service settings, article F draws on GST and contributes with new and somewhat robust empirical evidence on the impact of goal commitment on task performance among frontline public service employees.

Moreover, in line with the dissertation's focus on how contextual factors moderate the effect of employee work motivation and commitment on performance, article F provides some evidence on the moderating role of service user capacity (similar to article D). Whether the task performance effect of goal commitment differs across similar public service organizations that are different in terms of their service users' user capacity remains to be tested. In addition, this research focus is of scholarly relevance in terms of GST, in particular a need for more research 'examining the central hypothesis that goal commitment and goal difficulty interact in relation to task performance,

assuming sufficient variance in both variables' (Klein, Cooper, and Monahan 2013, 81). This call for research refers to a recognized and noteworthy limitation of our current knowledge of effects of goal commitment-goal difficulty interaction. Valid testing of the interaction hypothesis necessitates sufficient variation in both goal commitment and goal difficulty. However, many empirical studies feature only limited empirical variance on one or both parameters (exception include Erez and Zidon 1984; Tubbs 1993). This problem is especially prevalent for goal difficulty (Harrison and Liska 1994; Johnson and Perlow 1992; Klein and Kim 1998). In order to test the interaction hypothesis, 'some individuals must have easy goals, some moderate goals, and others difficult goals. Although this is the case in some situations, all employees or participants are often assigned the same challenging goal that violates this assumption' (Klein et al. 1999, 887).

In particular, article F provides insights on the task performance effect of goal commitment and goal difficulty interaction, because service user capacity may serve as an indicator of goal difficulty in the context of the article's research design. An explanation of the intuition behind this conceptual linkage thus necessitates a preceding presentation of the article's sample data, measures, and estimation strategy.

Overall, article F's research design is in many ways similar to that of article D (see section 6.2). Article F thus examines the role of goal commitment for task performance in a Danish school setting, i.e., using the same teacher survey data and administrative school data as article D. As in article D, employee task performance is operationalized by the test score achievements of the sample teachers' students. Teacher goal commitment is measured by a scale comprising five Likert-scale items in the teacher survey that match the content domains of those comprising a nine-item scale by Hollenbeck et al. (1989). Although not exempt from scholarly critique (Klein et al. 2001), Hollenbeck's scale is, as mentioned (section 3.4.4), among the most used measures of goal commitment; it is recognized as 'a general, flexible measure in that it can be used to assess goal commitment regardless of goal origin or timing' (Seijts and Latham 2000a, 320). Similar but not identical to article D, the article operationalizes service user capacity by a scale capturing the average socio-economic background of the sample teachers' class students.<sup>43</sup> To enhance the internal validity of the statistical findings (e.g., re-

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<sup>43</sup> The scale comprises predictor factor scores, generated on the basis of confirmatory factor analysis of four indicators: the proportion of students in the class (1) who are ethnic Danes, (2) whose mother holds an undergraduate degree or higher, (3) whose father holds an undergraduate degree or higher, and (4) who live with both

duce concerns about selection bias and omitted variable bias), article F employs the same within-student between-teachers fixed effects estimation strategy as article D.

Service user capacity, operationalized by the average socio-economic background of the sample teachers' class students, represents a context-specific, relatively 'objective' indicator of goal difficulty in the context of the within-student between-teachers fixed effects design. The basic intuition is that students' attainment of subject learning is a main teacher job goal, but that the teacher goal task of ensuring students' subject learning becomes increasingly difficult, *ceteris paribus*, when the socio-economic background (service user capacity) of a teacher's class is weaker (Björklund and Salvanes 2011; Black and Devereux 2011). For the purpose of article F, service user capacity is thus in line with the theoretical definition of goal difficulty, i.e., 'the extent to which an individual's goal is discrepant (either positively or negatively) from that individual's capacity to achieve the goal' (Wright 1992, 283).

Importantly, however, the article's fixed effects approach plays a significant role for the face validity of this conceptual linkage. The fixed effects approach implicitly estimates how goal commitment differences between student *i*'s Danish teacher and math teacher predict student *i*'s achievement in Danish relative to math. As mentioned (section 6.2.), all subject-invariant characteristics of the individual student is thus kept constant ('controlled for') by design in the fixed effects framework. The fixed effects approach therefore allows for an interaction effect estimate—on how the task performance effect of teachers' goal commitment differs across classes marked by different service user capacity—while simultaneously taking account of confounding at the individual student level, e.g., unobserved effects of the individual student's socio-economic background/service user capacity.<sup>44</sup> This particular

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parents. In contrast, article D operationalizes service user capacity by the average length of education of the students' parents. By arguing that the average socio-economic background of the sample teachers' class students—and not only the students' parents' education—is an indicator of service user capacity, the dissertation implicitly extends the notion that education may serve as a proxy for service user capacity (Kristensen, Andersen, and Pedersen 2012). I recognize that the validity of this slight extension, while relatively minor, is unsubstantiated empirically.

<sup>44</sup> For the purpose of illustration, say that we have two school classes: A and B. The average service user capacity of the students in A is relatively higher than that of the students in B (A is thus marked by a relatively lower goal difficulty than B from a teacher perspective). In both classes, the goal commitment of the students' Danish teacher and math teacher varies. Using within-student between-teachers fixed effects, we can estimate whether the effect of different goal commitment among the

feature of the fixed effects approach substantiates that service user capacity, operationalized by the average socio-economic background of the sample teachers' class students, may simultaneously represent a context-specific indicator of goal difficulty in light of the article's research design. Another way to say this is that the fixed effects approach helps establish the '*ceteris paribus*' notation of the intuition underlying the conceptual linkage between service user capacity and goal difficulty (i.e., the intuition that the teacher goal task of ensuring students' subject learning becomes increasingly difficult, *ceteris paribus*, when the socio-economic background (service user capacity) of a teacher's class is weaker).

While keeping constant both the job goal task and task performance indicator, article F thus operates with a proxy for service user capacity that simultaneously represents a context-specific, relatively 'objective' indicator of goal difficulty. As this indicator is marked by substantial empirical variance, article F's moderation findings should not be subject to the issue of limited empirical variance in goal difficulty measurement that marks many extant studies on task performance effects of goal commitment-goal difficulty interaction (Klein, Cooper, and Monahan 2013; Klein et al. 1999). Moreover, because this indicator is relatively 'objective' (i.e., not based on self-reported responses), concerns about measurement error, social desirability, and common source bias are diminished (Favero and Bullock 2015; Jakobsen and Jensen 2015; Meier and O'Toole 2013). Though many studies use perceptual goal difficulty measures (Cheng, Luckett, and Mahama 2007; Latham, Seijts, and Crim 2008; Lee and Bobko 1992; Wright 1990; Yearta, Maitlis, and Briner 1995), Locke and Latham (1990a) state a general preference for using 'objective' over 'subjective' measures of goal difficulty (see also Locke 1991; Wright 1992). At least in some respects, article F's results regarding goal commitment-goal difficulty interaction are thus superior to that of several existing studies.

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two teachers in class A (low goal difficult) is statistically distinct from the effect of different goal commitment among the two teachers in class B (high goal difficulty). Because subject-invariant characteristics of the individual student are kept constant by design, the resulting estimate should be largely unbiased by unobserved characteristics of the individual student. For example, the risk of omitted variable bias due to covariance of the individual students' socio-economic background/service user capacity with both the goal commitment and the task performance measure is diminished substantially.

The articles' analyses and findings are based on a final sample comprising 396 teachers and 3,759 students.<sup>45</sup> Multivariate within-student fixed effects regression identifies the effect of teacher goal commitment on task performance. The moderating effect of service user capacity (goal difficulty) on the goal commitment-task performance relationship is also estimated in the fixed effects framework via model inclusion of an interaction term (for goal commitment  $\times$  service user capacity). As a significant robustness check, the article discusses and performs tests in relation to three potential biases that are not directly accounted for by the fixed effects approach: subject-variant effects, unobserved teacher heterogeneity, and reverse causation (though deleted for space consideration, I also did a test for bias due to non-random student-teacher matching within schools). In sum, none of the robustness analyses provide substantial reason for rejecting the article's finding.

## 8.2 Findings

The article's results are in line with general GST expectations and findings. High goal commitment among frontline public service employees (teachers) is associated with higher levels of task performance (higher student test score achievements). However, the estimated effect size is relatively modest. A one standard deviation increase in goal commitment relates to three percent of a standard deviation increase in task performance. In relative terms, the magnitude of the article's goal commitment estimate is thus smaller than the ones observed across similar studies using private sector data (e.g., see Klein et al. 1999).

Empirical substantiation of the crowd of factors that may possibly explain this difference is beyond the scope of this dissertation. However, potential main explanations are likely related to the aforementioned ways in which both public employees and jobs are different from private employees and jobs. For example, relatively vague, hard-to-measure, and ambiguous goals

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<sup>45</sup> As in article D, teacher observations that did not match the criteria for within-student between-teachers fixed effects estimation were dropped (see section 6.2). This procedure could harm the representativeness of the sample. However, analyses of sample attrition suggest that the 396 sample teacher observations are not systematically different from the excluded teacher observations: Two-group *t*-tests for gender, ethnicity, age, education, and tenure (years) reveal no significant differences in means at  $p < .05$ . Similarly, the 176 schools of the sample teachers are not statistically distinct from the full population of Danish lower secondary schools with respect to average student test scores, average student socioeconomic background, and school size.

in public service settings (e.g., Chun and Rainey 2005a; Rainey 2014) may dilute the positive effect of goal commitment on task performance in the area of frontline public service provision.

In relation to the dissertation's aim of examining how contextual factors moderate the goal commitment-task performance relationship, article F indicates that the extent of the service user capacity (or goal difficulty) facing the frontline public service employees conditions the task performance effect of goal commitment. In terms of general GST, the evidence—although thin—supports that goal commitment may have a positive effect on task performance when goal task accomplishment is more difficult as opposed to less so (i.e., when the service users' user capacity is smaller as opposed to larger).

In sum, the article's findings thus emphasize the merits of managerial attention to employee goal commitment in public service settings. Irrespective of the somewhat modest size of the estimated effect, public managers may potentially improve the performance of its frontline personnel by actions (e.g., HRM policies) that aim to support and foster employee goal commitment. At the very least, public managers should not diminish their current efforts in cultivating employee commitment to the task goals of the organization.

## Chapter 9: Limitations

*The Oxford English Dictionary* defines 'research' (noun) as 'the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusion.' Research is 'scientific' when based on or characterized by the methods and principles of science, e.g., Karl Popper's *epistemology of falsificationism* (Popper 2002). *Per (theoretical) definition, the main goal of social science scholarship is thus to advance our knowledge about social phenomena.*

Unfortunately, empirical researchers face the inconvenient truth that 'there is no hope of doing perfect research' (Griffiths 1998, 97; see also Wenham 2005). Although most researchers strive for precise and 'true' results, their efforts always fall short of perfection. At the very least, the ubiquitous possibility of errors (both systematic and random) at different stages of the research process renders the hope for perfect research useless. In practice, all empirical studies can likely be refined in some way or another. In line with this notion, some researchers emphasize how empirical social science research is inherently marked by a trade-off between the ability to make causal statements (internal validity), the ability to generalize those statements to other settings (external validity), and the ability of a broader audience to directly apply them (ecological validity) (McGrath 1981; Wright and Grant 2010).

This dissertation is not the exception from the rule: None of its articles is exempted from limitations. The present chapter describes and discusses their main limitations and caveats in relation to internal validity, external validity, and ecological validity, respectively. Overall, the chapter thus presents the borderland of the dissertation's empirical contributions to research and practice.

### 9.1 Internal Validity

Identification of causality is often the goal of social science research studying the statistical relationship between two or more phenomena. Following the maxim of 'no causation without manipulation' (Holland 1986), some statisticians and econometricians suggest that causal inference from nonexperimental data is a lost cause. Others adhere to the truism that 'correlation does not imply causality' (Barnard 1982). In line with Angrist and Pischke (2009,

113), I believe that ‘correlation can sometimes provide pretty good evidence of a causal relationship, even when the variable of interest has not been manipulated by a researcher or experimenter;’ if ‘wielded skillfully, ‘metrics tools other than random assignment have much of the causality-revealing power of a real experiment’ (Angrist and Pischke 2015, 47). Although regression results rarely hold the same causal forces as the results from a randomized trial, regression-based causal inference is possible.<sup>46</sup>

Having said that, some internal validity concerns that call for attention and caution mark the dissertation’s articles D (‘Context Dependency’), E (‘Attraction and Context’), and F (‘Commitment and Context’).<sup>47</sup> Regardless of attempts at econometric rigor and sophistication, these articles draw on observational data and their findings are thus vulnerable to different sorts of endogeneity bias (albeit to various extents). For example, articles D and F both employ a within-student between-teachers fixed effects estimation strategy. As a result, the risk of confounding due to selection bias and omitted variable bias is reduced (Schlotter, Schwerdt, and Woessman 2011; Wooldridge 2009). However, the risk of endogeneity bias is not eliminated altogether. While the fixed effects approach takes account of between-school sorting and subject-invariant confounders at the student, class, and school level, the results remain vulnerable to potential within-school teacher-to-class sorting and confounding from subject-variant effects. Moreover, the fixed effects approach offers only limited safeguard against omitted variable bias due to unobserved teacher characteristics—and the risk of reverse causation bias cannot be rejected.

Caution in drawing causal inferences is advisable especially in relation to article E’s findings (i.e., the risk of biased estimates is, *ceteris paribus*, substantially smaller for articles D and F relative to E). The combination of cross-sectional data and a multinomial logit estimator yields statistical results that are susceptible to potential omitted variable bias, reverse causation bias,

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<sup>46</sup> Specifically, the potential for justifying a causal interpretation of regression is predicated on the validity of assuming that ‘when key observed variables have been made equal across treatment and control groups, selection bias from the things we can’t see is also *mostly* eliminated’ (Angrist and Pischke 2015, 47; italics mine).

<sup>47</sup> This is not to say that the internal validity of article A, B, and C is beyond questioning; I cannot rule out that the articles’ estimates may be biased. At the very least, the articles’ control and treatment groups could be marked by ‘chance imbalance’ (i.e., an imbalance in unobserved confounders occurring by chance). In relative terms, however—because of the random assignment of control and treatment conditions—the articles’ estimates should be unbiased.

and selection bias. Moreover, the dependent and independent variable are both measured by self-reports, which certainly does not diminish the risk of common source bias (Favero and Bullock 2015; Jakobsen and Jensen 2015; Meier and O'Toole 2013).

So what? Do these limitations completely invalidate the possibility of employing a cautious causal interpretation to the article's findings? Again, Angrist and Pischke (2009) provide some comfort and guidance in their concluding remark:

If applied econometrics were easy, theorists would do it. But it's not as hard as the dense pages of *Econometrica* might lead you to believe. Carefully applied to coherent causal questions, regression ... almost always make sense. Your standard errors probably won't be quite right, but they rarely are. Avoid embarrassment by being your own best skeptic, and especially, DON'T PANIC! (327).

Heeding the advice about self-skepticism and not panicking, this dissertation's articles—i.e., including those using survey experimental data but excluding article E—employ one or more robustness tests; different in type and form but all aiming for falsification. In brief, article A ('Activating Effort') performs two types of tests: one relating to whether the observed PSM treatment effects are, in fact, the result of PSM activation; another serving both as a control for outlier bias and as a 'conservative' test of one of the article's hypotheses. Article B ('Activating Choice') weighs and reanalyzes its data using Coarsened Exact Matching (Iacus, King, and Porro 2012). Article C ('Gender Insignificance') executes tests involving estimations on subsamples and use of other estimators. Article D tests the replicability of its general findings using another data set on school teachers and students (i.e., a data set used previously by Andersen, Heinesen, and Pedersen 2014). Article F conducts tests in relation to the four potential biases that are not directly accounted for by its within-student between-teachers fixed effects approach—i.e., subject-variant confounding, unobserved teacher confounders, reverse causation, and within-school sorting. In no case did the robustness tests give substantial cause to reject any of the individual articles' main results.

Despite the absence of robustness tests in article E—and irrespective of the caveats that its research design imposes—I want to emphasize one important point: In the perspective of the current state of PSM scholarship, the article contributes, by design, to our understanding of the effects of PSM on individuals' public sector attraction and selection. As discussed (section 7.1), the majority of studies examining Perry and Wise's (1990) selection proposition use data on public and private employees (Lewis and Frank 2002;

Rainey 1982; Steijn 2008; Wright and Christensen 2010). In consequence, their results are easily biased by confounding from organizational socialization and adaptation mechanisms (Wright 2008; Wright and Grant 2010). By using data on students, article E takes account of such confounders (i.e., given their pre-entry labor market status, students are assumedly to be largely unexposed to sector-specific organizational socialization and adaptation confounders).

In sum, the internal validity of the dissertation's articles should be viewed in terms of the uncertainty incited by the potential endogeneity biases that threatens their internal validity. Carefulness and caution in drawing causal inference from the dissertation's articles that use observational data—especially article E—are thus of special salience and merit. I fully recognize these articles' caveats with respect to internal validity and I advise and emphasize that their results should be evaluated in that light.

Still, I suggest that more harm than good may come from *fully* dismissing a casual interpretation of the articles' findings on the sole ground of *potential* endogeneity bias. An analogy can be drawn to the notion of 'false positives' and 'false negatives' (Type I and Type II errors): Rejecting an erroneous statement of causality is certainly important. However, and though randomized experimental research is the gold standard for causal inference (Dunning 2012; Margetts 2011; Schlotter, Schwerdt, and Woessman 2011), we should also be cautious to mechanically accept that correlation may never provide *some* (weak) evidence of a causal relationship. Consistent with this notion, I come to think of a conversation about methods for causal inferences I once had with Steven E. Finkel, professor at University of Pittsburgh, whose areas of expertise include applied quantitative methods (see Finkel 1995, 2007). As to the potential for causal inference from observational data, I remember him saying that 'the fact that an estimate could be biased does not mean that it is!'

I thus believe that the randomized experiment comprises the ideal for examining causal relationships and that observational data analyses very rarely offer strong proof of causality. In line with Angrist and Pischke's (2009, 2015) position, however, I simultaneously submit that observational data analyses may sometimes contribute to an understanding of causal relationships between phenomena. Contingent on the amount of scholarly self-skepticism, the data, and the estimator used, observational estimates may to various extents (i.e., with varying degrees of certainty) support the likelihood of a causal relationship.

## 9.2 External Validity

To what extent can the dissertation's findings be extrapolated to public service employees? Whereas two of the dissertation's articles (D and F) use data on public service employees, the remaining four articles draw on samples comprising university students (A and E) or citizens (B and C). Article E's use of students serves the purpose of disentangling the effect of PSM on public versus private sector preferences from the effect of organizational socialization and adaption processes on individuals' PSM and sector employment preferences. However, the use of student and citizen samples directly reduces the potential to generalize the results of articles A, B, and C to public service settings. While the use of students and citizens should not affect the internal validity of these articles, their estimates may not provide an accurate depiction of how HRM-related interventions activate the behavioral forces of work motivation among actual public employees.

As far as student respondents, the majority of experimental studies in the social sciences use students (Davis and Holt 1993; Henrich, Heine, and Norenzayan 2010; Kagel and Roth 1997) and the use of experimental methods is a widely accepted methodological approach to theory and policy analysis. Nevertheless, the use of students as surrogates for non-students has long been a controversial issue (Levitt and List 2007; Sears 1986). However, empirical research on the extent to which student behavior in experiments is representative of a broader population is limited, and some of the existing findings suggest that the experimental responses of students are seldom substantially different from those of other subject pools (Ball and Cech 1996; Plott 1987). For example, analyses of student responses to non-student responses in identical experiments (and the behavior of lab participants to 'real-world' behavior) find that student responses are largely generalizable to non-students, both in and beyond the laboratory setting (Alm, Bloomquist, and McKee 2011). On this basis, there is no strong empirical evidence for expecting that the cognitive processes and responses of the sample law students in article A are fundamentally different from those of actual employees with similar higher educations.

As to the use of citizen respondents, articles B and C's sample comprises adults of all ages, and thus includes both private and public employees. In consequence, potential confounding due to private-private sorting (or heterogeneity) diminishes the external validity of their findings in relation to public employees. Individuals in public employment may differ in important respects from their private sector counterparts (see section 8.1). As a result, the estimated behavioral effects of external HRM-related interventions may not

be directly generalizable to public service employees, i.e., the 'true' effect for private sector employees may vary from that of public sector employees, in turn affecting the articles' average effect estimates. Some caution in uncritical extrapolation of article B and C's findings to public service employees is further advisable in light of the dissimilar findings on effects of external PSM interventions in article A relative to B and C (section 5.3). In sum, I recognize and submit how extrapolation of the findings of article A, B, and C to real-life public service employees should be made with a conscious mind on the external validity caveats that the use of student and citizen samples implies.

A related concern is the potential for generalizing the results to the general population of public service employees. While articles D and F employ data on school teachers, their findings may not be directly generalizable to other types of public service employees such as nurses, police officers, and social workers.

Importantly, however, SLB research emphasizes how the people who work in frontline public service jobs 'tend to have much in common because they experience analytical similar work conditions' (Lipsky 1980, 3-4). Frontline public service organizations are generally characterized by a set of common features, e.g., (1) mission and task responsibilities that relate to the direct provision of public services to citizens; (2) high levels of personnel autonomy from organizational authority; and (3) considerable employee discretion in determining the nature, quantity, and quality of benefits and sanctions provided by the public service agency (Brehm and Gates 1997; Lipsky 1980; Maynard-Moody and Musheno 2003; Riccucci 2005). Similarly, most frontline public service jobs require specialized training and high levels of expertise, and frontline public service employees may be widely characterized by a distinct 'public service ethos' (Caiden 1981; O'Toole 2006; Plant 2003) and relatively high levels of PSM (Perry and Wise 1990). To which argument Harrits and Olesen (2012) add personal preferences for working with people and making a difference in people's lives.

At the very least, these lines of research support and increase the likelihood that the dissertation's findings concerning teachers may apply to a broader selection of frontline public service employees. I thus theorize that article D and F's findings may be extrapolated to other frontline public service employees (e.g., nurses, policy officers, and social workers) to the extent that they are similar to teachers in terms of work conditions and personal characteristics and preferences.

A third and final main external validity concern is the reliance on Danish data. All of the dissertation's articles use samples of Danish respondents. In line with historical institutionalism (Pierson and Skocpol 2002), both sociocul-

tural factors unique to the Danish people and not least the institutional configuration of the Danish welfare state entail that the dissertation's results may, potentially, not be directly generalizable to other country settings. This caveat includes other Western democratic states but is especially salient for non-Western, non-democratic states (Henrich, Heine, and Norenzayan 2010). I fully acknowledge this external validity limitation and thus advise that any extrapolation of the dissertation's findings to other countries should be made with care and caution and based on deliberations about their resemblance with Denmark (e.g., the findings are, *ceteris paribus*, likely far more generalizable to other Scandinavian countries than to Asian or South American countries).

### 9.3 Ecological Validity

In *applied research*, 'the goal is to predict a specific behavior [or outcome] in a very specific setting' (Stanovich 2007, 106). Applied research is thus preoccupied with answering a specific question or problem that has direct application(s) to the real world. Research on the effect of a specific policy reform or initiative on patient wait times in public health services may be directly applicable to public decision-makers and practice, and is thus an example of applied research. In contrast, *basic research* focuses on fundamental principles and testing theories (Calvert and Martin 2001). Driven by a desire to enhance and expand our understanding of the world around us, it relates to research undertaken primarily to advance knowledge without any specifically envisaged or immediately practical application (OECD 1994).

In reality, the demarcation between basic research and applied research is not clear cut. They are often inextricably intertwined. Most research is a hybrid of new knowledge generation and subsequent exploitation (ICSU 2004; Stanovich 2007). Still, this dissertation can be said to privilege a focus leaning more toward basic than applied research. In consequence, the ecological validity of most of the dissertation's articles is relatively low. In particular, a broader audience may not directly apply the findings of the dissertation's experimental articles A, B, and C. While the experimental treatments comprise HRM-related interventions, each seeking activation of the behavioral forces of individuals' work motivation, the treatments do not constitute actual HRM interventions that can be directly implemented in real-life public service organizations and practices. Moreover, in terms of contextual realism, I suggest that the experimental tasks and outcome measures relate to the essence of some aspects of real-life work tasks and behaviors—but I certainly recognize that they do not mirror them exactly. Overall, in order to convert

the articles' findings into *direct* applications for practice, the experiment treatments must be translated into specific HRM interventions relating to real-life work tasks.

In the same vein, some ecological validity limitations mark the dissertation's articles E and F. While article E expands our knowledge on the relationship between PSM and preferences for public versus private sector employment in important ways, it does not offer empirical evidence on *specific* HRM selection policies that may actively convert this linkage into increased personnel performance. Similarly, article F contributes to our knowledge on the role of employee goal commitment to task performance in frontline public service, yet it does not inform practice as to *particular* interventions yielding increased task performance via support and stimulation of employee goal commitment.

In sum, I acknowledge the dissertation's limitation with respect to ecological validity. However, I also want to emphasize how its dedication to basic as opposed to applied research does not result in failure to provide several significant contributions to our knowledge on how to capitalize on employees' work motivation and commitment to support and improve their efforts and task performance at work. While the possibility for *direct* application of the dissertation's findings is limited, they offer an important empirical foundation that encourages public organizations to engage in various efforts to actively support, activate, or cultivate the forces of employee work motivation and goal commitment. In other words, I suggest that the dissertation provides insights that justify, in their own right, a set of cautious yet substantive policy recommendations. At the very least, I feel comfortable suggesting that the dissertation may serve as the evidence platform for implementation—on a trial basis—of organizational policy interventions attending to employee work motivation and commitment. I return to suggestions for policy interventions in section 10.4.

Any such trial based implementation activities inevitably call for and benefit from applied research (e.g., studies on the effects of the specific policy interventions)—but this fact does not detract from the value or contribution of the basic research that preceded and gave cause to the implementation of the policy interventions in the first place. Such is the nature of the scientific research process: basic research feeds applied research and vice versa (Calvert and Martin 2001). Both types of research are important. In conclusion, I suggest that the implications of the dissertation's focus on basic research, and thus its limitations in relation to ecological validity, should be valued in light of the following point of view:

It is probably a mistake to view the basic-versus-applied distinction solely in terms of whether a study has practical applications, because this difference often simply boils down to a matter of time. Applied findings are of use immediately. However, there is nothing so practical as a general and accurate theory' (Stanovich 2007, 107).



# Chapter 10: Discussion and Conclusion

What are the main conclusions to be drawn from this dissertation's analyses and findings? How and in what respects does the dissertation contribute to and advance the state of scholarship on public employees' motivation and commitment at work? On the basis of the dissertation, what are some of the prominent issues of interest that future research should attend to and examine? Finally, what does the dissertation imply for policy and practice?

Guided by these questions, this chapter summarizes the dissertation's main findings and specifies the ways in which it enhances and expands our knowledge on public employees' work motivation and goal commitment. After a discussion of venues for future research, the chapter returns to John, our newly appointed school principal at Median School (from chapter 2). Based on this dissertation, what can John do and initiate, at least on a trial basis, to attempt to promote his teachers' work behavior and stimulate their task performance?

## 10.1 Summary of Findings

Despite the limitations illustrated in the previous chapter, this dissertation provides several empirical findings that all—in some respect—expand our understanding of ways to capitalize actively on the forces of employees' work motivation and commitment. The main findings are as follows:

- *External HRM-related interventions may activate the behavioral forces of individuals' work motivation* (articles A ['Activating Effort'] and B ['Activating Choice']). Both student and citizen data suggest that the use of HRM-related treatments targeting introjected extrinsic motivation relating to a need for feelings of self-importance and approval from the self or others (ego involvement) has a relatively large, positive effect on individuals' behavioral task effort and choice. Similarly, use of an HRM-related treatment targeting external extrinsic motivation in the form of pecuniary motivation appears to engage and move individuals' behavioral task choice in a beneficial direction. As to the activation effect of HRM-related treatments targeting identified or integrated extrinsic motivation in the form of PSM, the dissertation identifies a relatively large, positive effect on students' task effort. For the citizen sample data and with task choice as

outcome measure, however, the PSM treatment effect estimate is positive but not statistically significant.

- *The activation effects of external HRM-related interventions on the behavioral forces of individuals' work motivation are similar for males and females* (article C ['Gender Insignificance']). Three of five HRM-related treatments appear to have a significant average treatment effect on individuals' task choice, but these effects do not appear to differ significantly between male and female respondents.
- *Both organizational regulation of employee work discretion and service user capacity are contextual factors that may moderate the PSM-performance relationship* (article D ['Context Dependency']). Employees' PSM appears to correlate more positively with their task performance when they simultaneously face greater regulation of how they spend their working time and their service users' average user capacity is low to moderate.
- *Individuals with greater PSM exhibit preferences for public versus private sector employment* (article E ['Attraction and Context']). Higher PSM among students—i.e., individuals largely unexposed to potential organizational sector socialization and adaption confounding—is positively associated with attraction to public sector employment; negatively associated with attraction to private sector employment. In addition, moderation analyses indicate that individuals' academic fields of study comprise a contextual moderator of the association between PSM and sector employment preference.
- *Goal commitment among frontline public service employees has a positive effect on task performance—albeit relatively small in size* (article F ['Commitment and Context']). In particular, using data on frontline public service employees (teacher), higher goal commitment appears associated with higher task performance. Moreover, indicatory findings support that service user capacity (or goal difficulty) is a contextual moderator of this relationship. Although the evidence is thin, the positive goal commitment-task performance relationship appears stronger when the service users' average user capacity is smaller as opposed to larger (i.e., when goal task accomplishment is more rather than less difficult).

The following section presents and discusses some of the main scholarly contributions of the dissertation and its findings: How does the dissertation advance the state of our scholarship with respect to potential ways to capitalize on the forces of work motivation and goal commitment?

## 10.2 Scholarly Imprint and Implications

This dissertation expands our scholarly knowledge on work motivation and goal commitment in several important ways. With respect to work motivation, the dissertation advances a full conceptual embedding of PSM into an SDT understanding of human motivation. Building upon previous theory developments (Perry 2000; Perry and Vandenberg 2008; Vandenberg 2007), the dissertation suggests that PSM reflects a particular form of motivation relating to the identification with, or full internalization of, institutional public service values and motives. In terms of SDT, PSM is thus conceivable as an internalized and autonomous form of extrinsic motivation; a reflection of identified or integrated regulation (Deci and Ryan 2004; Gagné and Deci 2005).

Moreover, the dissertation introduces a taxonomy that distinguishes between PSM *cultivation* (how to foster and sustain high PSM) and PSM *activation* (how to engage actively an individual's present level of PSM). This conceptual distinction is important, not least because it emphasizes and implicitly calls for a slight shift in the focus of PSM research that examines ways to benefit from the positive PSM-performance relationship that is observed across numerous PSM studies. As discussed (section 5.1), public managers may potentially stimulate the performance of their organization using a combination of HRM practices, some directed at PSM cultivation, others at PSM activation. However, while scholars have already expanded our understanding of ways to potentially foster, promote, and sustain employee PSM (e.g., Leisink and Steijn 2008; Moynihan and Pandey 2007), research with focus on PSM activation is strikingly absent.

The dissertation directly supports the notion that research attention to venues for activation of work motivation is important and beneficial to practice. It shows that we may capitalize on the positive effects of individuals' work motivation on their behavior by means of external activation efforts, i.e., HRM-related interventions aimed at engaging an individual's extrinsic motivations. Even low-cost and low-intensity interventions may activate the forces of work motivation. More specifically, effects of managerial behavior and policy specifically serving employees' feelings of self-importance and approval from the self or others appear understudied, at least in public administration. In this regard, the dissertation's experimental findings underscore and warrant research attention to organizational causes and consequences of employees' ego involvement—what appears to be a specific and potentially potent form of introjected extrinsic motivation. In addition, the dissertation contributes by demonstrating how individuals' PSM is a resource that

may be actively engaged. Importantly, however, the dissertation suggests that the effectiveness of any such activation efforts may be contingent on the characteristics of the public personnel in question. The finding of dissimilar PSM treatment effects for different samples underpins that scholars should be vigilant when drawing conclusions of universal validity and application on the basis of empirical data. While this word of caution is well advised in general, it may be of particular relevance for research on work motivation. In general, the effects of any phenomenon on work motivation and motivation activation may be somewhat contingent on the constellation of work motivations that characterizes the population subject to study. For example, a policy seeking 'cultivation' of a given type of motivation may have a heterogeneous effect for personnel groups with differing average baseline quantities of that type of motivation. Similarly, the effect of a policy pursuing 'activation' of a given type of motivation may depend on the quantity of that type of motivation that exists in the target group.

In line with this notion of contextual moderation arising from sample heterogeneity in personal characteristics, the dissertation expands our scholarly knowledge on effects of gender differences in work motivations. In finding that activation effects of different HRM-related interventions are not statistically distinct for males and females, the dissertation indirectly supports that the average effectiveness of a given HRM 'motivation activation' intervention is likely unrelated to the gender composition of the employees in an organization.<sup>48</sup> The (null) finding contributes to gender research: As previously discussed (section 6.1), gender role and stereotype theory (Basow 1992; Eagly 1995; Eagly and Wood 2013) and several empirical studies (Bigoness 1988; Bright 2005, 2009; Cross and Markus 1993; DeHart-Davis, Major and Konar 1984; Marlowe, and Pandey, 2006; Gooderman et al. 2004; Hofstede 2001; Meece, Glienke, and Burg 2006) emphasize that males and females may hold different constellations of work motivation. Importantly, however, a somewhat conflicting line of research suggests that individual differences

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<sup>48</sup> I recognize how individual-level gender moderation is not the same as organizational gender composition moderation. For example, gender group dynamics and gender peer effects are variables that exist in the real-life workplace space, but which are 'eliminated' from the dissertation's gender moderation analyses and estimates by design. Nevertheless, I suggest that the individual-level findings, *ceteris paribus*, support that different gender composition in otherwise similar organizations or sections is more likely than unlikely to be an insignificant predictor of the effectiveness of HRM 'motivation activation' interventions. To be clear: by 'support' I mean 'provides indications of support' rather than 'shows' or 'substantiates.'

within groups of males and females are more pronounced than differences between the two groups (Wigfield et al. 2002); that males and females are more marked by work motivation similarities than differences (Dubinsky et al. 1993; Pearson and Chatterjee 2002). To the extent that males and females are, indeed, more differently than similarly work motivated, we would expect for the HRM-related treatments to yield heterogeneous 'motivation activation' effects for males and females. In turn—*qua* its (null) findings—the dissertation gives added salience to the latter notion, i.e., that males and females may be more similarly than differently motivated at work (Dubinsky et al. 1993; Pearson and Chatterjee 2002; Wigfield et al. 2002). At a minimum, this dissertation suggests that extant gender differences in work motivation may not be so prominent as to significantly moderate the effects of external 'motivation activation' efforts.

Besides personnel characteristics, the dissertation expands our understanding on how organizational characteristics can constitute as contextual moderators of how work motivation reflects positively on task performance. In particular—by its focus and findings on the role of organizational regulation of employee work discretion and service user capacity to the PSM-performance relationship—the dissertation contributes to our scholarly understanding of effects of employee PSM in at least two ways. First, greater discretionary regulation may potentially demotivate public service motivated employees (or restrict their opportunities to pursue and fulfil their PSM), and thus reduce their task performance (Le Grand 2010). As mentioned (section 6.3), however, public service employees, including those with high PSM, may be 'paternalistic' (Le Grand 2003; 2007; 2010). If so, public service motivated personnel may use extended levels of discretionary autonomy to support their personal understandings of how to best deliver services to people (Andersen et al. 2013; Gailmard 2010)—potentially at the expense of attention to task performance goals. In support of this important yet understudied notion, the findings emphasize that some extent of discretionary regulation may be beneficial to the forces of employee PSM. Some extent of organizational regulation of employee work discretion may help direct employees' work effort toward the achievement of a given task performance goal, i.e., reduce the likelihood that employees follow other goals as 'runaway agents' (Gailmard 2010; Kiewiet and McCubbins 1991).

Second, the dissertation supports that the PSM-performance relationship may be especially pronounced for employees facing users with low to moderate service user capacity. This finding is relevant to future empirical studies of PSM effects among public service employees. On the basis of this dissertation, I recommend that such studies attempt to take account of potential

confounding due to heterogeneity in service user capacity. At a minimum, their statistical findings should be interpreted and evaluated in light of the average service user capacity of the public service recipients in question.

The conceptual distinction between work motivation ‘cultivation’ and ‘activation’ evidently implies that capitalization of the forces of work motivation may occur via other means than external activation efforts. In this regard, this dissertation strengthens our knowledge about the prospects for public service improvements via active PSM cultivation procedures. By discovering a positive association between PSM and preferences for public versus private employment among individuals who are largely unexposed to potential organizational sector socialization and adaption confounding (students), the dissertation lends added substance to the PSM proposition that individuals with greater PSM are more likely to seek membership in a public organization (Perry and Wise 1990). Such substantiation is important, because it increases the likelihood that a given public service organization possesses a strong (albeit possibly underused) organizational resource: employee PSM. This insight is important to the utility of real-life PSM activation efforts (i.e., to activate employees’ PSM, the employees must necessarily hold some extent of PSM), but may also be of value to the potential design of PSM cultivation intervention. In particular, organizational PSM cultivation may occur via use of HRM attraction and selection policies that look to recruit a high-PSM workforce (Leisink and Steijn 2008). The dissertation indicates that the marginal organizational benefit in relation to organizational PSM cultivation is possibly greater for selection-type than attraction-type policies. Inasmuch as highly public service motivated individuals are inherently attracted to public sector jobs, organizational efforts toward recruitment of a high PSM workforce are likely better spent on the job interview and screening process (selection) than on advertising and communication procedures ensuring that its job applicant pool comprises high-PSM job applicants (attraction).

Having said that, the dissertation also emphasizes that attraction to public sector employment among individuals with high PSM is not universal to all types of public sector jobs—i.e., the association between PSM and sector attraction appears heterogeneous across students at different social science fields of study.<sup>49</sup> This finding is important because it highlights that the ideal

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<sup>49</sup> At least to some extent, the focus on students in different social science fields provides a ‘conservative’ (or ‘least likely’) test of moderation. In particular, I suggest that students across social science fields are likely *relatively* more similar to one another than to students in most other fields and types of education. In other words,

design of HRM policies seeking the recruitment of a high-PSM workforce may be contextually dependent. For example, attraction-type policies may be of special salience for certain public sector jobs, e.g., positions requiring an economics degree. Research is unlikely to ever offer evidence on the association between PSM and sector attraction for every single type of public sector profession. So what may organizations feasibly do in the face of this issue of educational heterogeneity? Besides practical reasoning on the basis of speculative deduction (e.g., that the PSM-attraction link for people with an accounting or public finance degree is likely similar to that of people with an economics degree), I propose that an organization's HR department could undertake a simple one-time survey analysis of job applicants' motivation for applying. Although such analysis is unlikely to comply with scientific standards, its result may provide an empirical base of practical merit and use for policy decisions on how to best recruit a public service motivated workforce.

With respect to goal commitment, the dissertation contributes to public administration research and accentuates why public service employees' goal commitment warrants scholarly attention. Extant studies of task performance effects of goal commitment are widely marked by methodological limitations and the vast majority uses private sector data (see section 8.1). In this perspective, the dissertation provides new and somewhat robust evidence on the role of goal commitment to task performance in real-life public service organizations.

That employee goal commitment is a likely contributing factor to public services performance is not a new idea in the field of public administration. However, direct empirical substantiation is important, not least to the relevance of further public administration research into antecedents of goal commitment among frontline public service employees. In other words, public service organizations may possibly improve their performance via HRM policies and interventions that cultivate or activate the goal commitment of the frontline personnel—but such possibility is clearly contingent on the existence of a positive goal commitment-task performance relationship. The same is true for the value and practical contribution of any scholarly investigation into potential procurement of public services performance via stimuli of employee goal commitment.

Moreover, the dissertation indicates that service user capacity (or goal difficulty) is a contextual moderator of the goal commitment-task performance relationship. Although the evidence is thin, this finding directly ad-

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the sample social science students are more homogeneous than a sample comprising political science, engineering, and linguistics students.

dresses the call for more empirical research on goal commitment-goal difficulty interaction in relation to task performance, assuming sufficient variance in both variables (Klein, Cooper, and Monahan 2013; Klein et al. 1999). In addition, the moderation results support that continued attention to goal commitment in the area of public service is important. To an increasing extent, the elected officials appear to be specifying performance goals and objectives requiring public organizations to improve their public services delivery while spending the same or less. At a minimum, modern public service organizations are not facing fewer or easier-to-achieve performance goals. In an era of increasingly ambitious and demanding task goals, the dissertation's result with respect to goal difficulty moderation indicates that employee goal commitment could be a factor of increasing salience and value to public service organizations.

### 10.3 Future Research

Most studies yield new knowledge but raise as many new questions as they answer; a 'well-designed study will answer some questions and will also raise new questions that can inform the design of subsequent studies' (Murnane and Willett 2010, 348). The research in this dissertation is no exception. This section presents an abbreviated discussion of some of the main venues for future research that the dissertation's findings may motivate and inspire.<sup>50</sup>

A first set of questions for future research relates directly to the dissertation's limitations with respect to internal, external, and ecological validity (chapter 9). In terms of internal validity, future studies should examine the linkage between PSM and public versus private sector attraction in an experimental framework. Ideally, one can imagine a randomized controlled trial study that tests the effects of a 'PSM cultivation' intervention on PSM and employee behavior and performance. Within such framework, researchers may—as a complementary research focus—possibly use treatment assignment as an instrumental variable (IV) for PSM.<sup>51</sup>

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<sup>50</sup> Similar to the review of limitations (chapter 9) and the summary of findings and scholarly implication in sections 10.1 and 10.2, this discussion of recommendations for future research highlights only *some* of the main areas of interest. The dissertation finds and raises a crowd of research questions that demand further scholarly attention, including some which this section may fail to address directly.

<sup>51</sup> In terms of two-stage least squares estimation, researchers may regress individuals' public versus private sector attraction on their predicted PSM (i.e., first-stage regression results). Besides instrument relevance, such analysis would naturally re-

Another and less resource-intensive approach involves the use of survey experiments. For example, say that a study exposes respondents to a set of vignettes describing different jobs and asks the respondents to rate their attraction to each described job. Each job description is randomized with respect to mentioning of sector, i.e. 'no label' (control), 'private,' and 'public'. This research design would allow for interaction analyses showing if and how PSM moderates the effect of each sector cue on individuals' job attraction. To further disentangle the effect of PSM on sector employment preferences from the effect of organizational socialization and adaptation processes, this research could be conducted among students as well as employees in both the private and the public sector. Such study would clearly not achieve exogenous variation in PSM, but because of the random assignment of sector cues, the results would be superior to most observational approaches in terms of internal validity.

Crowdsource platforms, such as Amazon's Mechanical Turk, comprises a potentially useful tool for conducting survey experiments as the one described. While crowdsourcing is in no way a panacea for empirical social science research, it may provide researchers fast, easy, and cost-effective access to a crowd of people, including students as well as private and public sector employees (Stritch, Pedersen, and Taggart 2015). Besides survey experimental designs, crowdsource platforms allow for both behavioral task experiments and longitudinal panel research.

In addition, the dissertation encourages research that examines the role of contextual factors, such as extent of regulation of employee work discretion and level of service user capacity, for the effect of PSM on task performance using experimental or quasi-experimental approaches. The same is true for the effect of employee goal commitment on task performance in the area of frontline public services provision. Again, the ideal would be to engage in IV estimation on the basis of a randomized controlled trial frame-

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quire the 'PSM cultivation' treatment to satisfy the exclusion restriction. Public versus private sector attraction could be measured by self-reported preferences or actual sector switching. In theory, similar IV estimation could be performed on nonexperimental data comprising public service organizations that have implemented a 'PSM cultivation' intervention and public service organizations that have not. In practice, however, the 'PSM cultivation' treatment assignment is likely not as good as random. Moreover, such analysis requires data on pre-treatment measures of PSM and public versus private sector attraction.

work, i.e., an experimental study of the effects of an external intervention cultivating PSM and goal commitment, respectively.<sup>52</sup>

While the ideal, I recognize how use of IV estimations as the ones suggested is easier said than done. In practice, field experimental research is a relatively time and effort intensive endeavor—and the availability of observational data suitable for such estimation procedure is sparse at best. In this perspective, I want to emphasize how relative increases in internal validity may also come about via other means, e.g., by refinement of variable measurement or inclusion of more employee covariates in fixed effects specifications as those in articles D and F.

In terms of external validity, future research should examine how HRM-related interventions activate the forces of work motivation among public service employees. Similarly, the dissertation warrants research that tests the boundaries for extrapolating the findings among school teachers to frontline employees in other areas of public service (e.g., nurses, police officers, and social workers). Finally, future research should examine the extent to which the dissertation's results are generalizable to other countries. As mentioned (section 9.2), sociocultural factors and not least the institutional configuration of the Danish welfare state may entail that the findings are not fully generalizable to other country settings.

Again, crowdsource platforms comprise a potentially useful tool for such future lines of research. Crowdsourcing may provide fast and relatively cheap access to employees across a variety of public services (Stritch, Pedersen, and Taggart 2015). Crowdsource platforms are also useful for cross-country comparative research, in particular for comparison of Western and non-Western countries. Take Amazon's Mechanical Turk as an example: The respondent pool comprises more than 500,000 individuals in 190 countries (Paolacci and Chandler 2014), the majority located in the United States (57 percent) and India (32 percent) (Ross et al. 2010).

In terms of ecological validity, future research should seek to translate the dissertation's experimental HRM-related treatments into actual HRM 'motivation activation' interventions and examine their respective effects on activation of employee work motivation. To what extent may implementation of HRM 'motivation activation' interventions in real-life public service organizations activate the behavioral forces of employees' work motivation?

In particular, I suggest that HRM interventions serving employees' introduced extrinsic motivation relating to a need for feelings of self-importance

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<sup>52</sup> The value of such IV estimations is of course contingent on the extent to which the treatments satisfy both the relevance and exclusion conditions.

and approval from the self or others may potentially take the form of non-pecuniary acknowledgments of employees, their work activity, and their special value to the organization. Concrete examples may include special attention to the endowment of positive encouragement and feedback at scheduled manager-employee meetings and open recognition of employees and their organizational indispensability (e.g., symbolic recognitions akin to 'employee of the month' endorsements). Similarly, tangible PSM activation schemes may involve a systematic effort to remind the public employees of how their work affects the lives of their clients and serves the public interest (e.g., weekly newsletters where clients voice how the organization's services improve their lives or routine discussions of the main purposes of the public services provided by the organization).

Future research should also examine how attention to job applicants' PSM may increase the PSM of the workforce and thereby improve the performance of the organization. As mentioned (section 7.2), I am not proposing that PSM should be the only or principal hiring criterion. However, screening of job applicants' PSM may be one useful tool among others when public service organizations are hiring new employees. More specifically, job applicants' PSM may be identified via a survey instrument. To minimize the risk of social desirability bias, such an instrument should not use extant PSM measurement items (Coursey and Pandey 2007; Kim et al. 2013; Perry 1996; Vandenabeele 2008a; Wright, Christensen, and Pandey 2013). A potential prescription involves the construction of a set of vignettes describing different fictive situations. For each vignette, three or more statements capturing different responses to the described situation are presented, with one of the statements relating to a particular PSM dimension. The job applicants are asked to mark the statement that best captures their immediate response. This design is similar in form to Deci and Ryan's (1985b) General Causality Orientation Scale. However, development and validation of such an instrument is clearly a task for future research in its own right.

A second set of questions for future research is motivated by the particular variables and variable relationships that the dissertation prioritizes and examines (or rather, the variables and variable relationships left unexamined in the dissertation). First, the dissertation focuses on particular aspects of different types of extrinsic motivation (i.e., external extrinsic motivation in the form of pecuniary motivation, introjected extrinsic motivation in the form of ego involvement, and identified or integrated extrinsic motivation in the form of PSM). This focus, however, does not diminish the potential salience of other aspects of extrinsic motivation. Examples include external extrinsic motivation relating to promotion, paid leave days, extra training, and additional

work responsibilities; introjected extrinsic motivation relating to the avoidance of guilt and anxiety; and identified or integrated extrinsic motivation relating to non-altruistic beliefs and norms (e.g., personal identification with the value of working hard; having diligence as an integral part of a person's sense of self). Future research should therefore examine the role of these other aspects of extrinsic motivation to employee behavior and performance at work—not least the possibility to capitalize on them. In addition, research is warranted that examines the feasibility for external cultivation and activation of individuals' intrinsic motivation. Moreover, research should examine the constellation of public employees' different forms of work motivation. Such investigation will not least inform our knowledge about the particular type(s) of work motivation to which HRM 'motivation cultivation' interventions are especially relevant and HRM 'motivation activation' efforts most beneficial.

Second—and in a similar vein—this dissertation focuses on a particular set of contextual moderators. Future research should examine how other contextual factors influence the ways in which individuals' work motivation and commitment may reflect positively on their behavior and performance.

Third, this dissertation's outcome measures involve partial aspects of individual work behavior and a context-specific operationalization of employee performance (i.e., teachers' task performance in ensuring students' subject learning). This dissertation's findings thus relate to only a subset of work behaviors and performance indicators. Scholars have long emphasized that performance is multidimensional. Besides an overall distinction between task performance and contextual performance (Borman and Motowidlo 1993, 1997; Motowidlo, Borman, and Schmit 1997), dimensions of public service performance include measures of output quantity, output quality, efficiency, effectiveness, accountability, equity, democracy, and impact (Boyne 2002b; see also Boyne 2003b; Brewer and Selden 2000). Performance in the public sector is thus complex and cannot be reduced to a single dimension (Andrews, Boyne, and Walker 2006). Moreover, what constitutes 'public services performance' is inescapably contestable. Brewer (2006, 36) thus notes:

Organizational performance is a socially-constructed concept ... This is especially true in the public sector where competing views of reality exists and many important disputes are settled by elections or mutual accommodation rather than by more objective and rational means. In the public sector (and elsewhere), organizational performance is an elusive concept that - like beauty - lies in the eye of the beholder.

Future research should thus expand the set of work behavior and performance measures that the dissertation focuses on and uses. How can we

capitalize on employees' work motivation and commitment to support and improve their efforts and performance in relation to other dimensions of work behavior and performance? In particular, HRM efforts to capitalize on the forces of work motivation may on the one hand reflect positively on behavioral and performance outcomes other than the ones being subject to examination in the dissertation. On the other hand, such efforts may also involve some extent of trade-off—i.e., unintended dysfunctional effects in relation to other aspects of work behavior and performance. For example, increased work motivation may increase employees' personal performance expectations and thus the workload they place on themselves, in turn resulting in greater job stress, work exhaustion, and burnout (Giauque, Anderfuhren-Biget, and Varone 2013; Kim and Wright 2007; Lindberg and Wincent 2011; Liu, Yang, and Yu 2014). Similarly, public administration scholars have long emphasized how the use of performance measurement in government may engender unintended dysfunctional consequences, such as reduced effort on non-measured performance dimensions (for a useful review, see Kelman and Friedman 2009). By a similar logic, increasing work motivation, e.g., PSM, may entail a shift in employees' performance orientation, away from efficiency toward output quality. The notion that public service motivated employees may be paternalistic and act as 'runaway agents' (Gailmard 2010; Kiewiet and McCubbins 1991) is consistent with this notion.

In sum, decisions on HRM efforts to capitalize on employees' work motivation and commitment should ideally be informed by research evidence on the 'total' effect of such procedures; expected effects in relation to a wide display of behaviors and performance outcomes, including 'dark side' effects, if any.

Fourth, the dissertation contributes with knowledge on how to potentially cultivate the PSM of an organization's workforce via HRM selection policies. However, increasing levels of employee PSM may clearly come about through alternate means and policies. Future research should seek to identify other possible HRM schemes toward increased personnel PSM—as well as ways to cultivate aspects of employee work motivation other than PSM.

In the same vein, this dissertation supports and underscores that public service organizations' may potentially capitalize on employees' goal commitment to improve their task performance at work. However, the dissertation does not provide any empirical evidence on manifest ways to do so in practice. To this end, more research is needed that substantiates the organizational factors that stimulate and increase the goal commitment of frontline public service employees. Such research may start by considering the findings of private sector research. Meta-analyses of goal commitment anteceded-

ents—primarily based on studies among private employees—suggest that several managerial variables are predictive of employee goal commitment (Klein et al. 1999; Locke, Latham, Erez 1988). These variables include managerial goal specificity, provision and type of feedback, strategy development, supervisor supportiveness, and leadership.

In line with these findings, researchers may also want to examine the consequences of transformational leadership strategies (Avolio and Yammarino 2002; Bass 1985, 1998, 1999; Burns 1978). While the underlying influence processes for transformational leadership are still vague and have yet to be studied systematically (Yukl 2013), some psychological research suggests that transformational leadership behavior may increase both the intrinsic valence of goal accomplishment and the salience of the organizational identity (and thus the organization's goals) in employees' self-concept (Shamir, House, and Arthur 1993).

Observational findings among school principals and teachers support the likely importance of managerial characteristics and behaviors to public service employees' goal commitment. Based on a set of 21 management variables, Pedersen et al. (2015) thus identify four distinct clusters of manager types and find that differences in manager type are associated with differences in teacher goal commitment. Similarly, Pedersen and Nielsen (2015) find that male teachers' goal alignment—a variable closely related to goal commitment—differs between female-led and male-led schools that are otherwise comparable in terms of size, type, number of teachers, and teacher gender composition.<sup>53</sup>

Finally, this dissertation is motivated by public administration puzzles relating to the constructs of employee work motivation and commitment. The inner process whereby work motivation and goal commitment direct, energize, and sustain behavior may be largely universal to human action. Just like

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<sup>53</sup> As most other quantitative studies of gender, the article uses the respondents' sex as gender indicator. For many gender scholars, however, sex refers to biological differences whereas gender relates to social differences (Duerst-Lahti and Kelly 1995). From this perspective, the article's gender indicator is likely systematically related to gendered behavior, including gender-specific management behavior and leadership style. At least to some extent, the article's results may thus support that differences in management behavior and leadership style (albeit gender-related) are associated with variation in employee goal alignment. This notion is in line with Grissom, Nicholson-Crotty, and Keiser (2012). Besides recognizing that 'gender is at times used as a proxy for leadership styles' (653), they emphasize how unobserved differences in leadership styles between the genders may underlie any observed relationships between supervisor gender and employee outcomes.

private and public employees differ (see section 8.1), however, public supervisors potentially differ from the average individual and subordinate, e.g., in terms of personality traits, aspirations, and work motivations. The dissertation's findings are therefore not directly inferable to the management level. Future research will have to substantiate the extent to which these results and suggestions can be translated to public managers. Such knowledge will not least be informative to top-level managers: In the same way as lower-level managers of public service organizations may benefit from guidance on how to capitalize on their employees' work motivation and commitment, top-level managers may want to know how to actively utilize the work motivation and commitment of the managers below them.

## 10.4 Implications for Practice

In conclusion, we return to the scenario of John from chapter 2, our newly appointed school principal at Median School. What can John do and initiate to attempt to direct, energize, and sustain his teachers' work behavior and stimulate their task performance in educating their students? In perspective of this dissertation's findings, knowledge contributions, and suggestions, I would advise John to consider implementing—at least on a trial basis—a set of HRM behaviors and policies involving the following four elements.<sup>54</sup>

- *Implementation of HRM policies that seek to activate the behavioral forces of the teachers' work motivation, i.e., their introjected extrinsic motivation relating to a need for feelings of self-importance and approval from the self or others (ego involvement) and identified or integrated extrinsic motivation in the form of PSM. As previously mentioned (section 10.3), ego involvement interventions may involve the conscious and frequent endowment of positive encouragement and feedback at scheduled teacher meetings and open recognition of individual teachers and their indispensability to the school (e.g., acknowledgements akin to 'employee of the month' endorsements). PSM interventions may involve a*

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<sup>54</sup> The validity of these policy recommendations should certainly be viewed and evaluated in light of the dissertation's caveats and limitations (chapter 9). For example, the dissertation's dedication to basic as opposed to applied research implies that some of the recommendations are based more on speculative reasoning than direct empirical evidence (e.g., the experimental articles test the effects of HRM-related treatments, not effects of actual HRM interventions). Still, I find no strong evidence that more harm than good will come from John trying out—on a trial basis—the recommended actions and initiatives.

systematic effort to remind the teachers of how their teaching is paramount for the students' lives and (ultimately) the development of society (e.g., newsletters where former students narrate how a teacher benefited their life and life trajectory in positive ways. Such newsletters could also contain summaries of educational research findings. The content of such newsletters could be a reoccurring point on the agenda of teacher meetings).

- *Procurement of some extent of regulation of teachers' work discretion.* To support that the teachers are working hard and focused to achieve the school task goal of ensuring students' subject learning—including that the forces of their PSM are not directed toward other personal task goals—some extent of regulation teacher's work discretion may be warranted. Such interventions may include regulation of how teachers prioritize and spend their work time. In addition, the school management is advised to clearly specify and emphasize to the teachers how the students' attainment of subject learning is a main goal task.
- *Attention to job applicants' PSM in the recruitment and hiring of new teachers.* Capitalization of the positive relationship between PSM and performance may occur by active efforts to recruit a teacher staff with high PSM. Attention to job applicants' PSM when new teacher positions become available may be a way forward. Job applicants' PSM could be one criterion for selection and hiring among others. Research has yet to develop and validate a survey instrument that can screen job applicants' PSM in real-life public service organizations. Still, school management could prepare a few open job interview questions gauging job applicants' primary work motives (e.g., 'Why did you decide to become a teacher?', 'What do you perceive as the main advantages of being a teacher?', 'Are you or have you previously been engaged in voluntary work in your spare time?')
- *Efforts to support and increase the teachers' goal commitment.* The school management should seek to accommodate that the teachers commit to the task goal of ensuring students' subject learning, i.e., internalize this organizational goal to the greatest extent possible. But what may strengthen the teachers' belief in the necessity and propriety of achieving this goal? Overlapping with the recommendations for ensuring some extent of regulation of the teachers' work discretion, the school management should clearly specify to the teachers how the students' attainment of subject learning is a main task goal—while explaining and engaging in dialogue as to why this is. In terms of the findings of private

sector goal commitment studies and transformational leadership research (especially Shamir, House, and Arthur 1993), the school management may cause the teachers to become highly goal committed (i.e., to the goal of ensuring students' subject learning) by verbalizations and behaviors involving: (1) more references to the goal's value and justification, (2) more references to the school's mission and to collective identity, (3) more positive references to the teachers' worth and efficacy in relation to the goal, (4) more expressions of high expectations to the teachers' accomplishment of the goal, and (5) more references to goal accomplishment as a distal as opposed to proximal task goal.

In sum, this set of HRM behaviors and policies may be labelled 'motivation and commitment management'—a headline describing an approach to public management that focuses specifically on organizational capitalization on employees' work motivation and commitment to support and improve their efforts and performance at work.

Future research is encouraged to validate, refine, and extend the suggested set of HRM behaviors and policies. In an era where modern public service organizations are not facing fewer or easier achievable performance goals and expectations, such undertakings may be well worth the effort. Greater attention to 'motivation and commitment management' among public management scholars and practitioners alike may help sustain and improve the performance of the public services—to the benefit of service users and society at large.



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# Summary

Knowledge of how to sustain and improve public service performance is a theme at the heart of public administration research, but important questions persist about the determinants of public employees' work behavior and performance. In particular, research on how to make active use of (capitalize on) the forces of public employees' work motivation and commitment remains limited.

This dissertation contributes to an expanded understanding of routes to higher levels of public service performance by examining the question: How can we capitalize on work motivation and commitment to support and improve the work efforts and performance of the employees who staff the public service organizations? The dissertation shows how different HRM-related interventions and particular contextual factors may sustain and enforce the ways in which work motivation and goal commitment reflect positively on individuals' behavioral choice, work effort, and task performance.

Theoretically, the dissertation approaches the constructs of work motivation and commitment from the intersection of public administration research, human resource management literature, and the allied fields of organizational behavior and industrial-organizational psychology. In particular, the dissertation examines work motivation through the lens of self-determination theory and public service motivation research. In addition to the introduction of a taxonomy distinguishing two venues for capitalization of work motivation ('cultivation' and 'activation'), the dissertation advances a full conceptual embedding of 'public service motivation' into a self-determination theory framework. To examine the role of goal commitment for task performance among frontline public service employees, the dissertation draws on goal setting theory.

Empirically, the dissertation conducts a set of quantitative analyses comprising a combination of experimental and observational studies (survey and register based) based on samples of students, citizens, and frontline public service employees.

In an era where the public service organizations are not facing fewer or more easily achievable performance goals and expectations, the dissertation thus demonstrates specific means and particular contexts relating to how public service organizations may potentially capitalize on the forces of employee work motivation and commitment—to sustain and improve the performance of the public services to the benefit of service users and society at large.



## Dansk resumé

Hvordan kan vi opretholde og forbedre de offentlige serviceydelser? Viden herom er et centralt tema for forskning indenfor offentlig forvaltning og styring. Alligevel er vigtige spørgsmål endnu uafklarede, herunder spørgsmål vedrørende determinanter for de offentlige ansattes arbejdsadfærd og arbejdspræstationer. Navnlig har kun begrænset forskning fokuseret på mulighederne for at gøre aktiv brug af (kapitalisere på) de drivkræfter for handling, som henholdsvis arbejdsmotivationen og engagementet blandt offentlige ansatte repræsenterer.

Denne ph.d.-afhandling bidrager til en udvidet forståelse af midler og muligheder til at forbedre de offentlige serviceydelser på baggrund af en undersøgelse af spørgsmålet: Hvordan kan vi kapitalisere på arbejdsmotivation og engagementet med henblik på at understøtte og fremme den arbejdsindsats og de resultater, som de offentlige servicemedarbejdere leverer? Afhandlingen viser, hvordan forskellige HRM-relaterede interventioner og særlige kontekstuelle forhold kan opretholde og forstærke de måder, hvorpå arbejdsmotivation og målengagement afspejler sig positivt på individers adfærdsmæssige valg, arbejdsindsats og arbejdspræstationer.

Skæringspunktet mellem forskning i offentlig forvaltning og styring, personaleadministration samt organisationspsykologi danner den overordnede ramme for afhandlingens teoretiske tilgang til arbejdsmotivation og målengagement. Specifikt undersøger afhandlingen arbejdsmotivation i perspektiv af 'self-determination'-teori og forskning i 'public service motivation'. Afhandlingen introducerer i den forbindelse en taksonomi, der sonder mellem to tilgange til kapitalisering af arbejdsmotivation ('kultivering' og 'aktivering'). Desuden viser afhandlingen, hvordan 'public service motivation' kan begrebsliggøres indenfor en 'self-determination'-teoretisk forståelsesramme. Afhandlingen undersøger betydningen af målengagement for arbejdspræstation blandt offentlige servicemedarbejdere i perspektiv af 'goal setting'-teori.

En række kvantitative analyser danner grundlaget for afhandlingens empiriske bidrag. Konkret involverer afhandlingen en kombination af eksperimentelle og observationelle studier (spørgeskema- og registerbaserede) blandt studerende, borgere og offentlige servicemedarbejdere.

I en tid hvor offentlige serviceorganisationer hverken mødes af færre eller lettere opnåelige resultatmål og forventninger, fremhæver afhandlingen således specifikke midler og bestemte kontekster, der begge omhandler hvorledes offentlige serviceorganisationer eventuelt kan udnytte de driv-

kræfter for handling, som de ansattes arbejdsmotivation og målengagement nu engang konstituerer – alt sammen med henblik på at understøtte og fremme de offentlige serviceydelser til gavn for såvel brugerne af de offentlige serviceydelser som samfundet generelt set.