Work-related well-being of (semi-)public sector employees

Bringing in the Job Demands-Resources model of work engagement

Rick T. Borst

Colofon

Explanation cover image: The inspiration for the peacock was given by the saying "as *proud* as a peacock", a key concept studied in this thesis as part of work-related well-being.

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DOCTORAL THESIS

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by

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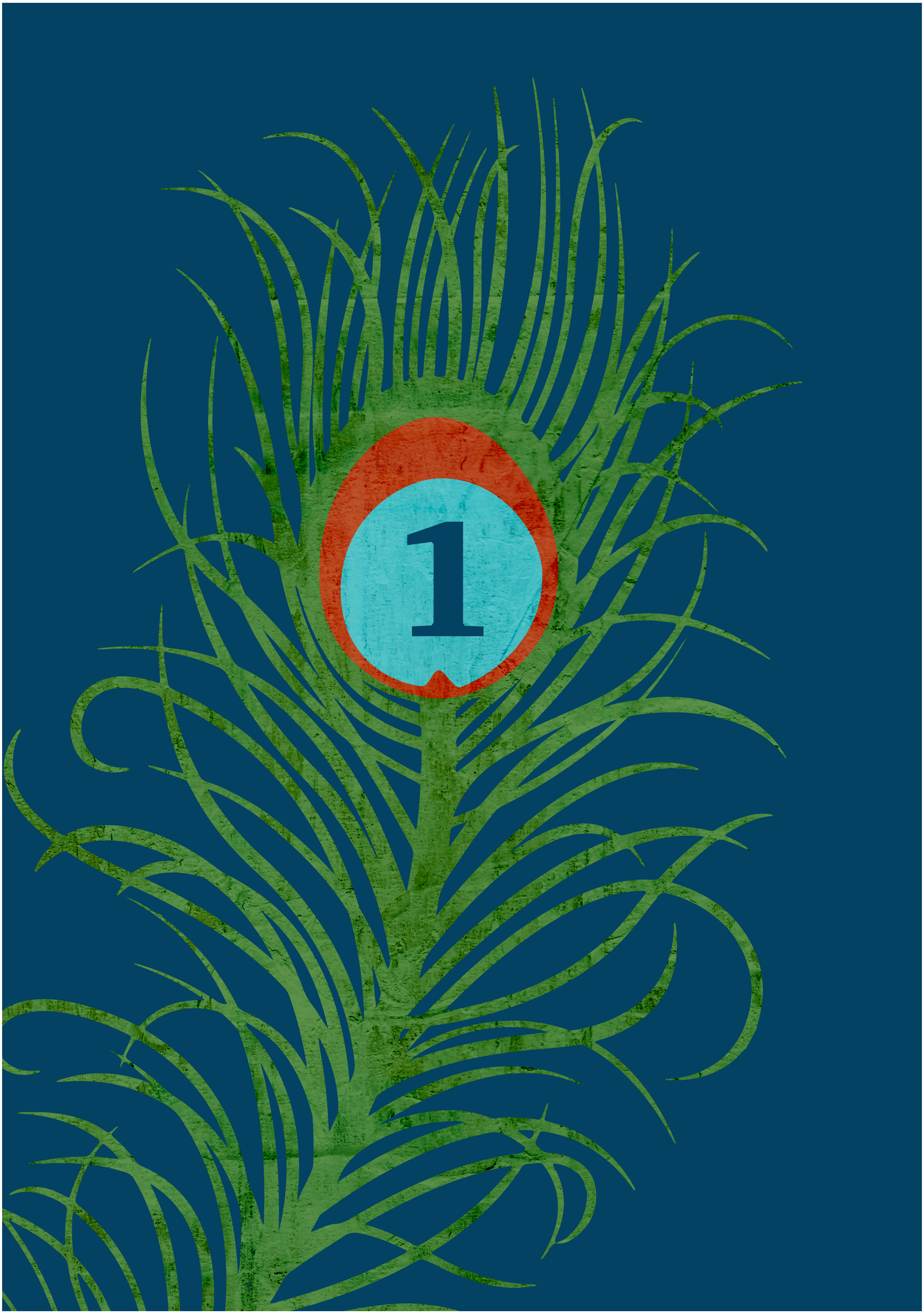
Table of Contents

TABLES AND FIGURES


1

Introduction

1.1 Introduction

Nowadays, many governments, including for example Ireland, Chile, the United States, the Netherlands, and the United Kingdom, administer surveys to assess the 'state' of civil service employees (Civil Service Employee Engagement Survey, Barómetro de la Gestión de Personas, Federal Employee Viewpoint Survey, Personeels- en Mobiliteitsonderzoek, and Civil Service People Survey respectively). Personnel in other semi-public sectors including, for example, healthcare and education are also often surveyed by governmental departments (e.g., National Healthcare Staff Survey in the United Kingdom, or the Personeels- en Mobiliteitsonderzoek in the Netherlands). Whereas one survey calls this 'state', satisfaction, the other calls it motivation, and yet another work engagement. Although these surveys show the recent interest of (semi-)public organizations in the 'state' of (semi-)public personnel, the question is how we can fully grasp this 'state' despite the diversity in labels and measures.

Within the scientific literature, the same conceptual discussions are taken place. While all scholars agree about the importance of the 'state' of (semi-)public personnel, many different labels and measures are being studied. Job satisfaction is one of the oldest and most studied concepts (Cantarelli, Belardinelli, & Belle, 2016), but also organizational commitment (e.g., Steijn & Leisink, 2006; Park & Rainey, 2007), and most recently work engagement (Noesgaard & Hansen, 2017; Akingbola & Van den Berg, 2017) are concepts that receive attention in public administration research. This dissertation intends to bring clarity in this conceptual complexity by integrating the various concepts into a conceptual framework that will be labeled 'work-related well-being'. It is argued that work-related well-being is an overarching framework that can grasp all these concepts as diverse but interrelated aspects.

The aim of this introduction is to assess the broader theoretical context in which this research is embedded. It will first of all focus at the theories of work-related well-being itself. Then to position work-related well-being in its broader theoretical context, its nomological network is clarified. To clarify this nomological network, the literature of both the antecedents and outcomes of work-related well-being are described. But not merely the antecedents and outcomes of work-related well-being define its nomological network; it also needs to take contextual factors into account which can influence the relationships between these concepts. Since the public-, and semi-public sectors are studied, the literature that focuses on defining sectoral differences is described. As the literature of work-related well-being, its antecedents, its outcomes, and its contextual dependencies all evolved throughout the years, the theoretical developments of these streams are sketched. By taking the perspective of theoretical development, this dissertation becomes a scientific journey through classical theories of work-related well-being up until the newest insights about work-related well-being.

That (semi-)public organizations and scholars nowadays try to assess the work-related well-being of (semi-)public employees is understandable given the major challenges in the public sector that put pressure on this well-being, including an increasing critical public opinion and shrinking budgets which lead to downsizing, organizational restructuring, and high expectations to perform better with fewer resources (Hesketh & Cooper, 2017; Liu, Yang, & Yu, 2015; Tummers, Kruyen, Vijverberg, & Voesenek, 2015). These pressures play out at a time when there are already radical changes in the world of work of (semi-)public employees. These changes include, for example, a shift from stable organizational environments to continuously changing environments, detailed job descriptions how employees should carry out their work to job crafting, dependency of employees in their development on the organization to own responsibility and accountability, and life-time employment to precarious employment (Schaufeli, 2013; Hesketh & Cooper, 2017). The abovementioned pressures and current changes require substantial psychological capabilities, adaptation and involvement of (semi-)public employees in order to preserve their work-related well-being and the public service delivery (Schaufeli, 2013; Hesketh & Cooper, 2017). This broad trend is called the "psychologization" of the workplace (Godard, 2014; Schaufeli, 2013).

This trend of psychologization forces (semi-)public organizations to increasingly focus on the management of human capital to preserve the work-related well-being (Schaufeli & Salanova, 2007). In other words, due to the psychologization in the workplace it is not only needed to fully grasp the work-related well-being of (semi-) public employees, but also how to manage it despite these changes. To understand this so-called psychologization of the workplace, it is necessary to start with one of the first psychological theories that laid the groundwork for all the theories on the stimulation of work-related well-being that followed— Maslow's hierarchy of needs (1943). Maslow argues that employees are motivated to achieve certain needs and that some needs take precedence over others (basic needs such as salary take precedence over psychological needs such as collegiality which take precedence over self-fulfillment needs such as autonomy and meaningful work).

After this theory, many theories translated Maslow's principles into tools to stimulate aspects of work-related well-being. Two research streams to stimulate the aspects of the work-related well-being of (semi-)public employees can be distinguished– job/personal characteristics theories and people management theories. Job/personal characteristics theories are aimed at the work environment and work experience of employees. People management theories are mainly aimed at the employment of resources to influence the behavior and attitudes of employees. Since both theoretical streams highlight different but equally important aspects of work-related well-being, this dissertation presents an amalgamation of the most recent, but also the preceding classical theories of both streams in the conceptual framework of the work-related well-being of (semi-)public employees.

Although work-related well-being in itself is important for (semi-)public employees (Guest, 2002), the question remains why it is also of importance to (semi-)public organizations? Already the first theories in which aspects of work-related well-being were discussed related the concepts with work performance (The Hawthorne Studies: Mayo, 1933). Since these studies, the so-called "happy-productive worker hypothesis" (a happy worker is a more productive worker than an unhappy worker) remained a popular research topic in work-related well-being research (Taris & Schaufeli, 2015). Alongside the interest for the relationship between aspects of work-related well-being and performance outcomes, the psychologization of the workplace led to an increasing attention for many other more psychological outcomes including job involvement, turnover-intention, work-life balance, and workaholism (e.g., Meyer, Stanley, Herscovitch & Topolnytsky, 2002; Cantarelli et al., 2016). These other employee outcomes can be categorized as attitudinal outcomes (e.g., Job involvement), and behavioral outcomes (e.g., turnover-intention, work-life balance and workaholism) (Albrecht, Bakker, Gruman, & Saks, 2015). Interestingly to notice from the behavioral outcomes is that it cannot be presupposed that aspects of work-related well-being always merely have positive effects. In other words, a potential "dark side" of work-related well-being also needs to be taken into account.

Although the trend of the psychologization of the workplace as well as the abovementioned theoretical developments of the antecedents and consequences of work-related well-being are relevant and important, they are at the same time generally defined (Bakker, Demerouti, & Sanz-Vergel, 2014; Bickerton, Miner, Dowson, & Griffin, 2015; Gorgievski, Moriano, & Bakker, 2014; Saks & Gruman, 2014; Schaufeli, 2013). This means that they barely take different work environments, including various institutional contexts, (sectors) into account.

However, many studies over the years have been dedicated to pinpoint the differences between the public and private sector in general (e.g., Rainey, 2003; Boyne, 2002; Buelens & van den Broeck, 2007) but also to pinpoint differences within the public sector in particular (van Loon, Vandenabeele, & Leisink, 2015; Lyons, Duxbury, & Higgins, 2006; Feeney & Rainey, 2009). This complete stream of research is based on the publicness approach which was introduced by Bozeman & Bretschneider (1994) as a way to distinguish public, semi-public (or "hybrid") and private organizations, accounting for the many different types of institutional and organizational configurations. Especially on the employee level, there are several signals that the mechanisms that lead to work-related well-being differ due to the degree of publicness (e.g., Buelens & van den Broeck, 2007; van Loon et al., 2015). However, a translation from the publicness approach to the employee level has not been made yet. To understand the mechanisms between the work-related well-being of (semi-)public employees and its antecedents and outcomes, it is therefore needed to systematically analyze them against the proper institutional background.

Inherent to the choice to build on the trend of the psychologization of the workplace in the (semi-)public sector, the taken perspective to build a framework of the work-related well-being of (semi-)public employees is a psychological one. More specifically, this dissertation tends to take a *positive* work (i.e., vocational) and organizational psychology perspective. Positive psychology is a research stream that broke the trend in vocational and organizational psychology in the 1990's by focusing on the study of positive emotions and positive character traits of employees instead of the negative ones. By taking this perspective, this dissertation can provide new insights in how the different aspects of the work-related well-being of (semi-)public employees are related, as well as what the deeper mechanisms behind the antecedents-well-being-outcomes relationship are. The integration of this perspective is in line with a new subfield within public administration called behavioral public administration. Behavioral public administration explicitly deals with the integration of theories and methods from psychology into the study of public administration (Grimmelikhuijsen, Jilke, Olsen, & Tummers, 2017). Proponents of this new subfield argue that an analysis of public administration topics through a psychological lens can be useful to confirm, add nuance to, or extend public administration theories (Grimmelikhuijsen et al., 2017).

1.2 Overall aim, main research question, and subquestions

As described above, this dissertation is a scientific journey through classical theories of work-related well-being up until the newest insights about work-related well-being. In retrospect, this scientific journey followed a "Kuhnian" or "Lakatosian" approach of scientific development. According to these famous philosophical scientists, one can speak of scientific development if a new theory is a worthy successor of the previous theory. A new theory is a worthy successor when it can explain as much as the first theory could explain, and additionally can make predictions which the old theory was not able to make. Taking this viewpoint, the first phase of scientific progress is that the gaps in the older theory become evident, followed by a second phase in which a new theory is developed which fills these gaps, concluded by a third phase in which the theory is further expanded up until gaps become evident again.

This dissertation also follows these three phases. In the first phase, the development in theories of work-related well-being of (semi-)public employees, its antecedents and its outcomes are studied. The literature about the work-related well-being of (semi-)public employees developed itself according to a process of muddling through with small steps towards a more and more complete framework. During the analysis of the theories, not only the merits of the theories, but also the gaps become more and more clear. The second phase of this dissertation is, therefore, aimed on the introduction of a new theory to fill (some of) these gaps. As the introduction showed, the most recent theory is the JD-R theory which recently started to gain attention in public administration literature. This theory was therefore systematically studied as a comprehensive model to explain the work-related well-being of (semi-)public employees as well as its antecedents and consequences. In the third phase of this dissertation the JD-R model is further developed in the (semi-)public sector to end with the first gaps in this theory which deserve further research.

The goal of the whole aforementioned process is also the goal of this dissertation: *To analyze the antecedents and the consequences of work-related well-being of (semi-) public employees*. The related main research question is: *What are the antecedents of the work-related well-being of (semi-)public employees and what are its consequences?* To answer this main research question, four sub questions were developed:

1. What is work-related well-being?

2. What are the antecedents of the work-related well-being of (semi-)public employees?
3. What are the employee outcomes of the work-related well-being of (semi-) public employees?
4. To what extend do the relationships differ across different institutional contexts including the private, semi-public and public sector?

As the first three sub questions show, there are three visible mechanisms: (1) work-related well-being itself, (2) the relationship between antecedents and work-related well-being, and (3) the relationship between work-related well-being and employee outcomes. Every sub question will be studied by following the three phases of theoretical development described above. While the development of theories of the three mechanisms according to the three phases will be described below, the actual tests of the theories in practice will take place in the subsequent chapters. Within these tests the fourth sub question will automatically be answered as it will be ingrained in the analyses.

1.3 What is work-related well-being?

1.3.1 Studying hedonic well-being and eudaimonic well-being

The discussion about the meaning of well-being dates back to the old Greeks. According to the proponents of the philosophy of hedonism, one should strive for maximum (sensory) pleasure and minimal pain. In other words, hedonic well-being refers to happiness, pleasure and enjoyment. In contrast, proponents of the eudaimonic sub-philosophy of virtue ethics argue that, apart from pleasure, one should strive to do what is meaningful and worth doing. In other words, eudaimonic well-being refers to purposefulness and meaningfulness (Diener, Scollon, & Lucas, 2009, McGregor & Little, 1998; Ryan & Deci, 2001). Recently, these philosophies gained increasing attention in psychology (Ryan & Deci, 2001).

Several elements in life can feed hedonic and eudaimonic well-being. One of the most essential elements is career (work-related) well-being (Kruger, 2011). A job is something that one spends time on and that shapes one's identity. It is something to look forward to every day in our lives (Kruger, 2011). How and to what extend a job feeds into the hedonic and eudaimonic well-being of humans is studied by vocational/occupational psychology (e.g., Waterman, Schwartz, & Conti, 2008; Straume & Vittersø, 2012). The hedonic focus of career well-being would emphasize the job itself or aspects thereof as enjoyable for the employee or pleasurable to do, whereas the eudaimonic focus is on the job as being meaningful and purposeful to the employee (Grant, 2008).

To make this distinction between hedonic and eudaimonic work-related well-being practically applicable, occupational psychologists developed a taxonomy of work-related well-being– the circumplex model of occupational well-being (Schaufeli, 2013; Bakker & Oerlemans, 2011). Within this taxonomy, it is argued that four different states of work-related well-being – burnout, work engagement, workaholism, and job satisfaction – can be positioned in the two-dimensional space made up by activation and pleasure. While a state of job satisfaction mostly feeds into the hedonic work-related well-being of an employee, a state of work engagement feeds into the eudaimonic work-related well-being of an employee (Fisher, 2014; Tummers et al., 2016).

These hedonic aspects of work-related well-being, including job satisfaction and organizational commitment, connote pleasure and at the same time satiation, contentedness, and calmness (Tummers et al., 2016; Schaufeli, 2013). Hedonic aspects of work-related well-being are in other words passive employee attitudes (Tummers et al., 2016). In contrast, eudaimonic indicators of work-related well-being – including work engagement, vitality, and pride – also connote pleasure but, in contrast with hedonic work-related well-being, also high activation – including enthusiasm, excitement and energy (Tummers et al., 2016; Schaufeli, 2013). Accordingly, this is the first research line of this dissertation. It answers the first sub question: "*What is work-related well-being?*".

1.3.2 The development of hedonic and eudaimonic well-being in Public Administration

Scholars have argued that within the public administration literature, attention is mostly given to hedonic work-related well-being (Tummers et al., 2016). Cantarelli et al. (2016) show, for example, that the first study in a public administration journal about the hedonic indicator job satisfaction dates back to 1969. In contrast, the first study in a public administration journal about the eudaimonic indicator 'work engagement' dates back to 2013 (Vigoda-Gadot, Eldor, & Schohat, 2013).

Nonetheless, Public Service Motivation (PSM for short) – defined as a general predisposition to serve the public interest (Perry & Hondeghem, 2008) – can be framed as a specific kind of eudaimonic work-related well-being, which has received much attention since its introduction by Perry and Wise in 1990 (Perry &

Vandenabeele, 2015). Within the stream of eudaimonic well-being, a distinction can be made between other-focused eudaimonic well-being and self-focused eudaimonic well-being (Barrett-Cheetham, Williams, & Bednall, 2016). As public servants become motivated due to compassion for others, are committed to the public interest, and are self-sacrificial (the dimensions of PSM), they develop other-focused eudaimonic work-related well-being (Barrett-Cheetham et al., 2016). In other words, especially self-focused eudaimonic well-being including pride, vitality, and work engagement remain underexposed within public administration.

Indicators of eudaimonic work-related well-being, such as pride and work engagement, connote meaningful work and experiencing work as a calling—two typical reasons of employees to work in the (semi-)public sector (Schnell, Höge, & Pollet, 2013; Nakamura, 2013; Tummers & Knies, 2013; Hakanen, Bakker, & Schaufeli, 2006). Pride can be defined as the degree in which someone works honorable, conscientiously and with dedication for his or her work and organization. Work engagement is defined as "[…] a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-Romá, & Bakker, 2002: 74). Vigor is characterized by having high levels of energy and mental resilience while working, dedication is characterized by feeling a sense of significance, enthusiasm, pride, and inspiration toward one's work, and absorption is characterized by being fully engrossed in one's work (Schaufeli et al., 2002). These definitions imply that pride and work engagement are not merely about happiness and pleasure (hedonia), but especially include the meaningfulness and purposefulness (eudaimonia) of the work to the person. As these are typical reasons for employees to work in the public sector, the eudaimonic work-related well-being indicators work engagement and pride are the newest research interests in public management research (Uggadan & Park, 2017; Vigoda-Gadot et al., 2013; Tummers et al., 2016; Lavigna, 2015; Akingbola & van den Berg, 2016).

1.4 Background to the antecedents – work-related well-being relationship

As mentioned above, two research streams to stimulate the aspects of the work-related well-being of employees can be distinguished—job/personal characteristics theories and people management theories. While job/personal characteristics theories are mainly aimed at studying the work environment and work experience of employees (framed here as the psychological "soft approach"), people management theories (leadership theories and Human Resource Management theories) are mainly aimed at the employment of resources to influence the work-related well-being and behavior of employees (framed here as the organizational "hard approach") (Knies, Leisink, & van de Schoot, 2017).

One of the first classical job/personal characteristics theories applied in the work environment is the so-called hierarchy of needs (Maslow, 1943) which explicates that employees are motivated to achieve certain needs and that some needs take precedence over others. Maslow (1943) argues that in the eyes of employees basic needs such as salary need to be sufficient before higher order psychological needs such as collegiality become important. Subsequently, Maslow argues that when employees perceive the psychological needs as sufficient, self-fulfillment needs such as autonomy and meaningful work become important. With this theory, Maslow already shows in 1943 that the highest order needs include meaningful work which is nowadays framed as an indicator of eudaimonic work-related well-being (i.e., work engagement).

As a follow up, two job/personal characteristics theories were developed as a translation of Maslow's principles into tools that can be used to stimulate work-related well-being: the theory X and Y (McGregor, 1957) and the two-factor theory (Herzberg et al., 1959). The core of these two classical models is that the work-related well-being of employees can be influenced by extrinsic motivators and intrinsic motivators. These theories show that extrinsic motivators including salary, fringe benefits, and bonuses are important, but not enough to reach high work-related well-being. Intrinsic motivators including developmental opportunities, autonomy, and responsibility are far more important to reach work-related well-being. As a follow up, Hackman & Oldham (1975; 1980) developed the job-characteristics model. The central argument in Hackman & Oldham's (1980) theory is that five core job characteristics (skill variety, task identity, task significance, autonomy, and feedback) should prompt three critical psychological states (meaningfulness, responsibility, and knowledge about results) which lead to positive outcomes (work motivation, job satisfaction, and performance). This theory is the first one that makes a difference between indicators of eudaimonic work-related well-being (i.e., meaningfulness) and hedonic work-related well-being (i.e., job satisfaction) and it makes the argument that eudaimonic well-being leads to hedonic well-being. While this is an important insight, the most important point in the theory is that it explicates the intrinsic motivators as well as the possibility of individual differences in motivational needs (i.e., psychological states).

The deeper psychological mechanism behind differences in intrinsic motivators and extrinsic motivators (defined by McGregor, 1957; Herzberg et al., 1959; Hackman & Oldham, 1975; 1980) and the possibility of individual differences in needs (defined by Hackman & Oldham, 1975; 1980) was subsequently elaborated upon by the Self-Determination Theory (SDT) (Deci & Ryan, 1985). Just as the above-mentioned theories, the SDT proposes two overarching forms of motivation: intrinsic motivation and extrinsic motivation (Deci & Ryan, 1985). Intrinsic motivation refers to the activation of an employee to do an activity out of enjoyment and self-interest. Extrinsic motivation refers to doing an activity for instrumental reasons which come in different forms. According to the SDT (Gagné & Deci, 2005), extrinsic motivation can reflect a desire to gain rewards or avoid punishment (external regulation), boost one's ego or avoid feelings of guild (introjected regulation), attain a valued personal goal (identified regulation), or express one's sense of self (integrated regulation).

Together with intrinsic motivation, both identified and integrated regulation are called autonomous motivation while the first two forms of extrinsic motivation are called controlled motivation. People who behave based on a form of autonomous motivation engage in an activity because they find it interesting and they are doing the activity wholly volitionally. In contrast, people who behave based on a form of controlled motivation engage in an activity because they have a sense they have to (Gagné & Deci, 2005). The descriptions of these forms of motivation show that these motivations are predispositions of employees. In other words, these motivations say something about the personality of employees and can be seen as employee traits. According to the SDT, these traits feed subsequently in the work-related well-being of employees (Deci, Olafsen, & Ryan, 2017).

Most recently, these personality traits (defined by Hackman & Oldham, 1975; 1980 and Deci & Ryan, 1985) and the extrinsic and intrinsic motivating job characteristics (defined by McGregor, 1957, Herzberg et al., 1959; Hackman & Oldham, 1975; 1980) were brought together by the Job Demands-Resources (JD-R) theory (Bakker & Demerouti, 2007). According to the JD-R theory, all working environments or job characteristics can be modeled using two different categories, namely job demands and job resources. Job demands are defined as those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort and are therefore associated with certain physiological and/or psychological costs (Bakker & Demerouti, 2007). Job resources refer to those physical, psychological, social, or organizational aspects of the job that either/or (1) reduce job demands and the associated physiological and psychological costs; (2) are functional in achieving work goals; (3) stimulate personal growth, learning and development (Bakker & Demerouti, 2007). Job resources can be located at the level of the organization at large (e.g., developmental opportunities, and job security), the interpersonal and social relations (e.g., supervisor support, leader-member exchange, and social support), the organization of work (e.g., feedback, and rewards), and the level of the task (e.g., job variety, content of the job, autonomy).

In addition to job demands and job resources, personal resources are distinguished in the JD-R theory, which are defined as the psychological characteristics or aspects of the self that are generally associated with resilience and refer to the ability to control and impact one's environment successfully (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Examples are PSM, proactivity, expertise, and optimism (Bakker, 2015; Xanthopoulou et al., 2007).

According to the JD-R theory, all these job demands, job resources, and personal resources affect especially eudaimonic work-related well-being (i.e., work engagement) and subsequently hedonic work-related well-being (i.e. job satisfaction and organizational commitment). The JD-R theory in other words picked up the argument from the Job-characteristics theory (Hackman & Oldham, 1980) that eudaimonic work-related well-being (meaningfulness in that theory) affects hedonic work-related well-being (job satisfaction in that theory), but translated meaningfulness to a more measurable factor named work engagement.

While the biggest advantages of the JD-R theory are its all-inclusiveness, flexible applicability in every institutional context (Bakker & Demerouti, 2014), and its ability to integrate both eudaimonic and hedonic work-related well-being, one of its biggest critiques is that the contextual differences are understudied (Bakker, Demerouti, & Sanz-Vergel, 2014; Bickerton, Miner, Dowson, & Griffin, 2015; Gorgievski, Moriano, & Bakker, 2014). This is why the JD-R theory is also one of the newest research endeavors in public management research (Steijn, 2013). Accordingly, this is the first part of the second research line of this dissertation. It answers a part of the second sub question: "*What are the antecedents of the work-related well-being of (semi-)public employees?*".

Alongside the development of job/personal characteristics theories, a stream of people management theories also emerged. While people management theories have a long history, its relationship with work-related well-being gained momentum in the 1990's when Human Resource Management (HRM) scholars started to 'build in the worker' (Peccei, van de Voorde, & van Veldhoven, 2013). Up until the late 1990's, HRM scholars were merely focused on the relationship between HRM and organizational performance but these scholars came to the conclusion that employees play an important 'role' in between. While bringing in the employee in the HRM-performance relationship started off with diverse HRM theories, recently these theories are combined by the nowadays mostly applied Ability-Motivation-Opportunity (AMO) theory.

The prevalent line of reasoning in the HRM theories that brought in the employee, argues that different configurations of HRM activities influence the work-related well-being of employees which can contribute to higher employee, and inherently organizational, performance (Peccei, van de Voorde, & van Veldhoven, 2013). Often, these different configurations refer to "bundles" or "systems" of HRM activities that, if internally aligned, positively influence organizational performance. Such HRM systems consist of a HRM philosophy ("system architecture" that serves as the guiding principle) with policies (guidelines and benchmarks for specific HR activities) and practices (HR activities to accomplish the policies) derived from this philosophy (Monks, Kelly, Conway, Flood, Truss, & Hannon, 2013). These systems are called High Performance Work Systems (HPWS; some scholars divide these systems further into High Commitment Work Systems (HCWS) and High Involvement Work Systems (HIWS)). In the first theories, several bundles of practices (e.g., performance measurement, work-related courses, recruitment, and selection) within those systems were proposed to influence the work-related well-being and subsequently the performance of employees.

These theories were combined by Appelbaum, Bailey, Berg, & Kalleberg (2000) in the overarching AMO-theory. This theory states that the work-related well-being and accordingly the organizational performance are dependent on the *A*bility, *M*otivation and *O*pportunity of employees. The ability component refers to the employee's ability to perform by providing a formal selection program and extensive employee training. The second component is motivation, suggesting that employees should be motivated to perform by implementing practices such as performance-based pay and decent promotion systems. The last component, opportunity, suggests that employees should receive the opportunity to perform by realizing practices like involvement and autonomy in work. In accordance, the AMO-theory developed a large overview of ability-enhancing practices, motivation-enhancing practices and opportunity-enhancing practices.

Despite these theoretical insights, the actual mechanisms between HRM and performance are nowadays still called a 'black box' since the knowledge of the factors and processes that mediate the HRM-performance relationship is still limited (Peccei et al., 2013). While there are many underlying reasons, two profound ones are (1) the possible moderating influence of the leadership styles of line managers, and (2) the possible moderating influence of institutional (sectoral) contexts. Firstly, HR practices affect well-being by structuring and affecting employees' experience at work. However, how a practice was intended and how it is actually implemented and experienced by employees can be influenced by first-line supervisors' leadership style (Wright & Nishii, 2013). Secondly, the sectoral context might influence how HR practices are experienced by employees (Vermeeren, 2014; Boselie et al., 2005). The literature describes specific institutional (e.g., legislative restrictions for HR managers), organizational, and employee characteristics (e.g., different priorities and expectations of (semi-)public employees) of public sector organizations that might influence the response to HR practices differently (e.g., Boyne et al., 1999; Emery & Giauque, 2005; Pollitt, 2003; Rainey, 2003). Contextualizing the HR-work-related well-being relationship is therefore one of the newest research endeavors (Knies, Boselie, Gould-Williams, & Vandenabeele, 2018). Simultaneously, as varying employee characteristics between different sectors might influence the experience of HR practices, the inclusion of the JD-R model – which is more focused on individual differences – in HRM research is also a new research endeavor in public management research. In other words, the amalgamation of both the psychological job/personal characteristics theories and people management theories within public management research might be fruitful. Accordingly, this is the second part of the second research line in this dissertation. It answers a part of the second sub question: "*What are the antecedents of the work-related well-being of (semi-)public employees?*".

1.5 Background to the work-related well-being – outcomes relationship

While research aimed at the relationship between work-related well-being and its antecedents developed in a relatively structured manner, research aimed at the outcomes of work-related well-being is far more scattered. Throughout the years, several employee outcomes of work-related well-being are identified that can be categorized as attitudinal outcomes, performance outcomes, and behavioral outcomes (Schaufeli & Taris, 2013; Albrecht, Bakker, Gruman & Saks, 2015).

While theoretically, hedonic and eudaimonic work-related well-being are distinguished, a debate was going on until recently whether they are empirically separable. While many studies have shown that indicators of eudaimonic work-related well-being (i.e., work engagement) are empirically separate from hedonic work-related well-being (i.e., organizational commitment and job satisfaction), the question remains what their relationship is. The latest insights state that behaving in an eudaimonic way is predictive of hedonic pleasure (Waterman, 2008). Barret-Cheetham et al. (2016) argue that employees who experience high levels of eudaimonic well-being are physically healthier, experience more satisfaction in their psychological needs, and experience higher levels of hedonic well-being. In other words, hedonic indicators including amongst others job satisfaction and organizational commitment are attitudinal outcomes of eudaimonic indicators including pride and work engagement. Conceptually, it is therefore suggested that hedonic work-related well-being is a part of well-being but also an outcome of eudaimonic work-related well-being.

Individual performance is probably the oldest studied consequence of work-related well-being. An important rationale behind this interest is the belief that happy workers tend to be more productive than other workers (Taris & Schaufeli, 2013). However, as this “happy-productive worker hypothesis” already suggests, it is mainly aimed at hedonic happiness (vis-à-vis eudaimonic well-being) and in-role performance (vis-à-vis extra-role performance). In-role performance is defined as the achievement of officially required outcomes and behaviors that directly serve the goals of the organization, while extra-role performance is defined as discretionary behavior on the part of an employee that is believed to directly promote the effective functioning of an organization, without necessarily directly influencing a person’s target productivity (Bakker, 2011). The recent addition of extra-role performance and eudaimonic well-being, made the “happy productive worker hypothesis” more complex since possible trade-offs might develop between for example in-role performance and extra-role performance (Taris & Schaufeli, 2013). Research has been unable to arrive at strong and practically relevant conclusions (Taris & Schaufeli, 2013).

Alongside the interest for the relationship between aspects of work-related well-being and performance outcomes, there is also an increasing attention for many behavioral outcomes including turnover-intention, work-life balance, and workaholism (e.g., Meyer et al., 2002; Cantarelli et al., 2016). Particularly interesting in this line of research is the recent interest in the potential “dark side” of work-related well-being (Bakker, Albrecht, & Leiter 2011). Scholars have shown that employees might reach such high levels of eudaimonic work-related well-being (i.e. work engagement) that they take work home (Bakker et al., 2011; Taris, Schaufeli, & Shimazu, 2010). This might lead to workaholism and work-life conflicts (e.g., Bakker Shimazu, Demerouti, Shimada, & Kawakami, 2013; Caesens, Stinglhamber, & Marmier, 2016; Clark, Michel, Stevens, Howell, & Scruggs, 2014). In other words, work-related well-being might also have a potential "dark side".

As the focus on eudaimonic work-related well-being is a fairly new research endeavor within public administration (e.g., Tummers et al., 2016), its relationship with hedonic work-related well-being is as well (Vigoda-Gadot et al., 2013). It is also argued that eudaimonic work-related well-being (i.e., work engagement) might be a potential answer to the main challenge in the public sector today, namely, performance enhancement (Vigoda-Gadot et al., 2013). It is suggested that eudaimonic work-related well-being is probably positively related with good service provision, the improvement of client satisfaction, and quality of service (Vigoda-Gadot et al., 2013). Accordingly, the study of the relationship between forms of work-related well-being and work-related well-being with other employee outcomes is the third research line in this dissertation. It answers the question: "*What are the employee outcomes of the work-related well-being of (semi-)public employees?*".

1.6 What are the differences in contexts?

As mentioned alongside the description of the aforementioned theories and models which relate work-related well-being and its antecedents and outcomes: they are general in nature. In other words, they are often applied without taking the context into account. It is also mentioned that several scholars recently began to argue that it is important to pay attention to the context in which the antecedents–work-related well-being–outcomes relationships are being studied (Knies, Boselie, Gould-Williams, & Vandenabeele, 2018; Vermeeren, 2014; Boselie et al., 2005; Bakker, Demerouti, & Sanz-Vergel, 2014; Bickerton, Miner, Dowson, & Griffin, 2015; Gorgievski, Moriano, & Bakker, 2014; Tummers et al., 2016).

In this dissertation, specific attention is paid to the public-sector context. Many public administration scholars have been studying the effects of differences between the public and private sector in general on aspects of the antecedents–work-related well-being–outcomes relationships (e.g., Rainey, 2014; Boyne, 2002; Buelens & Van den Broeck, 2007), but also differences within the public sector in particular (van

Loon et al., 2015; Lyons et al., 2006; Feeney & Rainey, 2009). This research stream is based on the publicness theory which defines publicness as *"a characteristic of an organization which reflects the extent the organization is influenced by political authority"* (Bozeman & Bretschneider, 1994: 197).

Within publicness theory, a distinction is made between the 'core approach' and the 'dimensional approach' (Bozeman & Bretschneider, 1994). The older core approach assumes that public and private differences can be captured in a simple distinction based on the political/judicial type (extend of public/political ownership and leadership). Some disagreement exist about the specific interpretation of ownership as some scholars also explicitly look at the extent organizations are politically steered. This is often seen as a specific interpretation of the judicial/political approach which reflects the extent organizations are influenced by political authority (Bozeman & Bretschneider, 1994). Still, these different interpretations are seen as related to the simple core approach of ownership. The more recent dimensional approach however assumes that organizations are not always purely public or purely private, but that there are also hybrid/semi-public organizations, for example in terms of funding (Bozeman & Bretschneider, 1994). This dimensional approach states that organizations can be placed on several spectra in addition to the political/judicial spectrum. Often used spectra in addition to the political spectrum (political/judicial approach) are a funding spectrum (economic approach) and normative spectrum (expectations and values approach) (Psech, 2008). As organizations can score differently on these spectra, the terms 'public' and 'private' are often taken as the opposite ends of a continuum indicating the degree of 'publicness' of an organization (Bozeman, 1987). Since these spectra frame broad characteristics of organizations, publicness is often framed as a specific interpretation of institutional theory (Vermeeren, 2014).

According to institutional theory, the institutional context can be defined as the full set of institutions with which an individual interacts, from macro-level such as national values and religion, to micro-level work practices (Scott, 2001). Regulative, normative and cultural-cognitive elements of institutions constrain the behavior and attitudes of individuals through determining respectively the rules of the game, the values deemed important, and the way of doing things, also known as institutional logics (March & Olsen 1989; Scott, 2001; Thornton & Ocasio, 2008). When these principles of the institutional theory are translated to the publicness theory, the broad political/judicial spectrum, funding spectrum, and normative spectrum of the publicness theory can be seen as the regulative, normative and cultural-cognitive elements of institutions which can influence employees through institutional logics.

Based on the political/judicial spectrum in combination with the funding spectrum, it is possible to distinguish three different institutional logics that might influence the antecedents–work-related well-being–outcomes relationship: professional, market, and political logic (Nordstrand Berg & Pinheiro, 2016). A professional logic, market logic and political logic are characterized by high levels of specific expertise and task complexity, efficiency, economic control and management, administrative routines, hierarchy, and indirect control respectively (Nordstrand Berg & Pinheiro, 2016).

Although in every organization a combination of these logics coexists, three main institutional contexts can be distinguished (Vermeeren, 2014; Verhoest et al., 2012; Nordstrand Berg & Pinheiro, 2016). Organizations with low publicness (i.e., private sector) are privately owned and privately funded. The behavior and attitudes of employees within these organizations is mainly determined by a market logic and to a lesser extent a professional logic. Organizations with medium publicness (i.e., hybrid or semi-public sector) are publicly funded, but semi-public or privately owned. Examples are hospitals and education. The behavior and attitudes of employees within these organizations is mainly determined by a professional logic, and to a lesser extent a market logic which increasingly replaced the political logic (Nordstrand Berg & Pinheiro, 2016). Organizations with high publicness (i.e., public sector) are publicly owned and publicly funded. Examples are central, regional and local government, and police & defense. The behavior and attitudes of employees within these organizations is mainly determined by a political logic, and to a lesser extent by a professional logic and a market logic (Nordstrand Berg & Pinheiro, 2016).

Based on the political/judicial spectrum in combination with the normative institutional spectrum, a taxonomy of organizations with a people-changing logic versus organizations with a people-processing logic is often applied (van Loon et al., 2015; Kjeldsen, 2014; Hasenfeld, 1972). Public organizations with a people-processing logic including the police, central, regional and local government and the judicial sector, deal with all kinds of users and only change the status or location of a user by applying the relevant legal framework (van Loon et al., 2015; Kjeldsen, 2014). Only limited contact is taking place and the users mostly remain unidentified. In contrast, more intense and longer contacts with an identifiable user group are demanded from people-changing organizations including schools and hospitals because they aim to change the user (van Loon et al., 2015).

Interestingly, both these dimensional publicness approaches come to the same division of sectors, but with a different motivation. As it is argued that the degree of publicness might influence the antecedents–work-related well-being–outcomes relationships, these publicness approaches are taken into account in the comprehensive framework of well-being in this dissertation. Accordingly, the effect of the sectoral context on the antecedents–work-related well-being–outcomes relationships will be the fourth research line which, as mentioned with the introduction of the sub questions, will be embedded automatically in the other research lines. The fourth research line will answer the sub-question: "*To what extend do the relationships differ across different institutional contexts including the private, semi-public and public sector?*".

All the above-mentioned relationships lead to the simplified research model of this dissertation as presented in Figure 1.1. Also take a look at section 1.8 to get a verbal explanation of the research model.

1.7 Relevance

Through answering the research question formulated at the start, this study aims to contribute to theoretical, methodological and practical knowledge about the 'state' of (semi-)public employees.

1.7.1 Theoretical relevance

This dissertation fits within the new research stream called behavioral public administration. This stream tries to combine the fields of public administration, behavioral science and psychology together to find new insights about the behavior and attitudes of (semi-)public employees (Grimmelikhuijsen et al., 2017). With the development of a work-related well-being framework of (semi-)public employees, this dissertation also draws insights from so-called positive vocational psychology, behavioral science and public administration. With the combination of these three different bodies of knowledge, this dissertation has three specific contributions.

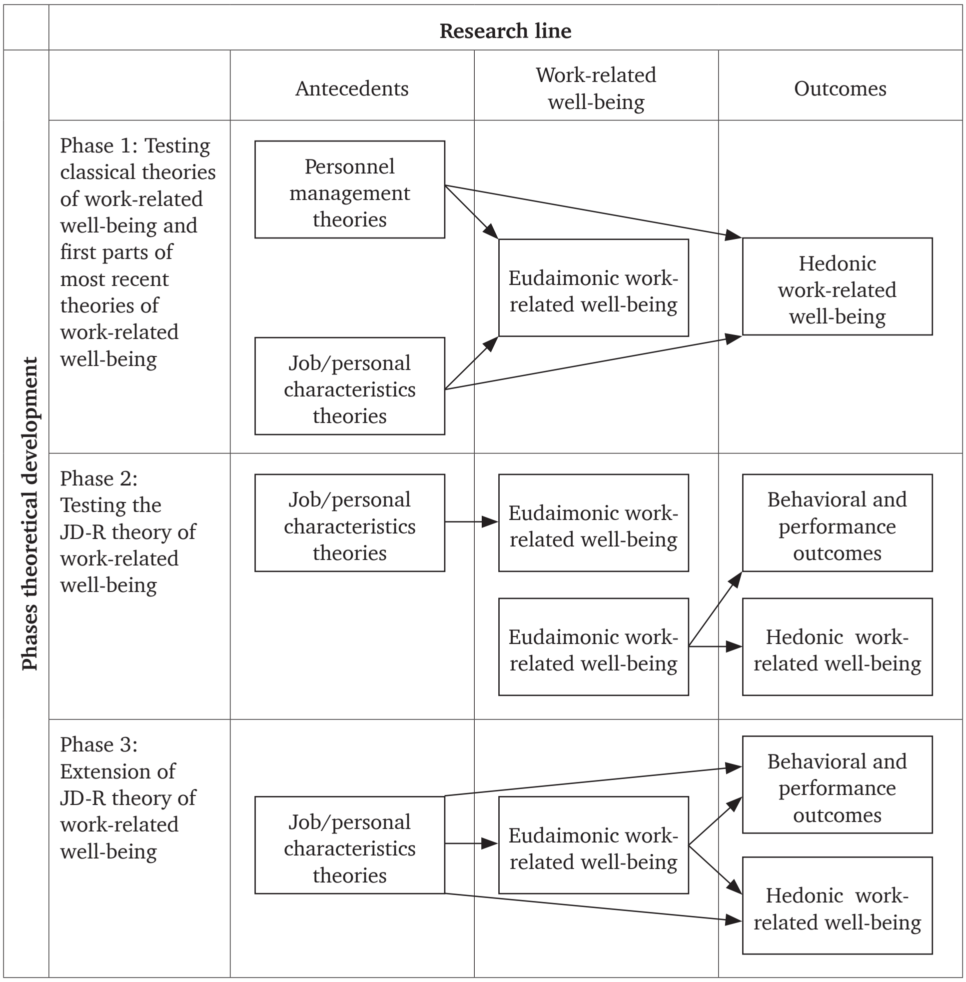


FIGURE 1.1: Research model

Firstly, by introducing work-related well-being as an overarching concept of states of (semi-)public employees, the conceptual ambiguity is diminished about the differences between states as well the relationships between these states. Especially the grouping of states in hedonic and eudaimonic work-related well-being brings in more clarity about the differences, similarities and relationships between states. The study of eudaimonic work-related well-being through work engagement and pride as new concepts is relevant. As argued by Tummers et al. (2016) hedonic indicators of work-related well-being such as commitment and satisfaction are widely studied within public administration. They show that it is interesting to complement this research by introducing eudaimonic indicators such as work engagement and pride due to their distinct character and potentially important consequences for attitudinal, behavioral and performance outcomes.

Secondly, by combining the three bodies of knowledge, the development of job/personal characteristics theories and personnel management theories of work-related well-being of (semi-)public employees could be systematized and identified. Due to this structuring, the job/personal characteristics theories and personnel management theories could also be expanded upon by combining them and putting them in the specific institutional contexts of the semi-public and public sector.

Finally and related to the second contribution, this dissertation places the antecedents–work-related well-being–outcomes relationship within various institutional contexts. In other words, knowledge is lacking about this relationship across different sectoral contexts. By translating the broad publicness principles (as an interpretation of the institutional context) to micro level employee behavior, this dissertation contributes to the understanding of the antecedents–work-related well-being–outcomes relationship across the private, semi-public and public sector context.

1.7.2 Methodological relevance

Within this dissertation several quantitative research methods are combined. To overcome questions of conceptual ambiguity about the indicators of work-related well-being of (semi-)public employees and its antecedents and outcomes, big quantitative studies are used which are representative of the complete Dutch public sector. As a result statements can be made about the existence of these relations with high certainty.

Large quantitative datasets of the Dutch central government in the years 2010 and 2014 of respectively 26.867 and 24.334 respondents across all different (semi-)public sector organizations as well as a dataset (control group) of the Dutch private sector in the year 2010 of 2.586 were used (Ministry of the Interior and Kingdom Relations, 2010; 2015). Every other year, the Dutch Ministry of the Interior and Kingdom Relations carries out a personnel monitor called the personnel and mobility monitor (POMO) involving a representative sample of the employees within the (semi-)public sector. I would like to thank Internetspiegel (the organization behind the data collection) and the Dutch Ministry of the Interior and Kingdom Relations for making the data available to conduct this dissertation. These large quantitative datasets were used to analyze several mechanisms underneath the antecedents–

work-related well-being–outcomes relationship. To analyze these mechanisms, logistic regression analyses were carried out in phase 1 of the theoretical development, and structural equations modeling (SEM) as well as comparative SEM were carried out in phase 3 of the theoretical development.

Next to the analysis of large datasets with several techniques, two meta-analyses were carried out in phase 2 of the theoretical development. Phase 2 is the introduction of a new theory which can explain everything the classical theory could explain, and additionally can make predictions which the classical theory was not able to make. As the JD-R theory is this new theory in the field of work-related well-being, meta-analyses were carried out to combine all the results of independent studies on the JD-R–work-related well-being–outcomes relationship. The meta-analytical technique is used to synthesize the results from various studies to assess systematically what is known about a particular phenomenon Since many articles have been published about the JD-R model without taking the specific institutional contexts into account, public administration scholars express a need for cross-sectorial meta-analyses to improve their understanding of general phenomena in the (semi-)public sector (Perry, 2012; Cantarelli et al., 2016). This dissertation therefore collected all the articles about the JD-R–well-being–outcomes relationship to get a good overview what is known about this relationship across sectors, before it is expanded upon. As such, some of the value added by this dissertation lies in the methodology.

1.7.3 Societal relevance

In recent times it is expected of public servants in many countries to perform better with fewer resources due to budget cuts, in combination with a context of bureaucrat bashing, and increasing emotionally demanding environments. On top of this, broad changes in the world of work (known as the psychologization of the workplace) are also taking place. All these pressures and changes require substantial psychological capabilities, adaptation and involvement of (semi-)public employees in order to preserve their work-related well-being and the public service delivery (Schaufeli, 2013; Hesketh & Cooper, 2017).

As the resources for (semi-)public employees became scarcer, it is important for public managers to know on which resources they need to focus and also where to deploy these resources to either gain or preserve a workforce with high work-related well-being. Simultaneously, it is important for public managers to know what work-related well-being exactly entails before they can try to influence it. This dissertation aims to contribute to knowledge about what work-related well-being entails and how it could be measured within the public-sector context through rigorous scientific research. In addition, to investigate on which resources public managers need to focus as well as where to deploy these resources to either gain or preserve a workforce with high work-related well-being, a comprehensive model is tested that entails all kinds of factors on the personal level, task level, work level, interpersonal level, organizational level, and institutional level. By bringing all these factors together, this dissertation provides knowledge on how public managers can optimize the work context and inherently the work-related well-being for all sorts of (semi-)public employees with different personalities and different tasks.

1.8 Structure of the dissertation

The empirical studies in this dissertation are assembled according to the three phases of theoretical development. The first phase exists of three chapters (chapters 2-4) which follows the development of work-related well-being research and the related job/personal characteristics theories and personnel management theories as described in sections 1.3 and 1.4. Since in classic work-related well-being research the hedonic indicators are studied, the main focus in chapter 2 and 3 is on job satisfaction and commitment. In line with the theoretical development, this changes to the investigation of one of the first eudaimonic indicators, namely professional pride, in chapter 4. The main focus in testing the relationship between these indicators of work-related well-being and classical job/personal characteristics theories and personnel management theories is on respectively work-related courses and performance measurement (personnel management theories) and some related characteristics from theory X and Y, and the two-factor theory (job/personal characteristics theories) in chapters 2 and 3. In line with the theoretical development, this changes to the investigation of a full high performance work system (newest theory within personnel management theories) in combination with some first parts of the JD-R model (newest theory within job/personal characteristics theories) in chapter 4.

The second phase consists of two chapters (chapter 5-6) which moves on to the introduction of the newest theoretical developments as described in sections 1.3, 1.4, and 1.5. The newest indicator of (eudaimonic) work-related well-being is introduced called work engagement. Furthermore, the JD-R model is further introduced as a comprehensive model to explain the work-related well-being of (semi-)public employees. It is analyzed what is known about the JD-R model in the literature. All studies on the antecedents and outcomes of the eudaimonic indicator work engagement are collected, which are used to test to what extend the institutional contexts of the public, semi-public, and private sector impact the effects of antecedents and outcomes of work engagement (chapters 5-6).

The third phase consists of two chapters (chapters 7-8) that move on to the expansion of the relationship between JD-R theory, work-related well-being and outcomes in the public and semi-public sector context by filling in the gaps found in chapters 5 and 6. More focus is placed on clusters of antecedents and personality factors. The first gaps in this new comprehensive framework of work-related well-being also become visible that will specifically be elaborated upon in the last chapter (chapter 9). This chapter consists of the overall conclusion and discussion of this dissertation. The nine chapters are schematically overviewed in Table 1.1.

1.9 Summary

This introduction intended to assess the broader theoretical context in which this research is embedded. It was aimed at introducing the goal, main research question and sub-questions, as well as the main research lines through which the research questions will be answered. As this dissertation is aimed at building a framework of the work-related well-being of (semi-)public employees, the first sub-question is aimed at the explanation of what work-related well-being is. This sub-question was already answered within this introduction as it forms the foundation for the remainder of this dissertation. As shown, work-related well-being consists of two parts–hedonic and eudaimonic work-related well-being. Hedonic work-related well-being can be described as feelings of happiness, pleasure and enjoyment due to and in work. In contrast, eudaimonic work-related well-being can be described as feelings of purposefulness and meaningfulness due to and in work. While indicators of hedonic work-related well-being including organizational commitment and job satisfaction received much attention within public administration research throughout the years, eudaimonic well-being including work engagement and pride received little attention.

The second sub-question is aimed at the antecedents of the work-related well-being of (semi-)public employees. An overview of the development in literature of the antecedents of work-related well-being is sketched. As shown, the influence of the antecedents on work-related well-being is studied by two research streams—job/personal characteristics theories and personnel management theories.

TABLE 1.1: Chapter overview

Empirical chapters	Research phase	Research line	Type of well-being	Methodology	Type of context	Publication status
Chapter 1 – Introduction						
Chapter 2: Courses for civil servants: Who attend and what are the effects?	Phase 1	Research line 1	Hedonic well-being	Logistic regression	Public sector	Published as a book chapter in G. Bouckaert & M.S. de Vries (Eds.), *Training for Leadership*. Brussels: Bruylant publishers.
Chapter 3: Is Performance Measurement Applicable in the Public Sector? A Comparative Study of Attitudes among Dutch Officials	Phase 1	Research line 1 and 4	Hedonic well-being	Logistic regression	Public versus private sector	Published in International Journal of Public Administration
Chapter 4: Proud to be a public servant? An analysis of the work-related determinants of professional pride among Dutch public servants	Phase 1	Research line 2 and 4	Eudaimonic well-being	Logistic regression	Public versus semi-public sector	Published in International Journal of Public Administration
Chapter 5: Organizational determinants of work engagement: A comparative meta-analysis across the public, semi-public, and private sector	Phase 2	Research line 1 and 4	Eudaimonic well-being	Meta-analysis	Public versus semi-public versus private sector	Accepted and presented at IASIA conference 2016 in Chengdu
Chapter 6: The attitudinal, behavioral and performance outcomes of work engagement: A comparative meta-analysis across the public, semi-public, and private sector	Phase 2	Research line 1 and 4	Eudaimonic and hedonic well-being	Meta-analysis	Public versus semi-public versus private sector	In review in an international peer reviewed journal (revise and resubmit)
Chapter 7: Exploring the Job Demands-Resources model of work engagement in government: Bringing in a psychological perspective	Phase 3	Research line 1 and 3	Eudaimonic and hedonic well-being	Structural equation modeling	Public sector	Published in Review of Public Personnel Administration
Chapter 8: Comparing work engagement in people-changing and people-processing service providers: A mediation model with red tape, autonomy, dimensions of PSM and performance	Phase 3	Research line 1, 3, and 4	Eudaimonic and hedonic well-being	Comparative structural equation modeling	Public versus semi-public sector	Published in Public Personnel Management
Chapter 9 – Conclusion and Discussion						

While job/personal characteristics theories are aimed at studying the work environment and work experience of employees (framed here as the psychological "soft approach"), personnel management theories are aimed at the employment of resources to influence the work-related well-being and behavior of employees (framed here as the organizational "hard approach"). The development of job/personal characteristics theories is expounded through the description of the first job/personal characteristics theory namely Maslow's hierarchy of needs, followed by theory X and Y (McGregor, 1957), two-factory theory (Herzberg et al., 1959), job characteristics theory (Hackman & Oldham, 1975; 1980), self-determination theory (Deci & Ryan, 1985), and most recently the Job Demands-Resources theory (Bakker & Demerouti, 2007). The development of personnel management theories is expounded through the description of the first loose theories of HRM focused on separate instruments toward more encompassing theories of HRM including HPWPs and AMO-theory and the most recent inclusion of leadership styles as well. Testing the relationships between these theories and work-related well-being separately as well as combined was suggested as the first and second research line of this dissertation respectively.

The third sub-question is aimed at the outcomes of the work-related well-being of (semi-)public employees. As shown, throughout the years, several outcomes of work-related well-being are identified that can be categorized as attitudinal outcomes, performance outcomes, and behavioral outcomes (Schaufeli & Taris, 2013; Albrecht, Bakker, Gruman, & Saks, 2015). Interestingly, attitudinal outcomes are equal to hedonic well-being and are often conceptualized as outcomes of eudaimonic well-being. It is argued that employees who experience high levels of eudaimonic well-being (work engagement and pride) are physically healthier, experience more satisfaction in their psychological needs, and experience higher levels of hedonic well-being (job satisfaction and commitment). Additionally, it is shown that behavioral outcomes of work-related well-being are not merely positive but could also be negative. Examples are an increase in workaholism and work disappointment due to work-related well-being. Testing the possible positive as well as the possible negative outcomes of work-related well-being was therefore suggested as the third research line of this dissertation.

The fourth sub-question is aimed at the influence of the institutional contexts including the private, semi-public and public sector on the work-related well-being of employees. It is shown that older theoretical approaches assume that public and private differences can be captured in a simple distinction based on the political/judicial type. However the more recent dimensional approach assumes that organizations are not always purely public or purely private, but that there are also hybrid/semi-public organizations, for example in terms of funding. This dimensional approach states that organizations can be placed on several spectra in addition to the political/judicial spectrum to determine the publicness of an organization. Often used spectra in addition to the political spectrum (political/ judicial approach) are a funding spectrum (economic approach) and normative spectrum (expectations and values approach). Based on these broad institutional characteristics, organizations can be classified as predominantly public, private or semi-public. It is suggested that the specific combination of broad institutional characteristics of every organization affect the micro-level work-related well-being and its antecedents and outcomes through the predominant institutional logic that is related to this specific combination of institutional characteristics. Testing the effects of these institutional contexts including the private, semi-public and public sector of the work-related well-being of employees was therefore suggested as the fourth research line of this dissertation.

As can be derived from the summaries of the research lines in this dissertation, the main thread in every research line is aimed at the development in theories of the work-related well-being of (semi-)public employees and its antecedents and outcomes. In other words, classical theories of work-related well-being up until the newest insights about work-related well-being will be analyzed and tested. This dissertation therefore tries to display a scientific journey through the development in thinking about work-related well-being of (semi-)public employees. This scientific development is taking place through the three phases of the “Kuhnian” or “Lakatosian” approach. According to these famous philosophical scientists the first phase of scientific development is aimed at discovering the gaps in the older theory, followed by a second phase in which a new theory is developed which fills these gaps, concluded by a third phase in which the theory is further expanded upon until gaps become evident again. Accordingly, in the first phase of this dissertation, the classical theories of work-related well-being of (semi-)public employees, its antecedents and its outcomes are tested. In the second phase, some of the research gaps found in the first phase were filled by introducing and systematically analyzing the newest theory of work-related well-being (JD-R). In the third phase of this dissertation the JD-R model is further developed in the (semi-)public sector to end with the first gaps in this theory which deserve further research.

PHASE 1

Testing classical theories of work-related well-being and first parts of recent theories of work-related well-being


2

Courses for civil servants: Who attend and what are the effects?

This chapter has been published as: Borst, R. T., Lako C. J., & Vries, M. S. de. (2013). Courses for Civil Servants: who attend and what are the effects? In: G. Bouckaert & M.S. de Vries (Eds.), *Training for Leadership* (pp. 273-292). Brussels: Bruylant publishers.

2.1 Introduction

Within the Dutch public sector, the expectations linked to the attendance of professional, skills-oriented, generic and company-specific courses by civil servants are extremely high. This becomes evident if one looks at the huge sums of money spent on such courses. It is estimated that, per annum, municipalities spend more than 187 million euro's on courses alone (Binnenlands bestuur, 2011)[1]. According to estimates, a similar level of funding is made available to public servants in the central government.

What emerges from a large-scale survey carried out among 26.876 civil servants under the auspices of the Dutch Ministry of Interior and Kingdom Relations (MWM2, 2010), is that 80.6% of the civil servants finds it important that funding is made available to attend work-related courses. Almost 75% of all the civil servants were of the opinion that it was important to very important that time is made available for such courses, and 73% of those questioned maintained that having study leave opportunities was important to very important. In addition, merely 61.6% had actually attended a course in the year prior to the study. Only a small minority, 25%, claimed to have absolutely no interest in courses whatsoever (Source: own analysis based on this study).

According to the literature published on the subject, the completion of work-related courses by civil servants is not only of importance to the individual employee but also to the government organization itself. Other considerations are employee job satisfaction, motivation, and feelings of organizational unity. All three are factors which, according to publications on work-related courses, constitute a side effect which, in its turn, becomes a positive spin-off affecting the achievements of civil servants and the quality of the service they then go on to provide to the general public (see: Steijn, 2003; Rhoades, Eisenberger, & Armeli, 2001; Meyer & Allen, 1997). Other researchers who examined the private sector drew similar conclusions when it came to the matter of the positive effects to be gained from work-related courses (Ballot. Fakhfakh, Taymaz, 2004; Barrett & O'Connell, 2001; Bartel, 2000; Bassi, Ludwig, McMurrer, & van Buren, 2002; Conti, 2005; Forrier & Sels, 2003; Green, Felstead, Mayhew, & Pack, 2000; Lengermann, 1999; Leuven & Oosterbeek, 1999; Wholey, 1990; Altonji & Spletzer, 1991; Barron, Black, & Loewenstein, 1987; Booth, 1991; Greenhalgh & Stewart, 1987; Groot, Hartog, & Oosterbeek, 1994; Lynch, 1992; Royalty, 1996).

1. A journal on Dutch internal affairs

The question that therefore inevitably emanates is: which groups of civil servants follow courses and what are the direct effects? Just to clarify, it should be pointed out that what is meant by work-related courses is any kind of course for which no recognized secondary school, higher vocational or university education diploma or qualification can be obtained.

The sub-questions therefore posed are these: Which civil servants attend such courses? How much time is allocated for work-related courses? Does the attendance of such courses really lead to the abovementioned effects? What can thus be concluded concerning the benefits of such courses and the time and financial investments made?

Before going on to discuss the findings, we shall first make an inventory of what has so far been published on the matter of work-related courses. What first needs to be examined is the determinants underlying why people do, or do not, go on courses. Furthermore, the matter of whether or not people follow courses is the dependent variable. The overview will culminate in certain hypotheses that will be tested in the context of this chapter. Subsequently, the theoretical backgrounds to three different effects of work-related courses will be traced and that, too, will lead to the formulation of hypotheses (section 2.2). In the process, it will be the doing of courses or not that will remain the dependent variable. Again, with regard to these hypotheses they will be tested and reported on in the present chapter. To that end, a detailed description will be given of the relevant data material and the operationalization (section 2.3) and that will be followed by a multivariate statistical analysis of the material (section 2.4). Finally this will lead to the answering of the research question posited above (section 2.5).

2.2 Theory

Here an inventory will be made, on the basis of the scientific literature, of what is known about the factors that can explain why employees within a given organization either do or do not follow courses (2.2.1). In addition, an overview will be given of the scientific literature that exists on the effects of work-related courses (2.2.2).

2.2.1 Work-related courses: who follow them?

What emerges from an examination of studies conducted on the factors influencing whether or not employees decide to follow courses is that they may be divided into organizational, individual and position-related characteristics.

Organizational characteristics

From a study carried out by Oosterbeek (1998) it emerged that the attendance of work-related courses differed according to the area within the private sector. One explanation might be that the degree of internal organizational dynamics influences the frequency of attended courses (Oosterbeek, 1998). Organizations with rapid organizational changes also influence the composition of personnel. It is conceivable that employees in an organization with a highly dynamic environment will also frequently undergo position changes. It is furthermore presumed that new employees will need to do in-service training if they are to function properly in their new job. Another expectation is that personnel that changes positions also need to attend courses to meet the demands of the new job. In other words, one may expect to see that new employees are more often and more quickly sent on courses than those who are experienced in carrying out their jobs. This leads to the following hypothesis:

> *H1: The attendance of work-related courses in the public sector is linked to the dynamics of the organizations. That is why significantly more civil servants who have recently changed jobs will be sent on courses than those who have not changed jobs.*

Individual characteristics

Equality between men and women is no longer a matter of overriding importance. When it comes to quality between male and female employees the Dutch public sector have, for a number of years, pursued policy diversity (Ministery of the Interior and Kingdom Relations, 2008: 1). Such a diversity policy is designed to offer women extra opportunities to enter and progress through the career ranks. Nevertheless, what emerges from research conducted by Leuven & Oosterbeek (1999: 314) is that women in the Netherlands, Canada, Switzerland and the United States stand less chance of going on work-related courses than men. According to Oosterbeek (1998: 277), women's careers are more often interrupted than those of men due to, for instance, pregnancies. As there is more uncertainty that they will return to the work process, organizations are more hesitant about investing in courses for women. It can therefore be predicted that more men than women will be sent on courses.

Age is also a significant factor. From research done by Ecorys (2010: 5) among local government employees it emerged that 58% of the public servants above 54 years attended courses whilst the percentage in other age categories was above 70% (Ecorys, 2010). One explanation for this might be that employers anticipate that the investment made in the training of younger staff will pay itself back over a longer period (Leuven & oosterbeek, 1999; Oosterbeek, 1998). It is thus predicted that also within the Dutch public sector young civil servants will attend more courses than older civil servants.

The third and final individual characteristic is the education level of civil servants. From studies conducted by, for example, Altonji & Spletzer (1991: 75) it is apparent that higher educated employees have a better chance to attend work-related courses than lower educated employees. This is supported by the widespread presumption among employers that employees with a higher educational background possess greater learning capacity and can therefore be more easily and better trained (Oosterbeek, 1999). The three expectations about individual characteristics therefore lead to the formulation of the following hypothesis:

> *H2: The participation in work-related courses in the public sector is connected to the individual characteristics including gender, age, and educational level and it is expected that male, younger and higher educated civil servants will be allowed to attend significantly more courses than female, older and lower educated civil servants.*

Position-related characteristics

The Dutch public sector has to deal with an extensive range of job responsibilities and has a unique role when it comes to the fulfillment of the needs of very diverse groups of voters. The public sector is thus an extremely complex system. Within the public sector, tasks of greater and less complexity may be distinguished. If the aim of work-related courses is to provide people with new skills and competencies then it is logical to expect that civil servants with more complex job descriptions will be sent on courses more often than those with less complex jobs. Also Altonji & Spletzer (1991: 73) argue that the effect of work-related educational activities is greater among employees in posts that demand many skills. It is thus expected that employees with more complex jobs will attend more courses.

Previous research showed that since 2002, there has been a rise in the number of temporary contracts (Berkhout, Werff, & Smid, 2011: 4). The chances of people with post-secondary school education and academics securing permanent positions are now at an all-time low (Berkhout et al., 2011). The rise in the number of temporary job contracts could have consequences for the opportunities to attend work-related courses. In their study, Arulampalam & Booth (1998) concluded that employees with a permanent contract had more chance of being allowed to attend work-related courses because employers anticipate that they will be less likely to stop working or be dismissed than employees on temporary contracts. If one pursues this line of argument one may expect that civil servants with permanent contracts will be given more chances to attend courses than those with temporary or other kinds of contracts.

The third position-related characteristic is what is termed the full-time equivalent. Employees who work full-time put in more hours. Employers can therefore get more hours and thus faster yields if they send full-time staff on work-related courses rather than part-timers. It is highly likely that a similar rationale will be applied to the Dutch public sector.

Finally there is the nature of the employee's work. There are different job divisions within the public sector, the best-known differentiation being the one made between executing, managerial and policy-making civil servants. It is logical to expect that the managerial group will be sent on more courses than the rest because of the greater range and diversity of their tasks giving more rise to the need to update their knowledge. That is supported by the theory of Lewin, Lippitt, & White, 1939) which revealed that managers have to determine goals and strategy, supervise staff, and develop policies: all tasks that other civil servants do not have to fulfill. All these points lead to the following hypothesis:

> *H3: Whether civil servants participate in work-related courses depends on the complexity of their job, the nature of their employment contract, whether they have a full-time job, and their type work. It is therefore expected that civil servants with complex positions, permanent contracts, full-time jobs and managerial positions will be required to attend significantly more courses than civil servants with less complex positions, temporary contracts, part-time jobs, and all but managerial positions.*

2.2.2 What are the expected effects?

The scientific literature shows that the attendance of work-related courses by civil servants affects various employee attitudes.

Job satisfaction

A study conducted by Gazioglua & Tansel (2006) among 28.240 British employees showed that employees who have attended work-related courses are significantly more satisfied about their jobs than those who have not attended any work-related courses (Gazioglua & Tansel, 2006: 1170). The findings presented by Georgellis

& Lange (2007: 976) also lead to the conclusion that there is strong evidence to support the idea that employment satisfaction increases after attended courses. This leads to the following hypothesis:

> *H4: The participation in work-related courses has a significant positive effect on the job satisfaction experienced by civil servants in the Dutch public sector.*

Besides the participation in work-related courses, job satisfaction can also be enhanced by factors such as a good salary, good relationships between managers and staff, job security, satisfaction with the organization, good relations with colleagues, feelings of recognition, variety in job tasks, and the chance to develop competencies to grow (Herzberg, 1966). In addition, complexity of the job (Agho, Mueller, & Price, 1993), educational level (Griffin, Dunbar, & McGill, 1978), age (Buzawa, 1984), and gender (Clark, 1997; Kim, 2005) are also factors that contribute to the job satisfaction among public servants. Alongside the participation in work-related courses, the above-mentioned factors are therefore also included in the model to explain the degree of job satisfaction of public servants.

Affective organizational commitment

Another positive employee attitude which might be influenced by the participation in work-related courses is the affective organizational commitment of public servants (Mottaz, 1988). Previous research has proven that organizational commitment can positively influence employee achievement and negatively influences absenteeism (see: van Maanen, 1975; Lee, 1971). According to Gould-Williams (2004), work-related courses have a positive effect on the organizational commitment of public servants because such courses are often specifically directed at the exclusive applicability to the current job and organization. This line of reasoning is also supported and confirmed in the healthcare sector by Bartlett (2001) which proved that the participation of medical staff in various courses indeed improved their connectedness with the organization. If we adhere to these findings then the following hypothesis can be stated:

> *H5: The participation in work-related courses has a positive significant effect on the organizational commitment experienced by civil servants in the Dutch public sector.*

Besides work-related courses, other factors also need to be taken into account when one wants to explain organizational commitment. Mottaz (1988) showed for example that satisfaction with the organization, job security, good relations with supervisor and colleagues, salary, and task complexity are amongst other important explanations of organizational commitment. At the same time, it has to be stressed that not all factors arising in various studies can be included in the model since an existing dataset is used. This is an important limitation which will be elaborated upon in the discussion.

Public Service Motivation

Alongside job satisfaction and organizational commitment, Public Service Motivation (PSM) is another phenomenon that has received much attention in the field of public administration. Like job satisfaction and organizational commitment, PSM is often related to lower absenteeism and higher performance of civil servants (Perry, Mesch, & Paarlberg, 2006).

According to Perry & Wise (1990), PSM connotes that some people are intrinsically motivated to work in the public sector because they want to support the common good and feel connected to society. Perry developed a theory to identify the determinants of PSM. Perry (2000) made a distinction between three types of determinants: socio-historical determinants, motivational determinants, and individual determinants. Examples of socio-historical determinants (Perry, 2000: 480) are amongst other the educational level, the socializations of the family, church and professional organizations, and so-called life-events. Examples of motivational determinants are the degree of task variety, job complexity, the extent to which the job provided (feelings) of recognition, job autonomy, performance and development agreements, amount of bureaucracy, length of time in service, job security, salary and other secondary benefits. Examples of individual determinants are age, gender and personal characteristics.

Interestingly, in this theory, no attention is given to the effects of work-related courses on PSM. An explanation might be that there is no evidence that the participation of work-related courses affect PSM but it is also possible that work-related courses were simply less crucial according to Perry (2000). However many employees specifically apply for a job in the public sector because of the provided job security, personal growth opportunities and the attractive fringe benefits including time and money to attend work-related courses. Furthermore, the participation in work-related courses ensures that public servants socialize within their public organizations and their task-environment, and are thus motivated to dedicate themselves to society and the public interest. In other words, it is expected that the participation in work-related courses will lead to an increase in the level of PSM among civil servants. The following hypothesis can be stated:

H6: The participation in work-related courses has a positive significant effect on the Public Service Motivation experienced by civil servants in the Dutch public sector.

Again, other determinants of PSM also need to be taken into account. The social-historical determinant educational level is taken into account as well as ten motivational determinants including relations with supervisors and colleagues, the participation in work-related courses, nature of the work, recognition, salary, complexity of the job, job security, satisfaction with organizations, development and performance agreements. The individual determinants age and gender are also included.

2.3 Methods

2.3.1 Data material

The data material used in the analysis was collected by the Ministery of the Interior and Kingdom Relations in 2010 and is known as the Personnel and Mobility Monitor (MWM2, 2010). This is a large-scale survey in which a random sample is taken from people working in the Dutch public sector. All public organizations are involved in the randomly drawn sample of 80.000 employees. In total, 26.876 public servants completed the questionnaire. This resulted in a response percentage of 34%, varying per sector between 27% and 38%. The characteristics of the Dutch public sector and the resulting response percentages are presented in Table 2.1 below.

The questionnaire included a wide range of questions. Amongst others, public servants answered questions about their personal background, the nature of their work, their mobility and employability within their organization, job satisfaction, terms of employment, performance management, supervisory contact, colleague support.

2.3.2 Variables

Since the dependent variable in the first model is the dichotomous variable "attended a work-related course", we conducted binary logistic regression analyses. In line with this choice, in the models in which respectively job satisfaction, organizational commitment, and PSM are the dependent variable, all other variables were coded uniformly in dichotomous response categories.

TABLE 2.1: Sample statistics

	Population	Sample	Response	Response (%)
Total public sector	**855.454**	**80.000**	**26.876**	**34**
Government	***288.865***	***28.500***	***10.596***	***37***
Central government	116.280	10.000	3.841	38
Local government	148.933	9.000	3.354	37
Provinces	11.098	4.000	1.383	35
Legal authorities	3.393	1.500	562	37
Water Boards	9.161	4.000	1.456	36
Education and science	***438.911***	***38.500***	***12.414***	***32***
Primary education	162.131	9.000	2.953	33
Secondary education	88.574	8.000	2.990	37
Secondary vocational education	47.446	5.000	1.553	31
Higher professional education	35.345	5.000	1.612	32
Universities	45.181	5.000	1.469	29
Public research institutes	2.152	1.500	409	27
University Medical Centers	58.082	5.000	1.482	29
Security	***127.678***	***13.000***	***3.866***	***30***
Defense	67.879	7.000	1.980	28
Police	59.799	6.000	1.886	31

Source: MWM2, 2010: 22.

In order to test the first hypothesis, a differentiation was made between employees who changed jobs in the course of 2009, and those who had not changed jobs.

In order to test the second hypothesis, a differentiation was made between employees who were born before 1954 (the so-called baby boomers) and those born 1954. The variable educational level was dichotomized into lower-educated (all educational backgrounds till bachelor's level in college) and higher educated (ranging from bachelor's degree in college to those holding a doctorate from a university).

With respect to the third hypothesis, the independent variable "complexity of the work" was dichotomized into respectively not complex and complex. The variable “nature of contract” was categorized into respectively permanent contracts and flexible contracts. Regarding the variable “full-time equivalent”, a differentiation was made between public servants who worked less than 36 hours per week (part-time) and those who worked 36 or more hours per week (full-time). Finally, the variable “nature of the job” was determined on the basis of three indicators. Depending on the sector a public servant works in, the questionnaire formulated a different question (three different questions in total). A differentiation was made in all three sectors between managerial positions and other kind of positions.

Regarding hypotheses four to six, the dependent variables are respectively “job satisfaction”, “organizational commitment”, and “PSM”. Job satisfaction, organizational commitment and PSM were respectively dichotomized into unsatisfied and satisfied, uncommitted and committed, unmotivated and motivated. The variables “relationship with supervisor”, and “satisfaction with organization” were dichotomized into unsatisfied and satisfied. The variable “salary” was dichotomized into below average (salaries up until €2.500 per month), and above average (salaries from €2.501 up to and above €7.000 per month). The independent variables “Job security”, “Applicability development and performance agreements”, relation with colleagues”, and “feelings of recognition” were dichotomized into disagree and agree.

2.4 Results

From an initial exploration, it emerged that 16.198 (60.3%) of the 26.876 respondents had completed one or more work-related courses. The remaining 10.678 public servants did not attend a work-related course. In total, 20.337 work-related courses were attended. That means that some of the respondents had followed more than one work-related course in that particular year. Further analysis shows that job-specific courses were attended the most (51.8%) followed by skills-oriented courses (37.4%) and company-specific courses (10.8%).

The respondents were also questioned about course duration. What emerged was that the average length of the attended courses was 18 days for job-specific courses, almost 10 days for skills-oriented courses and approximately 15 days for company-specific courses. The average length of the total number of courses was 14 days. The most common course duration was 2 days (16.8%) and the shortest courses were less than a day. Approximately 55.4% of the job-specific courses lasted a week or less. Much the same applied to skill-oriented and company-specific courses (respectively 68.6% and 66% lasted a week or less). Despite the importance attributed to the participation in courses, the time actually spend on courses was limited. One may question to what extent such short courses are capable of having the effects predicted by practitioners and literature.[2]

2.4.1 The course participants

To look more specifically which categories of public servants attended courses, a logistic regression analysis is conducted including organizational characteristics, individual characteristics and position-related characteristics. The results of this analysis are presented in Table 2.2 below. The table highlights the odds ratio and its significance. The odds ratio (exp. B) indicates the direction of the relationship. If it is less than 1, the group coded as 0 attend more courses but if it is greater than 1, the group coded as 1 attend more courses.

The table shows that public servants who recently changed their job more often attend work-related courses than public servants who did not change their job. Hypothesis one is therefore accepted.

In contrast, hypothesis two is almost completely supported. More female than male respondents attended work-related courses whilst the expectation was exactly the other way around. In addition, younger and higher educated public servants attended courses than older and low educated public servants. These results corresponded with the hypothesized relationships. Approximately 62.2% of the public servants below 55 years of age attended one or more courses as opposed to 54% above 55 years of age. The attendance rate between higher educated and lower educated public servants remained limited (61.5% vis-à-vis 58.3%).

2. It is probably interesting to further distinctions in the length of courses and the types of courses in order to explain the effects. Analyses proved that there is no significant difference in length and type of courses on the job satisfaction, organizational commitment and PSM of public servants. A further differentiation is therefore not included.

TABLE 2.2: Who are the people that attend work-related courses?

Independent variables	Sig.	Exp(B)/Odds ratio
Age (young=1) [1]	0.000	1.351
Full-time equivalent (full-time=1) [2]	0.000	1.314
Job complexity (complex job=1)[3]	0.000	1.259
Job security (tenure=1)[4]	0.000	1.185
Sex (female=1)[5]	0.000	1.149
Jobswitch (recently changed=1)[6]	0.000	1.133
Position (managementposition=1)[7]	0.000	1.125
Educational backgroun (highly educated=1)[8]	0.000	1.110
Constant	0.000	0.564

Nagelkerke $R^2 = 0.017$, $N = 26.309$.

Hypothesis three is completely supported. As expected, public servants with complex jobs, permanent contracts, full-time and management positions do, indeed, attend significantly more work-related courses than their colleagues with less complex jobs, temporary contracts, part-time jobs, and policy-related positions.

Despite the low explained variance, the analysis provides an initial impression and description of which work-related courses are attended and by whom.

2.4.2 The effects of the courses

We shall now attempt to determine the effects of the attendance of work-related courses on respectively job satisfaction, affective commitment and PSM.

Job Satisfaction

The results of the logistic regression are given below in Table 2.3.

3. The bivariate correlation is : $\chi^2 = 167.505$, $\alpha = 0.000$
4. $\chi^2 = 112{,}173$, $\alpha = 0.000$
5. $\chi^2 = 75{,}857$, $\alpha = 0.000$
6. $\chi^2 = 1{,}267$, $\alpha = 0.260$
7. $\chi^2 = 0{,}020$, $\alpha = 0.887$
8. $\chi^2 = 23{,}144$, $\alpha = 0.000$
9. $\chi^2 = 57{,}170$, $\alpha = 0.000$
10. $\chi^2 = 26{,}267$, $\alpha = 0.000$

TABLE 2.3: Effects on job satisfaction

Independent variables	Sig.	Exp(B)/Odds ratio
Satisfaction with organization (satisfied=1)	0.000	8.529
Relation with supervisor (good=1)	0.000	2.301
Job security (yes=1)	0.000	1.625
Relation with colleagues (good=1)	0.000	1.386
Recognition (yes=1)	0.000	1.339
Complexity position (complex=1)	0.000	1.232
Attendance work-related course (attended=1)	**0.000**	**1.152**
Age (young=1)	0.000	1.151
Salary (above average=1)	0.004	1.138
Educational background (highly educated=1)	0.105	1.066
Sex (female=1)	0.470	1.032
Full-time equivalent (full-time=1)	0.484	1.031
Constant	0.000	0.525

Nagelkerke $R^2 = 0.336$, $N = 25.028$.

As Table 2.3 shows, a reasonable portion (33.6%) of the total variation in job satisfaction is explained by the included determinants. Typical control variables including educational background, gender and full-time equivalent do not have a significant effect. It turned out that especially public servants who are satisfied with their organization are also satisfied with their job. In addition, factors including good relations with supervisor and colleagues, and job security are important determinants of the job satisfaction of public servants. Public servants also become satisfied when they receive recognition. Interestingly, the attendance of work-related courses only had a relatively small effect on the job satisfaction of public servants. Hypothesis four is therefore supported but in relation to other variables the effects of work-related course is limited.

Organizational commitment

A similar model can be created in case of organization commitment. The results of the logistic regression are presented in Table 2.4.

TABLE 2.4: Effects on organizational commitment

Independent variables	Sig.	Exp(B)/Odds ratio
Satisfaction with organization (satisfied=1)	0.000	5.021
Job security (yes=1)	0.000	1.811
Relation with supervisor (good=1)	0.000	1.563
Job satisfaction (satisfied=1)	0.000	1.504
Recognition (yes=1)	0.000	1.430
Relation with colleagues (=good=1)	0.000	1.356
Position (management position=1)	0.000	1.334
Full-time equivalent (full-time=1)	0.000	1.166
Attendance work-related course (attended=1)	**0.000**	**1.137**
Complexity position (complex=1)	0.000	1.164
Salary (above average=1)	0.148	1.054
Age (young=1)	0.371	1.033
Sex (female=1)	0.646	1.017
Constant	0.000	0.322

Nagelkerke $R^2 = 0.295$, $N = 25.189$.

The explained variance is again reasonable (29.5%). It becomes apparent that individual characteristics including age and gender do not have a significant effect on the organizational commitment of public servants. In contrast, a large number of organizational characteristics are significant. Satisfaction with the organization is again an important indicator of organizational commitment. Similarly to the job satisfaction model, good relations with supervisor and colleagues, job security, and recognition are important determinants of affective commitment of public servants. The attendance of work-related courses also has a positive effect on the organizational commitment of public servants but it is again relatively small. Hence hypothesis five is supported but with the same footnote as in the job satisfaction model.

Public Service Motivation

A similar type of analyses can also be conducted for PSM. The results are presented in Table 2.5 below.

TABLE 2.5: Effects on PSM

Independent variables	Sig.	Exp(B)/Odds ratio
Applicability development and performance agreements (agree=1)	0.000	1.524
Educational background (highly educated=1)	0.000	1.520
Salary (above average=1)	0.000	1.441
Complexity position (complex=1)	0.000	1.333
Recognition (yes=1)	0.000	1.236
Sex (male=1)	0.000	1.220
Position (management position=1)	0.000	1.201
Attendance work-related course (attended=1)	**0.000**	**1.196**
Satisfaction with organization (satisfied=1)	0.001	1.104
Relation with colleagues (good=1)	0.033	1.098
Job security (yes=1)	0.080	1.057
Age (young=1)	0.718	1.012
Relation with supervisor (good=1)	0.774	1.009
Constant	0.000	0.590

Nagelkerke R^2 = 0.075, N = 23.864.

Table 2.5 shows that public servants who agree that performance management is applicable have a much higher PSM than public servants who does not think that performance management is applicable. In addition, public servants with a high education background, a high salary, and a complex position also have a much higher PSM than public servants with a low educational background, a relatively low salary, and a relatively less complex position. The attendance of work-related courses again has only a relatively small positive effect on the PSM of public servants. Hence hypothesis six is accepted.

2.5 Discussion

The goal of this study was to analyze which employees within the public sector attend work-related courses, and what the effects of many factors including courses, relations with colleagues and managers, job security, salary, and recognition are on various attitudinal outcomes of public servants. The results are based on a large-scale survey of 26.876 public servants that is carried out once every two years by the Ministry of the Interior and Kingdom Relations.

What emerged from the first exploratory part of the study was that in the previous year, (2009), 16.198 (60.3%) of the 26.876 civil servants who participated in the survey had followed work-related courses. In total 20.337 work-related courses had been followed in that same year, the vast majority of which (51.8%) could be classified as job-specific courses. The average length of such courses was 14 days but what was perhaps most noticeable was the commonest course length (the modus) which amounted to a mere 2 days, the shortest lasting even less than a day and the vast majority being less than a week long. At the same time this leads one to question the effectiveness of such courses.

The first question posed, related to the type of civil servants who attend courses. Theoretically, it was expected that significantly larger numbers of respondents who recently started a new function would attend courses as opposed to those whose function had not changed. The empirical results showed that this was indeed the case. It was also expected that significantly more male, younger, and higher educated public servants would attend courses than their female, older and lower educated counterparts. It is indeed the case that relatively more younger public servants attend courses than their older colleagues. However, the results show that in fact there were more women attending courses than men. A possible explanation might be the diversity policies in the public sector which is designed to provide all personnel with similar opportunities and equal treatment. Furthermore, the differences regarding educational level prove to be minimal. Once again, it is no doubt the diversity policy which, in the public sector, has been adhered to for many years that most likely accounts for the differences in this area being so small as well. Lastly, it was expected that significantly more civil servants with complex positions, permanent contracts, full-time jobs and managerial positions would be allowed to attend courses than their opposite counterparts. From the present study it became apparent that this was in fact the case with all four variables. In other words, the expectations are confirmed.

The second question posed, related to the effects of various factors including course on job satisfaction, organizational commitment and Public Service Motivation. The attendance of work-related course proved to be hardly relevant relative to other factors including good relations with supervisors and colleagues, recognition, and job security.

As has been indicated, the expectations attached to the attendance of work-related resources are rather high but the results show that the actual effects are rather disappointing. In the current political climate of doing more with less means this finding becomes especially interesting. Millions of euros are spent on courses while the benefits seem to be negligible. Central government is busy reviewing and reducing its own expenditure. In the process, it is a good development to scrutinize the budget reserved for work-related courses. In this context, two caveats need to be borne in mind. Firstly, this study focused upon the short-term effects of courses. The questionnaire reviewed recently completed courses, and the related immediate feeling of public servants related to job satisfaction, organizational commitment, and PSM. It is, however, conceivable that the benefits of attending courses in terms of these employee attitudes will only be appreciated in the long term. The attendance of a work-related training might pay-off in the long term. In addition, the study was confined to the anticipated side effects of courses which means that there was little opportunity to examine the direct effect that courses have upon the performances of civil servants. It is to be expected that the performance of civil servants will improve but on the basis of this data it is hard to make any concrete claims. To that end further research would be required. Such research would have to be founded upon the conceptual model of work-related courses. What makes such research particularly pressing is the fact that among employers in the public sector there is still much ignorance surrounding the effectiveness of courses. To that end further research would be required. Further research is particularly interesting due to the fact that there is still much ignorance among public personnel managers about the effectiveness of courses.

More to the point, such research is desirable because ultimately it will simultaneously reveal whether the expectations surrounding the direct effects of courses upon employee performance are indeed too high. What then, is the most important conclusion to be drawn from the present study? It is that there are high expectations attached to the following of courses but those same expectations are only very minimally supported by the empirical research presented.


3

Is performance measurement applicable in the public sector? A comparative study of attitudes among Dutch officials

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3.1 Introduction

The use of performance measurement and performance management in the public sector remains a controversial issue. Performance management concerns making arrangements about the goals to be achieved, the way goals are measured, and to what extent these goals have actually been achieved. Utilization in the private sector has increased (see Neely, 1999; Neely, Richards, Mills, Platts, & Bourne, 1997), and there are some strong advocates of its utilization (see Broadnax & Conway, 2001) because of the identified benefits in encouraging people to achieve preset goals (de Waal, 2002; Lohman, 1999). It is nevertheless still doubted whether the measures present a valid picture of the content of the work. In other words, do they measure what they are intended to measure (see Au, 1996; Bevan & Hood, 2006; Bovaird & Löffler, 2003; de Vries, 2010; Guthrie & Parker, 1999; Guthrie & Schwoerer, 1994; Halachmi, 2011; Judge & Welbourne, 1994; Kanter & Brinkerhoff, 1981; Kaplan & Norton, 1992; Kluvers, 1998; Kouzmin, Loeffler, Klages, & Korac-Kakabadse, 1999; O'Faircheallaigh, Wanna, & Weller, 2000; Pollitt & Bouckaert, 2000; Rivenbark & Kelly, 2000; Spigelman, 2001; Steers, 1975)?

Already in 1994, Boschken argued that the complexity of public administration with various stakeholders implies that the utilization of simple measures of performance does not reflect the nature of public services. Therefore, different parameters must be used simultaneously (Boschken, 1994). Werner & Asch (2007: 159) go further and conclude on the basis of their research in healthcare that performance measurement gets in the way of delivering good care, because it risks diverting attention from other more important but unmeasured aspects of care, provide(s) no priority for following guidelines likely to yield a large clinical benefit compared with guidelines likely to yield at best a small clinical benefit and "may crowd out quality at the level of the patient that is equally important but that cannot be easily measured. Hence they reduce the quality that is most important for the patient, but cannot be easily measured" (cf., Halachmi, 2011: 25). According to Halachmi (2011), achieving the objectives of performance measurement cannot be guaranteed. Performance measures may be dysfunctional, have unintended and even adverse consequences for quality and productivity, and can contribute to a reduced credibility of government among the service recipients of that government. The discussion described here illustrates the pros and cons of performance management in the public sector. It is about the question whether the nature of the work in the public sector is so substantially different from the private sector that performance in the first sector makes little sense and in particular whether work in the public sector is more complex than that in the private sector. The latter would make performance measurement difficult if not impossible.

The central questions in this article are: how do public officials themselves think about the applicability of performance measurement? And how can the differences in their views on this be explained?

This is particularly interesting because there is little research available on the opinions of people who are subjected to performance measurement. Commitment to performance measurement from those who are subjected to it is necessary to really make it work. If officials subjected to performance measurement think their performances have been measured well, this will enhance performance measurement. This article contributes to a further understanding of the discussion because it takes into consideration not only the organizational and management perspectives about performance measurement but also the perspective of the officials involved. We use various behavioral models to answer the question whether, in the opinion of the officials themselves, performance measures can be applied in the public sector and by what factors the differences in their views can be explained. This report is based on a survey of 26.876 civil servants in 2010. The survey was sponsored by the Dutch Ministry of the Interior and Kingdom Relations (MWM2, 2010). Some of the questions in the survey covered the subject matter. Officials were asked, for instance, to indicate to what extent they thought performance agreements about their work were easily measurable.

The analysis of this database allows us to determine those factors that explain the variation in the views of officials on performance measurement (cf. Lee, 2008). Before we present the results of that analysis, we first address three theoretical models by which views on the applicability of performance in the public sector can be understood. That discussion yielded six factors that are assumed to affect opinion on the applicability of performance measurement somewhat differently within each of the different models (Theory). Following that, the data are presented and subsequently the results of the analysis are given, followed by a discussion.

3.2 Theory

How can performance measurement be understood? Here we will look at three models. In the first model, the distinction between the public and private sectors is key (Parker & Gould, 1999). In the second model, the applicability of performance measurement from a technical perspective and rational understanding of performance management is central, and in the third model, the issue is examined within the frame of individual and organizational interests.

3.2.1 Model 1. Public versus private sector

Regarding the first model, Au (1996) argued that the performance of an organization is a social construct that is particularly difficult to measure in the public sector. Parker and Gould (1999) mention four reasons why the public sector cannot be treated the same way as the private sector and why performance measurement cannot be used in the same way in both sectors. They argue:

1. The public sector acts in response to government policy that is ultimately based on collective choices. It treats citizens as a group rather than as individual consumers with certain rights.
2. The private sector provides goods and services to a certain level and at a certain price in response to supply and demand. It excludes consumers who do not pay for the supply of those goods and services. It acts in response to a consumer's demand regardless of his willingness to pay.
3. The private sector acts according to market principles, while the public sector is expected to be based on principles of social justice and fairness.
4. The private sector emphasizes effectiveness and efficiency, while the public sector is committed to the accessibility of government, fair treatment of citizens, and decent implementation of policy processes and compliance.

Orchard (1998) argued that deductive economic theories, such as public choice theory, fail to take into account the complexity of the modern public sector and its unique role in fulfilling the needs of very different groups of citizens. According to him, the public sector is fundamentally different from the private sector, and the latter's management tools, such as performance measurement, are therefore less applicable in the former sector. If this basic idea is also supported by workers in the public sector, it may be expected that the percentage of proponents of performance measurement in the public sector is significantly lower than in the private sector. In addition, this model makes no distinction between sectors within the public and private sectors. Both sectors are seen as coherent wholes and the jobs within the two sectors will not be a distinguishing factor. That implies that on the basis of this model it may be expected that the opinions of officials about the applicability of performance measurement do not vary across sectors, either within the public sector or across positions. Whether this is a suitable model is open to debate.

3.2.2 Model 2. Technical and rational perspectives

Although many scholars have underlined the specific nature of the public sector, Osbourne & Gaebler (1999) and Gore (1993) favor the transfer of management practices used in the private sector into the public sector. Other authors believe that a distinction must be made between different sectors and positions in public administration. Halachmi (2011) for example believes that productivity in services at the local level can be properly measured, but that in matters of national security at the national level it is much harder to measure performance because in relation to such as national security far fewer concrete things are central. His reasoning is that if a position is less complex and more concrete, better performance measurement will be possible, and if the environment is less politically driven, better performance measurement is possible. Boschken (1994) similarly argues that major differences can be expected in the application of performance measurements. Within the public sector, there are complex and less complex tasks, and if the arguments are correct then one can expect less scope for performance measurements in case of greater complexity of the position.

Within this model, substantive, technical, and rational arguments are used to determine when performance measurement is meaningful. Based on the idea that performance measurement can help employees to eventually improve their work and the different positions and content of performance systems, it is argued that the applicability of performance management depends on the potential fit between performance measurement and actual functioning. This model also assumes that managers will be more pleased about the opportunities for the applicability of performance measurement than policymakers. Performance measures are primarily management tools. Hood (1998) speaks about management by numbers. Cook, Vansant, Stewart, & Adrian (1995) argue that performance measurement especially serves management purposes. Grady (1991) argues that performance measurement is, in the first instance, meant to provide clarity to management at all levels of the organization in regard to what extent strategies and objectives are realized: “performance measures must first of all provide all management levels with feedback on how well the strategies and objectives are being met” (p. 51). Lee (2008) and Forsythe (2001) also share the view that the opinions of the managers about the applicability of performance measurement differ from those of legislators and supervisors. Lee (2008) concludes: “Thus, it is possible that managers at departments and statutory authorities have different perceptions because of the different nature of their responsibilities” (p. 131).

Based on this model, it can be assumed that attitudes toward the applicability of performance measurement and management vary within the public sector. Finally, it may be expected that if stakeholders believe that there are problems in performance within the organization they will consider performance measurement as useful to define what the problem is and how to resolve it. In other words, from the rational perspective officials are positive about the use of performance measurement because it is an instrument that can be used to boost their own image. From this model, it may be further derived that a higher percentage of officials with positive expectations regarding the applicability of performance management can be found among those officials who work in a less political environment (Halachmi, 2011), whose position is less complex (Halachmi, 2011), and especially among those officials holding managerial positions (Townley, Cooper, & Oakes, 2003). However, previous empirical studies show that this is not always the case. Lee (2008) noted, for example, that often only senior management is optimistic about the opportunities of performance measurement. This can be explained by a model in which organizational interests are key. Such a model is based on the public choice approach as found in works of Downs (1967), Niskanen (1971), and Dunleavy (1991).

3.2.3 Model 3. Individual and organizational interests

This model explains public choices as the result of officials pursuing their own interests and assessing the applicability of management instruments in terms of whether these make sense and are profitable for themselves and advantageous for their department. As Downs puts it, a bureaucracy is primarily a hierarchical system and “these superior-subordinate relationships are important for every official’s chances for improving his position in the bureau, including promotion, higher salary, and success in furthering policies” (1967: 80). And as Niskanen (1971) puts it, any official will favor those changes that grow the budget of his department. Dunleavy (1991) said that officials especially will support measures that increase the prestige of their office. In this model, performance measurement and performance management are judged by their contribution in improving employees’ position within the organization or in protecting, defending, and improving the position of the department within the organization. After all, performance measurement can create clarity about what the organization and the employee can expect from one another and to what extent the organization and the employee agree, whereas the absence of performance management can result in ambiguity and uncertainty. From this model, one would expect to find a high percentage of people favoring the applicability of performance measures, where uncertainty about the functioning is large and the organization could profit from performance management. This implies that one would expect to find a higher percentage of proponents within the public sector which suffers more from criticism of its poor performance than in the private sector. Even more proponents would be found among officials with complex positions in a politically steered organization when the criticism of bureaucracy is greatest and when officials have positive experiences with performance management. Moreover, it can be expected that those officials who feel that they and their colleagues function well are also more positive about the applicability of performance measurement than officials who are critical about the performance within their organization. In the latter case, performance measurement is not in their interest.

We acknowledge that the literature on this topic shows that recently more nuances have been added to the approaches of performance management (see for instance Boyne, Meier, O'Toole, & Walker, 2006; Talbot, 1999) and any modeling results in some simplification. In the theoretical discussion about the subject as well as in practice, the assumptions underlying the models can nonetheless still be seen as contrary explaining hypotheses about opinions on performance management.

In our view, the three models result in contrary hypotheses about the influence of different factors, including working in the public sector, the complexity of the position, operating in a more or less political environment, satisfaction with the functioning of the organization and experience with the applicability of performance management. This is shown in Table 3.1.

The three models produce opposite expectations about the effect of the six factors on attitudes toward the applicability of performance. In the following sections, we assess which model is corroborated best by empirical testing. The expected impact of the six factors on attitudes toward performance measurement is then examined in terms of six distinct hypotheses. We first present the data and subsequently the results of the analysis.

TABLE 3.1: Expectations regarding the effect of factors on the opinion about the applicability of performance measurement according to three models

	Model 1: The difference between the public and private sector is central	Model 2: Substantive, rational arguments dominate	Model 3: Public choice model
Expected influence of			
1. Sector: public versus private	Negative *	None **	Positive ***
2. Context: politically steered or not	None	Negative	Positive
3. Position: management or policy	None	Positive	None
4. Position: complex or not	None	Negative	Positive
5. Experience with performance measurements	None	None	Positive
6. Quality of functioning of colleagues	None	Negative	Positive

* Within the model in which the specific nature of the public sector is central, a negative association between the type of sector (public versus private) and the views on the applicability of performance measurement is expected.
** Within the model in which a technical rational perspective is central, it does not matter for the opinion about the applicability of performance measurement whether one refers to the public or the private sector as such.
*** From the public choice model in which personal and or organizational interests are central it may be expected that especially in the public sector, most proponents of performance measurement can be found.

3.3 The data

The data used for testing the six hypotheses are from a survey carried out in 2010 by the Dutch Ministry of the Interior and Kingdom Relations in the so-called Personnel and Mobility Monitor (MWM2, 2010). All government sectors are involved in the sample of 80.000 employees, of whom 26.876 completed the questionnaire. No elected officials are included. This resulted in a response rate of 34%, varying by sector between 27% and 38%. The characteristics of the Dutch public sector and the sample with the corresponding response rates are presented in Table 3.2.

TABLE 3.2: Sample statistics

	Population	Sample	Response	Response (%)
Total public sector	**855.454**	**80.000**	**26.876**	**34**
Government	***288.865***	***28.500***	***10.596***	***37***
Central government	116.280	10.000	3.841	38
Local government	148.933	9.000	3.354	37
Provinces	11.098	4.000	1.383	35
Legal authorities	3.393	1.500	562	37
Water Boards	9.161	4.000	1.456	36
Education and science	***438.911***	***38.500***	***12.414***	***32***
Primary education	162.131	9.000	2.953	33
Secondary education	88.574	8.000	2.990	37
Secondary vocational education	47.446	5.000	1.553	31
Higher professional education	35.345	5.000	1.612	32
Universities	45.181	5.000	1.469	29
Public research institutes	2.152	1.500	409	27
University Medical Centers	58.082	5.000	1.482	29
Security	***127.678***	***13.000***	***3.866***	***30***
Defense	67.879	7.000	1.980	28
Police	59.799	6.000	1.886	31

Source: MWM2 (2010: 22).

A control group consisting of 2.586 respondents from the private sector (ranging from Agriculture and Fisheries, Industry, and Trade and Construction to Health and Welfare), with a response rate of 42%, also completed the questionnaire. This control group was included in the analysis. The questionnaire received by the samples in the public and private sectors consists of clusters. In these clusters, respondents answered questions about their personal background; the content of their jobs, mobility, and employability within the organization; job satisfaction; working conditions; opinions about public service motivation; performance-related interviews with managers; and the degree of integrity of their colleagues. A number of items from the questionnaire were used for this study. The indicators for the variables from the six hypotheses are shown in Appendix 3.1. These indicators are the questions as asked in the survey.

For the dependent variable, the question that is indicative asked to what extent one's performance is readily measurable. The variable was dichotomized, in view of the multivariate analysis into respondents who (completely) agree or (completely) disagree with the extent to which their performance was readily measurable.

Also, with respect to the independent variables, we decided to dichotomize the answers to all of the indicators in light of the analytical method used.

For the purpose of testing the first hypothesis, the answers from officials from the public sector are compared to those from the private sector. This comparison is based on the responses of the respective respondents to the question of the applicability of performance measurement.

For the second hypothesis, a distinction is made between organizations with politicians at the top (central government, provinces, municipalities, and water boards) and those that are at some distance from politics (other sectors).

The answers to the variable associated with the third hypothesis—nature of work—were dichotomized to management or policy positions. This is the distinction between, for example, officials mainly involved in administration, management, control, ICT, and finance on the one hand and those conducting policy, policy analysis and research, policy development, communication, implementation, etc. on the other.

The independent variables "complexity of the work" (associated with hypothesis 4) and "quality of functioning" (associated with hypothesis 6) are dichotomized into (completely) disagree and (completely) agree.

Finally, the variable associated with hypothesis 5—experience with performance measurement and management—was determined by two indicators. The first indicator is the question whether the work results of the respondents were discussed during the performance review with their supervisor. This indicator is dichotomized into whether or not one's performance was discussed and whether or not concrete agreements about goals were made. The second indicator is the question whether the respondents have had a formal performance review in the past 12 months. This was already a dichotomy in the questionnaire.

These indicators are used in the next section to regress the opposite attitudes toward the applicability of performance measurement. We use cross tabulation in the case of each separate hypothesis, and multivariate binary logistic regression in the case of testing hypotheses 2 to 6, in a multivariate way.

3.4 Results

This section describes the outcomes of the empirical testing of the hypotheses presented. To begin, we consider whether there are significant differences between the private and public sectors when it comes to the opinion on the applicability of performance measurement and whether this view is dependent on the sector in which individuals operate, the type of position they hold, their experience with performance targets, and their opinion of their own performance vis-à-vis that of their colleagues. Subsequently, the aim is to conduct a multivariate logistic regression in order to determine whether the bivariate relations between the independent variables and the opinions about performance management hold when controlled for the influence of other variables. In addition, we will consider whether there is a negative or positive correlation between the indicators and opinions about the applicability of performance measurement.

Before we address those hypotheses, we first discuss how the respondents in the public sector judge the applicability of performance measurement. Table 3.3 displays the results of attitudes toward the applicability of performance measurement of all 26.876 respondents.

TABLE 3.3: Attitudes toward the applicability of performance measurement

My performance agreements are well measurable	Frequency	Percentage
Strongly disagree	1.100	4.1%
Disagree	4.153	15.5%
Neither agree not disagree	5.813	21.6%
Agree	10.445	38.9%
Strongly agree	2.931	10.9%
Do not know/not applicable	2.334	9.1%
Total	*26.876*	*100%*

Table 3.3 shows that most respondents (modus) have positive attitudes toward the measurability of performance: the majority (38.9%) of respondents agree with the possibility of measuring their performance objectives, which is 2.5-fold more than the number disagreeing with the applicability of performance measurement. Only 4.1% of the respondents indicated that they totally disagreed with the applicability of measuring their performance objectives, while 10.9% totally agreed.

The first question is whether there is variation between workers in the private and public sectors. Our first model resulted in the expectation that in the private sector a greater share of officials would be in favor of performance measurement. This seems apparent, but it does not show in reality. In Table 3.4, the attitudes of respondents toward the applicability of performance in both public and private sectors are presented.

TABLE 3.4: Attitudes toward the applicability of performance measurement (Public Sector—Private Sector (N = 29,462*)

My performance agreements are well measurable	Strongly agree	Strongly disagree	Total
Public sector	13.376 49.8%	13.500 50.2%	26.876 100%
Private sector	1.216 47.0%	1.370 53.0%	2.586 100%
Total	14.592 49.5%	14.780 50.5%	29.462 100%

*N = 29.462 of which 26.876 respondents from the public sector and 2.586 respondents from the private sector.
$\chi^2 = 7.120$, $a = 0.008$.

This table shows that on average there is little variation between respondents in the private and public sectors in regard to their views on the applicability of performance measurement; however, employees in both sectors are sharply divided on the issue of whether their results are readily measurable, which is the opposite of what might have been expected according to the first model. A relatively larger proportion of workers in the private sector than in the public sector is skeptical about the applicability of performance measurement of their functioning. Perhaps the differences in views on applicability can be explained by differences in the extent to which employees interpret their own interests. Our second model argues that being under a slightly higher risk of dismissal in the private sector might affect views on the application of performance measurement, which could be seen as dangerous.

Within the public sector significant differences are seen. Table 3.5 distinguishes different governmental sectors with regard to opinions about the applicability of performance measurement (The answer to the statement: “My performance agreements are well measurable”).

TABLE 3.5: Attitudes toward the applicability of performance measurement: By government sector

My performance agreements are well measurable	(Totally) agree Amount of respondents	Percentage
Provinces	881	63.7%
Water Boards	877	60.2%
Local government	1.811	54.0%
Central government	2.047	53.3%
Higher professional education	854	53.0%
Universities	765	52.1%
Police	977	51.8%
University Medical Centers	675	47.3%
Public research institutes	190	46.5%
Primary education	1.315	44.5%
Defense	870	43.9%
Legal authorities	244	43.4%
Secondary vocational education	658	42.4%
Secondary education	1.212	40.8%
Total	*13.376*	*49.8%*

$\chi^2 = 436.863$, $a = 0.000$.

From this table, it can be seen that within the public sector, wide variations exist with respect to the applicability of performance measurement. For example, officials in the most classic organizations (provinces and water boards) are very positive about the applicability of performance, with percentages of 63.7 and 60.2, respectively, just below which are the employees of municipalities and central government. These four organizations are all controlled directly by politicians. In contrast, officials in typical operational services such as education, the judiciary, defense, and research institutions are the least positive. This outcome supports our third model.

The three models also have different expectations about the extent and direction of the relationship between opinions on the applicability of performance measurement and the nature of the position held by respondents. Especially in the second model, performance measurement is primarily seen as a management tool and thus from this model it can be predicted that officials in managerial positions would be more positive about this than respondents with a policy position.

TABLE 3.6: Opinions about the applicability of performance measurement: Based on nature of the position

My performance agreements are well measurable	(Totally) agree	(Totally) disagree	Total
Management position	5.509 51,8%	5.122 48,2%	10.631 100%
Policy position	6.285 47,4%	6.978 52,6%	13.263 100%
Total	11.794 49,4%	12.100 50,6%	23.894 100%

$\chi^2 = 46.386$, $a = 0.000$.

Table 3.6 shows the results of the distinction between management and policy positions with respect to the opinions about the applicability of performance measurement.

Respondents in management replied as expected according to the second model. Indeed, such respondents were slightly more positive about the applicability of performance measurement than policy personnel (respectively, 51.8% and 47.4%), but although the differences are statistically significant they are minor.

Also, the three models have different expectations in regard to the extent to which the applicability of performance measurement is due to the complexity of the position. According to the first model, this should not matter and according to the second model, a negative relationship is expected. After all, the more complex the job, the more difficult, by definition, the measurement of performance. Finally, according to the third model, a positive relation is expected, because it is precisely in such complex positions that uncertainty is greatest and performance measurement could be used to inform others that one is performing well. Whether there is a significant relation and in which direction is shown in Table 3.7.

TABLE 3.7: Opinions about the applicability of performance measurement: Based on complexity of the position

My performance agreements are well measurable	(Totally) agree	(Totally) disagree	Total
No complex position	6.557 46.3%	7.612 53.7%	14.169 100%
Complex position	6.818 53.7%	5.886 46.3%	12.704 100%
Total	13.375 49.8%	13.498 50.2%	26.873 100%

χ^2 = 146,368, *a* = 0.000.

This table illustrates that respondents with a complex position are more in favor of the applicability of performance measurement than those with a less complex position (respectively, 53.7% and 46.3%). This is in line with the third model.

TABLE 3.8: Opinions about the applicability of performance measurement: Based on experience with performance agreements

My performance agreements are well measurable	(Totally) agree	(Totally) disagree	Total
No concrete arrangements	4.598 33.3%	9.209 66,7%	13.807 100%
Concrete arrangements	8.778 67.2%	4.291 32,8%	13.069 100%
Total	13.376 49.8%	13.500 50.2%	26.876 100%

χ^2 = 3.079,916, *a* = 0.000.

Another reason why respondents are positive about the applicability of performance measurement may lie in their practical experience with working arrangements. Our opinions are often simply driven by experience. Sometimes very specific working arrangements are made during performance reviews, sometimes not. Depending on this, the opinion of respondents could vary. In particular, in our third model, this is expected. Whether that is the case, can be seen in Table 3.8.

Respondents with practical experience of making performance arrangements are indeed more positive about the applicability of performance measurement than respondents without such experience (67.2% and 33.3%, respectively).

Finally, opinions on the adequacy of performance measurement could result from the review of one's own performance against that of colleagues. In our first model, this would make no difference. According to the second model, increased performance measurement would be necessary if the organization functions poorly. According to the third model, it would be desirable to apply performance measurement just to make clear that the organization is functioning properly. Table 3.9 shows which models have empirical support.

TABLE 3.9: Opinions about the applicability of performance measurement: Based on opinion about the functioning of the organization

My performance agreements are well measurable	(Totally) agree	(Totally) disagree	Total
Positive about functioning of colleagues	11.262 50.7%	10.937 49.3%	22.199 100%
Negative about functioning of colleagues	2.114 45.2%	2.563 54.8%	4.677 100%
Total	13.376 49.8%	13.500 50.2%	26.876 100%

$\chi^2 = 47.292$, $a = 0.000$.

The first issue to be remarked upon in Table 3.9 is that only a relatively small percentage of the respondents (17.4%) is negative about the performance of colleagues. Within this group of respondents, a smaller percentage is positive about the applicability of performance measurement (45.2%). Respondents with a negative opinion on the performance of colleagues in the organization are also negative about the applicability of performance measurement, although the differences are minor. This again conforms to the expectations of our third model. The vast group of respondents positive about the performance of colleagues (n = 22.199 or 82.6%) is deeply divided. The differences among this segment of the respondents are minor (50.7% vs. 49.3%).

While providing insightful results, the bivariate comparisons made above do not paint a complete picture because the significance of bivariate relationships can change when controlling for other variables.

In Table 3.10, the results of a logistic regression are presented for all the independent variables which, in the bivariate analysis, proved to have a significant effect on opinions toward the usefulness of performance measurement. This table shows the odds ratio and the significance thereof. The significance indicates whether an explanatory factor contributes significantly to the explanation of the differences in views among officials about the applicability of performance measures in their sector or whether this could have resulted by chance. The odds ratio (exp. B) indicates the direction in which the relation is heading: if lower than 1.0 the relation is negative, if higher than 1 the relation is positive. The independent variables in the table from top to bottom are ordered by the degree of influence: the higher the more "important" its impact.

TABLE 3.10: Multivariate explanation of opinions about the applicability of performance measurement

Independent variables	**Sig.**	**Exp(B)/Odds ratio**
Experience with performance measurement	0.000	3.653
At least one performance review last year	0.000	1.541
Complexity of work	0.000	1.379
Political context	0.000	1.209
Quality of work by colleagues	0.000	1.160
Nature of work: management position	0.002	1.094
Constant	0.000	0.252

Presented are the outcomes of the logistic regression.
Nagelkerke R^2 = 0.165, N = 23.890.

Table 3.10 shows that the impact of all factors in a multivariate analysis remains significant and continues to affect opinions on the applicability of performance in the public sector, even when controlled for the impact of the other factors. Especially among officials with experience in concrete work arrangements, there are many positive judgments about the applicability of performance measurements. This table also shows that officials dealing with more complex tasks, those working in a political context, those with positive views about the performance of their colleagues, and those in managerial positions are more positive about the applicability of performance measurement. Among those with experience in concrete work arrangements, with at least one formal interview in the previous year, functioning in a political context, working in managerial positions, and with positive judgments about the performance of their colleagues, the majority are positive about the applicability of performance. Among policy officials who do not meet these characteristics a minority are positive about the applicability of performance measurement. This is the interpretation of the outcomes of Table 3.10. The main explanation for opinions about the measurability of one's own performance is found in the concrete experience of working arrangements. Performance measurement is clearly much more applicable according to officials as they already have to deal with specific agreements in their daily work; they are more positive than officials with no concrete performance agreements. Having a regular formal performance review with a manager ensures that officials are more positive about performance measurement. This is especially consistent with our third public choice model stressing the interests of the organization.

3.5 Discussion

Every empirical study involves limitations, as does this study. Caution with respect to results is usually warranted, and that is the case in the present study. The conclusions are based on a secondary analysis of data gathered for other purposes. Data collection via a self-administered questionnaire is assumed to have resulted in less bias. The risk of social desirability in answering questions was reduced by the utilization of this type of self-administered questionnaire. Personal, one-on-one interviews with officials would probably have resulted in more social desirability effects (Lako & Rosenau, 2009).

This article reported on the applicability of performance management in the public sector from the perspective of public officials. The latest research shows that in 2010 the views held among officials about the applicability of performance measurement at work were more positive than might be expected based on theories that emphasize the complexity of the nature of the public sector. This would be markedly different from the private sector in that performance measurement in the public sector is undesirable and unfeasible. This theory was developed in this article as one of the three possible frameworks within which the opinions on performance measurement can be explained. The hypotheses ensuing from this framework are, however, not supported by the outcomes of the empirical analysis. The percentage of officials supporting performance measurement in the public sector is actually higher than that in the private sector. It is also evident from our analysis that the public sector cannot be seen as a coherent whole in this regard.

From an alternative theoretical framework (e.g., from a model in which substantive, technical, and rational considerations of the possibilities of the applicability of performance measurement are central), performance measurement would certainly be possible for less complex positions in nonpolitical environments, and necessary if there is poor quality in the positioning within the organization. This model, however, also gains little support in the empirical analysis.

What is clear from the outcomes of this research is the following: officials who are positive about the applicability of performance are found particularly in organizations that are controlled directly by politicians (municipalities, provinces, water boards, and local government), by individuals in complex managerial positions, those having positive judgments about the quality of the performance of colleagues within their organization, and those who have experience with performance management.

This is in line with our third theoretical model—the public choice model. In this model, it is assumed that officials who support the application of performance measures in their work are likely to see it as a tool that can be used to their own advantage, and which is in the interest of their organization. This so-called public choice model gets most support in this study. This model is able to explain why officials who are most affected by so-called bureaucrat bashing, namely those in municipalities, provinces, water boards, and central government, are significantly more positive about the applicability of performance measurements, especially when they carry out complex work; and their colleagues also perform well. They see this as a desired tool to “prove” to the hostile outside world that they work hard, effectively, and efficiently and meet their objectives.

The resulting conclusion is that the framework from which the potential of performance management and performance measurement in the public sector is assessed may need adjustment, and corroborates the findings from De Lancer, Jules & Holzer (2001). From the point of view of public officials favoring its use, the instrument of performance measurement could be very useful to reverse the negative image of the public sector. More research is needed to verify whether that adjustment of the interpretive framework with appropriate measures actually contributes to a better image. This plea for more research is even more understandable against the background of an increase in bureaucrat bashing.


4

Proud to be a public servant? An analysis of the work-related determinants of professional pride among Dutch public servants

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4.1 Introduction

Through history, academics and practitioners have been intrigued by the measurement of public servants' effectiveness and efficiency (Wilson, 1887; Dunsire, 1973; van Dooren, Bouckaert, & Halligan, 2015). The classic narrow focus on solely the rational and technical competencies of public servants to reach high performances (Weber, 1919) changed throughout the years toward a broader focus that also considers the importance of stimulating organizational factors (Gulick & Urwick, 1937), and most recently also psychological factors such as job satisfaction, affective commitment and Public Service Motivation (PSM) for the performances of public servants (Pandey & Stazyk; 2008; Leisink & Steijn, 2009).

Besides these existing psychological factors, the new concept professional pride gained increasing attention within several governmental HRM departments across the world such as the United States, United Kingdom, Canada and the Netherlands (Lavigna, 2013; Cotton, 2012; Kernaghan, 2011; Jansen, Brink, & van den Kole, 2010). A proud public servant is defined as someone who works honourably, conscientiously and with dedication and makes use of his or her education, knowledge, experience and professional ethics to reach this state (Vermeeren & van Geest, 2012: 316). An important reason for the current attention for professional pride is that the process of preserving the pride among public servants is difficult since a large group of governmental critics, including politicians and some media, portray public servants (i.e., "nameless and faceless bureaucrats") as overpaid and underworked (Jansen et al., 2010; Lavigna, 2013).

Professional pride is an important dimension of work engagement. Several empirical studies in the private sector show that it has important effects on extra-role performance (Sulea et al., 2012) and in-role performance (Chugtai & Buckley, 2011). Although public servants pride has several positive effects, it is not instantly apparent which instruments help to stimulate pride.

Quantitative studies aimed at work engagement and inherently professional pride do analyze several determinants of pride, but they particularly use the Job Demands-Resources (JD-R) model from the psychological sciences (see for a meta-analysis Halbesleben, 2010). They are mostly focused on private sector samples. The JD-R model is aimed at the work environment and work-experience of employees which are hard to influence by the organization. Recently, Albrecht, Bakker, Gruman, Macey, & Saks (2015) therefore opted to extend the analysis by testing the influence of actual human resource management (HRM) instruments on indicators of engagement such as professional pride. Typical HRM instruments are the high performance work practices (HPWPS) such as employee benefits and training (Boselie, 2005).

Scholars argue that employee benefits including high wages, short working hours, and fringe benefits do not affect the attitudes and behavior of public servants due to their extrinsic nature (Buelens & Van den Broeck, 2007; Lyons, Duxbury, & Higgins, 2006; Houston, 2000). It is argued that public servants are especially motivated by the intrinsic rewards of work providing feelings of accomplishment (Houston, 2000). However, these scholars also show that employee benefits including job security and work-life balancing benefits do have a large significant effect on the motivation of public servants (Buelens & Van den Broeck, 2007; Houston, 2000). Whether these employee benefits, and other HRM practices, influence professional pride have barely been tested in the private sector, let alone in the public sector (Albrecht et al., 2015). In other words, HRM practices might be practical instruments through which HR directors can directly influence public servants' professional pride and even more important their performance.

This study uses a big quantitative dataset which can be used to develop a comprehensive model in which the JD-R model and the HRM taxonomy are combined to explain the determinants of public professional pride. The accompanying research question is: What exactly is the professional pride of public servants and what are its determinants? Before dealing with the second part of the question, Section 4.2.1 describes what is known in the relevant literature about the significance of public professional pride. In section 4.2.2 an overview will be given of the JD-R model and the HRM taxonomy. It leads to the creation of hypotheses to be tested in the study. Section 4.3 presents the data material that are used to test the various hypotheses. The results of the outcomes of the analysis are presented in Section 4.4 before subsequently ending with a discussion in Section 4.5 and a conclusion in 4.6.

4.2 Theory

On the basis of scientific literature a definition of the term professional pride is formulated (4.2.1). At the same time an inventory is made of the determinants which might make public servants proud of their profession (4.2.2).

4.2.1 Professional pride: conceptual framework

Jansen et al. (2010) noticed that increasingly more attention seems to be devoted to the professional pride of public servants. In the field of public psychology, pride is broadly defined as possessing a certain feeling of status or respect, for oneself but also for others (Kernaghan, 2001: 69). It is a certain emotion that actually gives rise to positive feelings. Jansen et al. (2010: 15) even took it a step further when they defined pride as the process of self-consciously publicly supporting an achievement or quality of your own, or of someone to whom you feel closely allied, simply because you believe that its value deserves broader recognition. Viewed in this perspective, pride has a close connection to another complex concept, namely 'honor', a trait with which it is often compared.

Honor is something that Jansen et al. (2010:15) defined as the placing of high demands upon an individual's own actions so that in the eyes of others they gain a certain worth. As is clearly apparent from the broad definitions, these two concepts display certain evident similarities. As a matter of fact, both terms have very much to do with people's intrinsic qualities. If a person is proud or feels honored, then that infuses him or her with a degree of intrinsic motivation. However, pride and honor are two very different concepts. Feelings of honor contribute to a striving towards certain behavior whilst pride is much more a state of mind that leads to honor and inherently certain behavior. An employee who is proud of his or her profession is therefore someone who works honorable, conscientiously and with dedication and makes use of his or her education, knowledge, experience and professional ethics to reach this state (Vermeeren & van Geest, 2012: 316). Those who take pride in their profession are – so it is presumed – satisfied with their work because it is important and has significance, because it represents quality and is expertly executed in all good conscience (Jansen et al, 2010: 14).

Kernaghan (2001) applies pride specifically to the public sector and he distinguishes the various aspects that can endow public servants with feelings of pride. According to him these aspects range from a narrow focus on pride in oneself and one's team through pride in one's organization and in the public service as a whole to a broad focus on pride in one's country. The current study focuses on the narrow definition of pride to which Kernaghan refers. The presence of pride among public servants in their profession and the organization for which they work is examined. In other words, the degree in which someone works honorable, conscientiously and with dedication for his or her organization. In this study the following proposition is therefore be used to test the construct pride empirically: I am proud of the fact that I work for <<sector>> (for instance, the central government or a municipality).

A question which remains prominent is what the relationship is between pride and other positive psychological concepts such as organizational commitment (Meyer & Allen, 1991), Public Service Motivation (Pandey & Stazyk; 2008; Leisink & Steijn, 2009), and job satisfaction (Cantarelli, Belardinelli, & Belle, 2016). Studies focusing on work engagement and inherently pride showed that commitment with the organization, job satisfaction and Public Service Motivation are job attitudes which work in tandem to produce organizational outcomes (Albrecht et al., 2015, Perry & Vandenabeele, 2015). Lavigna (2015) argues that public organizations should recruit and retain employees who have a high degree of PSM and then build on that gene to drive high levels of engagement and inherently pride. Bakker (2015) also concludes that PSM may strengthen work engagement because public servants with high levels of enduring PSM find their work important and meaningful. Public servants with PSM are therefore likely to invest their resources in public service work and keep them engaged. Ten Brummelhuis & Bakker (2012) therefore conceptualize PSM as the key psychological resource which stimulate engagement and inherently pride. This, in turn, can lead to higher performances, commitment, and job satisfaction.

4.2.2 The determinants of professional pride

Public servants pride is important for employee outcomes and, to discover how professional pride can be stimulated, it is important to know what factors influence professional pride. In order to build a comprehensive model, the High Performance Work Practices (HPWPS) taxonomy from HRM (Posthuma, Campion, Masimova, & Campion, 2013) and the JD-R model from vocational psychology (Bakker & Demerouti, 2014) are combined as possible determinants of public servants pride. As mentioned in the introduction, while the JD-R model is focused on the work environment and work experience of employees, the HPWPS taxonomy is focused on concrete instruments. Albrecht et al. (2015) theorized that a combination might have a positive effect on work engagement and inherently pride. Bakker & Demerouti (2014) argue that the effects of these determinants might depend on the specific occupation under consideration. The specific circumstances of public servants will therefore be taken into account by the application of these models.

HPWPS taxonomy

The HPWS approach is one of the most commonly used HRM approaches to increase job performance (Boselie, 2005). The HPWPs taxonomy makes a distinction between five key high-performance work practices (Albrecht et al., 2015; Boselie, 2005): (1) selective recruitment and selection, (2) employee benefits, (3) appraisal and performance management, (4) training and development and (5) employee involvement and socialization. The approach builds on the notion that individual HPWPs can have a positive effect, but bundling these practices with each other will be even more successful (Boselie, 2005). Unfortunately due to the data, the first HPWP selective recruitment cannot be integrated into the model.

Employee benefits

In the two-factor theory (Herzberg, Mausner, & Snyderman, 1959) a differentiation is made between two kinds of factors, those that are intrinsic (e.g., the content of the job) and those that are extrinsic (such as employee benefits), that can have an influence on employee behavior. Theories such as the Cognitive Evaluation Theory (Deci & Ryan, 1985) and the Attribution Theory (Lepper, Greene, & Nisbett, 1973) show that extrinsic factors have a negative effect on intrinsic factors. One might therefore expect that employee benefits (extrinsic) have a negative effect on pride (intrinsic) as well. More recent theories such as the General Interest Theory (Eisenberger et al., 1999) and the Self-Determination Theory (Gagné & Deci, 2005) show however that basic needs in the work circumstances need to be fulfilled before someone can even be motivated or proud. Still, it is argued that public servants are more motivated by the intrinsic rewards of work which provide feelings of accomplishment instead of extrinsic motivators (Houston, 2000; Buelens & Van den Broeck, 2007). One might therefore expect that extrinsic benefits have a small positive significant effect on pride.

In the literature, a few primary working conditions and many different fringe benefits can be distinguished. The most common primary working conditions distinguished in earlier studies in public administration are good wages, satisfaction about the number of hours worked (part-time/fulltime) and tenure (Buelens & Van den Broeck, 2007; Caillier, 2013). Besides primary working conditions, several fringe benefits that emerged from the literature can be classified as working time arrangements (e.g., flexible work hours and teleworking), leave arrangements (e.g., paid parental leave, Childcare), financial arrangements (e.g., pension plan, collective healthcare), education and training arrangements (training facilitation through time and money), and arrangements for career support (e.g., job rotation and project work, support by a career coach). The following hypothesis can be stated:

H1: Primary and secondary working conditions have a significant positive effect on public servants pride.

Appraisal and performance management

Several scholars suggest that performance management is an important determinant of employee engagement and inherent professional pride (Albrecht et al., 2015; Gruman & Saks, 2011; Mone & London, 2010). According to Lavigna (2013), to be fully engaged, public servants need to understand what their roles, responsibilities and expectations are; receive consistent feedback on their performance; and be encouraged and supported as they strive to develop their capabilities. However, there are constraints on incentive structures in the public sector. This possibly makes performance management more a negative reinforcing instrument ("a competitive, adversarial and punitive ethos") than a motivating HRM instrument (Diefenbach, 2009: 905). Public servants have more pride when the public relies upon their professionalism and discretion, rather than upon measurable superficial activities (Jansen et al., 2010). Another argument is that performance management is frequently hard to apply because public servants have to deal with unique problems (Jansen et al, 2010). However, Borst, Lako, & de Vries (2012) argue that public servants might see performance measurement as a very useful instrument to reverse the negative image of the public sector. Public servants favoring performance measurement might be proud to show the results of their work. The following hypothesis can be stated:

H2: The perception of the applicability of performance measurement has a positive significant effect on public servants pride.

Training and development

What has emerged from research is that 'career development opportunities' are viewed by public servants as important for the cultivation of pride (Vermeeren & van Geest, 2012: 323).

One well-known career development opportunity is, for instance, the possibility to attend a work-related training. Evidence shows that employees can develop their personal resources through training and development which, in turn, influences work engagement and inherently pride (Albrecht et al., 2015; Luthans, Avey, Avolio, & Peterson, 2010). However, Borst, Lako, & de Vries (2013) concluded that attending a work-related training actually had relatively little effect on positive job attitudes such as work satisfaction and Public Service Motivation of Dutch public servants (Borst et al., 2013). One may therefore question whether receiving work-related training really may be viewed as an important determinant of public servants pride. However, on the basis of the scarce empirical studies performed within the public sector, one can expect that a positive correlation exists between career development opportunities and pride (Vermeer & van Geest, 2012; Borst et al., 2013). The discussion leads to the following hypothesis:

> *H3: The attendance of a work-related training has a significant positive effect on the pride of public servants.*

Employee involvement and socialization

Especially new hires, when they enter an organization, are typically excited about their new job and organization but also have feelings of uncertainty and anxiety (Albrecht et al., 2015). To keep newcomers proud, it is necessary to let them feel worthwhile, useful, valuable and not taken for granted (Albrecht et al., 2015). To be involved by colleagues in the execution of tasks in combination with the increasing influence in the organization probably might make public servants proud (Albrecht et al., 2015; Gunter & Furnham, 1996; Vermeeren & van Geest, 2012). The following hypothesis can be stated:

> *H4: Being involved by colleagues in the execution of tasks has a significant positive effect on the pride of public servants.*

Factors from the JD-R model

According to the JD-R theory, all working environments or job characteristics can be modeled using two different categories, namely job demands and job resources. Job demands are defined as those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort and are therefore associated with certain physiological and/or psychological costs (Schaufeli & Bakker, 2004). Job resources refer to those physical, psychological, social, or organizational aspects of the job that either/or (1) reduce job demands and the associated physiological and psychological costs; (2) are functional in achieving work goals; (3) stimulate personal growth, learning and development (Schaufeli & Bakker, 2004).

Recently, Xanthopoulou, Bakker, Demerouti, & Shaufeli (2007) extended the early JD-R model by including personal resources. Personal resources are defined as the psychological characteristics or aspects of the self that are generally associated with resilience and refer to the ability to control and impact one's environment successfully (Schaufeli & Taris, 2014). Since this study is especially interested in how to stimulate pride, it is only focus on job and personal resources.

Job resources

Several studies revealed that social support, supervisory coaching and feelings of job security[11] may instigate a motivational process leading to work engagement and inherently pride (e.g., Schaufeli & Taris, 2014). First, supportive colleagues, for example, satisfy the basic need of relatedness (Schaufeli & Taris, 2014). A good relation with colleagues is also functional in achieving work goals which gives feelings of purpose and meaningfulness (Bakker & Demerouti, 2008). Secondly, supervisory coaching also helps with attaining feelings of purpose, optimism and self-esteem (Bakker & Demerouti, 2008). Finally, in an insecure job situation, an employee perceives a discrepancy between the level of job security he or she desires and the level that his or her employer offers. Accordingly, this discrepancy or person– job misfit is likely to contribute to lower work engagement and inherently pride (Mauno, Kinnunen, Mäkikangas, & Nätti, 2005). Job security might in other words contribute to a sense of pride.

Summarized, through the achievement of work goals or the satisfaction of basic needs by the above mentioned job resources, an intrinsic positive work-related state of mind (i.e., professional pride) is stimulated (Bakker & Demerouti, 2007). This, in turn, can lead to higher performances and other positive job attitudes (Bakker & Demerouti, 2007).

> *H5: The job resources social support, supervisory coaching, and feelings of job security have a significant positive effect on the pride of public servants.*

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11. As Mauno et al. (2005) show there is a difference between the effects of objective job security (permanent contract/fixed-term contract) versus subjective job security (perceived job security) on work engagement and inherently pride. The objective version is more an instrument and is therefore characterized as part of the HPWP taxonomy while the subjective version is more likely to say something about the experience of the work situation by the employee and is therefore characterized as part of the JD-R model.

Personal resources

Three personal resources which have not been studied within the JD-R model but might be specifically interesting within the public sector are Public Service Motivation (PSM), optimism about the image of public servants, and occupational expertise. First, occupational expertise refers to the personal qualities and capabilities that are needed to reach given attainments (Van der Heijden, 2000). Occupational expertise might be especially important in the increasing demanding work environment of public servants nowadays (Cantarelli et al., 2016). It might be expected that public servants remain proud within an era of doing more with less means if they have enough occupation specific expertise to keep doing their job.

Secondly, Haque (2001) argues that the pride of public servants partly depends on their appreciation or recognition from the general public. As shown before, the prevailing image of public servants tends to be a negative one. Public servants are often portrayed as lazy and inhuman individuals (Waterman, Rouse, & Wright, 2004: 7). Their critics also accuse them of being nameless and faceless bureaucrats (Lavigna, 2013). All these prejudices converge in the activity known as 'bureaucrat bashing' (Goodsell, 2000). Despite the critics, Haque (2001) also showed that the pride of public employees also partly depends on their own view of the public service in terms of its social status and public respect. Psychological research shows that people invariably have a different idea of how they are perceived by others than is the case in reality (Gioia & Thomas, 1996; Gioia, Schultz, & Corley, 2000). In other words, there is often a discrepancy between how people believe that others see them and the public's actual perception (Haque, 2001: 103). Optimistic public servants might therefore not have the idea that they have a negative image and remain proud of their job.

Finally, PSM refers to the predisposition of individuals to serve the public interest (Perry & Hondeghem, 2008). It is a deep personality trait of individuals who are willing to engage in sacrificial behavior for the good of citizens without reciprocal benefits for themselves (Perry & Vandenabeele, 2015). Many employees enter public service because they are already committed to the mission of government (Lavigna, 2013). PSM is therefore a relatively stable, higher-level individual difference variable that is only subject to slow change (Bakker, 2015). It is seen as a "key psychological resource" (Bakker, 2015: 729) that might drive high levels of engagement and inherently pride (Lavigna, 2015).

> *H6: The personal resources occupational expertise, optimism about image, and PSM have a significant positive effect on the pride of public servants.*

4.3 Methods

4.3.1 Participants

The data used for testing the hypotheses are derived from a survey carried out in 2010 by the Dutch Ministry of the Interior and Kingdom Relations in the so-called Personnel and Mobility Monitor (MWM2, 2010). All government sectors are involved in the sample of 80.000 employees, of whom 26.876 completed the questionnaire. This resulted in a response rate of 34%, varying by sector between 27% and 38%. The characteristics of the Dutch public sector and the sample with the corresponding response rates are presented in Table 4.1.

TABLE 4.1: Sample statistics

	Population	Sample	Response	Response (%)
Total public sector	**855.454**	**80.000**	**26.876**	**34**
Government	***288.865***	***28.500***	***10.596***	***37***
Central government	116.280	10.000	3.841	38
Local government	148.933	9.000	3.354	37
Provinces	11.098	4.000	1.383	35
Legal authorities	3.393	1.500	562	37
Water Boards	9.161	4.000	1.456	36
Education and science	***438.911***	***38.500***	***12.414***	***32***
Primary education	162.131	9.000	2.953	33
Secondary education	88.574	8.000	2.990	37
Secondary vocational education	47.446	5.000	1.553	31
Higher professional education	35.345	5.000	1.612	32
Universities	45.181	5.000	1.469	29
Public research institutes	2.152	1.500	409	27
University Medical Centers	58.082	5.000	1.482	29
Security	***127.678***	***13.000***	***3.866***	***30***
Defense	67.879	7.000	1.980	28
Police	59.799	6.000	1.886	31

Source: MWM2 (2010: 22)

The questionnaire received by the sample consists of several clusters of questions each with a specific theme. In these clusters, respondents answered questions about their personal background, the content of their jobs, mobility and employability within the organization, job satisfaction, working conditions, public service motivation, performance-related interviews with managers, and the degree of integrity of their colleagues. A number of items from the questionnaire were used for this study.

4.3.2 Measures

Most studies focusing on the effects of HR practices use objective and subjective measures (Langevin Heavy et al., 2013). A combination of these forms of measures is also used in this study to test these practices. Studies analyzing the JD-R model mostly use subjective measures since the factors within this model are also focused on the experience of employees themselves. Therefore, subjective measures are used as well to analyze the job resources and personal resources (see Appendix 4.1 for the items of the multi-item scales). The independent variable *Professional pride* was measured with one item (i.e., “I am proud to work for <<my organization>>”) dichotomized into a binary response scale (Proud-Not Proud).

In case of the HPWPs, *Primary and secondary working conditions* were measured with various measures. Income was measured with one item (What is your monthly income?) on a 13-point scale (between less than €2,000 and more than €7,000 gross per month). Objective job security was measured with one item (What kind of contract do you have?) on a dichotomous response scale (fixed-term contract/ permanent contract). Desired number of working hours was measured with one item (Are you satisfied with the amount of hours you work?) on a dichotomous response scale (yes/no). The secondary benefits are measured with one item (Do you use the following fringe benefit?) on dichotomous response scales (I use them/I do not use them). *Applicability performance measurement* was measured with six items (e.g., “My performance agreements are well measurable” and “My performance agreements are realistic”) on a 5-point Likert scale (totally disagree-totally agree). The reliability analysis shows a good scale reliability (α = 0.75). *Work related training* was measured with one item (Did you follow a work-related training last year?) on a dichotomous response scale (yes/no). *Employee involvement* was measured with one item (In my job, colleagues ask me for advice when the work becomes complicated) on a 5-point Likert scale (totally disagree-totally agree).

In case of the JD-R model, *Social support* was measured with eight items (e.g., "My colleagues take no responsibility for the results of their work", and "my colleagues cut corners in their work") on a 5-point Likert scale (totally disagree-totally agree). The reliability analysis shows good scale reliability (α = 0.93). *Supervisory coaching* was measured with one item (how satisfied are you with the conversations with your supervisor?) on a 5-point Likert scale (totally dissatisfied-totally satisfied). *Feelings of job security* was measured with six items (e.g., "I am confident that I can continue to work with my employer for a long time" and "I doubt whether I can keep my current job"). The reliability analysis shows good scale reliability (α = 0.80). *Occupational expertise* was measured with one item ("I am confident that I can effectively perform a variety of tasks"). *Optimism about image* was measured with one item ("Most citizens appreciate our work"). *PSM* was measured with 10 items on a 5-point Likert scale (Totally disagree-Totally agree). The scale includes the dimensions of attraction to public policy (APP), compassion (COM), and commitment to the public interest (CPI). A second order three-dimensional construct was developed which showed a good scale reliability (α = 0.74).

Besides these variables, the control variables *age (in years)*, *gender*, *tenure (in years)*, and *educational level (high/low)* are included in the analysis. In addition to the frequently used controls, this study controls for *sector* since the literature shows that bureaucrat bashing is the highest within politically appointed organizations (Haque, 2001). It might therefore be the case that public servants within the public educational sector have a higher professional pride than public servants within politically appointed organizations. In addition, teachers might see their work as a real calling (PSM) to educate children and are prouder on their profession than public servants in politically appointed organizations.

4.4 Results

In this section, the results of the study are presented. First, descriptive statistics and correlations are reported (4.4.1). Then, binary logistic regression is applied by using SPSS Statistics 23 (4.4.2).

4.4.1 Descriptive statistics and correlations

In Table 4.2, means, standard deviations (S.D.), and correlations are reported.

TABLE 4.2: Descriptive statistics and correlations (N=24.328-26.871)

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 Gender (1=male)	0.55	0.498																	
2 Age	47.65	10.39	.17**																
3 Educational level	0.68	1.149	-.31**	-.02**															
4 Tenure	10.03	9.535	.06**	.44**	-.02**														
5 Sector	0.43	0.494	.14**	.04**	-.07**	-.16**													
6 Objective job security	0.94	0.240	.03**	.28**	-.02**	.16**	.12**												
7 Wages	5.33	3.261	.37**	.27**	.13**	-.01	.18**	.14**											
8 Satisfaction hours	0.94	0.238	.02**	.00	-.02*	-.01	.05	.04**	.04**										
9 Applicability performance measurement	3.77	1.159	-.08**	-.11**	.02**	-.06**	-.06**	-.05**	-.02**	.04**									
10 Training	0.60	0.489	.00	-.07**	.01	-.03**	.04**	.01	.04**	.00	.04**								
11 Involvement	3.78	0.742	.12**	.05**	.02**	-.01*	.05**	.09**	.22**	.03**	.05**	.05**							
12 Social support	3.66	0.924	-.04**	.03**	.05**	-.01	-.05**	-.01	.10**	.05**	.13**	.02**	-.04**						
13 Supervisory coaching	3.38	1.167	-.02**	-.03**	-.01	-.05**	.04**	.00	.02**	.09**	.13**	.06**	.02**	.23**					
14 Subjective job security	3.62	1.156	-.04**	-.32**	.06**	-.15**	-.09**	.01*	.12**	.06**	.17**	.10**	.15**	.13**	.12**				
15 Occupational expertise	4.05	0.697	-.04**	-.06**	.03**	-.07**	-.01	-.01	.09**	.01	.13**	.04**	.24**	.06**	.04**	.23**			
16 Optimism about image	3.27	0.959	-.04**	.08**	.02**	.08**	-.17**	-.02**	.00	.04**	.12**	.03**	.01	.14**	.09**	.12**	.07**		
17 PSM	3.60	0.816	-.03**	.11**	.05**	.02**	-.03	.03**	.13**	-.01	.13**	.06**	.17**	.23**	.05**	.11**	.27**	.13**	
18 Pride	0.70	0.459	-.03**	-.05**	.00	-.03**	-.11**	-.03**	.01	.06**	.13**	.06**	.05**	.14**	.15**	.13**	.10**	.28**	.18**

Note: The 11 used fringe benefits are not integrated into the model due to the lack of oversight, they are integrated in the logistic analysis which is used for hypothesis testing
**≤0.01 * ≤0.05

The descriptive statistics show that 55% of the sample is male. The average age is 47.7 years old and on average, respondents have worked for 10 years in their public organization. In addition, 68% of the sample is highly educated and 43% works in one of the governmental organizations (central government, local government, provinces, legal authorities and water boards). Interestingly, 69.9% is proud to work in the public sector and 7.5% is not proud. In addition, 22.6% says not to know whether they are proud or not. In this study, this is interpreted as negative since an employer want to have proud employees due to the positive effect on performances.

The correlations indicate several significant correlations between our central variables. Interestingly, the High Performance Work Practices show significant but relatively low correlations with pride. The job resources and personal resources show relatively high correlations with pride. Especially optimism about image and PSM show relatively high correlations with pride (respectively r = .28 and r = .18)[12]. The social factors social support and supervisory coaching show high correlations as well (respectively r = .14 and r = .15). In addition, while subjective job security has a high positive significant correlation with pride (r = .13), objective job security (Permanent/fixed-term contract) has a small negative significant correlation (r = -.03). This provides some indication that pride is determined by work experience and the work environment and can hardly be influenced by concrete HRM instruments.

4.4.2 Hypothesis testing

To test whether these individual correlations also have a significant effect when they are controlled for the other variables, a multiple logistic regression analysis is conducted. In Table 4.3, the results of the logistic regression are presented for all the independent variables. In model 1, merely the control variables are included. In model 2, the High Performance Work Practices are added and in model 3, the job- and personal resources are added as well. Through this method, the additional value of HRM in the explanation of pride can be distinguished (by comparing the fit measures).

12. These correlations show that pride barely correlates with PSM. The correlation is therefore not alarming to doubt the discriminate validity of pride. This confirms the theoretical assumption that PSM is a different concept from pride (Ten Brummelhuis & Bakker, 2012)

TABLE 4.3: Multiple logistic regression

	Model 1 (control)			Model 2 (HPWPS)			Model 3 (JD-R)		
	β	**Wald sig.**	**Odd's**	**β**	**Wald sig.**	**Odd's**	**β**	**Wald sig.**	**Odd's**
Gender	-.092	.002	.913	-.154	.000	.857	-.067	.057	.935
Age	-.004	.016	.996	-.004	.013	.996	-.013	.000	.987
Educational level	-.073	.023	.929	-.148	.000	.863	-.234	.000	.792
Tenure	-.008	.000	.992	-.006	.000	.994	-.006	.003	.994
Sector	-.535	.000	.586	-.569	.000	.566	-.407	.000	.666
Objective job security				-.074	.282	.929	-.028	.702	.972
Wages				.036	.000	1.037	.027	.001	1.028
Satisfaction hours				.469	.000	1.598	.310	.000	1.363
Flexible work hours				.051	.158	1.052	.068	.075	1.070
Teleworking				-.026	.507	.975	-.090	.029	.913
Sabbatical leave				.026	.674	1.026	.071	.277	1.074
Paid parental leave				.125	.057	1.134	.121	.083	1.128
Collective healthinsurance				-.033	.314	.968	-.033	.394	.968
Work after retirement age				.186	.049	1.204	.151	.136	1.163
Facilitate training through time				-.068	.225	.935	-.150	.011	.861
Facilitate training through money				.050	.370	1.051	.022	.706	1.023
Support by a career coach				.060	.385	1.062	.114	.123	1.120
Childcare				.049	.566	1.050	.061	.502	1.063
Function-roulation and projectwork				-.151	.094	.860	-.048	.616	.953
Applicability performance measurement				.414	.000	1.512	.183	.000	1.201
Training				.189	.000	1.208	.113	.000	1.120
Involvement				.131	.000	1.140	.066	.003	1.068
Social support							.160	.000	1.174
Supervisory coaching							.220	.000	1.245
Subjective job security							.148	.000	1.159
Occupational expertise							.105	.000	1.110
Optimism about image							.579	.000	1.785
PSM							1.148	.000	3.152
	N = 24.328 Nagelkerke R^2 =.023 χ^2 = 384.398 sig .= .000			**N = 23.167 Nagelkerke R^2 = .057 χ^2 = 960.129 sig .= .000**			**N = 23.167 Nagelkerke R^2 =.196 χ^2 = 3457.600** sig. = .000		

As table 4.3 shows, pride can indeed hardly be influenced by HRM instruments. The additional explained variance of pride by HRM instruments above the control variables is only 3.4%. Job- and personal resources from the JD-R model do explain a relatively large amount in the variance of pride (13.9%). Interestingly, sector has a significant effect with pride in all three models. The results show that a much smaller number of public servants within governmental organizations are proud than public servants from public education and security.

Hypothesis 1-4 express the theoretical expectations that the relationships between HRM instruments and pride are positive. Hypothesis 1 expected that primary and secondary working conditions have a positive effect on professional pride. Merely the primary working conditions wages and satisfaction with amount of hours worked have a positive significant effect on pride. The results show that fringe benefits have no significant effect on pride. Hypothesis 1 is therefore rejected. Hypothesis 2-4 are confirmed by the data. As expected, the applicability of performance measurement, the attendance of work related training and the involvement in the organization have a positive significant effect on pride.

Hypothesis 5 and 6 express the theoretical expectations that the relationships between Job- and personal resources and pride are also positive. The results indeed confirm that these resources have a positive significant effect on pride. Especially the personal resources PSM and optimism about the image of public servants have a positive significant effect on the pride of public servants.

4.5 Discussion and implications

The results of the present study show that factors from the Job Demands-Resources model are the most important determinants of public professional pride. Three factors from the work environment (i.e., job resources) including social support, supervisory coaching, and perceived job security all have a positive relation with the professional pride of public servants. Since only these three factors from the work environment are studied (contributing to only a small part of the explanation of pride), it might be interesting to further study the processes in this environment affecting pride. Recent public administration research into the importance of ethical leadership for several outcomes in the public sector might for example be interesting to combine with this psychological research into the pride of public servants. Especially since this study shows that supervisory coaching has positive effects on pride.

Next to the work environment, personal experiences related to the work seem to be the most important factors affecting professional pride. The predispositions of public servants to engage in sacrificial behavior for the good of citizens without reciprocal benefits for themselves (PSM) are very important for being proud to be a public servant. In addition, a much larger amount of public servants within public education and security are proud than public servants from governmental organizations. These results show that public servants who see their job as a real calling (e.g., teachers who educate children and police officers who protect citizens against crimes) are particularly proud.

A practical implication is therefore to focus on the Public Service Motivation of public servants to enhance their pride. Recent research shows that PSM can be stimulated by focusing on PSM already in the personnel selection process, and to use management practices that are supportive of PSM, such as participative leadership and treating employees fairly (Ritz, Brewer, & Neumann, 2016).

Public servants who are optimistic about their image among citizens also seem to be proud at their profession. In other words, public servants who do not experience bureaucrat bashing are proud. This result together with the findings that within politically appointed government organizations a relatively low amount of public servants is proud, underpin the notion that bureaucrat bashing is especially aimed at public servants within government organizations (Haque, 2001).

To keep public servants proud on their profession the focus should therefore be, amongst others, on diminishing the bureaucrat bashing by citizens. In 2012, the president of the United States also said in his speech for Public Service Recognition week that citizens should praise the professional pride and passion of federal, state and local public servants (American Society of Public Administration, 2012). It is indeed important to improve the image and inherently the professional pride of public servants since pride is positively related with the performances and inherent good service provision to citizens (Bouckaert, 2001; Lavigna, 2013; Vigoda-Gadot, Eldor, & Schohat, 2013).

Beyond the findings that respond expressly to the research objective, a number of limitations should be acknowledged. First, several factors in the study, including pride itself, are measured with a single item. Despite the advantages of using validated multiple item scales, this is the cost of using secondary data. Therefore, only four multi-item scales could be used. Secondly, due to the nature of the data, several factors of the HRM and JD-R framework cannot be included either. Thirdly, the study uses a sample of one country, and might not be representative for public sectors of other countries. Despite the limitations of the use of secondary data, the benefits are equally important. The results are in fact based on a representative sample of the complete public sector in the Netherlands. Due to these data relatively certain conclusions can be drawn about the professional pride of Dutch public servants.

4.6 Conclusion

The present study is concerned with investigating the effects of the JD-R model and the HRM taxonomy on public professional pride. The main conclusion is that the professional pride of Dutch public servants can barely be influenced by HRM instruments but is in particular determined by the work environment and personal experiences related to the work (JD-R). This conclusion connotes that pride is a state of mind which can hardly be influenced by extrinsic stimulators. Fringe benefits, for example, do not have any effect on the professional pride of public servants. In addition, applicability of performance measurement and training do have a positive effect on public professional pride but these factors are of relatively lower importance than the work environment such as good relations with supervisors and colleagues, and personal resources including Public Service Motivation and optimism about image. To increase professional pride and inherently the performance of public servants, practitioners should therefore focus on the stimulation of job resources and personal resources of public servants.

PHASE 2

Testing the JD-R theory of work-related well-being


5

Organizational determinants of work engagement: A comparative meta-analysis across the public, semi-public, and private sector

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5.1 Introduction

The concept of work engagement gained increasing attention from (semi-)public organizations across the world including the United States, United Kingdom, Canada and the Netherlands (e.g., Lavigna, 2013; Cotton, 2012; Kernaghan, 2011; Jansen, Brink, & van den Kole, 2010). Despite the recent attention to work engagement in (semi-)public organizations, there is a dearth of research examining work engagement in the public administration literature (Tummers, Steijn, Nevicka, & Heerema, 2016). A greater focus is being placed on rather passive employee attitudes such as job satisfaction and organizational commitment (e.g., Cantarelli, Belardinelli, & Belle, 2016). Different from these passive employee attitudes, work engagement is a positive psychological concept defined as "[…] a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-Romá, & Bakker, 2002: 74). Since employees can be very satisfied and highly committed but still put little effort in their job (Tummers et al., 2016), finding ways to improve work engagement is to be preferred above putting energy in stimulating passive employee outcomes to enhance performance.

How to stimulate work engagement is mainly studied by means of the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007). The JD-R model is a general model developed within the realm of 'positive psychology' (Bakker & Demerouti, 2008). However, studies applying the JD-R model in combination with work engagement do not take the specific circumstances of certain occupations and contexts into account (Bickerton, Miner, Downson, & Griffin, 2015, Bakker, Demerouti, & Sanz-Vergel, 2014, Gorgievski, Moriano, & Bakker, 2014). Several public administration scholars therefore call for more thorough scholarly attention to analyze the meaning and practical usage of work engagement in the public sector context (Perry & Vandenabeele, 2015; Lavigna, 2015; Vigoda-Gadot, Eldor, & Schohat, 2013; Khernaghan, 2011).

In response to calls for research to examine how contextual and institutional factors contribute to engagement, our main focus is the relationships between these job demands- and resources and work engagement across the public, semi-public and private sector. This focus was selected for several reasons.

First, conflict exists in whether the effects of job demands and job resources are equal across different contexts. Equal to the starting point of the JD-R model, researchers following the generic approach within public administration argue that all organizations face similar challenges and opportunities regardless their legal or formal status (Chandler, 1991). However, several proponents of the publicness paradigm within public administration have pointed out important sectoral differences that might impede the same effects of demands and resources on work engagement (Lavigna, 2013; Akingbola & van den Berg, 2016). Proponents of the publicness paradigm make a distinction between the public sector (government), semi-public sector (hospitals, education and executive agencies) and the private sector. Important differences between these sectors are, for example, relatively complex bureaucratic organizational structures in public organizations, more frequent changes of political leadership, and specific motivations to work as a classic public servant or a teacher/doctor which might affect the impact of for example autonomy, job significance and workload on work engagement (Lavigna, 2015).

Second, the field of work engagement research has grown increasingly, resulting in a significant number of studies that include correlations between job demands and resources and work engagement. Although the bulk of studies on work engagement were carried out in the private sector, several researchers "coincidentally" studied a sample of (semi-)public sector employees without considering potential sectoral effects (e.g., Breevaart, Bakker, Demerouti, & van den Heuvel, 2015). This enables us to use meta-analysis to assess the overall effects ascribed to the job demands and resources on work engagement.

The goal of this study is therefore twofold: (1) integrate the Job demand-resources model of work engagement within public administration literature, and (2) further develop the work engagement literature by taking potential sectoral differences into account. To reach this goal we conduct a cross-sectorial meta-analysis and answer the following question: *What are the effects of job demands and job resources on work engagement in the public, semi-public and private sector and to what extend do these effects differ across the public, semi-public and private sector?*

First, there is an increasing demand within public administration to draw on insights from psychology for the explanation of micro level behavior and attitudes of public servants (Wright, 2015). Grimmelikhuijsen, Jilke, Olson, & Tummers (2017) add that an analysis of public administration topics through a psychological lens can be useful to confirm, add nuance to, or extend classical public administration theories. Work engagement and its related positive psychology perspective add to this recent call.

Second, given that a large fraction of work engagement research is quantitative in nature, it is worthwhile to investigate these varying empirical findings quantitatively using meta-analytic techniques. Homberg, McCarthy, Tabvuma (2015) argue that combining results of independent studies on a particular subject using different data sets and methods can furnish more insight and greater explanatory power than the mere listing of the individual studies. Public administration scholars therefore express a need for cross-sectorial meta-analyses to improve their understanding of phenomena in the (semi-)public sector (Perry 2012; Cantarelli et al., 2016).

Third, practitioners within (semi-)public organizations probably want to know which job demands and resources influence the work engagement of public servants since work engagement has been linked to good service provision, the improvement of client satisfaction, and quality of service (Vigoda-Gadot et al., 2013). Work engagement is therefore potentially the answer to the main challenge in the (semi-) public sector today, namely, performance enhancement (Vigoda-Gadot et al., 2013).

The remainder of this article is structured as follows. Based on a review of the relevant literature, we apply the generic and publicness approach to the JD-R theory of work engagement in section 5.2. Subsequently, we present the meta-analytical procedure applied within this study in section 5.3. In section 5.4, we test the conceptual model using effect sizes found in peer-reviewed journals. Finally, we end in section 5.5 with recommendations for further research on work engagement in the semi-public and public sector, and a conclusion in section 5.6.

5.2 Theory

5.2.1 Work engagement defined

Work engagement is developed within the realm of positive psychology which focuses on the study of positive emotions and positive character traits. In line with this new research stream, vocational psychology scholars and organizational behavior scholars started developing new concepts which can be called “eudaimonic” concepts including vitality and work engagement (Deci & Ryan, 2008; Tummers et al., 2016). Eudaimonic concepts emphasize the meaningfulness and purposefulness of a job to the employee while the contrasting hedonic concepts (e.g., satisfaction and commitment) emphasize the pleasure and happiness of (facets of) the job (Grant, 2008).

The eudaimonic concept work engagement was introduced by Kahn (1990: 694) who described it as the "[…] harnessing of organization member's selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally and mentally during role performances". Through time, the study of work engagement has developed into roughly two main research streams. On the one hand, some researchers follow Kahn's model of employee engagement (e.g., Harter, Schmidt, & Hayes, 2002; May, Gilson, & Harter, 2004; Saks 2006; Rich, Lepine, & Crawford, 2010). On the other hand, the bulk of scholars apply Schaufeli et al.'s model of work engagement who defined it as "[…] a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli et al., 2002: 74).

An important difference between the two models is that Kahn (1990) is focused on the work roles while Schaufeli et al. (2002) focus on the work itself. In other words, Kahn (1990) specifically focus on the rational choice an employee has to whether or not give the full hundred percent of themselves in their work activities. In contrast, Schaufeli et al. (2002) do not call it a rational choice but focus on the work activities (Schaufeli & Bakker, 2010; Saks & Gruman, 2014).

Despite this substantive difference, both research streams show four fundamental similarities. First, engagement is considered a state of mind (vis-à-vis a stable trait) that is relatively enduring but fluctuates over time (Kahn, 1990; Schaufeli et al., 2002; Saks & Gruman, 2014). Secondly, engagement can in both streams be seen as an active energetic state of mind instead of a more passive attitude such as job satisfaction (Tummers et al., 2016). Thirdly, engagement is measured on the level of the employees work/task and not on the level of the job (such as job satisfaction) or the organization as a whole (organizational commitment) (Christian, Garza, & slaughter, 2011). However, only Saks (2006) add the separate level of organizational engagement to his conceptualization of work engagement. Lastly, engagement is a higher-order construct which comprehends an employee's cognitive (absorption), psychological (dedication), and physical (vigor) investments to his or her specific task/work (Kahn, 1990; Schaufeli et al., 2002).

Although there are some substantive differences and similarities between the measures, an important practical difference between the streams is that the engagement measure developed by Schaufeli et al. (2002) was the one who has been applied on a large scale in empirical research. This measure is called The

Utrecht Work Engagement Scale (UWES). Given the dominant use of the UWES measure to study work engagement we only considered studies that applied this scale.

5.2.2 JD-R model of work engagement

Together with the development of the work engagement construct, the study of its antecedents is organized based on the JD-R model (Bakker & Demerouti, 2008). According to this model, job characteristics can be classified as either job demands or job resources. Job demands are factors that cost energy to deal with, such as high workload and role ambiguity (Bakker, 2015). Job resources are factors that help individuals to deal with these demands, such as social- and supervisor support, developmental opportunities and autonomy (Bakker & Demerouti, 2008). These job resources could mitigate (moderate) the effect of job demands on work engagement. However, since we test the effect of so many different job resources and job demands, we will test only the direct effects and not the moderating effects. We do however include possible theoretical arguments about moderating effects.

Recently, Xanthopoulou, Bakker Demerouti, & Schaufeli (2007) extended the JD-R model by including personal resources. Personal resources are defined as the psychological characteristics or aspects of the self that are generally associated with resilience and refer to the ability to control and impact one's environment successfully (Schaufeli & Taris, 2014). Because most psychological approaches assume that human behavior results from an interaction between personal and environmental factors, personal resources are very important factors which affect work engagement (Schaufeli & Taris, 2014). Personal resources have been integrated into the JD-R model in five different ways (Schaufeli & Taris, 2014). The two most frequent ways utilized in empirical literature show that personal resources can have direct effects on work engagement or moderate the effect between job characteristics and work engagement. Due to the limitations of available data, we will not include personal resources in the actual analysis but we will include theoretical arguments about possible moderating influences of these personal resources on the effects of job demands- and resources on work engagement.

Generic approach towards the job demands-work engagement relationship

Two of the most frequently studied job demands in relation with work engagement are workload and role ambiguity (e.g., Hu, Schaufeli, & Taris, 2011; Albrecht, 2015; Gabel Shemueli. Dolan, Suárez Ceretti, & del Prado, 2015). Private organizations—especially large ones— as well as public organizations have to deal with various job demands such as public scrutiny and ambiguous goals (Chandler, 1991). The generic approach expects that factors such as organizational size and technology will influence organizations more than the private or public status of organizations (Christensen, Laegrid, Roness, & Røvik, 2011). It could be argued that having politicians on top of the organization makes the differences. The generic approach would however make the rebuttal that although the public sector is about conflict of interests (politics), such conflict is at the center of managerial life since management is always fundamentally about managing such conflict, regardless of the organizational setting (Kettl, 2015). All organizations face similar constraints and challenges, resulting in similar behaviors and outcomes (Murray, 1975). According to the generic approach it can therefore be expected that all employees encounter the same job demands and that the negative effects of the job demands are the same across sectors.

Publicness approach towards the job demands-work engagement relationship

As described by the Job Demands-Resources model, personal resources can mitigate the effect of job demands on work engagement. Accordingly, the proponents of the publicness approach would argue that, since the personal resource PSM is the highest within the semi-public sector followed by the public and private sector (Lyons et al., 2006; Taylor, 2007), the effects of job demands on work engagement would be the lowest within the semi-public sector followed by the public and private sector respectively.

Proponents of the publicness approach argue that job demands are higher in the public sector than in the semi-public and private-sector (see e.g., Boyne, 2002; Feeney & Rainey, 2009; Pandey & Wright, 2006; Jung, 2014; Rainey & Jung, 2015). Organizational structures of public organizations are known for their complicated, rule-bound and hierarchical decision making processes within elaborate bureaucratic systems (Rainey, 2014; Lavigna, 2015). In addition, it is argued that public sector organizations have the most influential (Boyne, 2002; Lavigna, 2015). High turnover rates of politically elected top executives and the influence from the media, citizens and the third sector can put public servants in difficult situations by forcing them to implement conflicting goals (Lavigna, 2013). These circumstances provide public servants with more role ambiguity, high work pressure and, thus, lower work engagement compared to employees in the other sectors.

Semi-public organizations are said to face less hierarchical complexity and political influence on their daily operations (Verhoest, van Thiel, Bouckaert, & Laegrid, 2012). Chun & Rainey (2005) show for such organisations that the percentage of financial resources received from government and the complexity of policy problems affects goal ambiguity. Since resource dependency and the complexity are lower in the semi-public sector than in the public sector, the goal ambiguity and the workload might be lower in the former sector. Still, these organizations have an extensive stakeholder environment and political executives remain ultimate responsibility for their activities (Verhoest et al., 2012). The role ambiguity and workload of employees is therefore expected to be higher in the semi-public sector than in the private sector, but lower than in the public sector.

However, as mentioned above, despite the fact that job demands are presumed to be the highest within the public sector followed by the semi-public sector and private sector respectively, the important personal resource PSM is a strong countervailing influence against role ambiguity and workload within the (semi-)public sector that can help sustain high levels of engagement (Lavigna, 2015; Bakker, 2015: 729). PSM refers to the personality trait of individuals willing to engage in sacrificial behavior for the good of citizens without reciprocal benefits for themselves (Perry & Vandenabeele, 2015). Employees are assumed to enter the public service because they are committed to the mission of government and see it as a real calling (Lavigna, 2013). Since such commitment to the mission of government is already present when entering the public service, public servants may care less about their job demands. Although PSM is present in every sector, PSM is the highest within the semi-public sector followed by the public and private sector (Lyons, Duxbury, & Higgins, 2006; Taylor, 2007). It will therefore have the highest countervailing influence on demands in the semi-public sector, followed by the public and private sector.

The insights of both the generic approach and publicness approach combined, lead to the following hypotheses:

> *H1$_{generic}$: The negative effects of workload and role ambiguity on work engagement do not differ between the public sector, semi-public sector and private sector.*

> *H1$_{publicness}$: The negative effects of workload and role ambiguity on work engagement is the lowest within the semi-public sector followed by the public sector and private sector, respectively.*

Generic approach towards the job resources-work engagement relationship

The argument of proponents of the generic approach would be that, although the values and–tasks may differ between sectors, the means of achieving them are essentially the same (Simon, 1995; Scott & Falcone, 1998). In other words, problems of organizing people, leading them and supplying them with resources are always the same, independent of organizational setting (Psech, 2008; Kettl, 2015). In accordance with the generic approach, the JD-R model assumes that the relationship between resources and work engagement will be the same for all employees irrespective of the sector in which they are employed.

Publicness approach towards the job resources-work engagement relationship
Previous studies have consistently shown that job resources located at the level of the organization at large (e.g., organizational support), the interpersonal and social relations (e.g., supervisor and co-worker support), the organization of work (e.g., autonomy, reward and feedback), and at the level of the task (e.g., job significance and developmental opportunities) positively affects work engagement (Hakanen et al., 2006; Bakker et al., 2007; Bakker & Demerouti, 2008). As a matter of fact, these studies show that job resources become salient and gain their motivational potential especially when employees are confronted with high job demands. Job resources change the perceptions and cognitions evoked by stressors such as job demands, and reduce the health-damaging consequences of such responses (Hakanen et al., 2006; Bakker et al., 2007). In other words, the relationship between job resources and work engagement is stronger when employees are exposed to high (vs. low) demands (Bakker et al., 2007). The job demands are as mentioned before expected to be the highest within the public sector followed by the semi-public sector and private sector respectively. The insights of both the generic approach and publicness approach combined, lead to the following hypotheses:

> *$H2_{generic}$: The positive effect of job resources on work engagement does not differ between the public sector, semi-public sector, and private sector.*

> *$H2_{publicness}$: The positive effect of job resources on work engagement is the highest within the public sector followed by respectively the semi-public sector and private sector.*

5.3 Method

This study uses a meta-evaluation approach. A meta-analysis synthesizes the results from various studies to assess systematically what we know about a particular phenomenon (Borenstein et al., 2009). In our case, we systematically collected and analyzed all peer reviewed published studies that analyzed determinants of work engagement. We used the reference program Endnote to collect the data from these publishes studies, and we applied the package Metafor for the statistical program R to synthesize the results (Viechtbauer, 2010). Below, the procedure followed is explained in detail.

5.3.1 Search strategy

Several steps were undertaken to identify relevant published studies. A systematic procedure was followed by applying the frequently used reporting scheme for meta-analyses (PRISMA) as is shown in Figure 5.1. The search took place in January and February 2016. Although most studies were published in the last few years (Saks & Gruman, 2014), all years were considered to be potentially relevant. As expected, the oldest study included in the meta-analysis was published in 2001 (when the UWES was introduced).

To identify relevant studies, we first searched the following five databases: PubMed, Web of Science, Emerald, PsychINFO, and Wiley. These databases were chosen, because of their complementary focus. Because the search was aimed at finding articles in which at least one organizational determinants of work engagement was included, there was no need to use separate strings for the determinants. The search therefore included the broad terms “work engagement”, “employee engagement”, “job engagement”, “staff engagement”, “UWES”, and “Utrecht Work Engagement Scale”. In total, 11.928 studies were identified using these keywords.

Secondly, we checked the reference lists of the eligible studies, other meta-analyses, and literature reviews that focused on the determinants of work engagement (Halbesleben, 2010; Mauno, Kinnunen, Mäkikangas, & Feldt, 2010; Christian et al., 2011; Bakker, Demerouti, & Sanz-Vergel, 2014; Bailey, Madden, Alfes, & Fletcher, 2017; García-Sierra, Fernández-Castro, Martínez-Zaragoza, 2016). This check yielded an additional 11 eligible studies. These 11 studies were not found in the initial search since the authors of these studies used different terms for the operationalization of work engagement (such as motivation).

Lastly, we emailed 84 authors of potentially relevant studies that did not report specific information about the sectorial background of their respondents or the required statistics needed for our analyses. Of the 84 authors contacted, 44 replied and twenty provided additional information. Based on the information provided by the authors, six additional articles were included in our sample.

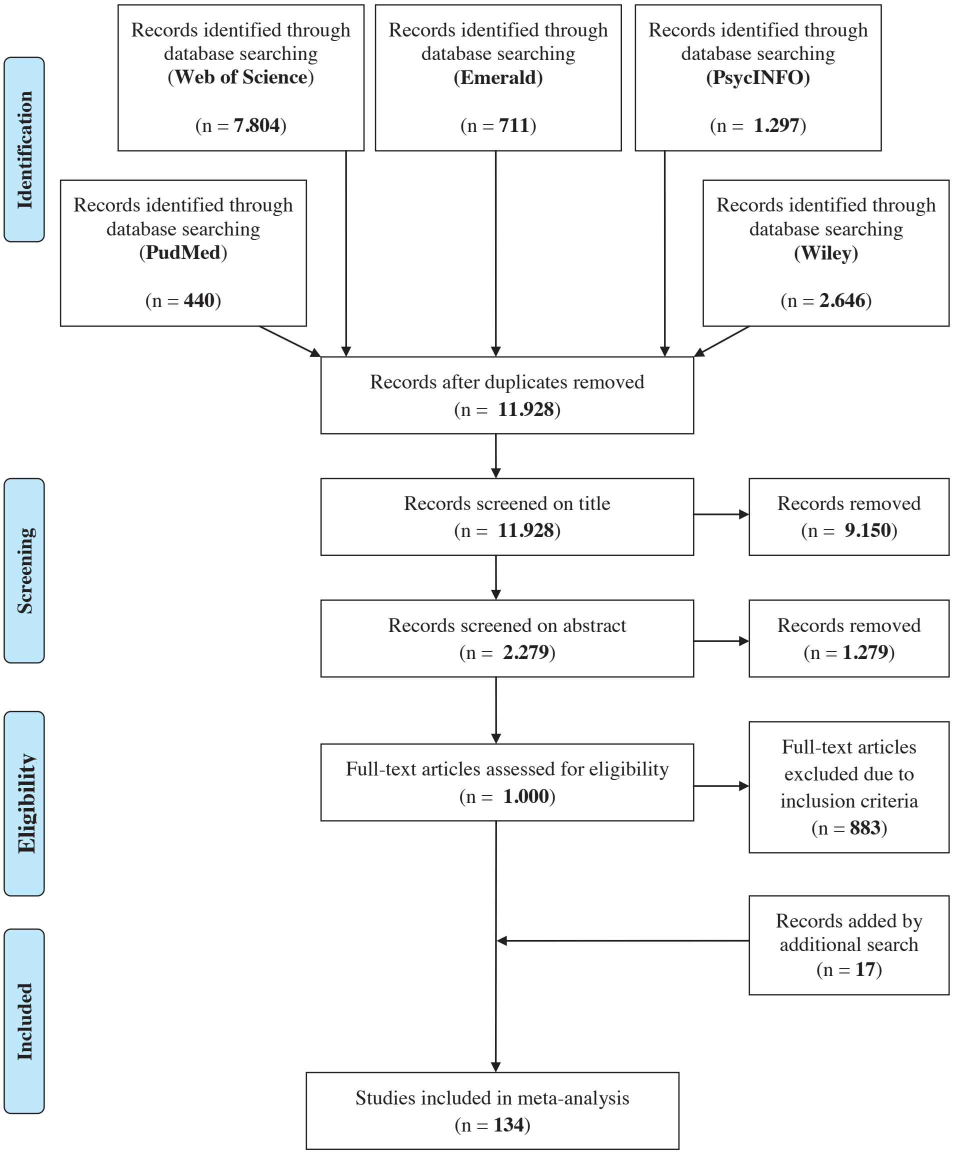

FIGURE 5.1: PRISMA flow diagram illustrating the literature research and selection process.

5.3.2 Inclusion criteria

The eligibility of studies for our meta-analysis depended on five inclusion criteria. Firstly, we only included studies that used the UWES to assess work engagement.

Several researchers consider engagement to consist primarily of vigor and dedication (Bakker, Albrecht, & Leiter, 2011; Lorente, Salanova, Martínez, & Vera, 2014). However, we remain conservative and maintain faithful to the mainstream conceptualization of UWES.

Secondly, studies were only included if they analyzed the relationship between organizational determinants and work engagement at the individual level. Thirdly, studies were excluded that did not provide the required information to test our hypotheses (correlation coefficients, standard deviations and sample sizes). The majority of meta-analyses compute the synthetic effect size using raw data based on zero-order bivariate correlation coefficients and its related standard deviation (Borenstein, Hedges, Higgins, & Rohstein, 2009). The use of other forms of raw data such as regression coefficients is highly problematic because the individual relations are corrected for other variables in the model (e.g., Borenstein et al., 2009; Hunter & Schmidt, 2014). Only studies that present a bivariate correlation table were therefore included.

Finally, only studies which were published in English were included. This criterion constrained the analysis to 13 organizational determinants (2 job demands and 11 job resources) of work engagement.

5.3.3 Operationalization

The studies in the final sample were coded using a coding sheet. The coding sheet developed by the first author was checked by the second author. This procedure led to minor adjustments in the code book. Three researchers were responsible for the coding of the studies. The first author coded all 134 studies and the second and third author coded 15 randomly chosen studies. No significant differences were found.

Firstly, *work engagement* was operationalized bases on the UWES. Secondly, we coded central, regional and local government, including fire departments, police & defense as public organizations; hospitals, education and executive agencies as semi-public and the remainder as private organizations. Our categorization of *sector* is in line with the publicness approach also applied by Vermeeren et al. (2015) and Verhoest et al. (2012). Finally, *Job demands and resources* were operationalized based on the taxonomy of the JD-R model (Bakker & Demerouti 2007). Bakker & Demerouti (2008) make a distinction between determinants of work engagement located at the level of the organization at large (e.g., organizational support), the interpersonal and social relations (e.g., supervisor and co-worker support), the organization of work (e.g., job security, autonomy, reward and feedback), and at the level of the task (e.g., job significance and developmental opportunities). Many authors used labels and operationalizations in their study that correspond with the job demands- and resources as mentioned in the JD-R model. With a few exceptions, we could therefore easily code all the resources in accordance with the JD-R model.

5.3.4 Meta-analytic procedure

To calculate the meta-analytic effect sizes, the Pearson correlation coefficients of all the included studies were collected. We compared the effect sizes on the level of complete work engagement scales. In cases where studies presented the Pearson correlation coefficients of the three dimensions separately, we calculated composites.

After computing the required effect sizes, we calculated the mixed-effect models by using the Metafor package (Viechtbauer, 2010). As is standard practice when comparing subgroups in a meta-analysis (Bornstein et al., 2009: 168), we firstly estimated the correlations for every subgroup (public, semi-public and private sector) separately. Secondly, we tested the moderating influence of the categorical variable sector on the overall dataset by performing Z-tests (sub-group analyses) which automatically corrects for the variation in sampling sizes across studies. Z-tests (as explained in Borenstein et al., 2009: 168) study the differences between subgroups and these differences are significant ($p \leq 0.05$) when the Z-value is equal to, or larger than 1.96.

Ultimately, we also checked for publication bias. Since reviewers and/or editors in most cases favor statistical significant results, publications which show significant effects are over-represented in a meta-analysis which, in turn, bias the meta-analytical findings (Stanly 2008). Publication bias was assessed for every effect size by means of the Egger's test of the intercept (Egger, George, Martin, & Christoph, 1997). If publication bias was found, Duvall & Tweedie's (2000) trim-fill analysis was applied to estimate the number of missing studies due to the suppression of the most extreme results on one side of the funnel plot.

5.4 Results

5.4.1 Preliminary analysis

Within our study, 530 effect sizes in 134 studies were identified. Table 5.1 presents a preliminary descriptive analysis.

TABLE 5.1: Descriptive statistics work engagement

Measure	***k***	***N***	**Mean**	***SDmean***	**95% LBCI**
UWES	104 (245)*	56.697	**3.918**	0.084	3.75: 4.08
Vigor	30 (95)*	20.508	**4.092**	0.172	3.76: 4.43
Dedication	30 (95)*	20.508	**4.309**	0.185	3.95: 4.67
Absorption	30 (95)*	20.508	**3.867**	0.187	3.50: 4.23
Sector					
Public sector	30 (98)*	21.604	**3.729**	0.165	3.41: 4.05
Semi-public sector	37 (149)*	16.179	**4.206**	0.159	3.89: 4.52
Private sector	70 (283)*	39.422	**3.871**	0.118	3.64: 4.10

k= Number of studies included in each analysis; * Number between brackets shows amount of effect sizes, *N* = the number of individuals in each analysis; *Mean* = sample-size weighted mean; *SDmean* = standard deviation of sample-size weighted mean; 95% LBCI = 95% likelihood-based confidence interval.

At the level of studies, 104 studies used a composite measure while 30 studies analyzed the three dimensions separately. Thirty studies reported effect sizes of work engagement in the public sector (21.9%), 37 studies in the semi-public sector (27.0%), and 72 studies in the private sector (51.1%). Of these studies, three tested relationships between work engagement and its determinants in two different sectors to compare them.

The bulk of the studies (76.1%) were conducted between 2012 and 2015. Respectively 83.3% of the public sector studies, 81.1% of the semi-public sector studies, and 70% of the private sector studies were published in these last four years. Furthermore, workforces of 30 countries are represented in the studies. From the studies analyzing a sample from the public or semi-public sector, 8 were conducted in developing countries, 58 were conducted in developed countries, and 1 analyzed a sample from a developing as well as a developed county.

At the level of effect sizes, 98 were from studies conducted in the public sector, 149 from the semi-public sector, and 283 from the private sector. In addition, 245 effect sizes used a composite measure of UWES, while 95 effect sizes measured vigor, 95 effect sizes measured dedication and 95 effect sizes measured absorption.

The most interesting finding relates to the differences in the mean work engagement between sectors. All items of the UWES are scored on a seven-point rating scale. Even after the deletion of studies that did not measure work engagement on a seven-point scale, the mean work engagement in the semi-public sector ($\bar{x}$= 4.206) is much higher than the mean work engagement in the public sector and private sector (respectively $\bar{x}$=3.729 and $\bar{x}$= 3.871).

5.4.2 Effects of organizational determinants on work engagement across sectors

Table 5.2 presents the meta-analytical results.

Except for workload, all studied determinants have a significant effect on work engagement in all the sectors. Within the public sector, job resources at the level of the task (developmental opportunities and job significance) have roughly the highest effect on work engagement, followed by respectively job resources at the level of the organization (organizational support), the interpersonal level (social support, supervisor support and leader member exchange), and the level of the organization of work (autonomy, reward, feedback, and job security). Within the semi-public sector, the effects of all the job resources on work engagement are relatively equal. One exception is job security which has an exceptionally low correlation with work engagement.

If we look at the results across sectors, Z-tests show that the effect of three job resources on work engagement significantly differ between sectors. Firstly, the effect of job significance is by far the highest in the public sector (r = .63, 95% LBCI = .49: .78) followed by respectively the private sector (r = .45, 95% LBCI = .34: .57) and semi-public sector (r = .36, 95% LBCI = .20: .53). Job significance has a significant higher correlation with work engagement within the public sector than within the semi-public sector (p = 0.02) and private sector (p = 0.05).

Secondly, a large difference between sectors can be found in the effect of job security on work engagement. The correlation with work engagement is the lowest within the semi-public sector (r = .07, 95% LBCI = -.08: .23), followed by respectively the private (r = .27, 95% LBCI = .14: .39) and public sector (r = .37, 95% LBCI = .22:

.51). Job security has a significant higher relation with work engagement within the public sector compared to the semi-public sector ($p = 0.01$). Job security also has a significant higher relation with work engagement within the private sector compared to the semi-public sector ($p = 0.05$).

Thirdly, a large difference is found in the effects of feedback on work engagement between the public ($r = 0.02$, 95% LBCI = -.16: .22) and the semi-public & private sector (respectively $r = 0.33$, 95% LBCI = .20: .46, and $r = 0.35$, 95% LBCI = .25: .44). Feedback has a significantly lower relation with work engagement within the public sector compared to the semi-public and private sector (respectively $p = 0.02$, and $p = 0.008$). However the analysis of feedback within the public sector is based on only one study which might make the comparison problematic.

Other noticeable, but insignificant, sectoral differences exist in the relationships between work engagement and organizational support, self-efficacy, developmental opportunities, and role ambiguity. Although the cross-sectoral differences are large for these determinants, the standard deviations are large as well. This might be an explanation for the insignificance of these relationships.

In the last column of Table 5.2, the Egger's test of publication bias only shows a small significant bias in case of the effect of job significance on work engagement. The additional trim-fill analysis shows that merely two studies can be found on the right hand side of the funnel plot while four studies can be found on the left hand side. This observation provide for the extreme results on the left-hand side of the funnel plot. The trim fill analysis estimates that two additional studies on the right-hand side of the funnel plot would make the plot more symmetric. Interestingly, the studies on the right hand side are from various sector as well as the studies on the left-hand side. It can therefore be concluded that the publication bias does not depend on the sector.

In sum, the relationships between job demands and work engagement do not significantly differ across sectors. Since the generic approach ($H1_{generic}$) suggested that there are no differences in the effects of job demands on work engagement between sectors, hypothesis $1_{generic}$ is accepted and hypothesis $1_{publicness}$ is rejected. However, the generic approach ($H2_{generic}$) also suggested that the positive effects of job resources on work engagement would also not differ between sectors. The results show that 3 (feedback, job security and job significance) out of 10 resources do differ which means that $H2_{generic}$ is rejected and $H2_{publicness}$ is partially accepted.

TABLE 5.2: Determinants of work engagement moderated by sector

Construct	*k*	*N*	*r*	*SDr*	Sig.	95% LCI	95% UCI	Z-test (PU vs SP)	Z-test (PU vs PR)	Z-test (SP vs PR)	Egger's Test*
1. Organisational support											
Public	6	2.975	**0.40**	0.04	0.000	0.32	0.49				
Semi-Public	3	1.007	**0.30**	0.08	0.000	0.15	0.45	1.16	-0.99	-1.82	0.8183
Private	10	3.995	**0.46**	0.05	0.000	0.38	0.55				
2. Social support											
Public	11	7.411	**0.27**	0.03	0.000	0.21	0.34				
Semi-Public	18	8.844	**0.29**	0.03	0.000	0.23	0.36	-0.43	-0.15	0.56	0.6560
Private	17	16.475	**0.27**	0.04	0.000	0.20	0.34				
3. Supervisor support											
Public	11	8.341	**0.33**	0.03	0.000	0.27	0.39				
Semi-Public	12	7.001	**0.31**	0.04	0.000	0.23	0.38	0.50	1.25	0.66	0.1830
Private	16	15.666	**0.27**	0.04	0.000	0.20	0.34				
4. Leader-member exchange											
Public	8	5.996	**0.36**	0.04	0.000	0.29	0.43				
Semi-Public	6	1.439	**0.34**	0.06	0.000	0.23	0.45	0.34	-1.08	-1.13	0.0635
Private	15	5.578	**0.42**	0.04	0.000	0.34	0.49				
5. Feedback											
Public	1	2.348	**0.02**	0.09	0.831	-0.16	0.20				
Semi-Public	5	669	**0.33**	0.07	0.000	0.20	0.45	-2.67	-3.09	-0.26	0.6159
Private	9	2.862	**0.35**	0.05	0.000	0.25	0.44				
6. Autonomy											
Public	12	8.316	**0.33**	0.03	0.000	0.27	0.39				
Semi-Public	19	8.135	**0.30**	0.03	0.000	0.24	0.36	0.46	-0.08	-0.82	0.3071
Private	25	24.326	**0.34**	0.03	0.000	0.28	0.39				
7. Job security											
Public	2	593	**0.37**	0.07	0.000	0.22	0.51				
Semi-Public	3	1.671	**0.07**	0.08	0.330	-0.08	0.22	2.73	1.04	-1.96	0.8090
Private	6	1.862	**0.27**	0.06	0.000	0.15	0.38				

8. Reward											
Public	2	2.290	**0.30**	0.08	0.000	0.14	0.45				
Semi-Public	5	1.041	**0.34**	0.06	0.000	0.22	0.46	-0.42	-0.15	0.36	0.5141
Private	9	13.880	**0.31**	0.05	0.000	0.22	0.40				
9. Developmental opportunities											
Public	5	4.604	**0.47**	0.04	0.000	0.39	0.56				
Semi-Public	11	5.482	**0.45**	0.04	0.000	0.37	0.53	0.43	1.54	1.15	0.8540
Private	12	4.666	**0.38**	0.04	0.000	0.30	0.46				
10. Job significance											
Public	2	1.342	**0.63**	0.07	0.000	0.49	0.78				
Semi-Public	3	504	**0.36**	0.08	0.000	0.21	0.52	2.49	1.95	-0.87	0.0305
Private	6	1.348	**0.45**	0.06	0.000	0.34	0.57				
11. Self-efficacy											
Public	2	1.374	**0.51**	0.07	0.000	0.37	0.65				
Semi-public	5	962	**0.36**	0.06	0.000	0.24	0.48	1.59	0.56	-1.37	0.0551
Private	12	3.599	**0.46**	0.04	0.000	0.38	0.55				
12. Role ambiguity											
Public	3	3.082	**-0.23**	0.06	0.000	-0.34	-0.11				
Semi-public	3	2.592	**-0.30**	0.08	0.000	-0.45	-0.15	0.77	1.32	0.29	0.9759
Private	10	16.043	**-0.33**	0.05	0.000	-0.41	-0.24				
13. Workload											
Public	5	6.138	**0.001**	0.05	0.987	-0.09	0.09				
Semi-Public	10	7.655	**-0.03**	0.04	0.417	-0.12	0.05	0.55	0.93	1.63	0.7876
Private	20	20.491	**0.05**	0.03	0.111	-0.01	0.12				

Note. k = the number of studies included in each analysis; N = the number of individuals in every analysis; $\boldsymbol{r}$ = sample-size weighted uncorrected correlation; SDr = standard deviation of sample-size weighted uncorrected correlations; Sig. = significance of sample-size weighted uncorrected correlation; 95% LCI = lower bound of confidence interval, 95% UCI = upper bound of confidence interval, Pu = Public sector, SP = Semi-public sector; Pr = Private sector, *Egger's Test is significant if $p \leq 0.5$

5.5 Discussion

In this study, we performed a cross-sectorial meta-analysis on the effects of job demands and job resources on work engagement. Work engagement has received little attention within semi-public and public sector research. The goal of this study was therefore twofold: (1) integrate the work engagement literature with public administration literature, and (2) further develop the JD-R model by taking potential sectoral differences into account. To reach these goals, 134 studies were analyzed.

According to proponents of the publicness approach, the relationships between job demands/resources and work engagement differ between the public, semi-public and private sector due to institutional factors such as the complex stakeholder environment, bureaucratic organization and specific motivation of public servants to work in the public sector. In contrast, proponents of the generic approach do not expect differences in this relationship since they expect that all organizations face similar challenges and opportunities regardless their legal or formal status. The results showed that although the majority of the effects of organizational resources and job demands on work engagement do not vary across sectors, the mean work engagement and three job resources do. We therefore found partial support for both the generic approach and publicness approach.

Many effects of job demands (e.g., role ambiguity), and job resources (e.g., colleague support and autonomy) on work engagement do not differ across sectors. A likely explanation might be that – in contrast with the publicness approach – the public and private sector might not be so fundamentally dissimilar in all important aspects (Boyne, 2002). However, our results show that some nuanced differences exist. Interestingly, these differences can especially be found between the semi-public and public sector.

Firstly, the mean work engagement is significantly higher within the semi-public sector than in the public and private sector. An explanation might be that teachers and health care employees might see their work as a calling (i.e., are motivated to work in public service) more than private sector employees (Hakenen, Bakker, & Schaufeli, 2006). These employees find their job intrinsically meaningful and purposeful (important aspects of work engagement) with lower interest in all the job resources. This explanation is corroborated since determinants of work engagement have in most cases roughly the lowest effect on work engagement within the semi-public sector.

Secondly, our results show that public servants become relatively more engaged when their job has a significant added value to the organization and/or the society as a whole than employees in the semi-public or private sector. This finding fits within the theories about PSM-fit. PSM-fit is the perceived usefulness by public servants of their jobs towards society (Steijn, 2008). It is assumed that when public servants perceive that their job is useful to society, they perform better and are more satisfied. Job significance is a corresponding construct although it is not merely aimed at society but also on the internal organization. Still, this study shows some first indications that PSM-fit is a very important determinant for the work engagement in especially the public sector.

Thirdly, the impact of job security on work engagement also shows differences across sectors. Job security has a significant lower correlation with work engagement within the semi-public sector compared to the public and private sector. The effect of job security on work engagement is not even significant in the semi-public sector. As mentioned above, a reason might be that teachers and hospital personnel see their work as a real calling and are intrinsically motivated to do their job and care less about extrinsic motivators including job security. Many studies confirmed the assumption that these employees are more intrinsically motivated than extrinsically motivated by organizational stimuli (Buelens & Van den Broeck, 2007).

Fourthly, receiving feedback has a significant lower correlation with work engagement within the public sector compared to the other sectors. The effect of feedback on work engagement is not significant within the public sector which means they do not become more engaged when they receive feedback. Although this finding is based on one study in the public sector, it still contributes to the discussion whether business like incentive structures including performance management should be introduced within the public sector.

In relation to the first two findings, future research should focus more on the impact of personal characteristics of public versus semi-public versus private sector employees on work engagement. Personal characteristics, such as the predisposition of public and semi-public employees to engage in sacrificial behavior for the good of citizens without reciprocal benefits for themselves (PSM), and the related perceived usefulness of the job to society (PSM-fit), might be important explanations for the higher mean work engagement of employees within the semi-public sector relative to other sectors, and the higher job significance in the public sector relative to other sectors (Lyons et al., 2006; Taylor, 2006).

In relation to the second two findings, future research should focus more on the impact of clusters of job resources on the work engagement of public versus semi-public versus private sector employees. Feedback and job security are resources on the second-lowest level of work: the level of the organization of work. In addition, job significance is a resource on the lowest level of work: the level of the work itself. As these resources differ, it might be interesting to study the effects of clusters of job resources on work engagement. Especially since the JD-R model treats all resources as equally important, while several scholars in public administration developed classes of characteristics to investigate their effect on, for example, job motivation, pride, job satisfaction, and organizational commitment (Moynihan & Pandey, 2007; Steijn, 2004; Vermeeren & van Geest, 2012).

Job resources are assumed to play either an intrinsic motivational role because they foster employees' growth, learning, and development, or an extrinsic motivational role because they are instrumental in achieving work goals (Bakker & Demerouti, 2008). Lower-level (i.e., job significance, autonomy) job resources especially fulfill an intrinsic motivational role as they foster basic human needs, such as the needs for autonomy, relatedness, and competence (Deci & Ryan, 1985), while higher level resources, including performance feedback and training, increase the likelihood of being successful in achieving one's work goals (Bakker & Demerouti, 2008). Studying these clusters of resources might therefore not only offer a further nuance of the broad JD-R model, but it also offers practical handles for HR-managers. Knowing which clusters of resources are the most promising to increase the work engagement of employees, makes it much easier for HR-managers to focus their HR-strategy on a specific cluster of instruments (Albrecht et al., 2015).

Although public administration scholars express a need to conduct cross-sectoral meta-analyses (Perry, 2012; Cantarelli et al., 2016), such studies have their limitations. Factors which might be of specific interest to scholars in certain sectors, such as PSM and red tape, could not be included due to the lack of available studies incorporating these factors. Furthermore, scholars within public administration are often less interested in whether a potential determinant has an effect, but rather in how to make it effective. Studies therein are, however, too scarce to include such factors in a meta evaluation. This meta-analysis should primarily be seen as a first comprehensive overview of the work engagement processes which are of interest to analyze, but future research is necessary to deepen out these processes.

5.6 Conclusion

Despite the limitations, our study shows that the mean work engagement and the effects of job significance, feedback and job security significantly differ between sectors. These differences might especially be explained by individual differences in psychological processes (e.g., PSM) and the characteristics of the resources (e.g., internal motivational stimulator or instrumental stimulator). HR managers might therefore have the possibility to influence the work engagement and inherent performance of their employees through these instruments. This research has in sum been able to present leads for respectively practitioners to possibly influence work engagement, and for future research to further integrate work engagement and inherently a positive psychology perspective in public administration.


6

The attitudinal, behavioral and performance outcomes of work engagement: A comparative meta-analysis across the public, semi-public, and private sector

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6.1 Introduction

Eager to learn from private sector trends, practitioners in (semi-)public organizations across the world have recently turned their eyes to the concept of work engagement to improve employee performance (e.g., Cotton, 2012; Jansen, Brink & Van den Kole, 2010; Lavigna, 2013; Kernaghan, 2011). Work engagement is a positive psychological concept defined as "[…] a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-romá, & Bakker, 2002: 74). Especially studies in the private sector show that work engagement is the most robust predictor of performance outcomes (e.g., Christian, Garza, & Slaughter, 2011). However, public management research on work engagement in general and on the relationship with performance outcomes in particular has been quite limited (Borst, Kruyen, & Lako, 2017; Kernaghan, 2011; Vigoda-Gadot, Eldor, & Schohat, 2013).

In recent times it is expected of public servants in many countries to perform better with fewer resources, critical public opinion, and increasing emotionally demanding environments (Liu, Yang, & Yu, 2015; Tummers, Kruyen, Vijverberg, & Voesenek, 2015; Uggadan & Park, 2017). Due to this environment, several scholars expect that the focus of practitioners on common well-being factors such as satisfaction and commitment is important but probably not enough to reach high performance (Tummers, Steijn, Nevicka, & Heerema, 2016; Uggadan & Park, 2017). Satisfied and committed employees do not reach their full potential since this can also be indicative for them being calm, content and relaxed, which leads to passive employees without much initiative (Schaufeli & Bakker, 2010; Tummers et al., 2016). Instead, it is argued that public managers need their employees to be proactive and dedicated, and feel energetic in their work to reach high performance – i.e., public organizations need engaged workers (Uggadan & Park, 2017). That is, it is expected that work engagement is positively related with good service provision, the improvement of client satisfaction, and quality of service (Vigoda-Gadot et al., 2013). Work engagement is therefore potentially the answer to the main challenge in the (semi-)public sector today, namely, performance enhancement (Vigoda-Gadot et al., 2013).

However, it remains to be seen whether work engagement is, equal to the private sector, a robust predictor of performance outcomes of public and semi-public employees (Akingbola & van den Berg, 2017; Bailey, Madden, Alfes, & Fletcher, 2017; Noesgaard & Hansen, 2017). Indeed, several scholars also empirically show that the publicness of an organization matters for the effects of work engagement on positive employee outcomes (Brunetto et al., 2017; Bakker & Hakanen, 2014). Publicness was introduced by Bozeman & Bretschneider (1994) as an approach to distinguish public, semi-public (or "hybrid") and private organizations, accounting for the many different types of institutional and organizational configurations. Lavigna (2013) argues, that the effect sizes of work engagement on employee outcomes might differ between sectors due to several of these publicness factors including different organizational structures, frequent changes of political leadership and the divergent motivations to work as a public servant (Lavigna, 2013; Perry & Vandenabeele, 2015).

In addition, work engagement might have negative behavioral side effects (a dark side) such as workaholism, work-life conflict, and work disappointment (e.g., Bakker, Shimazu, Demerouti, Shimada, & Kawakami, 2013; Clark, Michel, Stevens, Howell, & Scruggs, 2014). Findings on the relationship between for example workaholism and work engagement are mixed. Researchers have found a positive relationship (e.g., van Beek, Taris, & Schaufeli, 2011) as well as a negative relationship (e.g., Schaufeli, Shimazu, & Taris, 2009). The question is whether these differences can be attributed to the sectoral contexts in which employees work.

These circumstances need to be taken into account to find out whether public personnel managers indeed should focus on the stimulation of work engagement to improve individual outcomes. As Albrecht, Bakker, Gruman, Macey, & Saks (2015) show, many outcomes of work engagement can be distinguished that can be categorized as attitudinal (e.g., organizational commitment and job satisfaction), behavioral (e.g., turnover-intention, work-life conflict and workaholism), and performance outcomes (in-role performance and extra-role performance). Aligned with these outcome categories, we conducted a cross-sectorial meta-analysis to answer the following questions: *To what extent do the relations between work engagement and attitudinal, behavioral and performance outcomes differ across the public, semi-public and private sector?*

The cross-sectoral meta-analytic approach is applicable since, although implicitly, studies including work engagement were executed in several sectors including semi-public organizations (e.g., schools, healthcare), public organizations (e.g., central, regional, local government) and private organizations (e.g., businesses), sectoral differences were never explicatively considered. Combining the results of these independent studies on work engagement can furnish understanding to what extent work engagement is of the same importance for employees in the public and semi-public sector as it is for employees in the private sector. Public administration scholars express an increasing need for these kinds of cross-sectoral meta-analyses given the nature of our discipline to use theories from other disciplines without specific attention to the defining elements of the public sector that distinguish it from the private sector (Perry, 2012; Cantarelli, Belardinelli, & Belle, 2016).

With the contextualization of work engagement in the (semi-)public sector, we also contribute to the new theoretical trend called behavioral public administration. This new subfield in public administration explicitly deals with the integration of theories and methods from psychology into the study of public administration (Grimmelikhuijsen, Jilke, Olson, & Tummers, 2017). Proponents of this new subfield argue that an analysis of public administration topics through a psychological lens can be useful to confirm, add nuance to, or extend the existing public administration theories (Grimmelikhuijsen et al., 2017). As the existing public administration theories merely focus on passive employee attitudes including job satisfaction and commitment (Tummers et al., 2016), the introduction of the active employee attitude work engagement from vocational psychology add nuance to, and extend these existing theories.

The remainder of this article is structured as follows. Based on a review of the relevant literature, in section 6.2 we introduce our conceptual model of work engagement and its effects. We present the research method applied within this meta-analysis in section 6.3. Subsequently, in section 6.4, we test the hypotheses using the empirical articles found in peer-reviewed journals which tested the relationship between work engagement and outcomes. Finally, we end in section 6.5 with recommendations for further (public sector) engagement research and 6.6 with an overall conclusion.

6.2 Theory

6.2.1 Work engagement defined

Over the years, two traditions in the study of well-being have been developed—hedonic and eudaimonic well-being (Ryan & Deci, 2001). Hedonic well-being refers to happiness, pleasure and enjoyment while eudaimonic well-being refers to purpose, meaningfulness and psychological well-being (Diener, Scollon, & Lucas, 2009, McGregor & Little, 1998; Ryan & Deci, 2001). Waterman (1993) stated that, whereas happiness is hedonically defined, eudaimonia occurs when people's activities are most congruent with deeply held values and are holistically or fully engaged.

As applied to jobs, the hedonic focus would emphasize the job itself or facets as enjoyable for the employee or pleasurable to do, whereas the eudaimonic focus is on the job as being meaningful and purposeful to the employee (Grant, 2008). The concept work engagement fits within the psychological stream of eudaimonic well-being. Work engagement was introduced within the realm of positive psychology by Kahn (1990: 694) emphasizing that in an engaged state " […] people employ and express themselves physically, cognitively, emotionally and mentally during role performances". At a later stage, Schaufeli et al. (2002: 74) defined work engagement as a "[…] positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption". In other words, the study of work engagement has developed into roughly two main research streams.

The operationalization of vigor, dedication, and absorption in the Utrecht Work Engagement Scale (UWES) largely overlaps with Kahn's dimensions of respectively physical, emotional and cognitive component (Bakker & Demerouti, 2007). Vigor is characterized by having high levels of energy and mental resilience while working, dedication is characterized by feeling a sense of significance, enthusiasm, pride, and inspiration toward one's work, and absorption is characterized by being fully engrossed in one's work (Schaufeli et al., 2002). These definitions imply that work engagement is especially aimed at the meaningfulness and purposefulness (eudaimonia) of the work to the person (particularly the dedication dimension) instead of merely at the happiness (hedonia) about work.

6.2.2 Contextualizing work engagement

Interestingly, the main characteristics meaningfulness and purposefulness of work engagement are two typical reasons of employees to work in the public sector (Schnell, Höge & Pollet, 2013; Tummers & Knies, 2013; Hakanen, Bakker, & Schaufeli, 2006). Lyons, Duxbury, & Higgins (2006) show that even within the public sector differences can be found in the importance that employees attach to meaningfulness and purposefulness. They demonstrate that the semi-public sector including teachers and healthcare personnel value the purposefulness of their job even more than public servants, who value it more than private employees.

In this study we follow Lyons et al. (2006) approach who used an operationalization of sectors consistent with the dimensional publicness approach (Bozeman, 1987;

Bozeman & Bretschneider, 1994). According to this approach, organizations can be placed on several spectra of which the most often used are an ownership spectrum (political/judicial approach) and a funding spectrum (economic approach) (Psech, 2008). In case of the ownership spectrum, an organization can be owned by the state that represents society as a whole, but it can also be owned by an individual or a group of individuals (Psech, 2008). In case of the funding spectrum, organizations may be dependent to a greater extent on taxes, or they may depend on market income (Psech, 2008). The terms 'public' and 'private' are often taken as the opposite ends of a continuum indicating the degree of 'publicness' of an organization (Bozeman, 1987).

The influence of these broad publicness features on the employee level can be translated applying the institutional theory. According to institutional theory, the institutional context can be defined as the full set of institutions with which an individual interacts, from macro-level such as national values and religion, to micro-level work practices (Scott, 2001). Regulative, normative and cultural-cognitive elements of institutions constrain the behavior and attitudes of individuals through determining respectively the rules of the game, the values deemed important and the way of doing things, also known as institutional logics (March & Olsen, 1989; Scott, 2001; Thornton & Ocasio, 2008).

Based on the dimensions of publicness, it is possible to distinguish three different institutional logics that might influence the work engagement of employees– professional, market, and political logic (Nordstrand Berg & Pinheiro, 2016). A professional logic, market logic and political logic are characterized by high levels of specific expertise and task complexity, efficiency, economic control and management, and administrative routines, hierarchy and indirect control respectively (Nordstrand Berg & Pinheiro, 2016).

Although in every organization a combination of these logics coexist, it can be determined that three main institutional contexts can be distinguished (Vermeeren, Kuipers, & Steijn, 2014a; Verhoest, van Thiel, Bouckaert, & Laegrid, 2012; Nordstrand Berg & Pinheiro, 2016). Firstly, organizations with low publicness (i.e., private sector) are privately owned and privately funded. The behavior and attitudes of employees within these organizations is mainly determined by a market logic and to a lesser extent a professional logic. Secondly, organizations with medium publicness (i.e., hybrid or semi-public sector) are publicly funded but semi-public or privately owned. Examples are hospitals and education. The behavior and attitudes of employees within these organizations is mainly determined by a professional logic, and to a lesser extent a market logic which increasingly replaced the political logic (Nordstrand Berg & Pinheiro, 2016). Thirdly, organizations with high publicness (i.e., public sector) are publicly owned and publicly funded. Examples are central, regional and local government, and police & defense. The behavior and attitudes of employees within these organizations is mainly determined by a political logic, and to a lesser extent by a professional logic and a market logic (Nordstrand Berg & Pinheiro, 2016).

Within the semi-public sector, the occupational groups (e.g., nurses and doctors in hospitals and academics in universities) are considered to be professionals with high levels of expertise and task complexity. Due to the high levels of expertise and task complexity, these professionals receive autonomy and the possibility of professional self-regulation. In accordance with the highly specialized and professional self-regulatory focus in the semi-public sector, a market logic or political logic with respectively economic control or political control gains less ground than in the private and public sector, respectively.

Due to the high specialization and professionalization, the occupational groups in the semi-public sector often see their profession as a real calling (Hakanen, Bakker, & Schaufeli, 2006). In other words, semi-public personnel (i.e., educational personnel and healthcare personnel might see their work as a calling to educate children and heal citizens (Borst & Lako, 2017) and inherently find their job intrinsically meaningful and purposeful (important aspects of work engagement). As the behavior and attitudes of employees in the private sector and public sector is far more determined by a market logic and political logic respectively, it can be expected that the work engagement of employees within the semi-public sector is higher than in the public and private sector.

> *H1: The work engagement of semi-public employees is significantly higher than the work engagement of public and private employees.*

In addition, since a variation in work engagement might exist between employees according to the sectoral division based on publicness and institutional logics, it can also be questioned whether the effects of work engagement on attitudinal, behavioral, and performance outcomes differ between employees along the lines of this sectoral division (Akingbola and van den Berg, 2017; Bailey, Madden, Alfes, & Fletcher, 2017; Noesgaard & Hansen, 2017).

Work engagement and attitudinal outcomes

Although satisfaction and organizational commitment are rather passive attitudes, they are still seen as important attitudinal outcomes of public service and they are often compared with work engagement (Kernaghan, 2011). Within the framework of hedonic versus eudaimonic well-being, these concepts can be placed within the hedonic field of study (Tummers et al., 2016). Conceptually, job satisfaction is an attitude often defined as a positive (or negative) evaluative judgment one makes about one's job or job situation (Weiss, 2002). Job satisfaction differs from work engagement since it is constricted to the enjoyment of the job (i.e., hedonism) and connotes nothing about the significance or meaningfulness about the job (i.e., eudaimonism).

Organizational commitment is also an attitude characterized by an emotional attachment to one's organization (Meyer & Allen, 1991). Most studies aim at affective organizational commitment while continuance commitment and normative commitment are omitted. Affective organizational commitment differs from work engagement as well since work engagement is a broader and more intrinsic construct which involves a holistic investment of the entire self in terms of cognitive, emotional, and physical energies while affective organizational commitment involves merely an emotional attitude (i.e., hedonic) toward the organization as a whole (Christian et al., 2011). In other words, eudaimonic concepts such as work engagement focus more on the *process* of living well, while commitment and satisfaction are merely a *state* of feeling well (Ryan, Huta, & Deci, 2008).

As work engagement is a deep state of mind which connotes the satisfaction of basic psychological needs (physically, cognitively and emotionally), it might well lead to higher hedonically defined happiness and pleasure including commitment and satisfaction. Scholars indeed argue that employees who experience high levels of components of eudaimonic well-being (e.g., work engagement) are physically healthier, experience more satisfaction of their psychological needs, and also experience hedonic well-being (e.g., commitment) compared to employees with low eudaimonic well-being (Barret-Cheetham et al., 2016; Ryff, 1989).

A significant number of scholars argue that public servants are especially motivated by the meaningfulness and purposefulness of their job (Schnell, Höge, & Pollet, 2013; Nakamura, 2013; Tummers & Knies, 2013; Hakanen, Bakker, & Schaufeli, 2006). Comparing the public to the private sector, Lyons et al. (2006) show that public servants also value the purposefulness of their job more than private employees. It implies that a meaningful job makes public servants relatively happier than private sector employees. As shown before, work engagement is aimed at measuring the meaningfulness and purposefulness (eudaimonia) of an employees' job. Based on the discussion above, it can be expected that the effect of work engagement (meaningfulness and purposefulness) on the attitudinal outcomes job satisfaction and organizational commitment (happiness and enjoyment) is higher for public servants than private sector employees.

Semi-public employees including healthcare personnel and teachers specifically choose a highly specialized profession. These occupational groups have highly contact intensive jobs aimed at changing the state of clients (teaching and healing clients). The specialization and intrinsic motivation to teach and heal clients create a sense of calling amongst these semi-public employees (Borst & Lako, 2017; Hakanen et al., 2006). In other words, they become especially happy (i.e., satisfied and commitment) when they can be meaningful (i.e., engaged) to clients.

Due to the high specialization in the semi-public sector, these semi-public employees are given relatively high autonomy and professional self-regulation to serve clients and patients (i.e., the earlier mentioned professional logic). In other words, semi-public employees have the possibilities to do the meaningful work through which they become happy. Although, public servants in the public sector also become happy from being meaningful to citizens, the administrative routines, hierarchy and indirect control (i.e., political logic), reduces the possibility to follow a professional logic and inherently autonomously serve citizens. In other words, engaged semi-public servants have more opportunities to become happy (reflected in satisfaction and commitment) when they perceive their job as meaningful and significant (reflected in work engagement) than public servants (Tummers & Knies, 2013). It might therefore be expected that the relationship between work engagement and the attitudinal outcomes job satisfaction and organizational commitment is even stronger for semi-public employees than for public servants.

> *H2: The positive effect of work engagement on job satisfaction and organizational commitment is the highest within the semi-public sector followed by respectively the public sector, and private sector.*

Work engagement and performance outcomes

Several studies have shown that work engagement is positively related to in-role and extra-role performance (Christian et al., 2011). In-role performance is defined as the achievement of officially required outcomes and behaviors that directly serve the goals of the organization, while extra-role performance is defined as discretionary behavior on the part of an employee that is believed to directly promote the effective functioning of an organization, without necessarily directly influencing a person's target productivity (Bakker, 2011).

Few things are more engaging for employees than to see concrete results of their work (Lavigna, 2013). However, if applied to the public sector, the characteristics of the political logic in the public sector might impede the relationships between work engagement and in-role and extra-role performance. The ambiguous goals of public sector organizations are for example often hard to translate into objectively measurable units (Lavigna, 2013; Chun & Rainey, 2005). These hard-to-measure achievements might impede the relationship between work engagement and the concrete task-performance of public servants.

Furthermore, due to the high levels of formalization, administrative routines, and hierarchy (i.e., political logic) in the public sector, public managers experience difficulties in empowering employees (Fernandez & Moldogaviez, 2010). This lack of psychological empowerment might prevent employees to engage in discretionary and innovative behavior. Additionally, the public scrutiny and inherent accountability of public organizations might counter engaged public servants to go "the extra mile" (Lavigna, 2013). These contextual circumstances might especially have an impact on the extra-role performance (discretionary behavior) of public servants.

In addition, the complex stakeholder environment of the public sector could have an influence on the in-role and extra-role performance of public servants (Lavigna, 2013). Although public servants might be engaged, public sector organizations often find themselves in the eye of a hurricane of external stakeholders (e.g., political control and media attention), which can be large barriers (i.e., slow down the process) to reach the goals desired by public servants (Lavigna, 2013).

In contrast, although semi-public employees also have to deal with the influence of several of the abovementioned aspects of the political logic, the professional logic prevails. Compared to public servants, semi-public employees also have to deal with goal ambiguity (Anderson, 2015). However, the specific expertise and task complexity of semi-public employees lead to more discretionary space to reach goals than in case of public servants (Verhoest et al., 2012). The goal ambiguity in semi-public organizations is therefore relatively lower in the than in the public sector (Sun, Peng, & Pandey, 2014). The relationship between work engagement and the concrete task-performance of semi-public employees might therefore be less impeded.

In addition, due to the relatively high discretionary space that semi-public employees receive, the levels of formalization are relatively lower than in the public sector. Semi-public employees are thus less restricted to engage in discretionary and innovative behavior than public servants. However, equal to the public sector, semi-public organizations also have to deal with public scrutiny and a complex stakeholder environment. These circumstances might just as well lead to the impediment of semi-public employees to go the extra mile.

In sum, public servants face relatively hard-to-measure tasks, high levels of public scrutiny and formalization, and a complex stakeholder environment which might negatively influence the relationship between work engagement and performance outcomes. Equal to the public sector, semi-public organizations also face high levels of public scrutiny and a complex stakeholder environment. However, their goal ambiguity and formalization are somewhat lower than within the public sector.

> *H3: The positive effect of work engagement on in-role and extra-role performance is lower within the public sector, followed by respectively the semi-public sector and private sector.*

Work engagement and behavioral outcomes: The potential dark side

Next to the positive outcomes, work engagement also has a potential "dark side" (Bakker, Albrecht, & Leiter, 2011). Scholars have shown that employees might become so engaged in their work that they take work home (Bakker et al., 2011; Taris, Schaufeli, & Shimazu, 2010). This might lead to workaholism and work-life conflicts. However, most researchers argue that workaholism and work engagement are different psychological states (Van Beek, Taris, & Schaufeli, 2011). Workaholism results in negative outcomes and work engagement in positive outcomes. Still, workaholics are by definition hard workers who are unable to disengage from their work and think about it continually (van Beek et al., 2011). It might therefore be expected that work engagement can be positively related to workaholism and work-life conflict. However, findings on the relationship between for example workaholism and work engagement are mixed. Researchers have found a positive relationship (e.g., van Beek et al., 2011) as well as a negative relationship (e.g., Schaufeli, Shimazu, & Taris, 2009).

In addition, scholars also argue that being a highly work-engaged employee might lead to a high turnover intention (Caesens, Stinglhamber, & Marmier, 2014). Such employees might consider that their organization does not reciprocate equally the high efforts they put towards their work and therefore start to look for another job

(Caesens et al., 2014). Another argument might be that highly engaged employees find their job too stressful, and therefore start to look for another, less demanding job. However, most scholars argue that high work engagement in most cases have a negative relation with turnover intention (Halbesleben, 2010). The often found negative relationship between work engagement and turnover intention might therefore be weaker in the public and semi-public sector respectively.

Since the findings about the relationships between work engagement and behavioral outcomes are mixed, it might be questioned whether this is attributable to sectoral contexts. The often found negative relationship between work engagement and turnover intention might for example be weaker in the public and semi-public sector than in the private sector. Few things are less engaging for employees than to see colleagues getting away with pulling their weight (Lavigna, 2013). Although some countries started to "normalize" the special legal status and inherent job protections of public servants (Van der Meer, van den Berg, & Dijkstra, 2011), they still have stronger job protection than their private sector colleagues. This job protection makes it difficult to deal with poor performers (Lavigna, 2013). In addition, strict regulation (i.e., political logic) on rewards and performance incentives like large pay raise and bonuses make it difficult to reward public servants (Lavigna, 2013; Weibel, Rost, & Osterloh, 2010). The public sector cannot reciprocate equally the high efforts highly engaged public servants put in their work relative to laissez faire employees. Highly engaged public servants might therefore leave the organization for private organizations where an economic institutional logic including pay-for-performance systems gives them more opportunities to gain rewards (Perry, Engbers, & Jun, 2009).

In addition, it is highly likely that the found positive relationships between work engagement and the behavioral outcomes workaholism and work-life conflict are especially attributable to the private sector and to a lesser extend to the public and semi-public sector. Buelens & van den Broeck (2007) argue for example that public servants want respect for their personal lives and their family priorities. Public servants are, for example, less inclined than private sector managers to relocate their family for a better job (Posner & Schmidt, 1996). They also work far less hours than their private sector colleagues. Several studies also show that public organizations therefore lead private sector employers in the adoption of family-friendly policies (Feeney & Stitch, 2017; Saltzstein, Ting, & Saltzstein, 2001). Buelens & van den Broeck (2007) also show that respondents from the semi-public sector are even more motivated due to a balanced work-family relationship than public servants. This might be explained by the relatively large percentage of part-time workers within the education and healthcare sector. Engaged public servants and semi-public employees have in other words much more access and appreciation to and for family-friendly policies than private sector employees. Overall, the effect of work engagement on work-life conflict and workaholism will therefore probably be negative in the semi-public sector and public sector while the direction of these relationships are more insecure in the private sector.

H4: The negative effects of work engagement on turnover intention within the public sector will be the lowest, followed by respectively the semi-public sector and private sector.

H5: The effect of work engagement on work-life conflict and workaholism will be negative within the public and semi-public sector and positive in the private sector.

6.3 Methods

In this study, we systematically collected and analyzed peer-reviewed published studies that analyzed the outcomes of work engagement. A meta-analysis combines quantitative findings from a number of different studies into a single study to assess what is known about a particular subject (Borenstein, Hedses, Higgins, & Rohstein, 2009). The following sections provide more detail about the procedure followed within this cross-sectoral meta-analysis.

6.3.1 Data collection

Data collection in meta-analyses involves searching through the relevant databases to find the studies that are applicable to the subject under study. Figure 6.1 shows the process of data collection in this study.

6.3.2 Literature search

In January and February 2016, we systematically searched PubMed, Web of Science, Emerald, PsychINFO, and Wiley using the keywords “work engagement”, “employee engagement”, “job engagement”, “staff engagement”, “UWES”, and “Utrecht Work Engagement Scale”. In total, 11.928 studies were identified which we integrated into the reference program Endnote. Although work engagement was introduced in 1990 by Kahn, the year of publication is in several cases not registered properly in the databases. All years were therefore considered as potentially relevant in our data collection. After the identification phase, we started the screening and selection phases.

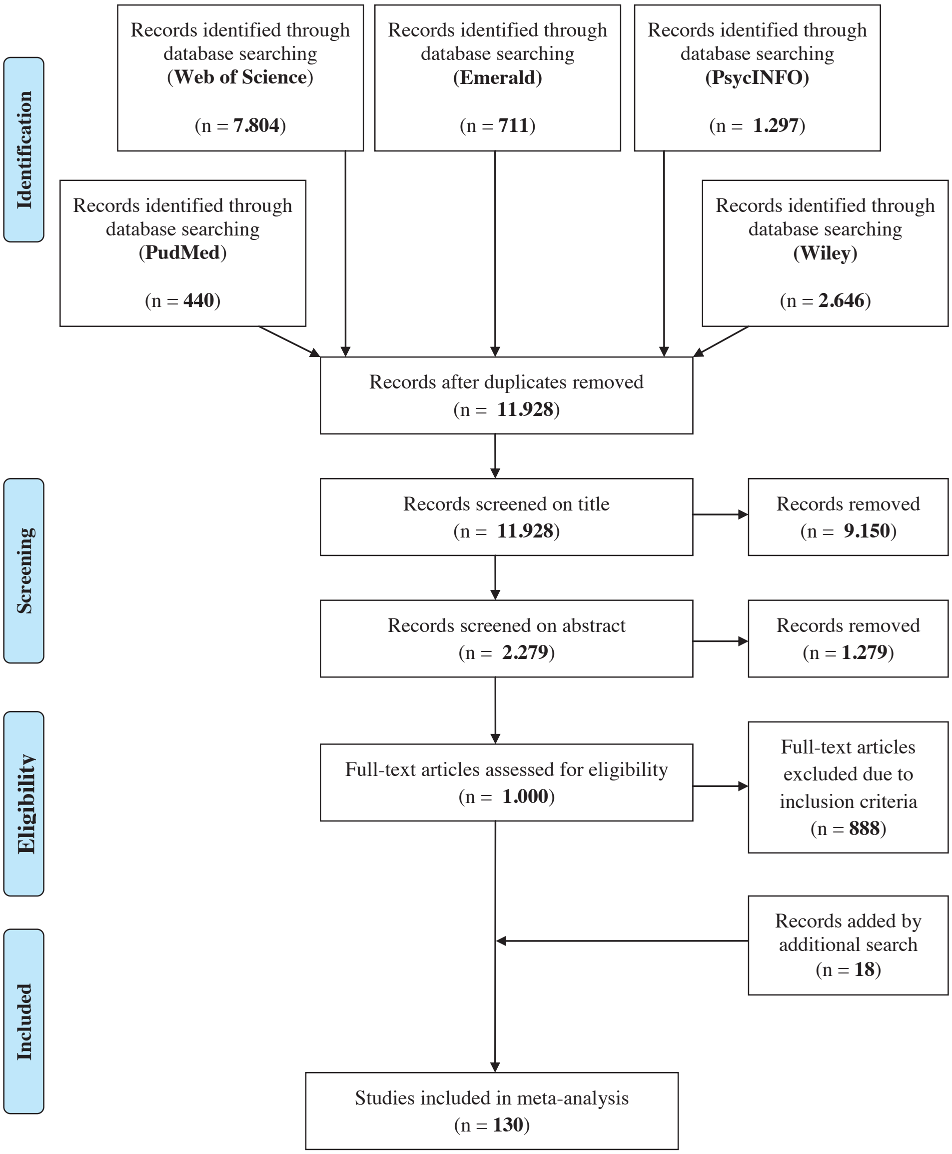

FIGURE 6.1: PRISMA diagram illustrating the systematic literature review

In the screening and selection phase we abided by five exclusion/inclusion criteria. Firstly, we only included papers that use completely measured work engagement constructs with all three dimensions of the UWES. Several researchers recently dropped the absorption dimension of the UWES (Bakker, Albrecht, & Leiter, 2011).

Removing this dimension is problematic since it diminishes its convergent and discriminant validity relative to other constructs such as organizational commitment (Saks & Gruman, 2014).

Secondly, we included papers that has an acceptable outcome variable of interest– typically these are studies that have dependent variables in regression analyses which are influenced by work engagement. Thirdly, we only included studies that analyzed the relationship between work engagement and its outcomes at an individual level. Some studies for example analyze the outcomes at the organizational level. These studies are in other words excluded. Fourthly, studies were excluded that did not provide the required information to test our hypotheses (correlation coefficients, standard deviations and sample sizes). The majority of meta-analyses compute the synthetic effect size using raw data based on zero-order bivariate correlation coefficients and its related standard deviation (Borenstein et al,. 2009). The use of other forms of raw data such as regression coefficients is highly problematic, because the individual relations are corrected for other variables in the model (e.g., Borenstein et al, 2009; Schmidt & Hunter, 2014). Only studies that present a bivariate correlation table were therefore included. Lastly, for the purpose of this article, we also limited the analyses to papers written in English and which are peer-reviewed.

Due to the application of these selection criteria, we ended up with a preliminary sample of 112 eligible studies. Several authors of potentially relevant studies did not report specific information about the sectorial background of their respondents or the required statistics for conducting our analyses. We emailed 84 authors of whom 44 replied and twenty provided additional information. Based on the information provided by the authors, 12 additional articles were included in our sample. We then cross-checked the references listed in the studies included in our database, which yielded an additional six eligible studies. These six studies were not found in the initial search since the authors of these studies used for example other terms for the operationalization of work engagement (such as motivation). In total, thus, 130 studies were therefore included in further analyses (see appendix 6.1 for an overview of all included studies).

6.3.3 Meta-analytic procedure

Variable coding

After identifying the studies, features about the study and each effect were coded. A coding sheet was developed by the first author and checked by the second author.

The discussion about the coding-scheme led to minor adjustments. As the coding of the main variables in this study was based on existing operationalizations, the coding procedure was rather straightforward (no abstraction in terms). It was therefore decided that the first author coded all 130 studies and the second and third author blindly and independently coded only 15 randomly chosen studies. The coding by the second and third author indeed showed no coding discrepancies and, thus no problems occurred in the intercoder reliability.

Firstly, several work engagement constructs are developed throughout the last two decades (Bailey, Madden, Alfes, & Fletcher, 2015). As mentioned in the theoretical section, The Utrecht Work Engagement Scale (UWES) was found to be the most widely adopted work engagement measure followed by other measures based on Kahn's (1990) model of employee engagement (e.g., Harter, Schmidt, & Hayes, 2002; May, Gilson, & Harter, 2004; Rich, Lepine, & Crawford, 2010; Saks, 2006). Engagement scales based on Kahn's model are applied in very few cases (Saks & Gruman, 2014) which made it impossible to include these scales[13].

Secondly, we coded central, regional and local government organizations, including fire departments, police & defense as public organizations; hospitals, education and executive agencies as semi-public, and all other organizations as private organizations (e.g., Banks, ICT companies, Industry & retail). Our categorization of sector is in line with Vermeeren et al. (2015) and Verhoest et al. (2012) who apply the publicness approach.

13. Some scholars argue that Kahn's conceptualization of work engagement reaches further than the UWES since Kahn's conceptualization is aimed at grasping the idea of employees bringing one's complete and true self to the performance of one's role (Saks & Gruman, 2014). According to scholars, this deep and authentic state is not fully grasped by the UWES in which work engagement is understood as the devotion and dedication of employees (Saks & Gruman, 2014). However, proponents of the UWES argue that the absorption dimension of the UWES does try to fully grasp this deep state and that the operationalization of vigor, dedication, and absorption in the Utrecht Work Engagement Scale (UWES) largely overlaps with respectively the physical, emotional and cognitive component of Kahn's conceptualization (Bakker & Demerouti, 2007). Still, we collected the studies with alternative scales and found 14 studies that used (a part of) an operationalization of Kahn's concept. In total, 4 studies (28.6%) measured work engagement in the public sector, 1 (7.1%) study measured work engagement in the semi-public sector, 7 studies (50%) measured work engagement in the private sector, and 2 studies (14.3%) measured work engagement in at least two different sectors. All these studies used a composite of an alternative work engagement scale. However, it is problematic to analyze and compare these studies further since there are too little studies on every dependent-independent variable relationship (e.g., the correlation between work engagement and in-role performance is only studied in one instance in every sector)."

Thirdly, performance, behavioral, and attitudinal outcomes of work engagement were distinguished in this study. As mentioned before, this study adopts the widely adopted categorization of performance outcomes in in-role and extra-role performance (Bakker, 2011). Examples of in-role performance are task performance and job performance, and examples of extra-role performance are organizational citizenship behavior and innovative work behavior.

Furthermore, work-life conflict and turnover intention are self-explanatory behavioral outcomes. Workaholism was operationalized based on the Dutch Work Additiction Scale [DUWAS] (Rantanen et al., 2015). This scale exists of two components–working excessively and working compulsively. The attitudinal outcome organizational commitment was operationalized based on the study of Meyer & Allen (1991) and job satisfaction is also self-explanatory.

Mixed-effects models

The primary statistical technique used in this meta-analysis was mixed-effect modeling. A mixed-effect model assumes that the studies included in the meta-analysis are a random selection from a larger population of studies. This form of modeling takes sampling error into account as well as the variation in effect sizes due to variation in the effects across studies. Additionally, mixed-effect modeling is specifically developed to take moderators into account. Since we include sector as a moderator and have studies that we do not assume to be identical in their characteristics, mixed-effect modeling is especially applicable.

To calculate the meta-analytic effect sizes, the Pearson correlation coefficients of all the included studies were collected. We compared the effect sizes on the level of complete work engagement scales. In cases where studies presented the Pearson correlation coefficients of the three dimensions separately, we calculated composites. All items of the UWES and alternative scales are scored on a seven-point rating scale. Some studies used a deviating scale of a five- or six-point rating scale. To make the studies comparable, the means and standard deviations were converted into seven-point rating scales by applying the linear transformation procedure. After the conversion, the means and standard deviations were calculated for both the studies applying an alternative scale and studies applying the UWES.

After computing the composite scores of the dimensions work engagement, the mixed-effect models were run using the Metafor package for the statistical program R to synthesize the results (Viechtbauer, 2010). As is standard practice when comparing subgroups in a meta-analysis (Borenstein et al., 2009: 168), first the correlations for every subgroup (public, semi-public and private sector) were estimated separately. Secondly, we tested the moderating influence of the categorical variable "sector" on the overall dataset by performing Z-tests (sub-group analyses), which automatically corrects for the variation in sampling sizes across studies. If the Z-test is equal to, or larger than 1.96, the difference is significant ($p \leq 0.05$).

6.4 Results

6.4.1 Preliminary analysis

The first hypothesis about the mean work engagement can be tested through a descriptive analysis. Our sample exists of 366 effect sizes in 130 studies. Table 6.1 presents the preliminary descriptive analysis.

Of the 130 studies, 100 studies used a composite UWES measure, while 30 studies analyzed the three dimensions separately. 22 studies (18.4%) measured work engagement in the public sector, 36 (25.7%) studies in the semi-public sector and 77 studies (55.9%) in the private sector. Five of these studies applied the UWES to two samples of different sectors.

The bulk of the studies (88.9%) were conducted between 2010 and 2015. Respectively 86.4% of the public sector studies, 91.7% of the semi-public sector studies, and 88.3% of the private sector studies were published in these last five years. Furthermore, workforces of 35 countries are represented in the studies. Of the 57 studies analyzing a sample from the public and/or semi-public sector, 51 were conducted in developed countries, 5 were conducted in developing countries, and 1 was conducted in both a developing and developed country.

At the level of effect sizes, 50 effect sizes came from studies conducted in the public sector, 91 from the semi-public sector, and 253 from the private sector. In addition, 180 effect sizes used a composite measure of UWES, while 95 effect sizes measured vigor, 95 effect sizes measured dedication and 95 effect sizes measured absorption. Twenty-eight effect sizes used a composite measure of an alternative scale.

TABLE 6.1: Descriptive statistics of work engagement

	k	*N*	Mean	*SDmean*	95% LBCI
Measure					
UWES	100 (180)*	51.036	**4.251**	0.091	4.07: 4.42
Vigor	30 (62)*	14.821	**4.091**	0.143	3.81: 4.37
Dedication	30 (62)*	14.821	**4.036**	0.200	3.92: 4.69
Absorption	30 (62)*	14.821	**3.971**	0.186	3.61: 4.34
Sector for UWES					
Public sector	22 (41)*	11.735	**4.107**	0.220	3.68: 4.54
Semi-public sector	36 (86)*	15.373	**4.768**	0.153	4.47: 5.07
Private sector	77 (239)*	38.749	**3.960**	0.123	3.72: 4.20
Year *UWES*Sector[a]					
≥2010 Public sector	19 (34)*	10.550	**4.090**	0.232	3.63: 4.55
<2010 Public sector	3 (7)*	1.185	**4.264**	0.690	2.91: 5.62
≥2010 Semi-public sector	33 (79)*	14.098	**4.745**	0.160	4.43:5.06
<2010 Semi-public sector	3 (7)*	1.275	**5.004**	0.510	4.00: 6.00
≥2010 Private sector	68 (198)*	34.416	**3.951**	0.128	3.70: 4.20
<2010 Private sector	9 (41)*	4.333	**4.080**	0.465	3.17: 4.99
Country*UWES*Sector					
Developed countries Public sector	21 (40)*	10.877	**4.156**	0.232	3.70: 4.61
Developing countries Public sector	1 (1)*	858	-	-	-
Developed countries Semi-public sector	31 (75)*	13.782	**4.727**	0.163	4.41: 5.05
Developing countries Semi-public sector	5 (11)*	1.591	**5.056**	0.433	4.21: 5.91
Developed countries Private sector	56 (192)*	29.909	**4.005**	0.146	3.72: 4.29
Developing countries Private sector	21 (47)*	8.840	**3.848**	0.230	3.40: 4.30

Note. k = the number of studies included in each analysis; N = the number of individuals in each analysis; *Mean* = sample-size weighted mean; *SDmean* = standard deviation of sample-size weighted mean; 95% LBCI = 95% likelihood-based confidence interval.
* Number between brackets shows amount of effect sizes.

The most interesting finding relates to the differences in the mean work engagement between sectors. As suggested by Hypothesis 1, it was expected that the work engagement of semi-public employees is significantly higher than the work engagement of public and private employees. This Hypothesis is indeed accepted as the results show that the mean work engagement in the semi-public sector ($\bar{x}$ = 4.768) is significantly higher than the mean work engagement in the public sector ($\bar{x}$= 4.107) and private sector ($\bar{x}$ = 3.960) respectively ($p = 0.038$, and $p = 0.001$ respectively).

6.4.2 Mixed-effects models

To investigate sectoral differences, separate bivariate models of the relationship between work engagement and its outcomes for each sector were calculated. Table 6.2 presents the models.

As Table 6.2 shows, public sector studies analyzing the relationship between work engagement and performance outcomes are relatively underrepresented. However, the limited number of studies does show that work engagement is an important indicator of the in-role and extra-role performance of (semi-)public servants. Furthermore, Table 6.2 shows that the most noticeable significant sectoral differences can be found on the level of attitudinal outcomes (job satisfaction and commitment) and behavioral outcomes (workaholism and turnover intention).

Work engagement has a significantly higher positive relation with job satisfaction within the public sector ($r = 0.67$, 95% LBCI = .61: .74) compared to the semi-public and private sector (respectively $r = 0.53$, 95% LBCI = .46: .60 $p = 0.003$ and $r = 0.55$, 95% LBCI = .48: .61 $p = 0.007$). The confidence intervals of the public sector compared to the semi-public and private sector do not overlap. Work engagement also has a significantly higher positive relation with organizational commitment in the public sector ($r = 0.63$, 95% LBCI= .55: .71) compared to the semi-public sector ($r = 0.46$, 95% LBCI = .37: .55, $p = 0.005$). Hypothesis 2 stated that the attitudinal outcomes job satisfaction and organizational commitment are the highest within the semi-public sector followed by respectively the public sector, and private sector, and is therefore partially accepted.

TABLE 6.2: Relationships of work engagement and its outcomes moderated by sector

Construct name	*k*	*N*	*r*	*SDr*	Sig.	95% LBCI	Z-test (Pu vs. Sp)	Z-test (Pu vs. Pr)	Z-test (Sp vs. Pr)
1. In-role performance									
UWES							-0.72	0.67	1.80
Public	2	1.515	**0.36**	0.06	***	0.24: 0.48			
Semi-Public	7	2.444	**0.42**	0.06	***	0.31: 0.53			
Private	24	13.372	**0.31**	0.03	***	0.24: 0.37			
2. Extra-role performance									
UWES							1.29	0.59	-1.16
Public	2	334	**0.46**	0.08	***	0.31: 0.61			
Semi-Public	8	2.623	**0.34**	0.05	***	0.24: 0.45			
Private	24	12.739	**0.41**	0.03	***	0.35: 0.47			
3. Job satisfaction									
UWES							2.93	2.72	-0.34
Public	7	3.635	**0.67**	0.03	***	0.61: 0.74			
Semi-Public	14	4.793	**0.53**	0.04	***	0.46: 0.60			
Private	21	9.157	**0.55**	0.03	***	0.48: 0.61			
4. Organizational commitment							-	-	-
UWES							2.83	1.55	-1.71
Public	5	1.777	**0.63**	0.04	***	0.55: 0.71			
Semi-Public	8	5.266	**0.46**	0.05	***	0.37: 0.55			
Private	23	15.714	**0.55**	0.03	***	0.49: 0.61			
5. Turnover intention							-	-	-
UWES							-2.61	0.82	1.81
Public	9	6.749	**-0.44**	0.03	***	-0.49: -0.38			
Semi-Public	14	6.760	**-0.32**	0.03	***	-0.38: -0.25			
Private	24	19.195	**-0.40**	0.03	***	-0.46: -0.34			

6. Work-life conflict							***0.42***	***-0.70***	***0.95***
UWES									
Public	6	3.125	**-0.18**	0.04	***	-0.26: -0.10			
Semi-Public	5	3.461	**-0.15**	0.06	*	-0.27: -0.02			
Private	8	2.060	**-0.23**	0.06	***	-0.34: - 0.12			
7. Workaholism							***0.89***	***1.88***	***0.52***
UWES									
Public	2	257	**0.33**	0.08	***	0.18: 0.49			
Semi-Public	1	343	**0.19**	0.14	ns	-0.08: 0.46			
Private	3	1.087	**0.10**	0.09	ns	-0.08: 0.28			
8. Working excessively (workaholism)							-	-	-
UWES									
Private	4	4.814	**0.18**	0.07	**	0.04: 0.31			
9. Working compulsively (workaholism)							-	-	-
UWES									
Private	4	4.814	**0.08**	0.07	ns	-0.06: 0.21			

Note. k = the number of studies included in each analysis; N = the number of individuals in every analysis; $\boldsymbol{r}$ = sample-size weighted uncorrected correlation; SDr = standard deviation of sample-size weighted uncorrected correlations; Sig. = significance of sample-size weighted uncorrected correlation; 95% LBCI = 95% likelihood-based confidence interval; Pu = Public sector, SP = Semi-public sector; Pr = Private sector.

Furthermore, work engagement has a significantly higher negative relation with turnover intention within the public sector (r = -0.44, 95% LBCI = -.49: -.38,) than within the semi-public sector (r = -0.32, 95% LBCI = -.38: -.25, p = 0.009). This finding is in opposite with Hypothesis 4 that stated that the negative effects of work engagement on turnover intention within the public sector will be the lowest, followed by respectively the semi-public sector and private sector. Hence Hypothesis 4 is rejected.

At the level of the performance outcomes, no significant sectoral differences were found. As noted, very little studies within the public and semi-public sector analyzed these relationships, which make the confidence intervals wide and unreliable. Hypothesis 3 stated that the positive effect of work engagement on in-role and extra-role performance is lower within the public sector, followed by respectively the semi-public sector and private sector, and is therefore rejected

The results also show that the negative relationship between work engagement and work-life conflict does not significantly differ between sectors. However, although the effect of work engagement on work-life conflict does not differ between sectors, the effect of work engagement on workaholism does show a difference between sectors. Only for the public sector, workaholism has a significant positive relation with work engagement(r = 0.33, 95% LBCI = .18: .49, p = 0.000). This relationship is in contrast not significant within the private and semi-public sector (r = 0.10, 95% LBCI = -.08: .28, p = 0.257, and r = 0.19, 95% LBCI = -.08: .46, p = 0.170). As table 6.2 shows, the confidence intervals of the relationships between work engagement and workaholism in the private and semi-public sector contain zero. It is in other words uncertain whether the relationship between work engagement and workaholism in the private and semi-public sector is either positive or negative. In contrast, within the public sector, there are stronger indications that this relationship is positive. Hence, Hypothesis 5 is rejected.

6.5 Discussion

The results above show that the most noticeable significant sectoral differences can be found in the mean work engagement, and the effects of work engagement on the level of attitudinal outcomes (job satisfaction and commitment) and behavioral outcomes (workaholism and turnover intention). The relationships between work engagement and performance outcomes are less certain due to the limited studies analyzing these relationships within the public sector. However, as expected work engagement is a very important predictor of the in-role and extra-role performance of (semi-)public employees.

The mean work engagement is significantly higher within the semi-public sector than in the public and private sector. An explanation might be that semi-public employees care more about the meaningfulness of their work than public and private sector employees. As mentioned in the theoretical section, work engagement is not merely about happiness and pleasure (hedonism) such as job satisfaction, but also includes the component of meaningfulness (eudaimonism) of the work to the person. In other words, the significantly higher mean work engagement of semi-public servants connotes and confirms the traditional viewpoint that semi-public servants value the meaningfulness and altruism of their job relatively more than private sector employees (Knies & Tummers, 2013).

This argumentation is further confirmed by the sectoral differences in the relationship between work engagement and the attitudinal outcomes job satisfaction and organizational commitment. The results show that engaged public servants (and inherently their perceived meaningfulness in their job) are significantly more satisfied with their job than semi-public and private employees and more committed to the organization than semi-public employees. In other words, public servants become happier from significant and meaningful work than private employees.

Our analysis also showed that work engagement has a significantly higher negative effect on turnover intention within the public sector than within the semi-public sector. Since public servants have the highest positive attitudes (satisfaction and commitment) when they are engaged, it seems within reason that they are the least inclined to leave their job. In addition, work engagement only has a significant positive effect on workaholism within the public sector. As (semi-)public servants are the most engaged because they value job meaningfulness more than private employees (which is a part of the measure of work engagement), it might explain why specifically public servants become the most addicted to their work when they are engaged. When public servants are engaged they sense the meaningfulness of their job which is relatively more important for them than for private employees. These public servants might be the most inclined to work obsessively. However there are not enough studies analyzing this relationship in every sector to firmly draw this conclusion. Recent studies showed that the potential "dark side" of work engagement needs further attention; the high significant relationship between work engagement and workaholism within the public sector confirms that it is indeed interesting to spend more attention to this side.

Although public administration scholars express a need to conduct cross-sectoral meta-analyses (Cantarelli et al., 2016; Perry, 2012), such studies, as does this study, also have their limitations. Unfortunately, only a few studies analyzed the relationship between work engagement and performance outcomes within the public sector and semi-public sector. In contrast, many studies analyzed this relationship in the private sector. Despite the recent attention from (semi-)public organizations to improve the performance of public servants, the scientific public management research is still limited. This has partly to do with the nature of the work engagement research. Work engagement is developed within the realm of psychology and psychologists are less interested in the context of a working population than public administration. Many scholars therefore have employees from several sectors in their studies which they are not able to split into public, semi-public and private sector samples. Some first results show that work engagement indeed has a positive effect on the performances of public servants but future research might specifically focus on the question whether it leads to good service provision, the improvement of client satisfaction, and quality of service.

Another limitation of this meta-analysis is the absence of studies in our analysis that include PSM. Similar to work engagement, PSM is also a construct which is focused on the measurement of feelings of meaningfulness and significance (eudaimonia) of employees. It would be interesting to analyze how PSM relates to work engagement (Perry & Vandenabeele, 2015). Bakker (2015) argues that work engagement and public service motives as incentives might work in tandem to produce important organizational outcomes. Including PSM in future research might therefore be an interesting lead to further understand the large differences we found in the mean work engagement and its effects on several outcomes across sectors.

Furthermore, as this cross-sectoral meta-analysis investigated effects of work engagement on different types of outcomes controlling for sectoral differences, there were too few studies left to control for additional factors such as country characteristics. Bailey et al. (2017) argue in their literature review that analyzing sector and country differences are the most interesting future research endeavors in work engagement research. Although we studied the first research endeavor, no reliable second-order moderation analyses could be carried out to study the second endeavor as well. Especially due to the small number of studies with effect sizes in the public-sector context (e.g., 2 studies for in-role and extra-role performance respectively), but also even in case of relations with more studies (e.g., the relationship between work engagement and job satisfaction within the public sector only exists of Anglo-Saxon countries). At the same time, these findings are an opportunity for future research. The overall view of all work engagement studies in this study shows that research into work engagement is mainly carried out in the developed countries and far less in developing countries. We encourage researchers to study the work-engagement-outcomes relationships in developing countries (Middle-Eastern, African, Southern-Asian) so we can determine whether the presumed effects persist in different countries.

A final limitation is that this study only uses the Utrecht Work Engagement Scale to measure work engagement. A stream of researchers started to criticize this scale due to various reasons including the limited theoretical body and discriminant validity of some of its indicators (Saks & Gruman, 2014; Macey & Schneider, 2008). This criticism stimulated them to develop alternative work engagement scales. Although this study developed more theoretical support by placing it in larger psychological research streams of well-being, future research might take these other scales and inherent dimension and scaling into account. Unfortunately, these scales have received little empirical attention so far and were accordingly not included in this study.

6.6 Conclusion

This study conducted a cross-sectoral meta-analysis into the relations between work engagement and its attitudinal, behavioral and performance outcomes. Until today, the psychological construct work engagement received little attention within semi-public and public sector research. We argue that work engagement is an important addition to current public administration research both theoretically as practically. Theoretically, we contribute to the new subfield behavioral public administration that calls for the inclusion of the methods and theories of psychology to extend and/or add nuance to existing public administration theories (Grimmelikhuijsen et al., 2017). By contextualizing the psychological construct work engagement, we extend the existing public administration theories that mainly focused on hedonic attitudes of public servants including commitment and satisfaction (Tummers et al., 2016).

Practically, public personnel managers need measures that indicate the rate of energy and proactivity of (semi-)public servants (reflected in work engagement) next to measures that merely indicate the calmness and contentedness of these employees (reflected in satisfaction and commitment). Work engagement is such a factor which is expected to be the most robust determinant of employee performance (just as it is in the private sector), and is positively related with good service provision, the improvement of client satisfaction, and quality of service (Vigoda-Gadot et al., 2013). By studying the effects of work engagement, we can therefore suggest to public personnel managers whether it is indeed a robust indicator of performance and inherently something which need to be stimulated.

The goal of this study was therefore to find out whether the effects of work engagement on attitudinal, behavioral and performance outcomes within the semi-public and public sector are indeed as high as expected and whether these outcomes differ between the public, semi-public and private sector. To reach this goal, 130 studies were analyzed. The most noticeable significant sectoral differences can be found in the mean work engagement, and the effects of work engagement on the level of attitudinal outcomes (job satisfaction and commitment) and behavioral outcomes (workaholism and turnover intention).

In addition, it is confirmed that work engagement is a very important measure for public personnel managers since it lead to high job satisfaction, high commitment, low turnover intention and high performance. Public personnel managers could therefore aim on the improvement of the (perceived) meaningfulness of the jobs (reflected in work engagement) by ensuring that employees are assigned interesting and challenging work that provides them with opportunities for skill variety, autonomy/job craftment, and performance feedback (Albrecht et al., 2015). Managers also need to promote the mission, vision, values, and culture of public organizations since these factors promote a strong sense of community which fosters feelings of meaningfulness as well (Albrecht et al., 2015). However, public personnel managers, especially within the public sector, should be aware of the possible darkside of work engagement, namely workaholism.

PHASE 3

Extension of the JD-R theory of work-related well-being in the (semi-)public sector


7

The causes and consequences of work engagement in government: exploring the Job Demands-Resources model

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7.1 Introduction

Work engagement—defined as "[…] a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-Romá, & Bakker, 2002)—has become a popular research topic within the management literature (Albrecht, Bakker, Gruman, Macey, & Saks, 2015; Saks & Gruman, 2014). Studies show that employees who experience high levels of work engagement are physically healthier, experience more satisfaction of their psychological needs, are more satisfied, and are more committed than employees with little work engagement (Barret-Cheetham, Williams, & Bednall, 2016; Ryff, 1989). Vigoda-Gadot, Eldor, & Schohat (2013) therefore argued that work engagement is an important complement to this field of research. Despite the attention for work engagement in public organizations across the world (e.g., Cotton, 2012; Jansen, van den Brink, Kole, 2010; Kernaghan, 2011; Lavigna, 2013), there is a dearth of research examining work engagement in the public administration literature (Khernaghan, 2011; Tummers, Steijn, Nevicka, & Heerema, 2016; Vigoda-Gadot et al., 2013).

The work engagement concept was developed in combination with the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007). At the heart of this model lays the assumption that all aspects in work environments can be categorized into job demands and job resources that either positively or negatively affects work engagement (Bakker & Demerouti, 2007). From the main idea of the JD-R model, it can be deduced that it is a general model developed within the realm of "positive psychology" (Bakker & Demerouti, 2008).

Interestingly, studies applying the JD-R model in combination with work engagement do not take the specific circumstances of certain occupations and contexts into account (Bakker, Demerouti, & Sanz-Vergel, 2014; Bickerton, Miner, Dowson, & Griffin, 2015; Gorgievski, Moriano, & Bakker, 2014). However, Lavigna (2013; 2015) argued, for example, that the complex bureaucratic organizational structures in public organizations, the frequent changes of political leadership, and specific motivations to work as a public servant might influence work engagement. Several public administration scholars therefore call for more thorough scholarly attention to analyze the meaning and practical usage of work engagement in the public sector context (Khernaghan, 2011; Lavigna, 2015; Perry & Vandenabeele, 2015; Vigoda-Gadot et al., 2013). The goal of this study is to extend the JD-R model of work engagement by introducing insights from public administration literature.

Simultaneously, by introducing work engagement in public administration literature, we bring in a "positive psychology" perspective into public administration (Tummers et al., 2016).

Specifically, our contribution to the JD-R model of work engagement is threefold. First and foremost, we extend the JD-R model by clustering job resources into two levels—organization-related resources and work-related resources. The premise of existing studies is that the more job resources employees have, the more engaged they will be (Saks & Gruman, 2014). Although clusters of job resources are proposed by some scholars (Schaufeli, 2015), all resources are treated as equally important in the empirical literature so far (Saks & Gruman, 2014). Instead of treating all job resources in the work engagement theory equally, it might be worthwhile to create classes of job resources and analyze if these classes vary in their importance for facilitating work engagement (Bakker & Leiter, 2010; Saks & Gruman, 2014).

Second, we introduce two new factors into the existing JD-R model of work engagement—red tape and Public Service Motivation (PSM). Lavigna (2013), among others, argued that several specific factors in the public sector might influence the work engagement of public servants. The two most important factors mentioned are the bureaucratic structures and especially the perceived red tape, and the specific motivation of public servants to work in the public sector (PSM; Kernaghan, 2013). Despite the attention to these factors in public administration literature (van Loon, Leisink, Knies, & Brewer, 2016; Perry & Vandenabeele, 2015), they have barely been empirically related to the JD-R in general (an exception is Giauque, Anderfuhren-Biget, & Varone, 2012), let alone to the JD-R model of work engagement in particular (Bakker, 2015).

Finally, work engagement is often analyzed as a mediating variable between the JD-R model and outcomes (Schaufeli, 2015). Drawing on this theory, we analyze the mediating role of work engagement between these two classes of job resources and public sector-specific factors on the one hand and the affective organizational commitment and turnover intention of public servants on the other hand. Although the direct effects of PSM and red tape on commitment (e.g., Vandenabeele, 2009 and Stazyk, Pandey, & Wright, 2009, respectively) and turnover intention (e.g., Campbell & Im, 2016 and Quratulain & Kahn, 2015 respectively) have been studied, the mediating effect of work engagement has not been taken into account before. As we know little about intermediate factors between, for example, PSM and individual outcomes (van Loon, Kjeldsen, Andersen, Vandenabeele, & Leisink, 2016), there has been a recent call for research that links the JD-R model of work engagement and PSM (Noesgaard & Rosenberg Hansen, 2017; Vandenabeele, Brewer, & Ritz, 2014). The integration of the JD-R model of work engagement might contribute to the understanding of the psychological mechanisms through which PSM lead to positive attitudes and behavior.

To fill these research gaps, the following question will be answered: Which factors influence public servants' work engagement, and what are its effects on organizational commitment and turnover intention? This question will be answered by means of an empirical analysis of a large sample of Dutch government employees (*N* = 9.465). The remainder of this article is structured as follows. Section 7.2 presents the theoretical background resulting in five hypotheses. In section 7.3 the method to test our hypotheses will be presented. The results of the analyses will be presented in Section 7.4. Finally, in Section 7.5, we explore several avenues for further research on work engagement in the public sector.

7.2 Theory

7.2.1 JD-R model of work engagement defined

Positive psychology broke the trend of vocational psychology in the 1990s by focusing on what employees are doing right instead of what they are doing wrong (Bakker & Daniels, 2011). Drawing upon positive psychology, scholars started to investigate constructs such as work engagement, which are in line with this positive energetic view (Tummers et al., 2016). Work engagement refers to an active energetic state of mind that is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). Vigor is defined as having high levels of energy and mental resilience while working; dedication is defined as feeling a sense of significance, enthusiasm, pride, and inspiration toward one's work; absorption is defined as being fully engrossed in one's work (Schaufeli et al., 2002).

Together with the development of the work engagement construct, the study of its antecedents and consequences is based on the JD-R model. According to this model, job characteristics can be classified as either job demands or job resources. Job demands are factors that cost energy to deal with, such as high workload and role ambiguity (Bakker, 2015). Job resources are factors that help individuals to deal with these demands including social- and supervisor support, developmental opportunities, and autonomy (Bakker & Demerouti, 2008). While the JD-R theory proposes that job demands and resources directly affect work engagement, they can also interact in shaping the work engagement of employees (Bakker & Demerouti, 2008; Hakanen, Bakker, & Demerouti, 2005). Scholars show that the effect of job resources on work engagement becomes more salient and gains motivational potential when employees are confronted with high job demands as job resources can help goal achievement.

As most psychological approaches assume that human behavior results from an interaction between personal and environmental factors, it is deemed necessary that personal resources are integrated into the JD-R model (Schaufeli & Taris, 2014). Indeed, Xanthopoulou, Bakker, Demerouti, & Schaufeli (2007) extended the JD-R model by incorporating these personal resources—next to job resources—which are psychological characteristics or aspects of the self, including self-efficacy and proactive behavior.

The JD-R model described is extended below by integrating public administration literature and inherently several phenomena of the public sector.

Red tape: A key job demand in the public sector

Although the effects of many job demands on work engagement have been studied, a key job demand in the public sector has been ignored. One of the most studied job demands within the public sector is the perceived unmanageable paperwork by public servants, also known as red tape (Bozeman & Feeney, 2011; Brewer & Walker, 2010; DeHart-Davis & Pandey, 2005; Walker & Brewer, 2008). When public servants encounter rules, regulations, or procedures that seem pointless yet burdensome, they become alienated of their work, less creative, and less productive (DeHart-Davis & Pandey, 2005). Red tape can therefore be framed as hindrance job stressors that are appraised as those job demands or work circumstances that involve excessive or undesirable constraints that inhibit an individual's work engagement (Crawford, Lepine, & Rich, 2010, Quratulain & Kahn, 2015). It has also been shown by Vermeeren & Geest (2012) that perceived red tape negatively affected the pride of public servants being an important part of work engagement. We therefore posit the following Hypothesis:

> *H1: Perceived red tape has a significant negative impact on the work engagement of public servants.*

Effect of classes of job resources on work engagement

Although the JD-R model treats all resources as equally important, several scholars in public administration developed classes of characteristics to investigate their effect on, for example, job motivation, pride, job satisfaction, and organizational commitment (Moynihan & pandey, 2007; Steijn, 2004; Vermeeren & Geest, 2012). These scholars make a distinction between work-related characteristics, organization-related characteristics and personal characteristics. As mentioned before, the JD-R model also recognizes personal resources as a separate class (Xanthopoulou et al., 2007), but ignores the importance of clusters of job resources on work engagement as well as how they are perceived by employees (Noesgaard & Rosenberg Hansen, 2017). As personal resources are a separate part in the JD-R model, we will discuss these resources in the next paragraph.

Within public administration literature, next to personal resources, two classes of job resources are often identified—work-related resources (e.g., teamwork with colleagues, content of the job, autonomy) and organization-related resources (supervisory support, developmental opportunities, and performance measurement; for example, Vermeeren & Geest, 2012). The present study argues that the effects of public servants' perceptions about these clusters of resources have divergent effects on work engagement.

Several studies have shown that public servants are more motivated by work characteristics than by organization-related characteristics. It is explained by the assumption that public servants are intrinsically motivated by the job instead of extrinsically motivated by organizational stimuli (Buelens & van den Broeck, 2007). It is therefore expected that when public servants are satisfied about their work-related resources, they become more engaged than when they are satisfied about their organization-related resources.

Various scholars show that public servants indeed are mostly motivated by work-related resources including job content, recognition, autonomy, and interesting work (Buelens & van den Broeck, 2007; Houston, 2000). Organization-related resources such as career development opportunities, supervisory support, and performance management have a positive but weaker effect on work engagement than work-related job resources (Conway Na, Kathy, Kerstin, & Bailey, 2016; Lavigna, 2013). Lavigna (2013) argued that supervisors in the public sector are often put in difficult situations by politically elected top executives to force public servants to develop and implement ambiguous and conflicting policies which results in lower work engagement. Conway et al. (2016) also showed that performance management within the public sector has no effect on work engagement. Public servants find themselves doing less of what they consider pleasurable or fulfilling because first of all they have to reach the standards set by the supervisors (Conway et al., 2016). In addition, Borst, Lako, & de Vries (2013) showed that career development opportunities only have a relatively small effect on the satisfaction of public servants. We can therefore state the following Hypothesis:

H2: Satisfaction about work-related resources has a stronger positive effect on work engagement than satisfaction about job resources from the organisation.

Moreover, as argued by the JD-R model, job demands, including red tape, moderate the impact of job resources on work engagement. Specifically, the more job demands employees experience, the higher the motivational potential of job resources on work engagement because they can help goal accomplishment (Bakker & Demerouti, 2008; Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007). Normally, red tape is a hindrance job stressor that is assumed to have a negative impact on the work engagement of public servants. However, in situations where job demands coincide with the availability of job resources, job demands are more likely to be experienced as challenges rather than hindrance job stressors (Bakker, van Veldhoven, & Xanthopoulou, 2010). In the case that public servants have job resources, they can be used to cope with this challenging demand (i.e., red tape). According to this coping mechanism, it might therefore well be the case that high-perceived red tape increases the effect of the perceived resources by public servants on their work engagement.

H3: The relationship between the job resources and work engagement of public servants is moderated by job demands (red tape) that is, the effects of work-related resources and organization-related resources on work engagement become more salient when public servants perceive high red tape.

Personal resources

PSM is seen as a "key psychological resource" (Bakker, 2015: 729) that is expected to drive high levels of engagement (Lavigna, 2015). However, the actual effect of PSM on work engagement is understudied. PSM refers to the predisposition of individuals to serve the public interest (Perry & Hondeghem, 2008). It is a personality trait of individuals who are willing to engage in sacrificial behavior for the good of citizens without reciprocal benefits for themselves (Perry & Vandenabeele, 2015). Many employees enter public service because they are already committed to the mission of government (Lavigna, 2013). PSM is therefore a relatively stable, higher-level individual variable that is only subject to slow change (Bakker, 2015). This means that PSM helps public servants to do their work full of energy and dedication—that is, work engagement (Bakker, 2015). However, this effect might depend on the degree to which employees feel that a particular organizational environment allowed them to fulfill their public service motives (Bright, 2007). A good fit between the PSM of a person and the organization is therefore necessary to reach high work engagement. Despite this nuance, PSM is a trait which gives public servants energy and therefore probably positively affects work engagement (Bakker, 2015).

Two other personal resources that are not entirely new to the JD-R model but have not been studied in a public sector context are professional expertise and proactivity. First, professional expertise refers to the personal qualities and capabilities that are needed to reach given attainments (van der Heijden, 2000). Second, proactive employees demonstrate initiative and perseverance (Crant, 1995). These are preconditions of vigor (Schaufeli et al., 2002). The three personal resources mentioned are expected to directly influence work engagement (Christian Garza, & Slaughter, 2011; Lavigna, 2015). This results in the following Hypothesis:

> *H4: Personal resources including proactivity, professional expertise and PSM, have a positive effect on the work engagement of public servants.*

7.2.2 Outcomes of work engagement

Kahn (1990) proposed that individual and organizational factors influence work engagement, which drives individual attitudes and behavior such as turnover intention and affective commitment. In other words, work engagement is believed to mediate the relationships between the JD-R model and job outcomes (Kahn, 1990; Schaufeli, 2015).

Within public administration literature, emphasis is being placed on the importance of organizational commitment. It is called a "hedonic indicator" that refers to happiness, pleasure, and enjoyment (Diener, Scollon, & Lucas, 2009; Ryan & Deci, 2001; Tummers et al., 2016). In contrast, work engagement is a so-called "eudaimonic" indicator that refers to purpose, meaningfulness, and psychological well-being (Diener, Scollon, & Lucas, 2009, McGregor & Little, 1998; Ryan & Deci, 2001). Although organizational commitment might have some minor overlap with work engagement, Vigoda-Gadot et al. (2013) showed that work engagement is theoretically but also empirically a different concept than organizational commitment. Work engagement is a more encompassing and deeper construct than affective organizational commitment as it connotes the *process* of the active investment of an employees' entire self (psychically, cognitively and emotionally) to its work (Tummers et al., 2016, Vigoda-Gadot et al., 2013). In contrast, hedonic concepts such as organizational commitment are called passive employee *attitudes* as employees can be committed to the organization, but they might simultaneously be passive in their behavior (Tummers et al., 2016). Organizational commitment connotes calmness and contentedness (e.g., "I feel at home in my organization") which might lead to low activation, while work engagement leads to enthusiasm and excitement which lead to high activation (adapted circumplex model of Russel, 1980, in Schaufeli, 2013).

Comparable with commitment, turnover intention is often characterized as a passive employee attitude, although it has a negative connotation (Harrison, Newman and Roth, 2006). Cohen, Blake, & Goodman (2016) show in a study among federal U.S. public agencies that this turnover intention often does not lead to actual turnover. It is passive since it often does not lead to actual behavior.

Studies show that employees who experience high levels of components of eudaimonic well-being (e.g., work engagement) are physically healthier, experience more satisfaction of their psychological needs, and also experience hedonic well-being (e.g., commitment) compared to employees with low eudaimonic well-being (Barret-Cheetham et al., 2016; Ryff, 1989). As work engagement is indeed a deep state of mind that connotes the satisfaction of basic psychological needs (physically, cognitively and emotionally), it might well lead to higher hedonically defined happiness and pleasure including affective organizational commitment and lower turnover intention. It is therefore expected that organizational commitment and turnover intention are outcomes of work engagement.

Moreover, while it is expected that organizational work engagement is a determinant of these job outcomes, several scholars in public administration showed that individual and job resources are also determinants of organizational commitment and turnover intention (Cohen et al., 2016; Moynihan & Pandey, 2007). It is therefore expected that work engagement partially mediates the relationship between individual and job resources, and job outcomes. This brings us to Hypothesis 5:

> *H5: Work engagement partially mediates job resources, job demands, and personal resources on one hand and organizational commitment, and turnover intention on the other hand.*

These hypotheses lead to the conceptual model presented in Figure 7.1.

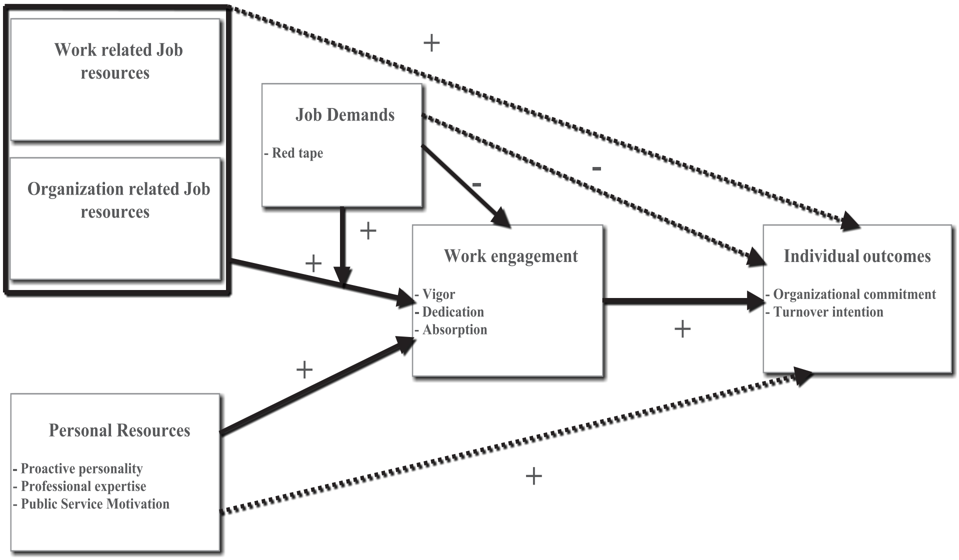

FIGURE 7.1: Conceptual model

7.3 Methods

7.3.1 Participants

To test the hypotheses, we used a survey carried out in 2014 by the Dutch Ministry of the Interior and Kingdom Relations (2015). In total, 31.181 questionnaires were sent to public servants employed in municipalities, provinces, water boards, central government and the legal authorities. In total, 9.503 questionnaires were returned (response rate = 30.5%). In total, 38 respondents with missing values on the variables needed for our research were excluded (all missings were on the control variables). After deleting participants with missing values on the research variables, data of 9.465 public servants was used.

7.3.2 Measures

The participants answered all measures on a 5-point Likert scale ranging from 1 ("Totally disagree") to 5 ("Totally agree") except for turnover intention, individual resources, and organization related resources. The individual and organization related job resources were measured using 5-point Likert satisfaction scales ranging from 1 ("Totally dissatisfied) to 5 ("Totally satisfied"). Turnover intention was dichotomized into "Yes" and "No". All items of the used constructs can be found in appendix 1.

Work engagement. Work engagement was measured using 6 items of the validated 9-item short version of the Utrecht Work Engagement Scale (Schaufeli et al., 2002). Work engagement is a higher order construct composed of the three dimensions vigor, dedication, and absorption. Because the three dimensions of engagement are highly intercorrelated (i.e., intersubscale correlations over .50), it is a common approach to combine the subscales into an aggregate measure of work engagement (e.g., Halbesleben et al., 2009). A high score indicates that an employee is engaged in his/her work.

Red tape. Red tape was measured with a validated 6 item-scale applied before within a large Dutch public sector survey (Vermeeren & Geest, 2012). A high score indicates that an employee perceives a high level of red tape.

Satisfaction with work-related and organization related job resources. According to the Dutch Ministry of the Interior and Kingdom Relations (2014) these two measures are based on theoretical concepts and controlled for unidimensionality by means of factor analysis and reliability analysis. A high score on both variables indicates than an employee is satisfied with respectively work-related resources and organization-related resources.

Public Service Motivation (PSM). PSM was measured with 10 items from the validated PSM scale of Vandenabeele (2008) and previously applied by van Loon, Kjeldsen, Andersen, Vandenabeele, & Leisink (2016). This scale is an adapted version from the original scale of Perry (1996) which Vandenabeele (2008a) developed to make it compatible within contexts such as the Dutch public sector. Vandenabeele (2008b) found that a model of three dimensions performed better than a four dimension model of public service motivation (with 'public interest' and 'self-sacrifice' collapsed into one dimension). We therefore used a second order three-dimensional construct which includes the dimensions of attraction to public policy (APP), compassion (COM), and commitment to the public interest/self sacrifice (CPI).

Affective commitment. Affective commitment was measured with 4 items from the validated affective commitment scale of Meyer & Allen (1990). A high score indicates that an employee feels committed to the organization.

Turnover intention. Turnover intention was measured with a single item: Are you currently looking for another job? Although a single item measure precludes analyses of reliability, it is a frequently applied measure in studies of turnover intentions (e.g., Conklin & Desselle, 2007; Grover & Crooker, 1995).

Professional expertise. Occupational expertise was measured with 3 items from Van der Heijden's (2000) validated occupational expertise scale. A high score indicates that an employee perceives that he/she has high occupational expertise.

Proactive personality. Proactive personality was measured with 5 items from Bateman and Crant's (1993) validated proactivity scale. However, instead of measuring general proactivity as in the scale of Bateman and Crant (e.g., "I am constantly on the lookout for new ways to improve my life") it is applied to the work environment (e.g., "I try to continually improve myself in my profession"). A high score indicates that an employee has a proactive personality.

Control variables. Several control variables were also included. We dummy coded gender (0 = male; 1 = female). Age was categorized into five cohorts (1 = 15-24 years; 2 = 25-34 years; 3 = 35-44 years; 4 = 45-54 years; 5 = 55 years and older). Tenure was included as a continuous variable, expressed as the number of years employees have worked for the organization. We also included education which was subdivided into seven categories, reflecting the Dutch educational system (1 = primary education; 2 = pre-vocational secondary education, 3= senior general secondary education and pre-university education, 4= secondary vocational education; 5 = higher professional education; 6 = university education; 7 = academic education). Age and education were treated as continuous variables in line with Vermeeren, Kuipers & Steijn (2014b).

7.3.3 Strategy of analysis

Our five hypotheses were tested using structural equation modeling performed in Mplus version 7.4 (Muthén, Muthén, & Asparouhov, 2016). A two-step approach was adopted where; firstly, the measurement model was examined, followed by the analysis of the structural model (Anderson & Gerbing, 1988). Since the measurement model included a large number of categorical variables of which many had skewed answer distributions (floor and ceiling effects), we applied the Weighted Least Squares Means and Variance adjusted (WLSMV) estimation method. The WLSMV estimation method does not assume normally distributed variables and provides the best option for modelling categorical data (Brown, 2006). After the development of the measurement model, all the created factors for the structural model are automatically corrected for skewedness and made continuous.

To test the measurement model, several fit measures were analyzed. In large samples (as in this research), the chi-square test almost always leads to the rejection of the model because the difference between the sample covariances and implied population covariances lead to a higher chi-square value when the sample size increases (Hu & Bentler, 1999). As a result, a number of alternative fit measures have been developed from which we use one of every "family" (Hu & Bentler, 1999). The comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square of approximation (RMSEA) are used to assess whether the model fits the data. The measures of CFI and TLI indicate fit with a threshold above 0.90 and excellent fit above .95. An RMSEA value indicates good fit below 0.08 and excellent fit below 0.05 (Byrne, 2012, Hu & Bentler, 1999; Kline, 2010). In addition, construct reliability (C.R.) and Average Variance Extracted (AVE) were calculated to test respectively the reliability and validity of our variables.

To analyze the relationships between the constructs, two structural models were developed. Within the first model, the mediated SEM-model was developed. A second model including simple slopes was calculated to test the moderating effects. The reason for this separate model is twofold. Firstly, the inclusion of latent interactions into the first model with eight latent variables cannot lead to a reliable estimation. Secondly, latent interactions do not lead to fit measures which would make the interpretation of the structural model less powerful. Since latent interactions do not lead to fit measures, we analyze the additional variance explained and the significance of the interaction to tell whether the moderating effects matter.

To test the mediating effects, the popular method of bootstrapping is applied (Bollen & Stein, 1990; Shrout & Bolger, 2002). This method is based on resampling with replacement that is done many times. The indirect effect from each subsample is computed which leads to the computation of an overall confidence interval. If zero is not in the interval, then the researcher can confidently conclude that the indirect effect is different from zero (Bollen & Stein, 1990). The reported results are based on bias-corrected and accelerated confidence intervals set at 0.95 with 1000 resamples.

7.4 Results

In this section, the results of the study are presented. First, a measurement model of the study's central variables is constructed in order to assess its measurement quality and convergent and discriminant validity (section 7.4.1). Then, descriptive statistics and correlations are reported. We then examine our hypotheses by means of a structural equation model (7.4.2).

7.4.1 The measurement model

The model consists of eight latent variables –work engagement, work-related job resources, organization related job resources, occupational expertise, proactive personality, PSM, red tape, affective commitment– and one observed, single-item variable – turnover intention. The values of the measurement model were 0.937 (CFI), 0.931 (TLI), and 0.052 (RMSEA) which indicate model fit. A Harman's single-factor test, in which all items are loaded onto one dimension, was performed to test for common method bias. This model had a significantly worse fit (CFI = 0.460, TLI = 0.434, RMSEA = 0.150) compared to the measurement model, indicating that common method bias is unlikely to influence the results (Podsakoff & Organ, 1986).

All items significantly loaded onto the appropriate factor (loadings ≥ .52). In addition, the C.R. of all constructs were higher than 0.60 and the AVE of all constructs, except PSM (0.46), were higher than 0.50 (Fornell & Larcker, 1981). An explanation for the low AVE of PSM might be that the first order factor (*Attraction to public policy making*) scores considerably lower than the other first order factors of PSM. Still the indicators loaded higher on this first order factor than on other constructs, and both the construct reliability (C.R.) and composite reliability of the dimension (Cronbach alpha) are good (respectively 0.80 and 0.74). We therefore chose to retain the low scoring factor in the PSM construct. We conclude from the above statistics that the reliability of our constructs is sufficiently warranted.

Furthermore, the AVE of 7 of 8 constructs exceeds the squared correlations between the other constructs which means that their discriminant validity is sufficiently warranted. One exception is the measure satisfaction with organization-related resources which has an AVE of 0.53 while the squared correlation of satisfaction with job resources is 0.56. The difference is negligible so multicollinearity is checked via the variance inflation factor (VIF). In Table 7.1, the means, standard deviations (S.D.), and correlations of the studied variables are presented.

TABLE 7.1: Descriptive statistics and correlations (***N*** = 9.465)

	Mean	**S.D.**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
1 Gender	.39	0.49	-												
2 Age	3.97	0.95	-.19***	-											
3 Educational level	4.53	1.40	.02*	-.20***	-										
4 Tenure	16.55	11.38	-.18***	.54***	-.30***	-									
5 Work engagement	3.90	0.77	-.03*	.03**	.05***	-.03**	α=0.90								
6 Work related job resources	4.26	0.79	.01	.05***	.04**	.03**	.71***	α=0.72							
7 Organization-related job resources	3.22	1.06	.02	.03***	.00	.00	.45***	.75***	α=0.86						
8 Professional expertise	3.90	0.76	-.05***	-.04***	.18***	-.06***	.44***	.30***	.06***	α=0.70					
9 Proactive personality	4.05	0.65	-.04***	-.01	.12***	-.05***	.57***	.36***	.11***	.71***	α=0.84				
10 Public service motivation	3.35	0.83	-.02	.05***	.17***	-.02	.50***	.31***	.18***	.38***	.55***	α=0.71			
11 Red tape	3.06	0.97	-.10***	.02*	-.03***	.05***	-.17***	-.36***	-.55***	.01	.02	-.03**	α=0.82		
12 Turnover intention	0.22	0.42	.04**	-.19***	.15***	-.18***	-.16***	-.29***	-.28***	.12***	.04***	.07***	.12***	-	
13 Affective commitment	3.26	0.90	-.04**	.03**	-.06***	.09***	.62***	.58***	.67***	.19***	.28***	.41***	-.32***	-.20***	α=0.78

a) * ≤0.05 **≤0.01 ***≤0.001
b) S.D. = standard deviation, α=Cronbach's alpha
c) VIF_{max} values 3.87 (criterion < 10); $tolerance_{min}$ .258 (criterion > 0.1); Lowest error variance .006 (criterion >.000), α = Cronbach's alpha. VIF = variance inflation factor.

As is shown in Table 7.1, the correlation between the two resources is 0.75. However, the VIF between the two constructs is 2.4, which indicates that the value is within acceptable range (Bowerman & O'Connell, 1990). Besides the absence of multicollinearity between the two constructs, the Cronbach alphas of both constructs are good (respectively $\alpha = 0.72$, and $\alpha = 0.86$), and the fit measures of the CFA of these measures are also good (TLI = 0.934, CFI = 0.950, RMSEA = 0.072). Thus, for this model, discriminant validity has been demonstrated.

7.4.2 Structural equation models

Two structural models were constructed to test our five hypotheses. The results of the direct effects are shown in model 1 of Table 7.2. We report the moderated relationships in model 2 of Table 7.2 and the bootstrapped indirect (mediating) effects of model 1 in Table 7.3.

The fit measures of the first model in Table 7.2 were 0.939 (CFI), 0.934 (TLI) and 0.049 (RMSEA), implying that the model has a good fit. A large proportion of the variance in work engagement of public servants is explained by our JD-R model ($R^2 = 0.518$). As model 1 show, hypothesis 1 is rejected because the perceived red tape of Dutch public sector employees does not have a significant effect on their work engagement.

In contrast, the results show that the job resources do have a significant and positive effect on work engagement. As hypothesized, work-related resources have a notably strong positive effect on work engagement ($\beta = 0.46$, $p < .001$), while organization-related resource have a small positive effect on work engagement ($\beta = 0.052$, $p < .01$). In other words, teamwork with colleagues, content of the job, and autonomy lead to higher work engagement among public servants than supervisory support, developmental opportunities, and performance measurement. Hypothesis 2 is therefore accepted.

According to Hypothesis 3 it was expected that these job resources become even more salient when perceived red tape is high. Comparing the models with moderator and without moderator (model 2), we note that the r-square increased with five percent. This provides an indication that the explained variance of work engagement increases as a result of the added interactions. For the interaction with work-related job resources, the regression coefficient is $\beta = 0.124$ ($p < .01$), while the interaction with organization related job resources is $\beta = -0.164$ ($p < .01$). In Figure 7.2 and 7.3, we plot the interaction effects in order to interpret the results.

TABLE 7.2: Results SEM analysis (N = 9.465)

	Model 1				Model 2	
	Work engagement JD-R including personal resources	**Affective commitment**	**Turnover intention[a]**		**Work engagement JD-R excluding moderation**	**Work engagement JD-R including moderation**
Gender	-.037 (.023)	-.046* (.021)	-.001 (.030)	Gender	-.045 (.024)	-.070*** (.018)
Age	.061*** (.014)	-.052*** (.013)	-.172*** (.018)	Age	.040** (.016)	.012 (.010)
Educational level	.025** (.008)	-.037*** (.008)	.106*** (.011)	Educational level	.016 (.009)	.003 (.007)
Tenure	-.005*** (.001)	.009*** (.001)	-.012*** (.002)	Tenure	-.006*** (.001)	-.006*** (.001)
Work-related job resources	.461*** (.019)	-.129*** (.023)	-.251*** (.032)	Work-related job resources	.663*** (.020)	.679*** (.017)
Organization- related job resources	.052** (.018)	.498*** (.019)	-.190*** (.028)	Organization- related job resources	-.042* (.021)	-.022 (.020)
Red tape	.017 (.013)	-.009 (.013)	-.019 (.020)	Red tape	.048*** (.015)	.049*** (.014)
Professional expertise	.048** (.015)	.001 (.015)	.179*** (.023)	Red tape*Work-related job resources		.124*** (.021)
Proactive personality	.267*** (.018)	-.022 (.018)	.022 (.026)	Red tape*Organization- related job resources		-.164*** (.018)
Public Service Motivation	.158*** (.014)	.169*** (.015)	.152*** (.022)			
Work engagement		.384*** (.019)	-.123*** (.026)			
R-square	.518	.511	.298	**R-square**	.394	.444
Model fit	CFI = .939, TLI = .934, RMSEA = .049			**Model fit**	AIC = 442440.354 BIC = 443298.996	AIC = 442958.538 BIC = 443831.492

Note. SEM = structural equation modeling; JD-R = job demands–resources; CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square of approximation; AIC = Akaike information criterion; BIC = Bayesian information criterion.
[a]As turnover intention is a binary outcome, probit regression coefficients are shown instead of linear regression coefficients. *$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

TABLE 7.3: Bootstrap results work engagement as mediator (*N* = 9.465)

		Affective commitment				Turnover intention			
		Effect	**SE**	**BootLLCI**	**BootULCI**	**Effect**	**SE**	**BootLLCI**	**BootULCI**
Work-related resources	Total	.047*	.021			-.308***	.028		
	Direct	-.129***	.023			-.251***	.032		
	Indirect[a]	.177***	.012	.159	.197	-.056***	.012	-.076	-.036
Organization-related resources	Total	.518***	.020			-.196***	.029		
	Direct	.498***	.019			-.190***	.028		
	Indirect[a]	.020**	.007	.009	.031	-.006*	.003	-.012	-.003
Professional expertise	Total	.019	.016			.174***	.024		
	Direct	.001	.015			.179***	.023		
	Indirect[a]	.018**	.006	.009	.029	-.006*	.002	-.011	-.003
Proactive personality	Total	.080***	.018			-.011	.025		
	Direct	-.022	.018			.022	.026		
	Indirect[a]	.102***	.009	.087	.115	-.033***	.007	-.045	-.021
Public Service Motivation	Total	.229***	.016			.132***	.022		
	Direct	.169***	.015			.152***	.022		
	Indirect[a]	.061***	.006	.051	.071	-.020***	.004	-.028	-.012
Red tape	Total	-.003	.014			-.021	.020		
	Direct	-.009	.013			-.019	.020		
	Indirect[a]	.007	.005	-.002	.015	-.002	.002	-.005	.000

Note. BootLLCI = Bootstrapped lower level confidence interval, BootULCI = Bootstrapped Upper Level confidence interval
a) Mediated through work engagement
* ≤0.05 **≤0.01 ***≤0.001,

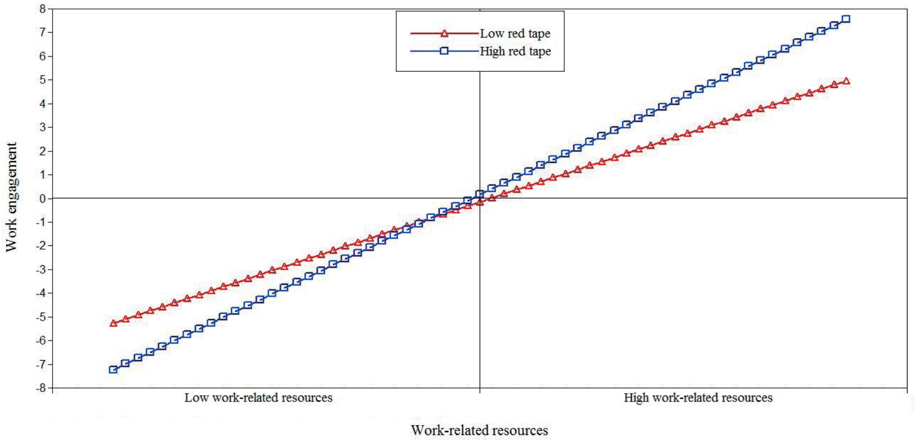

FIGURE 7.2: Interaction of red tape on the work-related resources-work engagement relationship

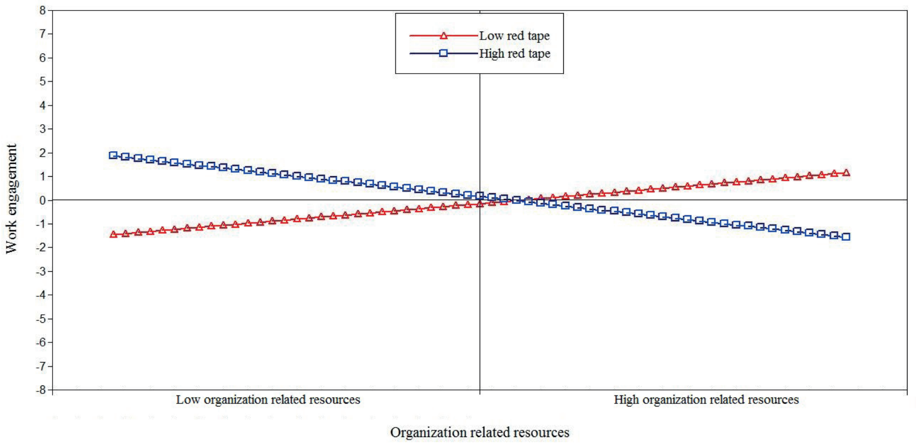

FIGURE 7.3: Interaction of red tape on the organization-related resources-work engagement relationship

Figure 7.2 and 7.3 show the estimated moderation effect of low (+1 standard deviation above the mean) and high red tape (respectively -1 and +1 standard deviation of the mean) on the relationship between respectively work-related resources and work engagement, and organization-related resources and work engagement. In accordance with hypothesis 3, the effect of work-related resources on work engagement is stronger with high red tape than with low red tape. However, the effect of organization related resources on work engagement is weaker with high red tape than with low red tape. Hypothesis 3 is therefore partially accepted.

According to Hypothesis 4 it was expected that the personal resources proactivity, professional expertise and PSM also have a positive effect on the work engagement of public servants. The results in model 1 indeed show that being a proactive person as well as having professional expertise and PSM, positively affects the work engagement of Dutch public servants (respectively $\beta = 0.267$, $p < .001$, $\beta = 0.048$, $p < .01$ and, $\beta = 0.158$, $p < .01$). Hence, Hypothesis 4 is accepted.

We partially accept Hypothesis 5 since Table 7.3 shows that work engagement is a significant (partial) mediator between 5 independent variables and both turnover intention and affective commitment. Interestingly, the direct effects of proactive personality and professional expertise on affective commitment are insignificant while their indirect effects through work engagement are significant. In other words, work engagement fully mediates the effects of proactive personality and professional expertise on organizational commitment. Moreover, the personal resources PSM and professional expertise have a positive significant effect on turnover intention instead of an expected negative effect (respectively $\beta = 0.152$, $p < .01$ and, $\beta = 0.179$, $p < .001$). However, the indirect effects of these personal resources through work engagement are positive. In contrast, work engagement is not a significant mediator in the case of the relationship between red tape and organizational commitment, and turnover intention respectively.

7.5 Discussion

This article had two aims. In the first place, we aimed to extend the JD-R model of work engagement by bringing in the public administration literature. In the second place, we wanted to contribute to the public administration literature by integrating work engagement literature and inherently a positive psychology perspective.

The work engagement concept is developed in combination with the Job Demands-Resources (JD-R) model. We extended this model in three ways. First, our analysis shows that satisfaction with work-related resources (autonomy, colleague support and job content) leads to higher work engagement among public servants than satisfaction with organization-related resources (supervisory support, developmental opportunities and performance measurement). An explanation might be that public servants become especially engaged due to intrinsic motivational resources. Job resources are assumed to play either an intrinsic motivational role because they foster employees' growth, learning and development, or an extrinsic motivational role because they are instrumental in achieving work goals (Bakker & Demerouti, 2008). Work-related job resources especially fulfill an intrinsic motivational role since they foster basic human needs, such as the needs for autonomy, relatedness and competence (Deci and Ryan, 1985), while organization related job resources including performance feedback and training increase the likelihood of being successful in achieving one's work goals (Bakker & Demerouti, 2008). These findings confirm that—relative to private sector employees—public servants become the most engaged by intrinsic factors including work-related resources (Buelens & Van den Broeck, 2007).

Moreover, the personal resources of public servants, including proactive personality, professional experience, and PSM, positively affect their work engagement. However, the extent to which public servants have a proactive personality and professional expertise does not matter for their organizational commitment. Moreover, the rate of PSM and professional expertise of public servants have a positive significant effect on their intention to leave their organization instead of an expected negative relation. The finding that PSM positively relates with turnover intention corroborates with the findings of Quratulain & Kahn (2015) who also demonstrate this possible "dark side" of PSM. A possible explanation for this mechanism might be that there is a misfit between individuals with high PSM and their organizational environment. When individuals with high PSM work in a particular organizational environment that does not allow them to fulfill their public service motives, there is no so-called PSM-fit (Steijn, 2008). This incompatibility might lead to negative behaviors and attitudes including turnover intention (Quratulain & Khan, 2015).

Second, our analysis shows that work engagement significantly mediates the relationship between the job resources and personal resources of public servants on the one hand and their commitment and turnover intention on the other hand. While the rate of proactivity and PSM of public servants directly affects their turnover intention, the indirect effects through work engagement are negative. Moreover, the rate of proactivity and professional expertise of public servants only affects organizational commitment when their work engagement is taken into account. In other words, work engagement fully mediates the effects of proactive personality and professional expertise on organizational commitment. These results show that commitment and turnover intention are rather superficial employee attitudes which are determined by environmental factors but barely by the personality of individuals.

In contrast, work engagement is determined by personality characteristics and environmental factors which confirm the idea that work engagement is a more encompassing and deeper state of mind of public servants than commitment and turnover intention.

Thirdly, our results show that the perceived ted tape by public servants does not have a negative effect on work engagement. The perceived red tape by public servants does not affect their organizational commitment or turnover intention either. However, the effect of work-related resources on the work engagement of public servants is stronger when they perceive high red tape than when they perceive little red tape. In addition, the effect of organization-related resources on the work engagement of public servants is weaker when they perceive a lot of red tape than when they perceive little red tape. In other words, the coping hypothesis is confirmed in case of work-related resources but not in case of organization-related resources (Bakker & Demerouti, 2008). A possible explanation might be that public servants, under conditions of high red tape, become increasingly engaged by their work-related job resources (including colleagues, autonomy and the content of the job) as these resources are the only ones that could form an (emotional) buffer against the perceived red tape. In contrast, although employees can be for example satisfied with the feedback of their supervisor and the developmental opportunities, they often need to fill out respectively the annual performance report and declare the course fees which really decreases the effects of the satisfaction with these organizational resources on their work engagement. In other words, it seems to be the case that organization-related resources in the public sector are automatically accompanied with more red tape which de facto lead to the evaporation of the positive effects of these resources on work engagement.

These results give some interesting opportunities for public personnel managers to enhance engagement and employee outcomes. Public personnel managers might for example focus especially on autonomy, co-operation with colleagues and the content of jobs if they want to improve outcomes. Public personnel managers could also enhance work engagement by selecting personnel with a proactive personality and PSM. Although by the selection of employees with PSM, public personnel managers should take the possible "dark side" of PSM into account.

Despite these contributions, our study also has some limitations. Our study includes the use of cross-sectional data which does not allow us to claim causal inferences concerning the presented results. As such, the possibility exists that work engagement is for example not only an antecedent but also an outcome of organizational commitment. In addition, since the questions on all the factors were asked in the same survey, the data could be subject to common source bias (CSB). Despite several precautions, future studies could employ longitudinal or experimental designs to overcome CSB. Furthermore, we made use of secondary data. The downside of using secondary data is that the operationalizations of some factors, such as red tape, were fixed beforehand. However, there is much debate about the operationalizations of red tape. Moreover, several interesting contextual factors could not be included such as variables related to person-organization fit and job demands such as role and goal ambiguity.

These limitations do hint at possible future research directions. Our study focused merely on the effects of work engagement on the outcomes "turnover intention", and "organizational commitment". As mentioned before, it is expected that work engagement is the most robust predictor of job performance. Future studies might therefore focus on the effect of work engagement on the in-role and extra-role performance of public servants as well. Furthermore, we included PSM as a personal resource and the results show that PSM positively affects work engagement. Simultaneously, our results also show that PSM positively affects turnover intention. In terms of the JD-R model, PSM might therefore be seen as a job demand as well. As this mechanism might be explained by PSM-fit, it could be a fruitful endeavor to integrate the PSM-fit concept into the JD-R model of work engagement in future research. In addition, future research might also focus on other public sector contexts such as education and healthcare to validate our results. The work engagement of public servants in classical public sectors (people-processing service providers) might not be affected by red tape because it is more institutionalized in this context (van Loon, 2015). However, public servants in other institutional contexts such as education and healthcare (people-changing service providers) might experience much more negative effects of red tape (van Loon, 2015). Although this research has been able to present interesting outcomes though integrating work engagement and inherently a positive psychology perspective in public administration, there is more to discover.


8

Comparing work engagement in people-changing and people-processing service providers: A moderated mediation model with red tape, autonomy, PSM-fit, dimensions of PSM and performance

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8.1 Introduction

Work engagement—defined as "[…] a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-Romá, & Bakker, 2002)—gained increasing attention in public organizations across the world (e.g., Jansen, Brink, & Kole, 2010; Kernaghan, 2011; Cotton, 2012; Lavigna, 2013). In contrast with passive attitudes such as organizational commitment and job satisfaction that connote calmness and contentness, work engagement connotes proactivity and energy (Tummers, Steijn, Nevicka, & Heerema, 2016). Since it is increasingly expected of public servants to perform better with fewer resources supplemented with an increasing negative image among citizens, public organizations need engaged public servants instead of merely satisfied (passive) employees (Lavigna, 2013; Liu, Yang, & Yu, 2015).

Despite the attention for work engagement in practice, there is a dearth of research examining work engagement in the public sector context (Tummers et al., 2016; Vigoda-Gadot, Eldor & Schohat, 2013; Khernaghan, 2011). Without specific attention to context, Bakker & Hakanen (2014) show for example that the work engagement of public dentists is significantly lower than the work engagement of private dentists. Also the within sector differences including the institutional contexts and inherent work tasks receive little attention (Bickerton, Miner, Downson, & Griffen, 2015, Bakker, Demerouti, & Sanz-Vergel, 2014; Gorgievski, Mariano, & Bakker, 2014). Nonetheless, the few researchers conducting research in that area showed interesting findings. Hakanen, Bakker, & Schaufeli (2006) argue that individual differences of teachers relative to other public occupations might influence work engagement. Borst & Lako (2017) show that the pride of public teachers as an important indicator of work engagement is much higher than the pride of public servants in classic public sectors such as local and central government.

The goal of this study is, therefore, to examine the relationship between antecedents and outcomes of work engagement in the public sector in general and the within public sector differences including varying institutional contexts and inherent work tasks in particular.

The analysis of the antecedents of work engagement is based on the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2008). Throughout the last decade, the effects of many antecedents and outcomes of work engagement have been studied applying this model (for an overview: Schaufeli & Taris, 2014: 64-65). I extend this JD-R model of work engagement by examining specific defining elements of the public sector context that might influence the work engagement of public servants—PSM, autonomy and red tape (Lavigna, 2013). Scholars have argued that, for example, applying PSM has a positive relationship with the work engagement of public servants (Bakker, 2015; Vigoda-Gadot et al., 2013; Jin & McDonald, 2017). However, it has also been shown that some dimensions of PSM do not have such an effect on the attitudes and well-being of public servants (e.g., Homberg, McCarty, & Tabvuma, 2015; Taylor, 2007). The effects of the dimensions of PSM as well as the effects of autonomy and red tape on work engagement might depend on the various institutional contexts within the public sector (Kjeldsen, 2014, van Loon, 2017).

Besides the focus on antecedents, scholars in public administration argue that work engagement is expected to be positively related with job satisfaction, good service provision, and quality of service (Vigoda-Gadot et al., 2013). Work engagement is therefore potentially an answer to the main challenge in the public sector today, namely, performance enhancement (Vigoda-Gadot et al., 2013). The effects of work engagement on job performance and job satisfaction of public servants will be tested below. Since work engagement is often analyzed as a mediating variable between job demands and job resources that impact on work engagement, which in turn affects outcomes (Schaufeli, 2015), I analyze the role of work engagement within the relationship between the public sector specific factors (PSM, red tape, autonomy) on the one hand and the performance and satisfaction of public servants on the other hand.

In a nutshell, my study tries to answer the following questions: Under which contextual conditions is work engagement associated with red tape, PSM and autonomy? What are the effects of work engagement on job satisfaction and job performance? To what extend is work engagement a mediator between these job resources and job outcomes? Do these relationships differ between public servants within different institutional contexts and what are the influential aspects of these contexts?

The outline of the article is as follows. In the next section (8.2), the theoretical framework is built including 4 hypotheses. The third section (8.3) describes the data, involving 23.688 public servants from all public organizations, as well as the methods used. The fourth section (8.4) then presents the results and the fifth section (8.5) discusses the findings and draws conclusions (8.6).

8.2 Theory

8.2.1 Work engagement: what is it and how does its nomological network looks like?

The concept of work engagement recently gained increasing attention in public organizations across the world, including the United States, United Kingdom, and Canada (e.g., Lavigna, 2013; Cotton, 2012; Kernaghan, 2011). Although managers in these public organizations are interested in stimulating work engagement, they often have an unclear picture of what work engagement entails (Cotton, 2012). One of the contributors to this confusion is the fact that the concept of work engagement developed initially from organizational practice rather than from academic research. Public organizations often use, for example, the Gallup Q12 questionnaire to measure the work engagement of their employees (Cotton, 2012; Lavigna, 2013). These questions are aimed at measuring the antecedents of work engagement instead of work engagement itself (Bakker & Leiter, 2010). Another contributor to the confusion is organizational leaders, who define engagement by the characteristics of engaged employees, as opposed to defining the construct itself (Byrne, Hayes, & Holcombe, 2017).

In contrast, scholars within the realm of positive psychology most often define work engagement as an active energetic state of mind that is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). Vigor is defined as having high levels of energy and mental resilience while working; dedication is defined as feeling a sense of significance, meaningfulness, enthusiasm, pride, and inspiration toward one's work; and absorption is defined as being fully engrossed in one's work (Schaufeli et al., 2002). It is expected that employees with high work engagement invest their entire self into their work (Christian, Garza, & Slaughter, 2011). In contrast with the conceptualizations of practitioners, this scientific conceptualization actually does define and operationalize the construct itself. By using this conceptualization we can therefore also deduce several implications for practitioners.

Although practitioners and academicians are different in conceptualizing engagement, they are similar in aiming to identify antecedents and outcomes (i.e., the nomological network) of such engagement (Macey & Schneider, 2008). Together with the development of the construct work engagement, the most often used model to study its antecedents and outcomes is the Job Demands-Resources model (i.e., JD-R model). According to the JD-R model, all working environments

8

or job characteristics can be modeled using two different categories, namely job demands and job resources. Job demands are factors that cost energy to deal with and are therefore negatively associated with work engagement (Bakker & Demerouti, 2007). Job resources refer to those physical, psychological, social, or organizational aspects of the job that either/or (1) reduce job demands and the associated physiological and psychological costs; (2) are functional in achieving work goals; (3) stimulate personal growth, learning and development and are accordingly positively associated with work engagement (Bakker & Demerouti, 2007). Recently, also personal resources are distinguished in the JD-R theory, which are defined as the psychological characteristics or aspects of the self that are generally associated with resilience and refer to the ability to control and impact one's environment successfully (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Accordingly, personal resources are expected to be positively related to work engagement (Xanthopoulou et al., 2007).

Kahn (1990) proposed that these resources influence work engagement which, in turn, drives individual attitudes, behavior, and performance. In other words, work engagement is believed to mediate the relationships between the JD-R model and employee outcomes. These employee outcomes are categorized in the JD-R model as attitudinal, behavioral, and performance outcomes (Albrecht, Bakker, Gruman, Macey, & Saks, 2015).

8.2.2 Institutionalizing the JD-R model of work engagement

While the biggest advantages of the JD-R model of work engagement are its all-inclusiveness (Bakker & Demerouti, 2014), one of its biggest critiques is that the influence of institutional differences between organizations on the relationships within the JD-R model are understudied (Bakker, Demerouti, & Sanz-Vergel, 2014; Bickerton et al., 2015; Gorgievski et al., 2014). According to several scholars within public administration, the specific public institutional context might for example play an important role in work engagement research (Akingbola & van den Berg, 2017; Bailey, Madden, Alfes, & Fletcher, 2017; Noesgaard & Hansen, 2017). There are specific defining elements within a public institutional context which influences the work engagement of public employees (Lavigna, 2013; Noesgaard & Hansen, 2017). The most important typical factors mentioned by public administration scholars that might influence work engagement, are the bureaucratic structures, especially the perceived red tape, the (dimensions of) public service motivation (PSM) of public employees to work in the public sector (i.e., the attraction to public policy making (APP), compassion (COM), and commitment to the public interest (CPI)), and the professionalism and necessary discretionary space that public employees often experience (Lavigna, 2013; Noesgaard & Hansen, 2017).

Due to the all-inclusiveness of the JD-R model it might be possible to frame also these defining elements as job demands, job resources, or personal resources. We will bring in these defining elements (Red tape and autonomy, APP, CPI, and COM) of the public institutional context to extend the existing knowledge of the JD-R model of work engagement. With the integration of these defining elements, we respond to a recent call for more integration of public administration research and work engagement research.

However, the same scholars that argue to take specific defining elements of the public institutional context into account when applying the JD-R model of work engagement, also argue that it may well be possible that work engagement and its antecedents and outcomes might differ between organizations within this institutional context (Akingbola & van den Berg, 2017; Bailey et al., 2017; Noesgaard & Hansen, 2017). One should therefore take into account the diversity in organizations within the group specified as public as well.

The stream of research within public administration that is aimed on pinpointing these institutional differences between various public organizations is the dimensional publicness approach (Bozeman & Bretschneider, 1994). According to follower of approach, it is rather naïve to think that the public sector is a homogeneous institutional context without differences between organizations (van Loon, 2017; Rainey, 2003). An institutional context exists of regulative, normative and cultural-cognitive elements that constrain the behavior and attitudes of individuals through determining respectively the rules of the game, the values deemed important, and the way of doing things, also known as institutional logics (Scott, 2001). The public institutional context is often demarcated merely based on the regulative elements and scholars inherently merely look at the influence of the regulative institutional logic on the behavior and attitudes of public employees. However, recent scholars started to extend this research by taking into account normative elements (i.e., the institutional logic that looks at the values deemed important) to study the observed differences in behavior and attitudes between public employees across public organizations (van Loon, Leisink, & Vandenabeele, 2013; Kjeldsen, 2014).

According to these scholars, a taxonomy exists of two opposing normative institutional logics within the public context—people-changing logic versus people-processing logic. The behavior and attitudes of public employees in a public organization with either a people-changing logic or a people-processing logic is determined by the amount of contact with clients and the service provided to these clients. The public organizations with mainly a people-processing logic are the police, central, regional and local government and the judicial sector. These public employees deal with all kinds of users and only change the status or location of a user by applying the relevant legal framework. Only limited contact is taking place and the users mostly remain unidentified (van Loon et al., 2013; Kjeldsen, 2014). In contract public organizations with mainly a people-changing logic are public educational organizations and public healthcare organizations. More intense and longer enduring contacts with an identifiable user group are demanded from people-changing organizations because they aim to bring about changes in the user (van Loon et al., 2013).

Below it is argued how these contrasting institutional logics influence the relationships between the defining elements in the public context (i.e., red tape, autonomy and the dimensions of PSM as parts of the JD-R model) and work engagement as well as the influence of these logics on the relationships between work engagement and its employee outcomes (i.e., performance and job satisfaction). The related conceptual model is presented in Figure 8.1.

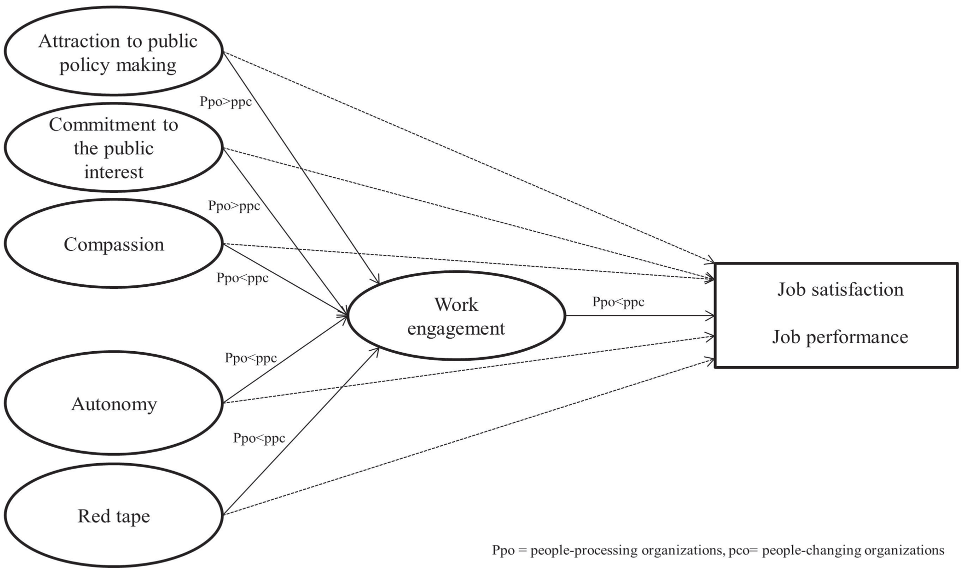


FIGURE 8.1: Conceptual model

Red tape as a job demand

Bureaucratic burdens and red tape is defined as the rules, regulations, and procedures that remain in force and entail a compliance burden, but do not advance the legitimate purposes the rules were intended to serve (Bozeman, 2000: 12). Public management research has a rich tradition that focuses on red tape (Bozeman & Feeney, 2011; Brewer & Walker, 2010; DeHart-Davis, & Pandey, 2005). Scholars conclude that when public servants encounter rules, regulations, or procedures that seem pointless yet burdensome, they become alienated of their work, less creative, and less productive (DeHart-Davis & Pandey, 2005). Red tape can be framed as a hindrance job stressor being judged as job demands or work circumstances that involve excessive or undesirable constraints that inhibit an individual's work engagement (Crawford, Lepine, & Rich, 2010, Quratulain & Kahn, 2015).

Although red tape is an obstacle for all employees, it is likely to be less detrimental for the work engagement of public servants within people-processing organizations since they are more socialized within these bureaucratic processes as they apply the relevant legal framework to deal with users themselves (Kjeldsen, 2014). People-processing service providers, such as many functions within municipalities or the police, put the focus on regulating services and applying legal frameworks. Although their job entails an objective classification for which they need clear rules, they are far more used to dealing with rules and regulations (which is automatically accompanied with red tape) than public servants within people-changing organizations including nurses and teachers. Nurses and teachers are expected to have lasting personal contacts, and interactions with users to change these users. These public servants in people-changing organizations are not trained (socialized) to deal with legal frameworks and inherently red tape. They especially experience that the time spend on filling out paperwork is lost as it cannot be spend on their main task (educating and healing clients). It is therefore probably far more detrimental to the work engagement of employees in people-changing organizations than to the work engagement of employees in people-processing organizations. This results in the following Hypotheses:

> *H1a: Perceived red tape has a significant negative impact on the work engagement of public servants in general.*

> *H1b: Perceived red tape has a higher significantly more negative impact on the work engagement of public servants in people-changing organizations than on the work engagement of public servants in people-processing organizations.*

Autonomy as a job resource

Autonomy refers to the discretionary powers and freedom with respect to work goals, setting priorities, shaping task elements, and determining the order and tempo in which tasks are executed (Runhaar, Konermann, & Sanders, 2013). The relationships between job autonomy on the one hand, and outcomes such as satisfaction and commitment on the other hand, have been extensively studied within public administration (Tummers et al., 2016). However, whether job autonomy is related to the work engagement of public servants has not received any attention. Job autonomy fulfills one of the basic human needs, and it can therefore be expected to positively affect work engagement (Bakker & Demerouti, 2008). Indeed, Tummers et al., (2016) study vitality (conceptually similar to the vigor dimension of work engagement) and show that perceived job autonomy has a positive impact on the vitality of public servants, because autonomy gives them energy in making employees act upon their deep values, goals, and interests. In addition, Jansen et al., (2010) studied the pride (an important indicator of work engagement) of public servants, and also show that public servants are more proud when they experience professionalism and discretion (Jansen et al., 2010).

As argued above, it is expected that this relationship is stronger for public servants within people-changing organizations than for public servants within people-processing organizations. As Hasenfeld (1972) shows, people-processing organizations have four tasks: client assessment of the existence of the condition that legitimate an action; clients evaluation to determine the appropriate action alternatives; making a choice among the alternatives; carrying out the chosen alternative. These tasks are highly standardized reducing the necessity of job autonomy for public servants in people-processing organizations.

In contrast, public servants within people-changing organizations have intense and enduring contact with users making their work more non-routine. This type of service requires a focus on being responsive toward the user (van Loon, 2017) and this responsiveness requires additional discretionary space in comparison to public servants in people-processing organizations who have a more routine and structured job in which they apply a structured legal framework upon users with which they have merely one-off contacts. Furthermore, public servants in people-changing organizations, for instance teachers, have a strong intrinsic calling to help students often beyond what is asked (Hakanen et al., 2006; van Loon, Vandenabeele, & leisink, 2015). They will profit most from autonomy. This results in the following hypotheses:

H2a: Perceived autonomy has a significant positive impact on the work engagement of public servants in general.

H2b: Perceived autonomy has a higher significant positive impact on the work engagement of public servants in people-changing organizations than on the work engagement of public servants in people-processing organizations.

Dimensions of PSM as personal resources

While Bakker (2015) expects that PSM as a personal resource of public servants has a positive effect on the work engagement of public servants, many studies show that the strength of the links between PSM and, for example, affective commitment, motivation and job satisfaction vary considerably depending on the dimensions of PSM being examined (Homberg et al., 2015; Taylor, 2007). Perry & Wise (1990) stated that an individual's PSM can be attributed to a mixture of rational, normative and affective motives. Although PSM is seldom identified with rational motives, the attraction to the public policy-making (APP) dimension can be considered to be rational in nature (Taylor, 2007). The attraction of public servants to public policy making is partly inspired by the needs for power and self-esteem (Wise, 2000). The commitment to the public interest (CPI) and the desire to pursue the common good are normative motives for public servants to work in the public sector. The desire and willingness to help others including the altruism and feelings of compassion (COM) towards others are the affective motives of public servants to work in the public sector.

Within the conceptualization of work engagement, meaningfulness and significance of the job are central themes. The desire to undertake work of social worth (normative motives) and the willingness to help others (affective motives) are strong engaging properties for public servants, at least stronger than the external self-serving needs including rational motives (APP) (Taylor, 2007; Bright, 2013). Although this could be valid for the public sector as a whole, the effects of the various motives on work engagement might vary based on the personality of public servants and their inherent choice for a certain public organization. It is in other words expected that the nature of an organization is a good proxy for the size of the effects of a certain motive on work engagement.

Within people-changing organizations, identification with the users is likely to be a part of the organization's character and work values (van Loon et al., 2013). This identification will lead to a greater amount of sympathy. Public servants within these organizations are especially driven by affective motives (van Loon et al., 2013). In contrast, public servants within people-processing organizations are mostly focused on fair and neutral processing without building relationships with users. They are driven predominantly by instrumental motives (APP) as they want to be part of a bigger whole, and also normative motives (CPI) because ethical behavior is a central value (van Loon et al., 2013). It is therefore more likely that affective motivates (COM) have a stronger effect on the work engagement of public servants in people-changing organizations than on public servants in people-processing organizations. At the same time, it is expected that instrumental motives and normative motives have a stronger effect on the work engagement of public servants in people-processing organizations than on public servants in people-changing organizations. This results in the following Hypotheses:

> *H3a: The individual dimensions of PSM, including the attraction to public policy making (APP), compassion (COM), and commitment to the public interest (CPI), have a positive significant effect on the work engagement of public servants, but the APP dimension has a significantly lower effect than the COM and CPI dimensions.*

> *H3b: Affective motives have a stronger effect on the work engagement of public servants in people-changing organization than on the work engagement of public servants in people-processing organizations, while instrumental motives and normative motives have a stronger effect on the work engagement of public servants in people-processing organizations than on public servants in people-changing organizations.*

Outcomes of work engagement: job satisfaction, and job performance

Work engagement is believed to mediate the relationships between job demands and resources on the one hand and job satisfaction and job performance on the other (Kahn, 1990; Schaufeli, 2015). Within the public administration literature, hedonic indicators such as job satisfaction received a lot of attention (e.g., Wang, Zheng, Hu & Zeng, 2014; Yang & Wang, 2013; Cantarelli, Belardinelli, & Belle, 2016). Conceptually, job satisfaction is an attitude often defined as a positive (or negative) evaluative judgment one makes about one's job or job situation (Weiss, 2002).

Within the scholarly literature a distinction is made between "hedonic indicators" and eudaimonic indicators of well-being (Diener, Scollon, & Lucas, 2009). Hedonic indicators refer to happiness, pleasure and enjoyment (Diener et al., 2009; Ryan & Deci, 2001; Tummers et al., 2016). Eudaimonics indicators refer to purpose, meaningfulness and psychological well-being (Diener et al., 2009, McGregor & Little, 1998; Ryan & Deci, 2001). Job satisfaction is a typical hedonic indicator as it is limited to enjoyment of the job (i.e., hedonism). Job satisfaction differs from work engagement since work engagement connotes activation (enthusiasm, alertness, excitement, elation) while satisfaction connotes satiation (contentment, calmness, serenity, relaxation) (Schaufeli, 2013).

Studies show that employees who experience high levels of components of eudaimonic well-being (e.g., work engagement) are physically healthier, experience more satisfaction of their psychological needs, and also experience hedonic well-being (e.g., satisfaction) compared to employees with low eudaimonic well-being (Barret-Cheetham, Williams, & Bednall, 2016; Ryff, 1989). Work engagement is therefore defined as a more encompassing and deeper construct than job satisfaction since it connotes the investment of an employees' entire self (psychically, cognitively and emotionally) to its work while satisfaction only focuses on a *state* of feeling well. This reasoning would explain why several scholars define satisfaction as an outcome of work engagement (Albrecht et al., 2015).

Similarly, several scholars expect that work engagement might be very important to reach good service provision, the improvement of client satisfaction and quality of service within the public sector (Vigodat-Gadot et al., 2013, Akingbola & Van den Berg, 2017). However, other studies also show that job demands and job resources have direct effects on job satisfaction and job performance (see e.g., Hsieh, 2016; Cantarelli et al., 2016). It is therefore expected that work engagement not fully, but partially mediates the relationships between the JD-R model and the job outcomes satisfaction and job performance. For example autonomy is a basic psychological need which leads to satisfaction and higher performance through feelings of vitality and significance which are factors reflected in work engagement (Albrecht et al., 2015; Ryan & Deci, 2000). An important part of the effect of autonomy on job satisfaction and performance is, in other words, explained by work engagement.

Work engagement is expected to be a stronger partial mediator between job resources and job outcomes in the people-changing organizations than in people-processing organizations. Independent of the offered job resources and job demands, these public servants' performance and satisfaction is mostly determined by the perceived meaningfulness and significance (reflected in work engagement). A large portion of the effects of job resources and job demands on job outcomes will therefore be accounted for by work engagement. In contrast, public servants in people-processing organizations are expected to have a roughly lower initial commitment than people-changing organizations. The indirect effect of job resources and job demands on outcomes through work engagement will therefore be less strong in people processing organizations. The following hypothesis can be stated:

H4a: Work engagement partially mediates the effects of red tape, autonomy, and the dimensions of PSM on job satisfaction and job performance.

H4b: Work engagement is a stronger partial mediator in case of public servants in people-changing organizations than in case of public servants in people-processing organizations.

8.3 Methods

8.3.1 Data collection

Every other year, the Dutch Ministry of the Interior and Kingdom Relations carries out a personnel monitor (POMO) involving a representative sample of the employees within the public sector. This representative sample is randomly extracted from the so-called datawarehouse APS which consists of all public servants in the Dutch public sector. This article utilizes the data collected in 2014 as the government decided to include multiple items on work engagement in 2014. In total, 87.536 questionnaires were digitally sent to public servants employed in the organizations which are defined as “public” according to the legal institutional criteria. These public servants received log-in codes on the 14th of June 2013. On the third of July the respondents received a reminder and on Monday the 21st of July, the data collection closed. In total, 24,334 public servants responded to the questionnaire implying a response percentage of 28%.

Two groups of organizations were constructed: educational organizations and hospitals were identified as people-changing services, and municipalities, provinces, water boards, central government, the legal authorities, judicial sector, military and police as people-processing services (cf. Kjeldsen, 2014; van Loon, 2017). After listwise deletion of respondents with missing values on one or more of the research variables, the data of 13.513 public servants in people-processing services and 10.175 public servants in people-changing services could be used. See Table 8.1 for the demographics.

TABLE 8.1: Sample statistics

	People-processing organizations		People-changing organizations		Total	
	N	%	N	%	N	%
Gender						
Male	8,908	65.9	4,055	39.9	12,963	54.7
Female	4.605	34.1	6,120	60.1	10,725	45.3
Age						
15-24 years	130	1.0	112	1.1	242	1.0
25-34 years	1,498	11.1	1,544	15.2	3,042	12.8
35-44 years	2,757	20.4	1,875	18.4	4,632	19.6
45-54 years	4,839	35.8	2,970	29.2	7,809	33.0
≥55 years	4,289	31.7	3,674	36.1	7,963	33.6
Education						
Primary education	56	0.4	32	0.3	88	0.4
Pre-vocational secondary education	2,167	16.0	609	6.0	2,776	11.7
Senior general secondary/ pre university education	1,087	8.0	344	3.4	1,431	6.0
Secondary vocational education	3,343	24.7	1,038	10.2	4,381	18.5
Higher professional education	3,693	27.3	5,454	53.6	9,147	38.6
University education	2,692	19.9	1,849	18.2	4,541	19.2
Academic education (PhD)	475	3.5	849	8.3	1.324	5.6
Tenure						
≤1 year	381	2.8	580	5.7	961	4.1
2-10 years	4,230	31.3	3,987	39.2	8,217	34.7
11-20 years	3,796	28.1	2,946	29.0	6,742	28.4
21-30 years	2,450	18.1	1,588	15.6	4,038	17.0
31-40 years	2,364	17.5	1,020	10.0	3,384	14.3
41-50 years	292	2.2	54	0.5	346	1.5

8

8.3.2 Measures

The items used were formulated as 5-point Likert scales ranging from *completely agree* (5) to *completely disagree* (1).

Work engagement was measured using 6 items out of the validated 9-item short version of the Utrecht Work Engagement Scale (Schaufeli et al., 2002). Work engagement is a higher order construct composed of three dimensions, that is, vigor, dedication, and absorption. Because the three dimensions of engagement are highly correlated (i.e., intersubscale correlations over .50), it is a common approach to combine the subscales into an aggregate measure of work engagement (e.g., Halbesleben et al., 2009). A high score indicates that an employee is highly engaged in his/her work.

The items of *(the dimensions of) PSM* were derived from the validated PSM scale of Vandenabeele (2008a) and previously applied by van Loon et al. (2016). This scale is developed by Vandenabeele (2008a) to make it compatible within contexts such as the Dutch public sector. Attraction to public policy (APP), compassion (COM), and commitment to the public interest (CPI) respectively exist of two, four and three items.

Job Autonomy was measured with four items adapted from Hackman & Oldham (1980). A high score indicates than an employee perceived autonomy in his/her job.

Red tape was measured with a validated 6 item-scale applied before by Vermeeren & Geest (2012). A high score indicates than an employee perceives a high level of red tape.

Performance was measured with a 3 item-scale recently validated by van Loon et al., (2016). The items refer to the appreciation of the employee in the organization as a proxy of his or her performance. A high score indicates than an employee perceives that he or she performs well.

Job satisfaction was measured with one item: "Considering everything, how satisfied are you with your job?" Although a single item measure precludes analyses of reliability, it is a frequently applied measure to analyze job satisfaction in public administration studies (Cantarelli et al., 2016; Scarpello & Campbell, 1983).

Table 8.2 shows the items, factor loadings and the reliability (Composite reliability and cronbach's alpha) and validity (Average Variance Extracted) of the measures.

TABLE 8.2: Operationalization and data quality

	People-processing organizations	**People-changing organizations**
Measures	FL	FL
Work engagement (ppo α=0.90, AVE=0.73, CR=0.94; pco α= 0.90, AVE=0.74, CR=0.95)		
UWES1 I am proud on the work that I do	.859	.862
UWES2 My job inspires me	.907	.911
UWES3 I am enthusiastic about my job	.923	.918
UWES4 I feel happy when I am working intensely	.756	.808
UWES5 When I get up in the morning, I feel like going to work	.830	.828
UWES6 At my work, I feel bursting with energy	.844	.828
Attraction to public policy (ppo α=0.73, AVE=0.65, CR=0.79; pco α=0.70, AVE=0.67, CR=0.80)		
PSM0 Politics is a dirty word. (R)	.769	.648
PSM1 I have little interest in politics. (R)	.847	.963
Commitment to public interest (ppo α=0.77, AVE=0.54, CR=0.82; pco α=0.76, AVE=0.53, CR=0.82)		
PSM2 I unselfishly contribute to my community.	.548	.630
PSM3 Providing meaningful public service is very important to me.	.827	.775
PSM4 I find it more important to contribute to the public good than having personal success.	.660	.663
PSM5 The general interest is a key driver in my daily life.	.849	.828
Compassion (ppo α=0.65, AVE=0.50, CR=0.74; pco α=0.64, AVE=0.50, CR=0.74)		
PSM6 It is difficult for me to contain my feelings when I see people in distress.	.704	.732
PSM7 I think the welfare of fellow citizens is very important.	.858	.789
PSM8 If we do not show more solidarity, our society will fall apart.	.509	.573

8

	People-processing organizations	People-changing organizations
Autonomy (ppo α=0.84, AVE=0.66, CR= 0.88; pco α=0.87, AVE=0.71, CR=0.91)		
AUTO1 I can decide on my own when I do my job	.850	.868
AUTO2 I can decide on my own how I do my job	.779	.741
AUTO3 I can decide on my own where I do my job	.854	.901
AUTO4 I can decide on my own with whom I do my job	.755	.850
Red tape (ppo α=0.83, AVE=0.50, CR= 0.86; pco α=0.86, AVE=0.58, CR=0.89)		
Red1 Filling out forms and systems cost me a lot of time	.697	.773
Red2 It takes me a long time to comply with all the rules and obligations within my organization	.621	.668
Red3 Some rules or guidelines that I encounter in my work contradict with each other	.674	.705
Red4 Guidelines and regulations are more important in my organization than my experience or intuition.	.843	.827
Red5 Rules and procedures in my organization make it difficult to do my job well	.743	.817
Red6 Requirements of supervisory bodies and inspections make it difficult for me to do my job well	.663	.777
Performance (ppo α=0.62, AVE=0.52, CR=0.75; pco α=0.69, AVE=0.56, CR=0.79)		
Perf1 Compared with people who do the same work as I do, I am highly appreciated by my organization.	.418	.569
Perf2 In my work, colleagues ask me for advice if things get complicated.	.848	.860
Perf3 In my work, I am given the more difficult jobs.	.824	.785

Note FL = Factor loading

Next to these measures, I control for several other factors. I dummy coded *gender* (0 = male; 1 = female). *Age* was categorized into five cohorts (1 = 15-24 years; 2 = 25-34 years; 3 = 35-44 years; 4 = 45-54 years; 5 = 55 years and older). *Tenure* was included as a continuous variable, expressed as the number of years employees have worked for the organization. I also included *education* which was subdivided into seven categories, reflecting the Dutch educational system (1 = primary education; 2 = pre-vocational secondary education, 3= senior general secondary education and pre university education, 4= secondary vocational education; 5 = higher professional education; 6 = university education; 7 = academic education). Age and education were treated as continuous variables in line with Vermeeren, Kuipers, & Steijn (2014).

8.3.3 Data analysis

The four hypotheses were tested using structural equation modeling performed in Mplus version 7.4 (Muthén, Muthén, & Asparouhov, 2016). A two-step approach was adopted. First the measurement model was examined, followed by the analysis of the structural model (Davis and Stazyk, 2017). Since the measurement model included categorical variables of which many had skewed distributions (floor and ceiling effects), I applied the Weighted Least Squares Means and Variance adjusted (WLSMV) estimation method. The WLSMV estimation method does not assume normally distributed variables and provides the best option for modelling categorical data (Brown, 2006). After the development of the measurement model, all the created factors for the structural model are automatically corrected for skewedness and made continuous.

To test the measurement model, several fit measures were analyzed. In large samples (as in this research), the chi-square test almost always leads to the rejection of the model, because the difference between the sample covariances and implied population covariances will lead to a higher chi-square value if the sample size increases (Hu & Bentler, 1999). As a result, a number of alternative fit measures have been developed from which I use one of every "family" (Hu & Bentler, 1999). The comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square of approximation (RMSEA) are used to assess whether the model fits the data. The measures of CFI and TLI indicate good fit with a threshold above .90 and excellent fit above .95. RMSEA indicates fit below .10 and excellent fit below 0.08 (Byrne, 2012, Hu & Bentler, 1999; Kline, 2010).

In order to be able to test the hypothesized relationships and compare the results between the people changing and people processing organizations, measurement invariance needs to be present. Using Mplus v7.4, the full measurement model was tested and comparisons were made between the three levels of invariance. Configural invariance tests whether the constructs in this study have the same factor structure across groups and, in this multi-group model, all loadings and variances are allowed to differ. In testing for metric invariance, all the factor loadings are constrained, and for scalar invariance, factor loadings and intercepts are constrained to be equal.

Normally, by comparing the configural model with the metric model, and the scalar model with the metric model, the change in Chi-square and fit measures (RMSEA, TLI, and CFI) are checked. However, just as with the absolute Chi-square test, the chi-square difference statistic is sensitive to sample size and almost always (as in this case) lead to the rejection of the measurement invariance assumption (Chen, 2007). I will therefore focus on the fit statistics. For testing invariance in large samples, a change of ≥ -.010 in CFI, supplemented by a change of ≥ .015 in RMSEA in the more constrained model would indicate non-invariance (Chen, 2007).

Applied to the data, the fit measures of the comparison between the configural (TLI = .955, CFI = .961, RMSEA: .063) and metric model (TLI = .956, CFI = .961, RMSEA = .062) even increase which indicates metric invariance (ΔTLI = +.001, ΔCFI = +.000, and ΔRMSEA = -.001). When comparing the metric (TLI = .956, CFI = .961, RMSEA = .062) and the scalar models (TLI = .955, CFI = .955, RMSEA = .063), the fit measures decrease within acceptable margins (ΔTLI = -.001, ΔCFI = -.006, and ΔRMSEA = +.001). In other words, scalar invariance and inherently measurement invariance are present. It is therefore allowed to compare the people-processing and people-changing organizations.

8.4 Results

8.4.1 Measurement model

The measurement models of respectively people-processing organizations and people-changing organizations show good fit (respectively TLI = .959, CFI = .964, RMSEA = .059, and TLI = .950, CFI = .956, RMSEA = .067). A Harman's single-factor test, in which all items are loaded onto one dimension, was performed to test for common method bias within each group. These models had significantly worse fits (people-processing: TLI = .511, CFI = .546, RMSEA = .197; people-changing: TLI = .484, CFI = .520, RMSEA =.198) than the measurement models, indicating that common method bias is unlikely to influence the results (Podsakoff & Organ, 1986).

TABLE 8.3: Correlations

	1	2	3	4	5	6	7	8	11	12	13	14
1 Gender (male-female)	-	-.13***	-.12***	-.09***	.03***	-.11***	-.06***	.02***	-.17***	-.01	-.07***	-.01
2 Age	-.13***	-	-.18***	.57***	-.01	.13***	.06***	.08***	-.03***	.08***	-.02	-.02*
3 Educational level	.05***	-.15***	-	-.11***	.07***	.14***	.10***	.03**	.12***	.10***	.13***	-.03**
4 Tenure	-.21***	.57***	-.29***	-	-.01	.06***	.01	.04***	-.08***	.12***	-.01	-.01
5 Work engagement	-.03***	.01	.04***	-.02*	-	.11***	.30***	.32***	.12***	-.01	.42***	.44***
6 Attraction to public policy	-.01	.05***	.24***	-.04***	.23***	-	.26***	.26***	.04***	.01	.14	.01
7 Commitment to public interest	-.04***	.05***	.16***	-.01	.38***	.40***	-	.74***	.07***	.10***	.23***	.06***
8 Compassion	.03**	.10***	.05***	.03***	.31***	.31***	.71***	-	-.01	.12***	.21***	.05***
11 Autonomy	-.05***	.06***	.24***	.00	.28***	.14***	.14***	.08***	-	-.32***	.23***	.20***
12 Red tape	-.13***	-.00	-.06***	.09***	-.13***	-.14***	.00	.01	-.22***	-	.04***	-.28***
13 Performance	-.08***	-.01	.16***	-.01	.40***	.19***	.27***	.19***	.26***	.05***	-	.20***
14 Job satisfaction	.01	.04***	.00	.02*	.48***	.13***	.12***	.08***	.24***	-.26***	.17***	-

Note people-processing organization below the diagonal, people-changing organizations above the diagonal.
* ≤0.05 **≤0.01 ***≤0.001.

TABLE 8.4: Descriptive statistics

	Work engagement		Attraction to Public policy		Commitment to public interest		Compassion		Autonomy		Red tape		Job satisfaction		Performance	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
People-processing organizations	3.93	0.63	3.62	0.87	3.51	0.64	3.77	0.58	3.1	0.87	3.13	0.72	4.03	0.86	3.61	0.66
People-changing organizations	4.08	0.63	3.63	0.84	3.44	0.62	3.87	0.55	2.7	0.94	3.30	0.81	4.04	0.85	3.64	0.69
Independent sample t-test	-18.504***		-.483^{ns}		7.758***		-13.766***		37.557***		-17.670***		.240^{ns}		-3.824***	

Descriptive Statistics

Correlations between the variables for both types of organizations are presented in Table 8.3 while the descriptive statistics of the variables for these types are presented in Table 8.4.

There are significant differences between the groups. Public servants in people-changing organizations have a significantly higher work engagement than public servants in people-processing organizations (respectively, ($\bar{x}$ = 4.08 and $\bar{x}$ = 3.93, p = .000). In addition, public servants in people-changing organizations also have significant higher compassion and perceive significant more red tape in their work than people-processing organizations (respectively $\bar{x}$ = 3.87 and $\bar{x}$ = 3.30 versus respectively $\bar{x}$ = 3.77 and $\bar{x}$ = 3.13, p =.000). In contrast, public servants in people-processing organizations have a significant higher commitment to the public interest and perceive significantly more autonomy in their job than public servants in people-changing organizations (respectively $\bar{x}$ = 3.51 and x^{-} = 3.10 versus respectively $\bar{x}$ = 3.44 and $\bar{x}$ = 2.70, p = .000).

8.4.2 Structural model

To test my hypotheses, I conducted a structural model (as shown in Table 8.5).

First, I tested my Hypotheses that red tape has a negative effect on the work engagement of public servants in both types of organizations, but that the negative effect is higher for public servants in people-changing organizations than for public servants in people-processing organizations. While the average perceived red tape by public servants is significantly higher within people-changing organizations than that perceived by public servants in people-processing organizations, Table 8.5 shows that its negative effect on the work engagement of public servants in people-changing organizations is significantly lower than on the work engagement of public servants within people-processing organizations (respectively β = -.02 and β = -.10, p $\leq$.000). Hypothesis 1a is in other words accepted and Hypothesis 1b needs to be rejected.

Second, I tested Hypothesis 2a and b which stated that perceived autonomy has a significant positive impact on the work engagement of public servants in general and the positive effect is larger for public servants in people-changing organizations than for public servants in people-processing organizations. The results in Table 8.5 show that autonomy has a positive effect on the work engagement of public servants in both types of organizations, but the assumed difference is exactly reversed. The effect on work engagement is significantly higher in case of public servants in people-processing organizations than in case of public servants in people-changing organizations (respectively β = .24 and β = .11, p≤.000). Hence Hypothesis 2a is accepted and Hypothesis 2b needs to be rejected.

TABLE 8.5: Structural equation model

	Model 1 Work engagement			**Model 1 Job satisfaction**			**Model 1 Job performance**		
	β ppo	**β pco**	**Z_{diff}**	**β ppo**	**β pco**	**Z_{diff}**	**β ppo**	**β pco**	**Z_{diff}**
Gender	-.07**	.10**	**6.04**	.07**	-.09**	**5.91**	-.13**	-.14**	**0.32**
Tenure	-.01**	.00	**1.41**	.00	.00	**0.71**	.01**	.00	**1.41**
Age	.02	.01	**0.49**	.04**	-.03**	**4.64**	-.04**	-.03**	**0.74**
Education	.01	.06**	**4.30**	.01	-.06**	**6.38**	.13**	.09**	**2.81**
Autonomy	.22**	.12**	**6.22**	.10**	.10**	**1.35**	.11**	.16**	**2.94**
Red tape	-.07**	-.01	**3.29**	-.22**	-.29**	**4.98**	.10**	.07**	**1.47**
Attraction to public policy	.11**	.03*	**3.96**	.03*	.00	**1.41**	.08**	.09**	**0.65**
Commitment to public interest	.22**	.10**	**4.94**	-.03	.00	**0.96**	.06**	.07**	**0.57**
Compassion	.10**	.20**	**3.98**	-.06**	-.06**	**0.04**	-.01	-.01	**0.33**
Work engagement	NA	NA	NA	.54**	.53**	**0.22**	.29**	.32**	**1.47**
R^2	.19	.10	-	.40	.40	-	.18	.19	-
	People processing organizations:				People changing organizations:				
TLI=,	.944				.945				
CFI=,	.952				.952				
RMSEA=	.057				.061				

Note Z_{diff} is calculated with the formula:
* ≤0.05 **≤0.01

Third, Table 8.5 shows that the CPI and COM dimension have a much higher effect on work engagement than the APP dimension. The APP dimension is even non-significant in case of public servants in people-changing organizations. The effects of the APP and CPI dimensions on the work engagement of public servants in people-processing organizations are also significantly higher than these effects on the work engagement of public servants in people-changing organizations (respectively β = .09 and β = .46 vis-à-vis β = .02 and β = .18, p≤.000). The COM dimension has a significantly higher impact on the work engagement of public servants in people-changing organizations than on the work engagement of public servants in people-processing organizations (β = .29 and β = .11, p≤.000). These results confirm the relationships as stated by Hypothesis 3a and 3b.

Fourth, I tested the expectations (reflected in hypothesis 4a and b) that in general work engagement is a mediator between the above mentioned factors and job satisfaction and performance, and that work engagement is a stronger mediator in case of public servants in people-changing organizations than in case of public servants in people-processing organizations. To test these possible mediating effects, I employed a bootstrapping method (as shown in Table 8.6) with 1.000 resamples and confidence intervals set at 0.95.

TABLE 8.6: Mediation model

		Job satisfaction ppo	**Job satisfaction pco**	**Z_{diff}**	**Performance ppo**	**Performance pco**	**Z_{diff}**
Autonomy	Total	.22**	.16**		.18**	.20**	
	Direct	.10**	.10**		.11**	.16**	
	Indirect[1]	.12**	.06**	**5.97**	.06**	.04**	**4.60**
Red tape	Total	-.25**	-.30**		.08**	.08**	
	Direct	-.22**	-.29**		.10**	.07**	
	Indirect[1]	-.04**	-.01	**3.25**	-.02**	-.01	**3.20**
Attraction to public policy	Total	.08**	.02		.11**	.10**	
	Direct	.03**	.00		.08**	.09**	
	Indirect[1]	.06**	.02*	**4.23**	.03**	.01*	**3.54**
Commitment to public interest	Total	.09**	.05**		.12**	.11**	
	Direct	-.03	.00		.06**	.08**	
	Indirect[1]	.12**	.05**	**4.76**	.06**	.03**	**4.10**
Compassion	Total	-.01	.05*		.02	.05*	
	Direct	-.06**	-.06**		-.01	-.01	
	Indirect[1]	.05**	.11**	**3.80**	.03*	.06**	**4.07**

Note Z_{diff} is calculated with the formula:
[1]Mediated by work engagement
* ≤0.05 **≤0.01

Table 8.6 shows that work engagement is in all instances a partial mediator for public servants in people-processing and people-changing organizations. Hypothesis 4a is therefore accepted. In addition, work engagement is only a stronger partial mediator for public servants in people-changing organizations in case of the relationships between compassion and both outcomes. Hence Hypothesis 4b is rejected.

8.5 Discussion

Due to the increasing demanding work engagement, public managers need their employees to be proactive and dedicated and feel energetic in their work to reach high performance—that is, public organizations need engaged workers. Most studies are merely focused on the commitment and job satisfaction of public servants, which are passive attitudes that do not lead to the attainment of the full potential by these public servants. Studying work engagement as a new concept in public administration has in other words become relevant. The goal of this study was to examine the relationship between antecedents and outcomes of work engagement in the public sector in general and the within public sector differences including institutional contexts and inherent work tasks in particular. After all, assuming that the attitudes and behaviors of public servants are all the same across all different public organizations is naive.

Based on the results presented above it can be concluded that public servants have different personalities and work in different institutional contexts, which influences their work engagement. Public servants in organizations with a people-changing service orientation (including education and healthcare) become especially engaged due their compassionate personality and possibility to contribute to society. Public servants in organizations with a people-processing service orientation (including for example the local government, and the police) become especially engaged due to their attraction to public policy making and commitment to the public interest.

In conflict with my expectations, red tape has a negative effect on all public servants, but employees in people-processing organizations experience more detrimental effects on their work engagement due to red tape than their colleagues in people-changing organizations. In addition, the effect of autonomy on the work engagement of public servants is positive, but the effect is much smaller in case of health care personnel and teachers than in case of people-processing public servants. Possibly because public servants in people-changing organizations are more socialized in the contexts of relatively high red tape and relatively low autonomy and knew what they were getting into. Another explanation might be that teachers and healthcare personnel see their work as a real calling and are relatively less interested in all the provided job resources (Hakanen et al., 2006).

The argument that especially public servants in people-changing organizations see their work as a real calling might also explain the results that public servants in people-changing organizations have a significantly higher work engagement than their people-processing counterparts. In any case work engagement is in both types of organizations an important mediator between personality and job factors on the one hand and job performance and job satisfaction on the other hand.

8.5.1 Contributions for practice

My research is timely given the growing pressures in for example the U.S. congress to increase employee engagement (Byrne et al., 2017). This study shows that public personnel managers should be aware in what kind of environment they work before they introduce resources to increase work engagement. The effects of job resources and job demands on the work engagement of public servants vary depending on the environment.

Firstly, public personnel managers in public hospitals and schools need to realize that their personnel becomes especially engaged by their intrinsic motivation and compassion for others (affective motivates). This personnel has an intrinsic calling and is much less influenced by all sorts of external job resources. In contrast, public managers within the police, defense, but also central and local government need to realize that their personnel becomes engaged by the possibility to contribute to the public interest and to develop public policies (normative motives and rational motives). In other words, public managers should take into account the specific motives of their personnel in choosing their steering mechanisms.

Secondly, in contrast with schools and hospitals, public personnel managers within the police, defense, central government, and local government can increase the work engagement of their personnel by decreasing red tape and increasing the possibility to work autonomously. Although the experienced red tape is high within schools and hospitals, the detrimental effect on the work engagement and inherent performance is negligible.

Thirdly, work engagement is a very important stimulator of performance and job satisfaction of personnel in every context. The importance of stimulating the work engagement of public servants by their managers (Cotton, 2012; Lavigna, 2013; Kernaghan, 2011; Byrne et al., 2017) is therefore confirmed by this study.

8.5.2 Limitations and future research directions

I end this article by discussing some limitations. First, I used cross-sectional data. As such, assumptions are merely based on theoretical arguments about the likely direction of causality, moving from resources and demands through work engagement to performance and satisfaction. Future studies could employ longitudinal or experimental designs that could test the actual causality of these relationships. Second, since the questions on all the factors were asked in the same survey, the data could be subject to common source bias (CSB). To limit possible bias, several actions were taken including asking reversed questions, providing full anonymity in completing the survey, and separating all the factors in the survey. Additional tests were also conducted including the Harman's one-factor test for both groups which is still an important test to identify issues with CSB (George & Pandey, 2017). Furthermore, interaction effects are a core element of this paper which cannot be the product of CSB (George & Pandey, 2017). Third, a distinction between public organizations based on normative institutional logics has shown to be relevant in explaining differences in work engagement. However, other distinctions may also be relevant. Cultural-cognitive institutional elements might for example matter or the differences between street-level bureaucrats and personnel behind the scenes. More research on how differences between public organizations influence the relationship between work engagement and its antecedents and outcomes is necessary to gain insight into the context dependency of work engagement.

8.6 Conclusion

Concluding, my empirical results emphasize the importance of work engagement research in public administration since it lead to higher performance and job satisfaction. My research findings especially highlight the importance of taking into account the personality of public servants and also the need to relate institutional theory with work engagement. This research therefore shows that work engagement is a very important addition for scholars and practitioners in public administration but there is more to discover.


9

Conclusion and discussion

9.1 Introduction to the conclusion and discussion

The overall aim of this dissertation was to analyze the antecedents and the consequences of work-related well-being of (semi-)public employees. To reach this aim, this dissertation displayed a scientific journey through the development in thinking about work-related well-being of (semi-)public employees and its antecedents and consequences. This journey took place by distinguishing three phases of scientific development according to the “Kuhnian” or “Lakatosian” approach. According to these famous philosophical scientists the first phase of scientific development is aimed at discovering the gaps in the older theory, followed by a second phase in which a new theory is developed which fills these gaps, concluded by a third phase in which the theory is further expanded upon until gaps become evident again. Accordingly, in the first phase of this dissertation, the classical theories of work-related well-being of (semi-)public employees, its antecedents and its outcomes are tested. In the second phase, some of the research gaps found in the first phase were filled by introducing and systematically analyzing the newest theory of work-related well-being (JD-R). In the third phase of this dissertation the JD-R model was further developed in the (semi-)public sector which ended with the first gaps in this theory that deserve further research.

Following the overall aim of this dissertation, the main research question was formulated as: *What are the antecedents of the work-related well-being of (semi-) public employees and what are its consequences?* To answer this main research question, four sub questions were developed:

1. What is work-related well-being?
2. What are the antecedents of the work-related well-being of (semi-)public employees?
3. What are the employee outcomes of the work-related well-being of (semi-) public employees?
4. To what extend do the relationships differ across different institutional contexts including the private, semi-public and public sector?

The main findings and inherently the answers to the sub questions will be presented below (section 9.2), which together will lead to the answer to the main research question (section 9.3). After the formal part, it is time to start philosophizing in the spirit of Kuhn and Lakatos in the subsequent discussion. A discussion will take place about the theoretical contributions (section 9.4), followed by a discussion of the limitations (section 9.5), a possible future research agenda (9.6), and recommendations for practice (section 9.7). Finally, a final conclusion of this chapter and dissertation will be given (section 9.8).

9.2 Summary of the main findings and answers to the sub questions

Research line 1 to answer sub question 1: Meaning of work-related well-being
The introduction of this thesis provided already a preliminary answer to the first sub question. Work-related well-being consists of a hedonic part as well as a eudaimonic part. While hedonic work-related well-being is aimed at feelings of happiness, pleasure and enjoyment, eudaimonic work-related well-being is aimed at feelings of purposefulness and meaningfulness of the work. Over the years hedonic work-related well-being has received much attention in public management research. In contrast, eudaimonic work-related well-being only recently gained attention. Accordingly, the first two of the seven empirical chapters of this dissertation aimed at the hedonic indicators job satisfaction and commitment. In line with the theoretical development, in the third empirical chapter the focus moves to one of the first eudaimonic indicators, namely professional pride. Subsequently, the fourth and fifth empirical chapter dive more deeply into the eudaimonic well-being of (semi-) public employees by studying work engagement. As suggested by the literature, employees who experience high levels of eudaimonic well-being, including pride and work engagement, are physically healthier, experience more satisfaction in their psychological needs, and experience higher levels of hedonic well-being. In other words, hedonic indicators including, amongst others, job satisfaction and organizational commitment, are attitudinal outcomes of eudaimonic indicators. The fifth empirical chapter is aimed at both eudaimonic and hedonic well-being, and it can be concluded that eudaimonic well-being indeed is highly correlated with hedonic well-being. This conclusion is confirmed in chapters 6 and 7, which show that eudaimonic work-related well-being leads to hedonic work-related well-being. Work-related well-being is in other words the extent to which an employee feels meaningful and purposeful as well as happy and pleased due to his work.

Research line 2 to answer sub question 2: Antecedents of work-related well-being

The second research line was aimed at the analysis of the relationships between antecedents and work-related well-being. Two streams of research can be distinguished that study these relationships–job/personal characteristics theories and personnel management theories. While job/personal characteristics theories are aimed at studying the work environment and work experience of employees (framed here as the psychological "soft approach"), personnel management theories are aimed at the employment of resources to influence the work-related well-being and behavior of employees (framed here as the organizational "hard approach").

In line with the first phase of theoretical development, the first two empirical chapters were aimed at testing two of the first personnel management theories, related to work-related courses and performance measurement, and some characteristics of classic job/personal characteristics theories, namely theory X and Y, and the two-factor theory. In chapter 2, the influence of attending work-related courses on the well-being of (semi-)public servants is analyzed. It can be concluded that relative to, for example, social support, and supervisory support (antecedents of job/personal characteristics theories), the attendance of work-related courses only has a marginal influence on the job satisfaction and affective commitment (hedonic work-related well-being) of (semi-)public employees.

In chapter 3, the applicability of performance measurement according to the perception of (semi-)public employees is tested. The results show that especially the institutional context and the self-interest of (semi-)public employees seem to affect their perceptions about the applicability of performance measurement. It can be concluded that employees who are positive about the applicability of performance measurement are found particularly in complex managerial positions, those having positive judgments about the quality of the performance of colleagues within their organization, and those who have experience with performance management.

Subsequently, in line with the theoretical development, chapter 4 investigates the relation of a full high performance work system (newest theory within personnel management theories) in combination with some first parts of the JD-R model (newest theory within job/personal characteristics theories) on the eudaimonic work-related well-being (i.e., pride) of (semi-)public employees. It can be concluded that the pride of (semi-)public employees is hardly influenced by high performance work systems (i.e., personnel management theories), but is in particular determined by the job/personal characteristics theories (i.e., job security, optimism about image and PSM).

As it was concluded that job/personal characteristic theories were more promising than personnel management theories in explaining the eudaimonic and hedonic work-related well-being (i.e., respectively pride, satisfaction and commitment) of (semi-)public employees, chapter 5 tested, in line with the theoretical development, the newest job/personal characteristics theory more thoroughly via meta-analyses on the literature related to this subject. The chapter tested the influence of job resources and job demands from the JD-R theory on eudaimonic work-related well-being (i.e., work engagement). It was concluded that most job resources are positively related with eudaimonic work-related well-being (i.e., work engagement) and job demands are negatively related. However, the sizes of the relations differ across public and semi-public employees. Furthermore, it seems that some clusters of job resources have stronger relations with the work-related well-being of (semi-) public employees than other clusters. The final phase of theoretical development embodied by chapter 7 and 8 is therefore focused on the more in-depth study of these specific characteristics.

Chapter 7 dives into the influence of clusters of job resources, red tape and personal resources, including PSM, on the work-related well-being (i.e., work engagement) of public employees. It also analyzes the mediating role of eudaimonic work-related well-being (i.e., work engagement) between the JD-R model and the job outcomes turnover intention and organizational commitment (i.e., hedonic work-related well-being). It was concluded that public employees reach higher eudaimonic work-related well-being (i.e., work engagement) due to work-related job resources (content of job, relations with colleagues, autonomy) than due to organization related job resources (e.g., career development opportunities, supervisory support and feedback). In addition, personal resources stimulate eudaimonic work-related well-being (i.e., work engagement) of public employees. In contrast with expectations, red tape does not negatively affect eudaimonic work-related well-being (i.e., work engagement) directly, but is an important stimulator of the relationship between work-related job resources and eudaimonic work-related well-being (i.e., it is a challenge stressor which can be coped with due to work-related resources). The results also show that eudaimonic work-related well-being (i.e., work engagement) is an important mediator between JD-R and turnover intention and organizational commitment (i.e., hedonic work-related well-being).

Based on these insights, chapter 8 was aimed at further specifying some of these relationships through contrasting institutional contexts as well as taking into account performance outcomes and the multidimensional character of PSM. It was concluded that the personality characteristic attraction to public policy making (APP) of (semi-)public employees has a lower relation with eudaimonic work-related well-being (i.e., work engagement) than the personality characteristics compassion (COM) and commitment to the public interest (CPI) of (semi-)public employees. In contrast, it can be concluded that APP, CPI, and COM barely have an effect on the hedonic work-related well-being (i.e., job satisfaction) of (semi-) public employees and that red tape has a stronger negative effect on the hedonic work-related well-being (i.e., job satisfaction) of (semi-)public employees than on their eudaimonic work-related well-being (i.e., work engagement). The same conclusion can be drawn about autonomy (although the relations with the aspects of well-being are obviously positive).

Research line 3 to answer sub question 3: Employee outcomes of work-related well-being

The third research line was aimed at the analysis of the relationships between work-related well-being and employee outcomes. Only recently, the various employee outcomes of the work-related well-being of (semi-)public employees gained structural theoretical support. In line with the theoretical development, the various employee outcomes of work-related well-being were therefore tested from the second phase (chapter 6) onwards.

As chapter 6 was aimed at the introduction of the newest theory as a sequel of the classical studies of employee outcomes, it studied employee outcomes that can be subdivided into attitudinal, behavioral and performance outcomes. Research line 1 already concluded that attitudinal outcomes (i.e., organizational commitment and job satisfaction) are the same as hedonic work-related well-being as well as that eudaimonic work-related well-being (i.e., work engagement) leads to hedonic work-related well-being. Chapter 6 therefore tested the relationship of these two aspects of the work-related well-being of (semi-)public employees and indeed found that they are highly related. In addition, it was concluded that the eudaimonic work-related well-being of (semi-)public employees seems to lead to higher in-role and extra-role performance (performance outcomes) as well as to lower turnover intention and lower work-life conflict but higher workaholism (behavioral outcomes). However, there were very few studies that tested the relationships between eudaimonic work-related well-being (i.e., work engagement) and performance outcomes, so it was also concluded that more attention needed to be dedicated to especially this relationship. In other words, in line with the third phase of theoretical development, chapter 7 and 8 are more focused on the in-depth study of several of these relationships due to their specific application in the (semi-) public sector context(s).

Chapter 7 and 8 tested relations between work-related well-being and several employee outcomes more in-depth in the (semi-)public sector context. Chapter 7 tested the relationship between the eudaimonic work-related well-being (i.e., work engagement) of public employees and the attitudinal outcome (i.e., hedonic indicator) organizational commitment as well as the behavioral outcome turnover intention. It was concluded that the eudaimonic work-related well-being of public employees is positively related with their organizational commitment and negatively related with their turnover intention. In addition, it was concluded that eudaimonic well-being is an important mediator between the JD-R model and these outcomes.

Chapter 8 tested specific parts of the relationship between work-related well-being and employee outcomes. It also tested the relationship between the eudaimonic work-related well-being (i.e., work engagement) of (semi-)public employees and the attitudinal outcome (i.e., hedonic indicator) job satisfaction. It was concluded that the eudaimonic work-related well-being of (semi-)public employees is positively related with their job satisfaction as well as with their in-role performance. In addition, it can be concluded that eudaimonic well-being is also an important mediator between the JD-R model and these outcomes.

Research line 4 to answer sub question 4: Contextualizing the antecedents–work-related well-being–employee outcomes relationship

The fourth research line aimed at testing the antecedents–work-related well-being–employee outcomes relationships in and across different sectoral (institutional) contexts. The broad publicness theory was applied on the employee level via institutional theory. Classic theoretical approaches assume that public and private differences can be captured in a simple distinction based on the political/judicial type (i.e., ownership). The more recent dimensional publicness approach assumes that organizations are not always purely public or purely private, but that there are also hybrid/semi-public organizations, for example in terms of funding. This dimensional approach states that organizations can be placed on several spectra in addition to the political/judicial spectrum to determine the publicness of an organization. Often used spectra in addition to the political spectrum (political/ judicial approach) are a funding spectrum (economic approach) and normative spectrum (expectations and values approach). Based on these broad institutional characteristics, organizations can be classified as predominantly public, private or semi-public.

In line with the theoretical development, the main focus in the first phase (chapter 2 and 3) was on the judicial approach, but at the end of phase 1 (chapter 4) and especially from research phase 2 (from chapter 5) onwards, forms of the dimensional publicness approach on the antecedents–work-related well-being–employee outcomes relationships are tested.

Chapter 2 and 3 applied the judicial approach. The third chapter compared the applicability of performance management across the public and private sector (i.e., ownership), but also within the public sector between politically steered and non-politically steered organizations. This is often seen as a specific interpretation of the judicial/political approach that reflects the extent organizations are influenced by political authority. It was concluded that, overall, there is no difference in the perceived applicability of performance management between private and public employees, but that within the public sector, especially employees in politically steered organizations (i.e., central government, municipalities, provinces, water boards, and local government) perceive the applicability of performance management as a more positive instrument than employees in non-politically steered organizations (e.g., educational institutions, academic hospitals and public research institutes).

Chapter 4 aimed to investigate the effect of the dimensional approach on the eudaimonic indicator pride. It turns out that pride is more frequent among employees within the semi-public sector (education and healthcare) than among employees in the classical public sector (i.e., central government, municipalities, provinces, water boards, and local government). The findings about the differences in eudaimonic well-being between sectors are further investigated in chapter 5 and 6 by testing a different indicator of eudaimonism–work engagement.

In chapter 5, the influence of a large amount of job resources and job demands on the eudaimonic indicator work engagement is analyzed in different institutional contexts (public, semi-public, and private sector). It was concluded that the influence of most job resources and demands on work engagement do not differ across sectors, but the mean work engagement and three job resources do (feedback, job security, and job significance). The mean work engagement is significantly higher within the semi-public sector than in the public and private sector. In addition, it was suggested that the effect sizes of clusters of job resources on the eudaimonic work-related well-being of employees might differ. Within the public sector, job resources at the level of the task have roughly the highest influence on work engagement, followed by respectively job resources at the level of the organization, the interpersonal level, and the level of the organization of work. Within the semi-public sector, the influences of all the job resources on work engagement are relatively equal. One exception is job security which has an exceptionally low correlation with work engagement.

In chapter 6, the influence of the eudaimonic indicator work engagement on behavioral, attitudinal, and performance outcomes across the private, semi-public, and public sector is analyzed. The results show that significant sectoral differences exist in eudaimonic work-related well-being (i.e., work engagement), and the influence thereof on the level of attitudinal outcomes (job satisfaction and commitment; hedonic work-related well-being) and on behavioral outcomes (workaholism and turnover intention). Similar to the meta-analysis in chapter 5, the results in chapter 6 show that the mean work engagement is significantly higher in the semi-public sector than in the private sector. Engaged public servants are also significantly more satisfied with their job than semi-public and private employees and more committed to the organization than semi-public employees. Furthermore, work engagement has a significantly higher negative influence on turnover intention within the public sector than within the semi-public sector, and work engagement only has a significant positive influence on workaholism within the public sector.

Chapter 8 aimed at investigating the effects of red tape, job autonomy and the multidimensional character of PSM on performance, and eudaimonic & hedonic work-related well-being in these contrasting institutional contexts. In addition, the effect of eudaimonic work-related well-being on hedonic work-related well-being and performance is tested as well as the mediating role of work-related well-being between its antecedents and outcomes across these contexts. It is concluded that the higher eudaimonic work-related well-being in the semi-public sector relative to the public sector might be explained by differences in personality of its employees since the results show that semi-public employees become especially engaged due their compassionate personality and possibility to contribute to society (i.e., affective motives of meaningfulness: the embodiment of work engagement), while public employees become especially engaged due to their attraction to public policy making and commitment to the public interest (i.e., rational and normative motives). Red tape has a negative influence on all employees, but public employees experience a more detrimental influence on their eudaimonic work-related well-being (i.e., work engagement) due to red tape than their colleagues in the semi-public sector. The influence of autonomy on the eudaimonic work-related well-being (i.e., work engagement) of all employees is positive, but the influence is much smaller in case of semi-public employees than in case of public employees.

9.3 Answers to the main research question

The central research question of this dissertation was:

What are the antecedents of the work-related well-being of (semi-)public employees and what are its consequences?

Three parts can be distinguished in the research question. First, w*hat is work-related well-being?* This dissertation found that well-being is made up of two parts: hedonic and eudaimonic well-being. As applied to the work context, the hedonic focus emphasizes the job itself or facets as enjoyable for the employee or pleasurable to do, whereas the eudaimonic focus is on the job as being meaningful and purposeful to the employee (Grant, 2008). While hedonic indicators of work-related well-being, including job satisfaction and organizational commitment, connote pleasure and at the same time satiation, contentedness, and calmness (Tummers, Steijn, Nevicka, & Heerema, 2016; Schaufeli, 2013), eudaimonic indicators of work-related well-being, including work engagement, vitality, and pride, also connote pleasure but, in contrast with hedonic work-related well-being, high activation including enthusiasm, excitement and energy (Tummers et al., 2016; Schaufeli, 2013).

Second, *what are the antecedents of the work-related well-being of (semi-)public employees?* The antecedents of work-related well-being are studied by two research streams–job/personal characteristics theories and personnel management theories. While job/personal characteristics theories are aimed at studying the work environment and work experience of employees, personnel management theories are aimed at the employment of resources to influence the work-related well-being and behavior of employees (i.e., HRM and leadership research). Although some HRM instruments (including performance measurement and work-related training) impact on the work-related well-being of (semi-) public servants, this dissertation found that such well-being is mainly determined by job and personal characteristics as suggested by job/personal characteristics theories. The classical theories including the hierarchy of needs (Maslow, 1943), theory X and theory Y (McGregor, 1957), the two-factor theory (Herzberg et al., 1959), the job-characteristics model

(Hackman & Oldham, 1975; 1980), and the self-determination theory (Deci & Ryan, 1985) were all pieces of a puzzle. Recently, these pieces fell into place when the overarching JD-R theory was introduced.

By testing the overarching JD-R theory, this dissertation found that job resources on all levels positively influence the eudaimonic work-related well-being (i.e., work engagement and pride) as well as the hedonic work-related well-being (i.e., job satisfaction and organizational commitment) of (semi-)public employees. Task-related job resources and interpersonal resources have a larger positive influence on eudaimonic work-related well-being than organization related resources, while the influence of clusters of resources on hedonic work-related well-being is scattered.

Equally important are the personal resources for the work-related well-being of (semi-)public employees including their proactivity, Public Service Motivation, expertise, and optimism. PSM and optimism are important for both the hedonic and eudaimonic work-related well-being of (semi-)public employees, while expertise and proactivity are only important for the eudaimonic work-related well-being of public employees. In contrast, this study found that job demands, including role ambiguity, workload, and red tape, are detrimental for the hedonic and eudaimonic work-related well-being of (semi-)public employees. However, some of these demands can have a positive moderating effect on the job-resource–well-being relationship depending on whether these demands are challenging or hindrance demands. In case of the presence of challenging demands (e.g., red tape), work-related job-resources gains its motivating abilities since employees can use these to cope with challenging demands.

The importance of these factors is largely dependent on the institutional contexts in which these employees work. The application of this institutional approach shows that the eudaimonic work-related well-being (i.e., work engagement and pride) in itself is significantly higher in the semi-public sector than in the public sector. The differences in eudaimonic work-related well-being of (semi-)public employees across institutional contexts are, for example, determined by contrasting personalities. The eudaimonic work-related well-being of employees in the semi-public sector is determined by their compassionate personality and possibility to contribute to society, while the eudaimonic work-related well-being of public servants in the public sector is determined by their attraction to public policy making and commitment to the public interest. In addition, red tape has a negative influence on all (semi-)public employees but the ones in public organizations experience a more detrimental influence on their eudaimonic work-related well-being than their colleagues in the semi-public sector. Furthermore, the influence of the job resources job security, autonomy and job significance on the eudaimonic work-related well-being of all employees is positive but their influence is much smaller in case of the semi-public sector than in case of the public sector.

Third, *what are the employee outcomes of the work-related well-being of (semi-)public employees?* Although well-being can be divided in an eudaimonic aspect as well as a hedonic aspect, this study shows that hedonic work-related well-being is an important outcome of eudaimonic work-related well-being. Attitudinal outcomes—also known as indicators of hedonic work-related well-being (i.e., organizational commitment and job satisfaction)—are important consequences of eudaimonic work-related well-being. In addition, eudaimonic work-related well-being also has a positive influence on several performance outcomes (including extra-role and in-role performance), and a negative influence on behavioral outcomes (turnover intention and work-life conflict). This dissertation also shows that eudaimonic work-related well-being has a positive influence on the workaholism of employees. However, this is only the case for employees in the public sector. The institutional context therefore plays a role in the consequences of work-related well-being as well.

Besides the importance of the institutional context in explaining differences in the negative consequences of eudaimonic work-related well-being, it is also important in explaining differences in the positive consequences of work-related well-being. Employees in the public sector/people-processing organizations are relatively more reluctant to leave their organization when they experience eudaimonic work-related well-being than employees within the semi-public sector/people-changing organizations. Also, public servants in the public sector/people-processing organizations experience higher hedonic work-related well-being due to eudaimonic work-related well-being than their colleagues in the semi-public sector/people-changing organizations.

9.4 Discussion of the theoretical contributions of this dissertation

Through the integration of a psychological perspective, this dissertation aimed to contribute to the new subfield within public administration called behavioral public administration, as well as to the knowledge about work-related well-being. Below, the four major contributions of the overall dissertation are highlighted.

"All different 'states' of (semi-) public employees can be brought together under the heading work-related well-being and next to hedonic work-related well-being, more attention for eudaimonic work-related well-being in public administration is justified."

Firstly, this dissertation brings more clarity in the conceptual complexity inherent to the measurement of the 'state' of (semi-)public employees. Public practitioners as well as public administration scholars use several indicators for this 'state'. This dissertation has tried to bring all these indicators together under the umbrella term 'work-related well-being'. Because the state of (semi-)public employees is framed as work-related well-being, this dissertation brings in relatively new literature in the study of Public Administration, namely psychological literature.

Psychological literature shows that there are two types of work-related well-being—hedonic work-related well-being and eudaimonic work-related well-being. This dissertation shows that, until recently, scholars within public administration mostly focused on the explanation of hedonic work-related well-being which refers to happiness, pleasure and enjoyment in the job or aspects thereof. Typical indicators (i.e., 'states') of hedonic work-related well-being are job satisfaction and organizational commitment (Tummers et al., 2016). These states are indeed the typical indicators that receive attention in public administration (Tummers et al., 2016; Cantarelli et al., 2016; Steijn & Groeneveld, 2013). In contrast, eudaimonic work-related well-being (i.e., work engagement) refers to meaningfulness and purposefulness. Meaningfulness and purposefulness are often seen as two typical reasons of employees to work in the (semi-)public sector. Thus although public administration scholars have focused up until recently on an important part of work-related well-being (i.e., hedonic work-related well-being), this dissertation shows that it should be extended with eudaimonic work-related well-being.

""Soft" instruments (as emphasized in job/personal characteristics theories) have a much larger relation with the work-related well-being of (semi-)public employees than "Hard" instruments (as emphasized in personnel management theories)."

Secondly, within the field of HRM, a distinction is often made between a "hard" and a "soft" approach of managing employees (Boselie, 2010). Although the literature makes a distinction between hard and soft HRM, it is possible to extend this thinking towards a hard and soft overall approach. Instead of making a distinction within HRM between hard and soft, HRM as a whole can be framed as relatively "hard" in relation to the Job Demands-Resources (JD-R) model. The key element that demarcates hard and soft HRM is whether the emphasis is placed on resources or humans (Truss, Gratton, Hope-Hailey, McGovern, & Stiles, 1997). Although soft HRM is often equated with the human relations via high commitment work systems, it all still comes down to the employment of resources ("hard" approach) by the organization to influence the behavior and attitudes of employees. This emphasis becomes especially clear when the JD-R model is taken into account. The JD-R model is in contrast aimed at the work environment, work experience and personality of employees. In other words, the JD-R model puts a much bigger emphasis on the human perspective, and inherently "soft" instruments than HRM does. This is also the reason why HRM is framed as a part of personnel management theories while the JD-R model can be framed as a job/personal characteristics theory.

By taking the above perspective, this dissertation contributes to this theoretical gap by showing that "soft" instruments (i.e., JD-R) have a much larger influence on the work-related well-being of (semi-)public employees than "hard" instruments (i.e., HRM). One exemplary result of this dissertation to underline these contrasts is the difference in the relationship between objective security (permanent contract/fixed-term contract) versus subjective job security (perceived job security) with eudaimonic work-related well-being (i.e., pride). The objective version is predominantly an instrument and is therefore characterized as part of HRM ("hard" approach) while the subjective version is more likely to say something about the experience of the work situation by the employee and is therefore characterized as part of the JD-R model ("soft" approach) (Mauno et al., 2005). The results, for instance, show that objective job security (i.e., hard instrument), does not have a relationship with eudaimonic well-being, while subjective job security (i.e., soft instrument) does. However, objective job security (i.e., hard) does have a positive relationship with hedonic work-related well-being. In other words, while in most cases soft instruments have a stronger relation with the work-related well-being of (semi-)public employees than hard instruments, in some cases it depends on the instrument but also especially on the kind of well-being. These findings confirm in other words the importance of highlighting all different aspects of the state (i.e., work-related well-being) of (semi-)employees before conclusions can be drawn about how to stimulate it.

"In relation to organization related job resources, work-related job resources have a stronger relation with the eudaimonic work-related well-being of public servants."

From the literature on the JD-R model it remains unclear what resources will be most important for eudaimonic work-related well-being (i.e., work engagement) or why some resources might be more important than others for facilitating eudaimonic work-related well-being (Saks & Gruman, 2014).

This dissertation contributes to this theoretical gap by showing that job resources on the level of work are much more important than job resources on the level of the organization. Job resources are assumed to play either an intrinsic motivational role, because they foster employees' growth, learning and development, or an extrinsic motivational role, because they are instrumental in achieving work goals (Bakker & Demerouti, 2008). Work-related job resources especially fulfill an intrinsic motivational role since they foster basic human needs, such as the needs for autonomy, relatedness and competence (Deci and Ryan, 1985), while organization related job resources including performance feedback and training increase the likelihood of being successful in achieving one's work goals (Bakker & Demerouti, 2008). These findings therefore not only show that work-related resources are more important than organization-related resources for facilitating eudaimonic well-being, but also confirm the theory that public servants become the most engaged by intrinsic factors.

"The relation of resources (personal resources and job resources) and demands with the eudaimonic work-related well-being of (semi-)public employees, as well as the relation of eudaimonic work-related well-being with attitudinal (i.e., hedonic work-related well-being), behavioral, and performance outcomes of (semi-)public employees is dependent on the institutional context."

Fourthly, the institutional context plays an important role in explaining hedonic (i.e., commitment and satisfaction), and eudaimonic work-related well-being (i.e., work engagement) in two ways. First, specific defining elements such as PSM and red tape can play a role in one context but far less in others. Second, the differences between sectoral contexts as described in the publicness theory, influence the relations between respectively the antecedents, work-related well-being, and employee outcomes. However, there is little attention within the literature for the translation of these broad regulative, normative and cultural-cognitive institutional elements to the effects on the state of employees.

This dissertation shows that such broad institutional differences affect the state of (semi-)public sector employees through so-called institutional logics. Institutional logics concern the rules of the game, the values deemed important, and the way of doing things. Especially the demarcation between organizations with a political logic (administrative routines, hierarchy, and indirect control) versus a professional logic (high levels of specific expertise and task complexity), and a people-changing logic (intense and long contacts with an identifiable user group aimed on changing (i.e., healing or teaching) the user) versus a people-processing logic (short one-of contacts with clients from which the status is not changed) seems to influence the work-related well-being of employees and how it comes about.

9.5 Discussion of the limitations

According to the Lakatosian/Kuhnian phases of theoretical development, the final phase suggests that the first new theoretical limitations should become visible. Since this dissertation has arrived at that last phase, it is time to focus on these limitations. The next section will therefore concentrate on the discussion of these substantive theoretical limitations (and inherently give several future research suggestions). But first, as is customary, this section will focus on the limitations of the overall research design of this dissertation (with implicit theoretical limitations enclosed in them as well).

Multilevel perspective
The used data assess the relationships on the individual level. Yet, most organizations are interested in the levels of demands, resources, and well-being of whole teams or departments (Bakker & Demerouti, 2017). Within the public sector, a trend is visible regarding the change of traditional hierarchical organizational structures into decentralized specialized teams (Hughes, 2012; Pollitt & Bouckaert, 2011). Self-managing teams with their own tasks and responsibilities are becoming more common (Kramer, Thayer, & Salas, 2013; Rainey, 2014). The interest in team well-being and team performance has gained ground (Van der Hoek, Groeneveld, & Kuipers, 2016). Integrating a multi-level version of the JD-R theory in research can in other words help to capture the complexity of the public sector. Future applications of the JD-R model of work engagement in the public sector should therefore take the multilevel nature of data into consideration, and also investigate team job demands and resources, that is, perceptions of job characteristics at the team or departmental level.

By choosing this perspective, the influence of various institutional aspects of different sectoral contexts can also be more easily studied. While this dissertation attempted to study the impact of institutional aspects of different sectors (public, semi-public, and private) on the employee, these aspects were rather implicitly tested (via sectoral groupings based on theoretical substantiation). To further confirm that the found differences in employee well-being between employees can be ascribed to the institutional differences between sectoral contexts, this multilevel perspective might be fruitful.

Objective measures
Related to the second point, the individual level data used in the chapters is self-reported. Although most JD-R studies have used self-reported job demands and resources as well as self-reported outcomes, the problem with such measures is that the same person (the focal employee) provides all information and that, therefore, statistical relationships between constructs may be inflated as a result of common source bias (CSB) (Bakker & Demerouti, 2017). To limit possible bias, several actions were taken including asking reversed questions, providing full anonymity in completing the survey, and separating all the factors in the survey. Additional tests were also conducted including the Harman's one-factor test, which is still an important test to identify issues with CSB (George & Pandey, 2017). Furthermore, interaction effects are a core element, which cannot be the product of CSB (George & Pandey, 2017). Despite these precautions, future studies could employ more objective measures including other-rated performance measures (supervisors or clients).

Experimental designs or time series for causality
Related to the third point, because a largely quantitative, cross-sectional design was chosen for assessing the relationships, all the studies in this dissertation have analyzed the relationships at one point in time. A problem with a cross-sectional design is that uncertainty remains about the causalities found. Within this dissertation, for example, it is assumed that eudaimonic work-related well-being leads to hedonic work-related well-being. While this assumption is supported by theory and the results also show a relation between the two, it is not possible to establish the direction of this relationship with certainty. To overcome this problem, longitudinal or experimental designs are needed. Although public administration scholars have recently started using experiments, public administration is still far from an experimental science on the same scale as psychology (Grimmelikhuijsen et al., 2017). However, just like this dissertation integrates psychological theories in the discipline of public administration, the methods of psychology might also be integrated in this discipline of public administration. The integration of

these methods from psychology into public administration might lead to several synergy effects, as proposed by the new subfield behavioral public administration (Grimmelikhuijsen et al., 2017).

9.6 Discussion of a possible future research agenda

As mentioned above, this dissertation has several limitations in itself. However, during the third phase of the Lakatosian/Kuhnian theoretical development of the work-related well-being research, this dissertation also uncovered several new substantive theoretical limitations. These limitations raise new questions and form a starting point for new research on work-related well-being of (semi-)public employees in general and work engagement in particular. Three of these substantive limitations and inherent research suggestions are discussed in this section.

First, the finding that especially work-related job resources (vis-a-vis organization related job resources) relate to the eudaimonic work-related well-being (i.e., work engagement) of public servants shows the relative importance of different resources. However, job resources, including relationships with colleagues, job content, and job autonomy, are not easily created. Future research could dive deeper into the mechanisms of how these job resources develop and can be maintained. Recently, Bakker (2017) suggested two approaches to study the possible development of job resources: the strategic (top-down) approach, and the proactive (bottom-up) approach.

The strategic top-down approach entails strategic human resource management, and daily transformational and empowering leadership through which the organizational climate and the job demands and resources experienced by employees can be influenced (Bakker, 2017; Albrecht et al., 2015). The findings in this dissertation show that HRM instruments have a relatively disappointing result on the eudaimonic work-related well-being (i.e., pride and inherently work engagement) of (semi-)public employees. However, the mechanisms of a well-developed HRM system, combining several practices, influencing job resources, and indirectly eudaimonic work-related well-being (i.e., work engagement), as well as attitudinal (i.e., hedonic work-related well-being), behavioral and performance outcomes, could be interesting to analyze in future studies. Furthermore, the findings in this dissertation show that leader-member exchange and supervisory support have a positive influence on the work engagement of public employees.

Studying the influence of leadership styles (including for example ethical leadership and transformational leadership) on the creation of resources and inherently eudaimonic work-related well-being (i.e., work engagement) might therefore be interesting to study.

The proactive bottom-up approach involves self-management, job crafting, focus on using innate qualities, and mobilizing own volatile energetic, affective and cognitive resources to create organizational resources. Particularly interesting is the increasing attention for job crafting in psychology and HRM. Job crafting has been defined as the physical and cognitive changes individuals make in their task or relational boundaries. Physical changes refer to changes in the form, scope or number of job tasks or relationships at work, whereas cognitive changes refer to changing how one perceives the job (Wrzesniewski & Dutton, 2001). Although job crafting shows several positive effects on the job design (e.g., Tims, Bakker, & Derks, 2013), work engagement (Bakker, Tims, & Derks, 2012), and job performance of employees (e.g., Tims, Bakker, Derks, & Van Rhenen, 2013), its attention within the public sector is marginal. It is therefore interesting to study job craftment and its effects within the public sector.

Second, the findings show that the personality of (semi-)public employees is important for their eudaimonic work-related well-being (i.e., work engagement). Personal resources represent a set of characteristics that form an individual's self-beliefs of his or her ability to control and impact the environment (Gawke, Gorgievski, & Bakker, 2017). Personal resources of (semi-)public employees including PSM, experience, and proactivity play a key role in explaining eudaimonic work-related well-being (i.e., work engagement) and its consequences. As this dissertation shows, the JD-R model proposes several interactions between job demands and resources. Equal to job resources, personal resources are also expected to present a buffer for the undesirable impact of job demands on work engagement. However, research has provided only limited support for this proposition, which means that more research is needed to test the job demands-personal resources interaction. In addition, research into the creation of personal resources is also limited.

Third, the findings show that, particularly in the public sector, eudaimonic work-related well-being (i.e., work engagement) might have a possible dark side. Findings on the relationship between workaholism and work engagement are mixed. Researchers have found a positive relationship (e.g., Van Beek, Taris, & Schaufeli, 2011) as well as a negative relationship (e.g., Schaufeli, Shimazu, & Taris, 2009). However, as chapter 6 shows, all studies within the public sector carried out so far, show a positive relationship between work engagement and workaholism. Workaholics are, by definition, unable to disengage from their work (van Beek et al., 2011). Although work engagement is mostly related to positive outcomes, further research into the negative behavioral side effects for the well-being such as workaholism, therefore seems to be in order (cf., Bakker, Shimazu, Demerouti, Shimada, & Kawakami, 2013; Caesens, Stinglhamber, & Marmier, 2016; Clark, Michel, Stevens, Howell, & Scruggs, 2014).

9.7 Discussion of the recommendations for practice

Although the empirical support for the proposed relations within JD-R theory and work-related well-being is accumulating, intervention studies that apply the theory to practice are still scarce (Wingerden, Bakker, & Derks, 2017). This is to be expected since the JD-R model is aimed at the work environment and work experience of employees which are relatively intangible factors and inherently hard to fully grasp for practitioners. However, at a time when the work-related well-being of employees in the (semi-)public sector is subject to major challenges, in part caused by organizational restructuring, downsizing, and high expectations to perform better with fewer resources, an increasing amount of public and semi-public organizations across the world start to express their interest in the means that stimulate employees' eudaimonic work-related well-being (i.e., work engagement) (van Wingerden, Kessel, Bakker, & Derks, 2014; Cotton, 2012; Lavigna, 2013; Kernaghan, 2011; Byrne et al., 2017). Some studies show the first positive results of JD-R interventions in several organizations including, amongst others, public schools (e.g., Wingerden, Bakker, & Derks, 2017a; Wingerden, Bakker, & Derks, 2017b; Sakuraya, Shimazu, Imamura, Namba, & Kawakami, 2016; Biggs, Brough, & Barbour, 2014). In combination with the findings of this study, these intervention studies give relevant starting points for practice. Overall two different strategies can be chosen by public managers.

Firstly, if public managers want to increase the work-related well-being of (semi-) public employees, they can choose a rather top-down intervention approach to influence job demands, job resources and personal resources through HRM systems and/or management practices. When such a top-down approach is chosen, HRM- and line-managers are the key actors in need of developing an encompassing HRM system that influences the organizational climate and the job demands and resources experienced by employees in their work roles, and indirectly influence the eudaimonic work-related well-being (i.e., work engagement), as well as attitudinal (i.e., hedonic work-related well-being), behavioral and performance outcomes.

Although this study shows that disconnected HRM practices as discrete elements of a HRM system have relatively small influence on the work-related well-being of (semi-)public employees, a synergistic system or a bundle of HRM practices could have a positive impact on the development of JD-R and inherently the work-related well-being of (semi-)public employees. Job resources on all levels are highly related with the work-related well-being of (semi-)public employees. These task-related job resources, organization-related resources, and personal resources could be created and influenced by a HRM system that contains a combination of respectively socialization, training & development, and recruitment & selection practices.

Besides the importance of a well-developed HRM system, the line-manager has an important role in stimulating the work-related well-being of (semi-)public employees through providing job resources. As the results of this study show, job resources on the interpersonal level (supervisory support, organizational support, and leader-member exchange) stimulate the work-related well-being of (semi-)public employees. Depending on the work environment, a manager could therefore integrate a certain leadership style through which these job resources on the interpersonal level can be influenced.

Secondly, public managers could also choose a rather bottom-up intervention approach to influence job demands, job resources, and personal resources through the creation of an organizational climate of self-management, intrapeneurship, and job-crafting by (semi-)public employees. To create such an organizational climate, the whole organization needs to be included. As the creation of such a climate is rather complex, public managers can choose to attend a job crafting training program which may increase public servants' awareness regarding the ways in which they can adapt their job to their own needs and preferences, so that they experience more well-being. Since these interventions are especially aimed at creating a climate in which the preferences of (semi-)public employees' themselves are stimulated, the personal resources of these employees are developed.

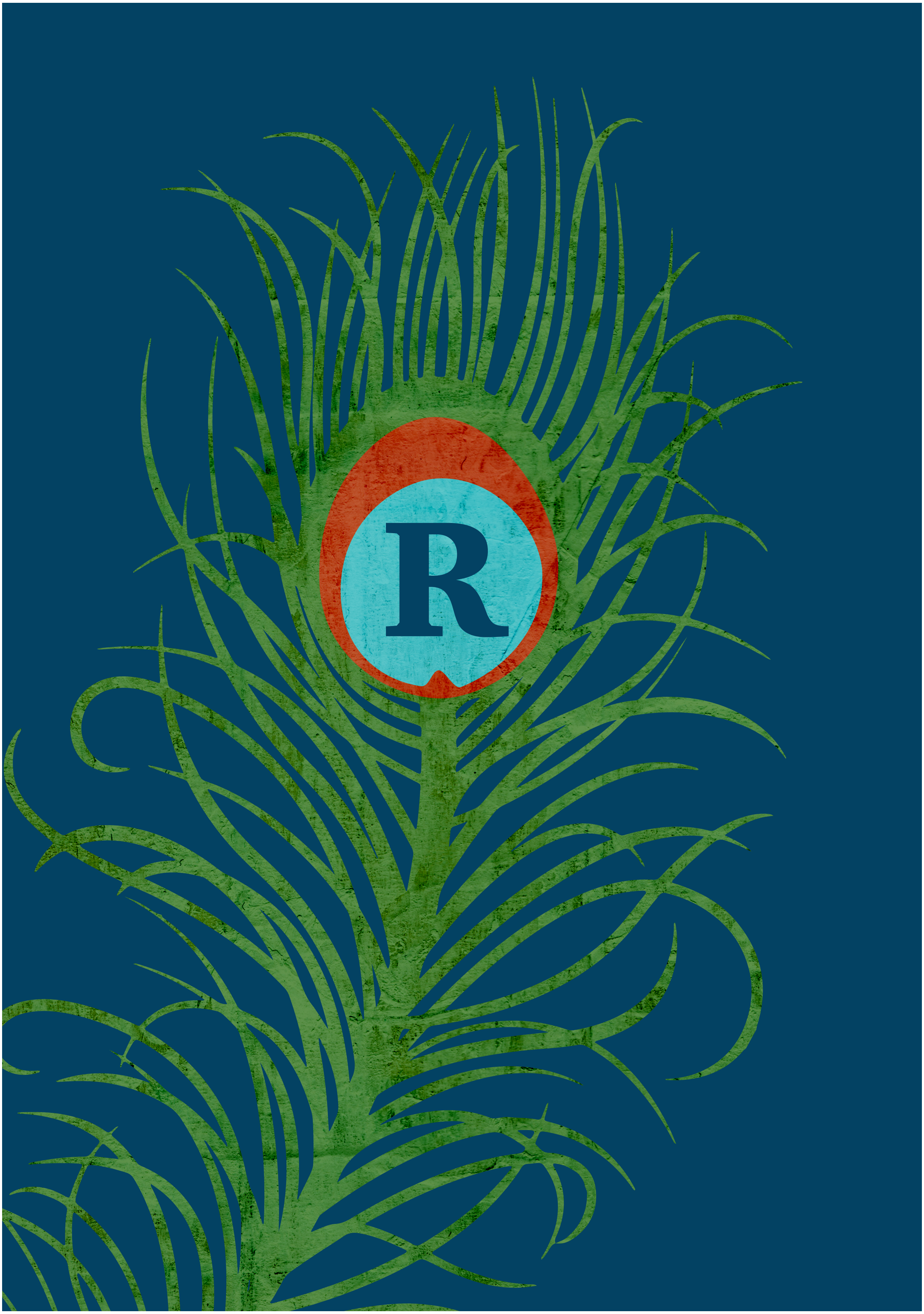
Aside from the chosen approach, public managers should always be aware of the negative influence of job demands on (semi-)public employees' work-related well-being including role ambiguity, workload, red tape, and bureaucrat bashing. In almost all circumstances, red tape negatively affects the hedonic and eudaimonic work-related well-being of all employees. The portrayal of (semi-)public employees as lazy, anonymous, and faceless bureaucrats can be blamed on this red tape. Public managers should therefore try to diminish job demands such as red tape as much as possible.

9.8 To conclude

Job satisfaction, organizational commitment, job vitality, professional pride, work engagement; all these terms refer to one of the important aspects of human life– work-related well-being. When someone asks for the deepest wishes of people, most often we refer to good health and wealth. To make these measurable we often dumb these down to well-being. The five essential elements of well-being are work-related well-being, social well-being, financial well-being, physical well-being and community well-being. This dissertation zoomed in on work-related well-being. People with high work-related well-being are more inclined to be happy and to prosper in life overall. Low perceived work-related well-being ensures that the chances of high well-being in other areas also decrease rapidly.

Nowadays there are major challenges in the public sector that put pressure on this work-related well-being, including an increasing critical public opinion and shrinking budgets which lead to downsizing, organizational restructuring, and high expectations to perform better with fewer resources (Hesketh & Cooper, 2017; Liu, Yang, & Yu, 2015; Tummers, Kruyen, Vijverberg, & Voesenek, 2015). These pressures play out at a time when there are already radical changes in the world of work including a shift from stable organizational environments to continuously changing environments, dependency of employees in their development on the organization to own responsibility and accountability, and life-time employment to precarious employment. The pressures and current changes require substantial psychological capabilities, adaptation and involvement of (semi-)public employees in order to preserve their work-related well-being (Schaufeli, 2013; Hesketh & Cooper, 2017). Via a vocational psychology perspective this study investigated how their work-related well-being can be measured, influenced, and what effects are to be expected thereof.

Especially so-called eudaimonic work-related well-being is brought in as a part of well-being which is understudied within the (semi-)public sector. It aims at investigating feelings of meaningfulness and significance by fulfilling work-related activities. Pride and work engagement are typical factors that determine such work-related well-being and inherently measure the deeper motives of employees. Overall, this study shows that among different institutional contexts (semi-)public employees vary in their personalities and work. These differences influence their work-related well-being. Therefore, different instruments should be deployed to increase this work-related well-being. The stimulation of such work-related well-being is worthwhile as it results in improved performance, lower turnover intention, but also higher workaholism. By bringing in this nuanced vocational psychology view this dissertation therefore hopes to contribute in finding ways to generally grasp the work-related well-being of our (semi-)public employees as well as how to make them as proud as a peacock (again).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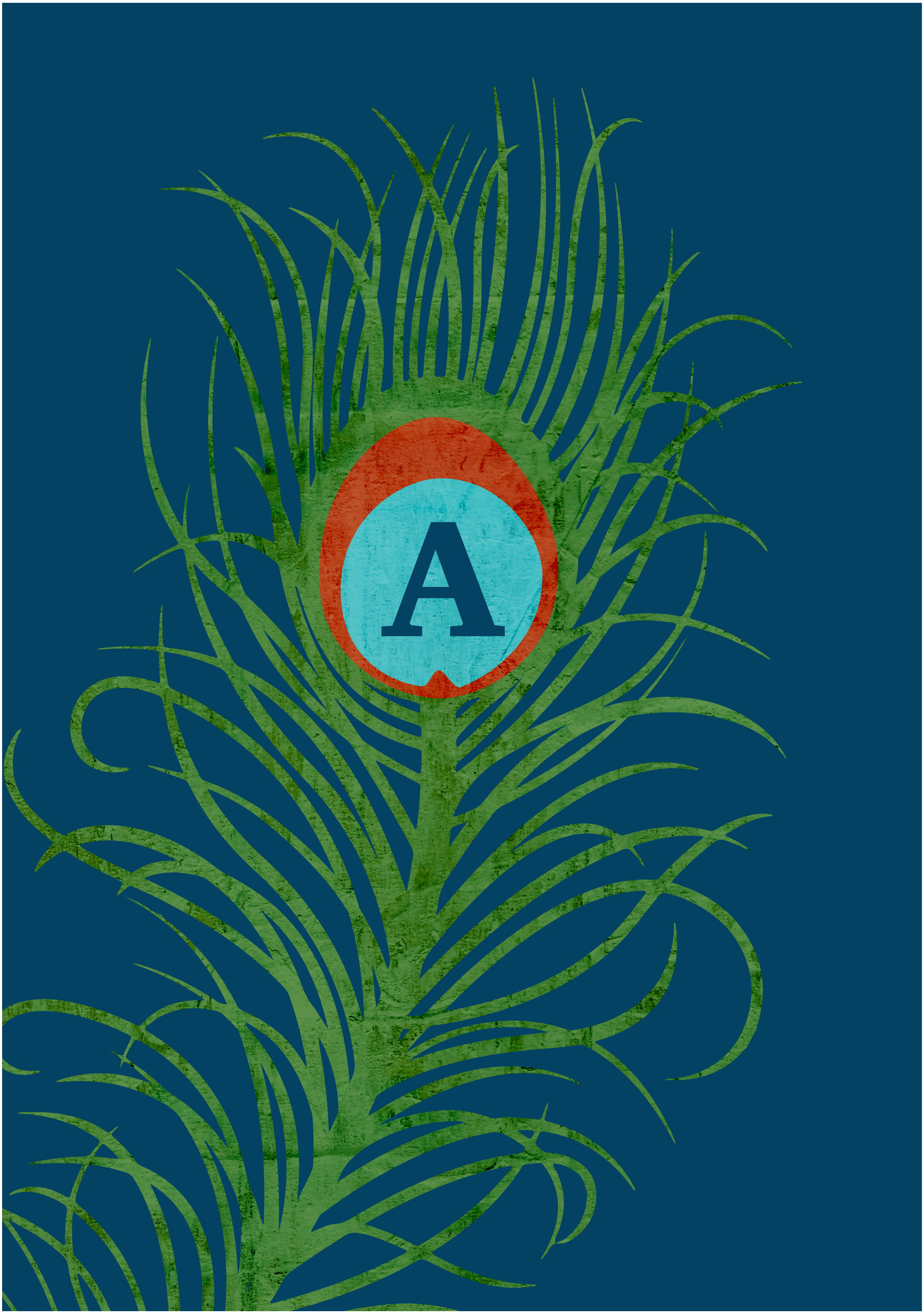
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Appendices

Appendix belonging to chapter 3

APPENDIX 3.1: Operationalization

Variables	**Indicators (questions from the questionnaire)**
Dependent variable	
Applicability of performance measurement	To what extend do you agree with the following statement? "My performance agreements are well measurable." - Strongly disagree - Disagree - Neither agree nor disagree - Agree - Strongly agree - Do not know/not applicable
Independent variables	
Public sector versus private sector	Given are two files within the POMO research. One among workers in the public sector and one among workers in the private sector
Politically steered organizations	In which department of the public sector do you work? (14 possible responses see Table 2. A distinction is made between organizations with elected politicians at the top of the organization (National, Provinces, Municipalities and water boards) versus organizations where elected politicians are separated from the top of the organization (other sectors)).
Nature of work	Which description fits best to your work? (By sector, the question asked but otherwise had the same goal. Possible answers were, for example administration, management, control, ICT and finance on the one hand and policy research, policy development, communication, implementation, etc. on the other hand.)
Work complexity	To what extent is the following statement applicable to your work? "In my work people give the difficult tasks to me." - Strongly disagree - Disagree - Neither agree not disagree - Agree - Strongly agree
Experience with performance measurement	Did your supervisor discuss your work results with you? Mark whether the subject was talked about and whether specific agreements were made - Not discusses - Discussed but no concrete agreements - Discussed and concrete agreements
Quality of functioning of oneself vis-à-vis colleagues	The following statement addresses the integrity of your (direct) colleagues. To what extent do you agree with this statement? "My colleagues often do unproductive things in the boss's time." - Strongly disagree - Disagree - Neither agree not disagree - Agree - Strongly agree

Appendix belonging to chapter 4

APPENDIX 4.1: Operationalization

Target variable:	Indicators used:
Performance measurement	My results are well measureable
	My performance measures are realistic
	It motivates me to create performances measures
	The possibility of performance related pay gives me extra motivation
	The creation of developmental appointments gives me extra motivation
	I know who I can turn to with questions about personnel business
Subjective job security	I am confident that I can continue to work for a long time for my employer
	I doubt it if I can keep my current job (reversed)
	I think I will lose my job in the near future (reversed)
	If it is necessary, I would certainly be able to find a new job
	I am convinced that if necessary I can find work with another employer
	If I would have been unemployed, It would be hard for to find a job (reversed)
Social support (all reversed)	My colleagues do not take responsibility for the results of their work
	My colleagues are not honest about the results of their work
	My colleagues cut corners in their job
	My colleagues distort the truth to their manager(s)
	My colleagues try to hide mistakes that they make
	My colleagues often do unproductive things in the boss's time
	My colleagues unjustly call in sick
	My colleagues often need longer to a task than is necessary
Public Service Motivation	To me, politics is a dirty word (reversed)
	I don't care much for politicians (reversed)
	I unselfishly contribute to my community
	Providing meaningful public service is very important to me
	Making a difference to society means more to me than personal achievements
	The general interest is a key driver in my daily life
	It is difficult for me to contain my feelings when I see people in distress
	I seldom think about the welfare of people whom I don't know personally (reversed)
	Considering the welfare of others is very important to me
	If we do not show more solidarity, our society will fall apart

Appendix belonging to chapter 6

APPENDIX 6.1: Studies used in meta-analysis

UWES studies:

Adriaenssens, J., Gucht, V. de., & Maes, S. (2015). Causes and consequences of occupational stress in emergency nurses, a longitudinal study. *Journal of Nursing Management, 23,* 346-58.

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Appendix belonging to chapter 7

Appendix 7.1: Measurement scales

1. Satisfaction with job related resources
- Satisfaction with content of the job
- Satisfaction with the degree of autonomy
- Satisfaction with co-operation with colleagues

2. Satisfaction with organization related resources
- Satisfaction with mode of leadership
- Satisfaction with result oriented focus of the organization
- Satisfaction with the provision of information within the organization
- Satisfaction with career opportunities
- Satisfaction with how I am reviewed
- Satisfaction with the degree of influence within the organization
- Satisfaction with the attention of the organization for my personal welfare

3. Work engagement
- I am proud on the work that I do
- My job inspires me
- I am enthusiastic about my job
- I feel happy when I am working intensely
- When I get up in the morning, I feel like going to work
- At my work, I feel bursting with energy

4. Affective commitment with organization
- I feel like 'part of the family' at my organization.
- This organization has a great deal of personal meaning for me.
- I feel at home in this organization.
- I really feel as if this organization's problems are my own.

5. Red tape
- Filling out forms and systems costs me a lot of time
- It takes me a long time to comply with all the rules and obligations within my organization
- Some rules or guidelines that I encounter in my work contradict with each other

- Guidelines and regulations are more important in my organization than my experience or intuition.
- Rules and procedures in my organization make it difficult to do my job well
- Requirements of supervisory bodies and inspections make it difficult for me to do my job well

6. Proactive personality
- I like to use my know-how to reach good results
- I have a clear picture of how the work can best be done
- I try to continually improve myself in my profession
- I 'm always looking for better ways to do my work
- I actively follow the developments in my field of work

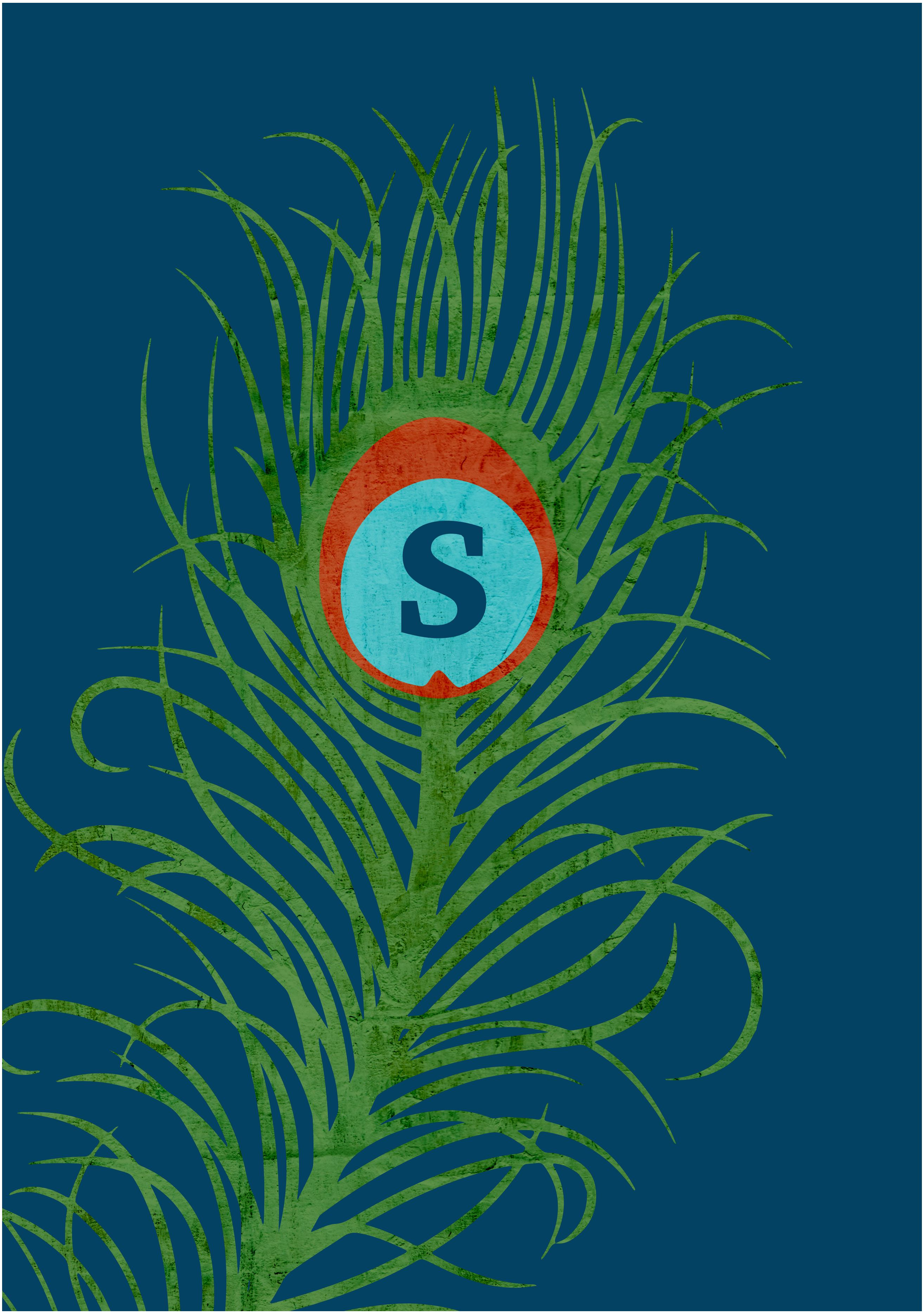
7. PSM
- To me, politics is a dirty word (reversed)
- I don't care much for politicians (reversed)
- I unselfishly contribute to my community.
- Providing meaningful public service is very important to me
- Making a difference to society means more to me than personal achievements
- The general interest is a key driver in my daily life.
- It is difficult for me to contain my feelings when I see people in distress
- I seldom think about the welfare of people whom I don't know personally.
- Considering the welfare of others is very important to me
- If we do not show more solidarity, our society will fall apart.

8. Professional expertise

I am confident that I can effectively perform a variety of tasks

In my work, colleagues ask me for advice if things get complicated.

In my work, I am given the more difficult jobs.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Summary (English)
Samenvatting (Nederlands)

Summary

Nowadays, many practitioners in the public sector as well as public administration scholars show interest in the 'state' of (semi-)public personnel as well as the antecedents and outcomes of this 'state'. The interest from (semi-)public organizations and scholars in this 'state' and its antecedents and consequences is understandable given the major challenges in the public sector that put pressure on this state (e.g., the increasing critical public opinion and shrinking budgets which lead to downsizing, organizational restructuring, and high expectations to perform better with fewer resources). These pressures play out at a time when there are already radical changes in the world of work of (semi-)public employees (e.g., a shift from stable organizational environments to continuously changing environments). Despite the interest in the state as well as its antecedents and consequences, many different labels and measures are being used to frame this 'state'. This dissertation intends to bring clarity in this conceptual complexity by integrating the various concepts into a conceptual framework that will be labeled 'work-related well-being'. The goal of this dissertation therefore is t*o analyze the antecedents and the consequences of work-related well-being of (semi-)public employees*.

To reach this aim, this dissertation displays a scientific journey through the development in thinking about work-related well-being of (semi-)public employees and its antecedents and consequences. This journey takes place by distinguishing three phases of scientific development according to the "Kuhnian" or "Lakatosian" approach: (1) testing the classical theories of work-related well-being of (semi-) public employees including its antecedents and its consequences (chapters 2-4), (2) filling some of the research gaps found in the first phase by the introduction and systematic analysis of the newest theory of work-related well-being (i.e., the Job Demands-Resources model) (chapters 5 and 6), (3) the further expansion and in-depth development of the Job Demands-Resources model in the (semi-)public sector (chapters 7 and 8).

However, before starting with these phases, chapter 1 explains what work-related well-being is as well as how its antecedents and consequences are studied. Chapter 1 shows that work-related well-being consists of two parts–hedonic and eudaimonic work-related well-being. Hedonic work-related well-being can be described as feelings of happiness, pleasure and enjoyment due to and in work. In contrast, eudaimonic work-related well-being can be described as feelings of purposefulness and meaningfulness due to and in work. While indicators of hedonic work-related

well-being including organizational commitment and job satisfaction received much attention within public administration research throughout the years, eudaimonic well-being including work engagement and pride received little attention.
Furthermore, chapter 1 shows that the influence of the antecedents on work-related well-being is studied by two research streams—job/personal characteristics theories and personnel management theories. While job/personal characteristics theories are aimed at studying the work environment and work experience of employees, personnel management theories are aimed at the employment of resources to influence the work-related well-being and behavior of employees.

In addition, chapter 1 shows that the outcomes of work-related well-being can be clustered in attitudinal, behavioural, and performance outcomes. It is concluded that eudaimonic work-related well-being affect hedonic work-related well being (which is similar to the attitudinal outcomes including job satisfaction and organizational commitment), behavioural outcomes (e.g., turnover intention, workaholism), and performance outcomes (in-role and extra-role performance).

In line with the first phase of theoretical development, chapters 2 and 3 are aimed at testing the relationships between two characteristics of the first personnel management theories, related to work-related courses and performance measurement, and some characteristics of classic job/personal characteristics theories on the hedonic work-related well-being of (semi-)public employees. In chapter 2 the influence of attending work-related courses (derived from personnel management theories) on the hedonic work-related well-being of public servants is analyzed. It is concluded that relative to, for example, social support, and supervisory support (derived from job/personal characteristics theories), the attendance of work-related courses only has a marginal influence on the job satisfaction and organizational commitment of (semi-)public employees.

In chapter 3, the applicability of performance measurement (derived from personnel management theories) according to the perception of (semi-)public employees is tested. The results show that especially the institutional context and the self-interest of (semi-)public employees seem to affect their perceptions about the applicability of performance measurement. It is concluded that employees who are positive about the applicability of performance measurement are found particularly in complex managerial positions, those having positive judgments about the quality of the performance of colleagues within their organization, and those who have experience with performance management.

Subsequently, in line with the theoretical development, chapter 4 investigates the relation of a full high performance work system (newest theory within personnel management theories) in combination with some first parts of the JD-R model (newest theory within job/personal characteristics theories) with the eudaimonic work-related well-being (i.e., pride) of (semi-)public employees. It is concluded that the pride of (semi-)public employees is hardly influenced by high performance work systems (i.e., performance measurement and courses), but is in particular determined by the job/personal characteristics theories (i.e., job security, optimism about image and Public Service Motivation).

As it is concluded that job/personal characteristic theories were more promising than personnel management theories in explaining the eudaimonic and hedonic work-related well-being (i.e., pride, satisfaction and commitment) of (semi-)public employees, chapter 5 and 6 test the newest job/personal characteristics theory more thoroughly via meta-analyses on the literature related to this subject. In chapter 5, the influence of a large amount of job resources and job demands on the eudaimonic concept work engagement is analyzed in different institutional contexts (public, semi-public, and private sector). The results show that the influence of most job resources and demands on work engagement do not differ across sectors, but the mean work engagement and three job resources do (feedback, job security, and job significance). The mean work engagement is significantly higher within the semi-public sector than in the public and private sector. In addition, it was suggested that the effect sizes of clusters of job resources on the eudaimonic work-related well-being of employees might differ. Within the public sector, job resources at the level of the task have roughly the highest influence on work engagement, followed by respectively job resources at the level of the organization, the interpersonal level, and the level of the organization of work. Within the semi-public sector, the influences of all the job resources on work engagement are relatively equal. One exception is job security which has an exceptionally low correlation with work engagement.

In chapter 6, the influence of the eudaimonic indicator work engagement on behavioral, attitudinal, and performance outcomes across the private, semi-public, and public sector is analyzed. The results show that significant sectoral differences exist in eudaimonic work-related well-being (i.e., work engagement), and the influence thereof on the level of attitudinal outcomes (job satisfaction and commitment; hedonic work-related well-being) and on behavioral outcomes (workaholism and turnover intention). Similar to the meta-analysis in chapter 5, the results in chapter 6 show that the mean work engagement is significantly higher in the semi-public sector than in the private sector. Engaged public servants are also significantly more satisfied with their job than semi-public and private employees and more committed to the organization than semi-public employees. Furthermore, work engagement has a significantly higher negative influence on turnover intention within the public sector than within the semi-public sector, and work engagement only has a significant positive influence on workaholism within the public sector.

In line with theoretical development, the final phase consists of two chapters (chapters 7-8) that move on to the expansion of the relationship between JD-R theory, work-related well-being and outcomes in the public and semi-public sector context by filling in the gaps found in chapters 5 and 6. Chapter 7 is aimed at fulfilling several suggestions of the meta-analyses in chapters 5 and 6. The chapter dives into the influence of clusters of resources on the work engagement of public servants as well as into the influence of red tape and personal resources including PSM on work engagement. It also looks at the mediating role of work engagement between the JD-R model and the job outcomes turnover intention and organizational commitment. The results show that public servants become much more engaged by work-related job resources (content of job, relations with colleages, autonomy) than by organization related job resources (e.g., career development opportunities, supervisory support and feedback). In addition, personal resources including PSM, task experience and proactivity also stimulate work engagement of public servants. Interestingly, in contrast with expectations, red tape does not negatively affect work engagement directly but is an important stimulator of the relationship between work-related job resources and work engagement. The results also show that work engagement is an important mediator between JD-R and the job outcomes turnover intention and organizational commitment.

With these enhanced insights into the influence of this public sector specific characteristics on the work engagement of public servants, chapter 8 is aimed at further specifying some of these relationships in contrasting institutional contexts within the public sector as well as taking into account performance outcomes and the multidimensional character of PSM. In this chapter, the dimensional publicness approach based on the normative institutional spectrum (people-processing organizations versus people-changing organizations) is applied (which has the same classification of organizations as respectively the public and semi-public sector as used in chapters 5 and 6). The results show that public servants in organizations with a people-changing service orientation (including education and healthcare) become especially engaged due their compassionate personality and possibility to contribute to society. In contrast, public servants in organizations with a people-processing service orientation (including for example the local government, and the police) become especially engaged due to their attraction to public policy making and commitment to the public interest. In conflict with expectations, red tape has a negative influence on all public servants but employees in people-processing organizations experience a more detrimental influence on their work engagement due to red tape than their colleagues in people-changing organizations. In addition, the influence of autonomy on the work engagement of public servants is positive but the influence is much smaller in case of health care personnel and teachers than in case of people-processing public servants. Furtermore, in line with the findings of the meta-analyses, public servants in people-changing organizations have a significantly higher work engagement than their people-processing counterparts.

To summarise, the main argument put forward in this dissertation is twofold: (1) eudaimonic work-related well-being (i.e., pride and work engagement) is an important addition to the explanation of the 'state' of (semi-)public employees, and (2) among different institutional contexts (semi-)public employees vary in their personalities and work which influences their work-related well-being and inherently their attitudinal, behavioral, and performance outcomes.

As highlighted in the conclusion and discussion of this dissertation, the findings of this dissertation do not only add knowledge to the new research stream called behavioral public administration and inherently positive vocational psychology, behavioral science and public administration. Instead, the findings also have implications for practitioners. If public managers want to increase the work-related well-being of (semi-)public employees, they can choose a rather top-down or a bottom-up intervention approach. Firstly, within a top-down approach, line managers need to implement a well designed HRM system with mutually adjusted management practices that influence job demands, job resources and personal resources, and in turn the eudaimonic work-related well-being (i.e., work engagement), as well as attitudinal (i.e., hedonic work-related well-being), behavioral and performance outcomes. Secondly, within a bottom-up intervention approach, public managers can influence the job demands, job resources, and personal resources through the creation of an organizational climate of self-management, intrapeneurship, and job-crafting by (semi-)public employees. These approaches may help with the major challenges and pressures in the world of work of (semi-)public employees.

Building on the findings of this dissertation, future research may explore the established theoretical framework further by studying the relations between HR practices/systems on the one hand, and job demands, job resources and personal resources on the other hand. In addition, to better understand the sectoral differences in the relationships mentioned in the theoretical framework, future research into the theoretical embeddedness of the theoretical framework in institutional theory is fruitfull. Furthermore, the potential dark side of work-related well-being could also be interesting for future studies.

Samenvatting

Tegenwoordig tonen veel beoefenaars in de publieke sector, evenals bestuurskundigen, interesse in de 'staat' van (semi-)publiek personeel evenals de antecedenten en uitkomsten van deze 'staat'. De interesse van (semi-)publieke organisaties en wetenschappers in deze 'staat' en de antecedenten en gevolgen daarvan is begrijpelijk gezien de grote uitdagingen in de publieke sector die druk uitoefenen op deze staat (bijvoorbeeld de toenemende kritische publieke opinie en krimpende budgetten die leiden tot inkrimping, organisatorische herstructurering en hogere verwachtingen om beter te presteren met minder middelen). Deze druk speelt zich af op een moment dat er al radicale veranderingen zijn in de wereld van het werk van (semi-)publieke werknemers (bijvoorbeeld een verschuiving van stabiele organisatieomgevingen naar voortdurend veranderende omgevingen). Ondanks de interesse in de ‘staat’ van (semi-)publieke werknemers en de antecedenten en gevolgen ervan, worden veel verschillende labels en meetinstrumenten gebruikt om deze 'staat' te framen. Dit proefschrift beoogt duidelijkheid te scheppen in deze conceptuele complexiteit door de verschillende concepten te integreren in een conceptueel raamwerk dat als 'werkgerelateerd welzijn' zal worden bestempeld. Het doel van dit proefschrift is daarom om de antecedenten en de gevolgen van werkgerelateerd welzijn van (semi-)publieke werknemers te analyseren.

Om dit doel te bereiken, toont dit proefschrift een wetenschappelijke reis door de ontwikkeling in het denken over werkgerelateerd welzijn van (semi-)publieke werknemers en de antecedenten en consequenties daarvan. Deze reis vindt plaats door drie fasen van wetenschappelijke ontwikkeling te onderscheiden volgens de "Kuhniaanse" of "Lakatosiaanse" benadering: (1) het testen van de klassieke theorieën over werkgerelateerd welzijn van (semi-)publieke werknemers, inclusief de antecedenten en de gevolgen daarvan (hoofdstukken 2-4), (2) het vullen van enkele van de kennislacunes in onderzoek die in de eerste fase zijn gevonden door de introductie en systematische analyse van de nieuwste theorie van werkgerelateerd welzijn (oftewel het Job Demands-Resources model) (hoofdstukken 5 en 6), (3) de verdere uitbouw en grondige ontwikkeling van het Job Demands-Resources model in de (semi-)publieke sector (hoofdstukken 7 en 8).

Voordat er echter is overgegaan op deze fasen, is in hoofdstuk 1 uitgelegd wat werkgerelateerd welzijn is en hoe antecedenten en consequenties kunnen worden bestudeerd. Hoofdstuk 1 laat zien dat werkgerelateerd welzijn bestaat uit twee delen: hedonisch en eudaimonisch werkgerelateerd welzijn. Hedonisch werkgerelateerd welzijn kan worden omschreven als gevoelens van geluk, plezier en genot als gevolg van en in werk. Daarentegen kan eudaimonisch werkgerelateerd welzijn worden omschreven als gevoelens van betekenisvolheid en zinvolheid als gevolg van en in werk. Terwijl indicatoren van hedonisch werkgerelateerd welzijn, inclusief betrokkenheid van de organisatie en werktevredenheid, in de loop der jaren veel aandacht hebben gekregen binnen de publieke sector, krijgt eudaimonisch werkgerelateerd welzijn, waaronder bevlogenheid en trots, weinig aandacht.

Verder laat hoofdstuk 1 zien dat de invloed van de antecedenten op werkgerelateerd welzijn kunnen worden bestudeerd door twee onderzoeksstromen te onderscheiden – theorieën over werk/persoonlijke kenmerken en theorieën over personeelsmanagement. Hoewel theorieën over werk/persoonlijke kenmerken zijn gericht op het bestuderen van de werkomgeving en werkervaring van werknemers, zijn theorieën over personeelsbeheer gericht op het gebruik van middelen om het werkgerelateerde welzijn en gedrag van werknemers te beïnvloeden.

Bovendien laat hoofdstuk 1 zien dat de gevolgen van werkgerelateerd welzijn geclusterd kunnen worden in attitudinale, gedrags- en prestatie-uitkomsten. Er wordt geconcludeerd dat eudaimonic werkgerelateerd welzijn van invloed is op hedonisch werkgerelateerd welzijn (wat een synoniem is voor de attitudinale uitkomsten, waaronder werktevredenheid en betrokkenheid van de organisatie), gedragsuitkomsten (bijvoorbeeld de ontslagintentie, workaholism) en prestatie-uitkomsten (in-role en extra-role prestaties).

In lijn met de eerste fase van de theoretische ontwikkeling zijn de hoofdstukken 2 en 3 gericht op het testen van de relaties tussen twee kenmerken van de eerste theorieën over personeelsmanagement, te weten werkgerelateerde cursussen en prestatiemeting, en enkele kenmerken van klassieke theorieën over werk/persoonlijke kenmerken met het hedonische werkgerelateerde welzijn van (semi-)publieke werknemers. In hoofdstuk 2 wordt de invloed van het volgen van werkgerelateerde cursussen (afgeleid van theorieën over personeelsmanagement) op het hedonistische werkgerelateerde welzijn van ambtenaren geanalyseerd. Geconcludeerd wordt dat ten opzichte van bijvoorbeeld collegiale en leidinggevende steun (afgeleid van werk/persoonlijke theorieën), de aanwezigheid van werkgerelateerde cursussen slechts een marginale invloed heeft op de werktevredenheid en de betrokkenheid bij de organisatie van (semi-)publieke werknemers.

In hoofdstuk 3 wordt de toepasbaarheid van prestatiemeting (afgeleid van theorieën over personeelsmanagement) volgens de perceptie van (semi-)publieke werknemers getest. De resultaten laten zien dat met name de institutionele context en het eigenbelang van (semi-)publieke werknemers hun percepties over de toepasbaarheid van prestatiemeting lijken te beïnvloeden. Geconcludeerd wordt dat medewerkers die positief zijn over de toepasbaarheid van prestatiemeting vooral te vinden zijn in complexe managementposities, die de kwaliteit van de prestaties van collega's positieve beoordelen en die al eerdere ervaring hebben met prestatiemeting.

Vervolgens wordt in hoofdstuk 4, in lijn met de theoretische ontwikkeling, de relatie van een volledig "high performance work system" (de nieuwste theorie binnen de theorieën over personeelsmanagement) in combinatie met enkele eerste delen van het Job Demands-Resources model (nieuwste theorie binnen de theorieën over werk/persoonlijke kenmerken) met het eudaimonisch werkgerelateerd welzijn (met andere woorden trots) van (semi-)publieke werknemers onderzocht. Er wordt geconcludeerd dat de trots van (semi-)publieke werknemers nauwelijks wordt beïnvloed door een "high performance work system" (onder andere bestaande uit prestatiemeting en cursussen), maar wordt vooral bepaald door de theorieën over werk/persoonlijke kenmerken (dat wil zeggen werkzekerheid, optimisme over imago en Public Service Motivation).

Aangezien wordt geconcludeerd dat theorieën over werk/persoonlijke kenmerken veelbelovender zijn dan de theorieën over personeelsmanagement bij het verklaren van het eudaimonische en hedonische werkgerelateerde welzijn (dat wil zeggen trots, tevredenheid en betrokkenheid) van (semi-)publieke werknemers, testen hoofdstuk 5 en 6 de nieuwste theorie over werk/persoonlijke kenmerken grondiger via meta-analyses van de literatuur met betrekking tot dit onderwerp. In hoofdstuk 5 wordt de invloed van een grote hoeveelheid "job resources" en "job demands" op het eudaimonische concept bevlogenheid geanalyseerd in verschillende institutionele contexten (publieke, semipublieke en private sector). Uit de resultaten blijkt dat ondanks dat de invloed van de meeste "job resources" en "job demands" op de bevlogenheid van werknemers niet per sector verschillen, de gemiddelde bevlogenheid en drie "job resources" toch significant variëren (feedback, werkzekerheid en functiewaardering). De gemiddelde bevlogenheid is aanzienlijk hoger binnen de semipublieke sector dan in de publieke en private sector. Daarnaast kan worden gesuggereerd dat de effectgrootten van clusters van job resources op het eudaimonische werkgerelateerde welzijn van werknemers kunnen verschillen. Binnen de publieke sector hebben job resources op het niveau van de taak ongeveer de grootste invloed op bevlogenheid, gevolgd door respectievelijk "job resources" op het niveau van de organisatie, het intermenselijke niveau en het niveau van de werkorganisatie. Binnen de semipublieke sector zijn de invloeden van alle “job resources” op de bevlogenheid relatief gelijk. Een uitzondering vormt werkzekerheid met een uitzonderlijk lage correlatie met bevlogenheid.

In hoofdstuk 6 wordt de invloed van de eudaimonische indicator bevlogenheid op attitudinale, gedrags- en prestatie-uitkomsten in de private, semipublieke en publieke sector geanalyseerd. De resultaten laten zien dat er significante sectorale verschillen bestaan in eudaimonisch werkgerelateerd welzijn (dat wil zeggen bevlogenheid), en de invloed daarvan op de mate van attitudinale uitkomsten (werkteveredenheid en organisationele betrokkenheid; hedonisch werkgerelateerd welzijn) en op gedragsuitkomsten (workaholism en ontslagintentie). Net als de meta-analyse in hoofdstuk 5 laten de resultaten in hoofdstuk 6 zien dat de gemiddelde bevlogenheid aanzienlijk hoger ligt in de semipublieke sector dan in de private sector. Betrokken ambtenaren zijn ook aanzienlijk meer tevreden met hun werk dan semipublieke en private werknemers en meer betrokken bij de organisatie dan semipublieke werknemers. Bovendien heeft bevlogenheid een significant hogere negatieve invloed op de ontslagintentie binnen de publieke sector dan in de semipublieke sector, en heeft bevlogenheid bij de organisatie alleen een significante positieve invloed op workaholism binnen de publieke sector.

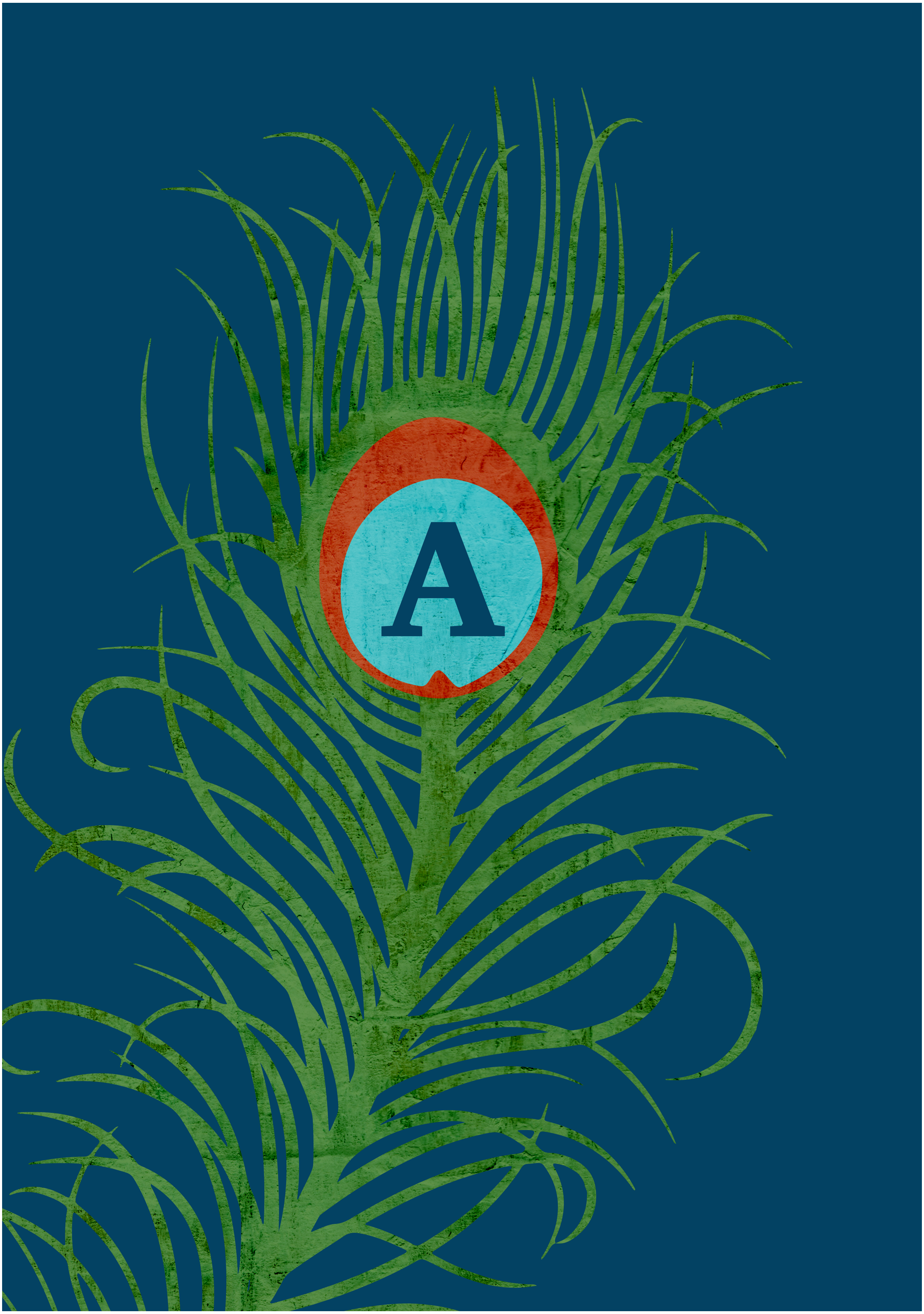
In lijn met de theoretische ontwikkeling, bestaat de laatste fase uit twee hoofdstukken (hoofdstuk 7 en 8) die overgaan op het vullen van enkele kennislacunes die naar voren kwamen in de hoofdstukken 5 en 6. In deze hoofdstukken vindt een uitbreiding plaats van de relaties tussen de Job Demands-Resources theorie, werkgerelateerd welzijn en uitkomsten in de publieke en semipublieke sector. Hoofdstuk 7 is gericht op het uitvoeren van verschillende suggesties van de meta-analyses in de hoofdstukken 5 en 6. Het hoofdstuk duikt dieper in de invloed van clusters van “job resources” op de bevlogenheid van ambtenaren alsook in de invloed van bureaucratische rompslomp en “personal resources”, waaronder PSM, op de bevlogenheid van ambtenaren. Er wordt ook gekeken naar de mediërende rol van bevlogenheid tussen het JD-R-model en de uitkomsten ontslagintentie en betrokkenheid bij de organisatie. De resultaten laten zien dat ambtenaren meer bevlogen worden door werkgerelateerde “job resources” (inhoud van werk, relaties met collega's, autonomie) dan door organisatie gerelateerde “job resources” (zoals bijvoorbeeld carrièremogelijkheden, ondersteuning door leidinggevenden en feedback). Daarnaast stimuleren “personal resources”, waaronder PSM, werkervaring en proactiviteit, de bevlogenheid van ambtenaren. Interessant is dat de bureaucratische rompslomp, in tegenstelling tot de verwachtingen, de bevlogenheid niet direct negatief beïnvloedt, maar een belangrijke modererende stimulans is voor de relatie tussen werkgerelateerde “job resources" en bevlogenheid. De resultaten laten ook zien dat bevlogenheid een belangrijke mediator is tussen JD-R en de ontslagintentie en de betrokkenheid bij de organisatie.

Met deze verbeterde inzichten in de invloed van deze specifieke kenmerken van de publieke sector op de bevlogenheid van ambtenaren, is hoofdstuk 8 gericht op het nader specificeren van enkele van deze relaties in contrasterende institutionele contexten binnen de publieke sector, alsook op de invloed van het multidimensionale karakter van PSM op bevlogenheid en het effect van bevlogenheid op in-role prestaties. In dit hoofdstuk wordt de "dimensional publicness" benadering toegepast op basis van het normatieve institutionele spectrum ("people-processing organizations" versus "people-changing organizations"; overeenkomstige de classificatie van organisaties als respectievelijk de publieke en semipublieke sector zoals gebruikt in hoofdstuk 5 en 6). De resultaten laten zien dat ambtenaren in people-changing organizations (inclusief onderwijs en gezondheidszorg) vooral bevlogen raken vanwege hun compassievolle persoonlijkheid en mogelijkheid om bij te dragen aan de samenleving. Ambtenaren in people-processing organizations (waaronder bijvoorbeeld de lokale overheid en de politie) worden daarentegen vooral bevlogen vanwege de aantrekkingskracht op het maken van overheidsbeleid en hun interesse in het dienen van het algemeen belang. In tegenspraak met de verwachtingen heeft de bureaucratische rompslomp een negatieve invloed op alle werknemers, maar werknemers in people-processing organizations ervaren een grotere nadelige invloed op hun bevlogenheid als gevolg van administratieve rompslomp dan hun collega's in people-changing organizations. Daarnaast is de invloed van autonomie op de bevlogenheid van ambtenaren positief, maar de invloed is veel kleiner in het geval van personeel in de gezondheidszorg en leraren dan in het geval van ambtenaren in people-processing organizations. Verder, in lijn met de bevindingen van de meta-analyses, hebben ambtenaren in people-changing organizations een aanzienlijk hogere bevlogenheid dan hun tegenhangers in people-processing organizations.

Samengevat is het belangrijkste argument in dit proefschrift tweeledig: (1) eudaimonisch werkgerelateerd welzijn (oftewel trots en bevlogenheid) is een belangrijke toevoeging aan de verklaring van de 'staat' van (semi-)publieke werknemers, en (2) te midden van verschillende institutionele contexten variëren (semi-)publieke werknemers in hun persoonlijkheid en werk wat van invloed is op hun werkgerelateerde welzijn en inherent hun attitudinale, gedrags- en prestatie-uitkomsten.

Zoals in de conclusie en discussie van dit proefschrift is benadrukt, voegen de bevindingen van dit proefschrift niet alleen kennis toe aan de nieuwe onderzoeksstroom genaamd behavioral public administration en inherent arbeidspsychologie, gedragswetenschappen en bestuurskunde. In plaats daarvan hebben de bevindingen ook implicaties voor beroepsbeoefenaars in de publieke sector. Als publieke managers het werkgerelateerde welzijn van (semi-)publieke werknemers willen vergroten, kunnen ze kiezen voor een aanpak van bovenaf (top-down) of van onderaf (bottom-up). Als er wordt gekozen voor een top-down benadering, moeten lijnmanagers, een goed ontworpen HRM-systeem implementeren met wederzijds aangepaste managementpraktijken. Dit systeem heeft immers effect op de "job demands", "job resources" en "personal resources" van (semi-)publieke werknemers en inherent op het eudaimonisch werkgerelateerde welzijn (dat wil zeggen bevlogenheid), evenals de attitudinale (oftewel hedonisch werkgerelateerd welzijn), gedrags- en prestatie-uitkomsten. Als er wordt gekozen voor een bottom-up benadering, kunnen publieke managers invloed uitoefenen op de "job demands", "job resources" en "personal resources" van (semi-)publieke werknemers door het creëren van een organisatorisch klimaat van zelfmanagement, intrapeneurship en "job-crafting" voor (semi-)publieke werknemers. Deze benaderingen kunnen helpen bij de grote uitdagingen en druk in de wereld van het werk van (semi-) publieke werknemers.

Voortbouwend op de bevindingen van dit proefschrift, kan toekomstig onderzoek het uitgewerkte theoretische kader verder verkennen door de relaties tussen HR-praktijken/systemen aan de ene kant, en de "job demands", "job resources" en "personal resources" aan de andere kant te bestuderen. Verder is het zinvol om beter inzicht te krijgen in de redenen voor de sectorale verschillen in de relaties die in het theoretisch kader worden genoemd. Hiervoor is toekomstig onderzoek naar de theoretische inbedding van het theoretisch kader in de institutionele theorie vruchtbaar. Bovendien laat dit proefschrift zien dat werkgerelateerd welzijn niet alleen maar positieve gevolgen heeft. Het is daarom ook interessant om de potentiële "dark side"van werkgerelateerd welzijn te onderzoeken in toekomstige studies.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Acknowledgements in Dutch (Dankwoord)

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CV

Over de auteur (Curriculum vitae)

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Rick Borst is geboren in Utrecht op 14 augustus 1991. Hij behaalde zijn bachelor en master Bestuurskunde, met een specialisatie in organisatie en management, aan de Radboud Universiteit in Nijmegen. Daarnaast behaalde hij ook de master Bedrijfskunde, met een specialisatie in strategisch management, aan de Radboud Universiteit Nijmegen. In oktober 2015 startte hij als een PhD-kandidaat bij het department bestuurskunde van de Radboud Universiteit. Van 1 september 2017 tot 1 september 2018 was hij vervolgens junior docent bij datzelfde departement. Momenteel is hij aangenomen als assistant-professor bij het departement Bestuurs- en Organisatiewetenschap aan de Universiteit Utrecht.