HRM Implementation and Performance in the Public Sector

Brenda Vermeeren
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For this research we acknowledge financial support from the ‘Programma Vernieuwing Rijksdienst’ of the Dutch Ministry of Interior and Kingdom Relations. Moreover, we acknowledge financial support from the program InternetSpiegel of the Dutch Ministry of Interior and Kingdom Relations for printing this dissertation. The interpretations, conclusions, and recommendations are, however, those of the author and do not necessarily represent those of the Ministry of Interior and Kingdom Relations.


Layout and printing: Optima Grafische Communicatie, Rotterdam.
HRM Implementation and Performance in the Public Sector

HRM implementatie en prestaties in de publieke sector

Thesis

to obtain the degree of Doctor from the Erasmus University Rotterdam
by command of the rector magnificus

Prof.dr. H.A.P. Pols

and in accordance with the decision of the Doctorate Board.
The public defense shall be held on

Friday, the 28th of March 2014 at 11.30 hours

by

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born at Rotterdam
DOCTORAL COMMITTEE

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Voorwoord

VOORWOORD (PREFACE IN DUTCH)

Een moment waar ik lang naar uitgekeken heb, is toch ineens heel snel daar: het schrijven van het voorwoord. Met het schrijven van dit voorwoord komt er een einde aan mijn promotietraject. Als ik daar nu op terugkijk dan komen er veel positieve gedachten naar boven. Om te beginnen heb ik de mogelijkheid gekregen om me helemaal in een onderwerp vast te bijten. Daarbij heb ik heel veel vrijheid gekregen om invulling te geven aan mijn werkzaamheden. Verder heb ik veel interessante cursussen in binnen- en buitenland kunnen volgen en heb ik diverse conferenties bijgewoond om mijn onderzoekresultaten te presenteren in Nederland, maar ook in het buitenland (Kopenhagen, Malta, Bern, Toulouse, Bergen, Leuven en Edinburg). Al met al heb ik hier erg veel van geleerd. Te- gelijkertijd was het ook een alles behalve eenvoudige opgave die een behoorlijke dosis doorzettingsvermogen en incasseringsvermogen gevraagd heeft. Als ik nu bij het schrijven van dit voorwoord echter de balans opmaak, kan ik stellen dat ik ondanks de gebruikelijke strubbelingen bij een promotietraject met veel plezier terugkijk op een traject dat zonder noemenswaardige obstakels is verlopen.

Dat dit promotietraject nu daadwerkelijk tot een afronding komt, is niet alleen mijn verdienste en ik wil dan ook iedereen bedanken die daar een bijdrage aan geleverd heeft. Een aantal mensen wil ik echter graag persoonlijk noemen. Mijn begeleiders Bram Steijn en Ben Kuipers verdienen het om als eerste bedankt te worden. Beiden hebben een belangrijke rol vervuld in het tot stand komen van dit proefschrift. Bram en Ben, jullie gaven mij veel vrijheid om mijn eigen weg te vinden, maar wanneer ik dat nodig had, waren jullie er ook voor de nodige support en wijze raad. Daarnaast wil ik jullie ook bedanken voor het op de rem gaan staan als ik weer eens teveel tegelijk wilde gaan doen. Belangrijke lessen die ik van jullie geleerd heb, zijn om tot de kern te komen en om niet oneindig te nuanceren. Dat is niet makkelijk voor iemand met een drang tot perfectionisme, maar met elkaar zijn we denk ik iedere keer tot een resultaat gekomen waar we ons allemaal in konden vinden.

Daarnaast hebben jullie beiden op jullie eigen wijze bijgedragen aan dit proefschrift en aan mijn ontwikkeling. Bram, ik wil je zowel bedanken voor je inhoudelijke betrokkenheid bij het onderzoek als voor je betrokkenheid bij mijn persoonlijke ontwikkeling en welzijn. Wat betreft het onderzoek hadden we op frequente tijden een voortgangsoverleg gepland waarbij je altijd kritisch naar mijn stukken gekeken had. Maar ook buiten de reguliere overleggen was je bereikbaar en betrokken. Als ik je mailde dan had ik vaak nog dezelfde dag een inhoudelijke reactie en ook stond je deur open als ik snel iets wilde vragen of afstemmen. Naast deze betrokkenheid bij het onderzoek waardeer ik je mensgerichte stijl van leidinggeven. De kleine dingen, zoals de telefoontjes toen ik om gezondheidsredenen een korte periode thuis zat of je hoofd om de hoek van onze kamer met de vraag of alles onder controle is, zijn van grote waarde. Maar ook je betrokkenheid bij mijn ontwikkeling in brede zin, waardeer ik. Je maakt me attent op kansen
Voorwoord

die zich voordoen en je helpt me deze te verwezenlijken. Daar ben ik je erg dankbaar voor. We hebben de afgelopen jaren naast het promotieonderzoek al aan diverse andere projecten samengewerkt en ik kijk uit naar onze verdere samenwerking op deze terreinen de komende jaren.

Ben, jij bent vanaf het begin betrokken geweest bij mijn promotietraject. Tussen de reguliere voortgangsoverleggen hadden wij op frequente basis een overleg gepland staan waarbij we kort de stand van zaken doorspraken en brainstormden over zaken aangaande het onderzoek. Ik wil je bedanken voor alle tijd die je daarin geïnvesteerd hebt, maar bovenal wil ik je bedanken voor je verfrissende blik en kritische vragen die mij hielpen om mijn werk vanuit verschillende invalshoeken te bekijken en die mij zeker ook hielpen om te relativeren. Naast deze inhoudelijke betrokkenheid toonde je ook je betrokkenheid bij leuke en minder leuke momenten in mijn privéleven, zoals je aanwezigheid op mijn bruiloft, je ‘zieken’-bezoek en -telefoontjes en je kraambezoek. Jouw inhoudelijke en sociale betrokkenheid hebben ertoe bijgedragen dat ik met een positief gevoel terug kijk op deze periode; bedankt daarvoor.

Verder wil ik alle collega’s van de afdeling Bestuurskunde bedanken voor de prettige en lezerzame samenwerking en voor de waardevolle opmerkingen bij door mij gepresenteerde onderdelen van mijn proefschrift. In het bijzonder wil ik de collega’s van het PHRC (Public Human Resource and Change)-team bedanken voor de samenwerking. Jullie inhoudelijke betrokkenheid bij de thematiek maakt jullie een prettig en kritisch publiek. Ik ben blij dat ik ook na mijn promotie nog aan de afdeling en het team verbonden blijf. Daarnaast wil ik mijn mede-AIO’s bedanken voor de sociale component tijdens lunches en AIO-uitjes. Met een aantal AIO’s ben ik als het ware ‘opgegroeid’ en die wil ik in het bijzonder noemen: Iris Korthagen (mijn methodologische sparringpartner), Guido van Os (met wie ik samen het AIO-platform georganiseerd heb), Ruth Prins (mijn NIG-cursusmaatje), Lars Tummers (met wie ik aan diverse andere onderzoeken samengewerkt heb) en mijn paranimfen Tessa Janssen en Joris van der Voet, die ik graag apart bedank.

Tessa en Joris, ik heb jullie gevraagd om mij als paranimfen terzijde te staan tijdens de verdediging van mijn proefschrift. Jullie zijn de afgelopen jaren nauw betrokken geweest bij mijn promotieonderzoek. Tessa, onze samenwerking begon toen ik je ging begeleiden bij je masterscriptie naar de relatie tussen HRM en prestaties. Vervolgens kwam je als AIO bij de afdeling in dienst en veranderde ons contact al snel van vooral zakelijke gesprekken naar sociale gesprekken. Naast dat we inhoudelijk met een vergelijkbare thematiek bezig zijn, hebben we ook daarbuiten veel raakvlakken en dat maakt dat even thee drinken als snel kan resulteren in een uur kletsen. Ik kijk uit naar al onze toekomstige gesprekken over van alles en nog wat. Joris, als mijn kamergenoot heb jij misschien nog wel het meest meegekregen van al mijn proefschriftperikelen en succesmomenten. Ik vind het mooi dat we dit traject nu vlak na elkaar afronden en elkaar bij staan als paranimf. Met veel plezier kijk ik terug op al onze gesprekken en discussies over werkgerelateerde onderwerpen, maar
Voorwoord

ook over zaken die daar niets mee te maken hadden. Daarnaast was je altijd bereid om mee
to denken of advies te geven. De afgelopen jaren hebben we vooral naast elkaar gewerkt
aan ons eigen onderzoek. Daarbij zeiden we regelmatig tegen elkaar dat het leuk zou zijn
als we een keer samen een artikel zouden gaan schrijven. Een paar maanden geleden deed
die mogelijkheid zich voor in een project waarin onze beiden expertises samenkomen.
Ik kijk ernaar uit om, ook als je dadelijk in Spanje werkzaam bent, onze samenwerking
voort te zetten. Ik zal onze regelmatige gesprekken, discussies en wandelingetjes naar het
koiffeapparaat echter wel gaan missen.

Naast mijn aanstelling op de Erasmus Universiteit heb ik sinds augustus 2009 ook een
aanstelling bij InternetSpiegel; een programma van het Ministerie van Binnenlandse Zaken
en Koninkrijksrelaties, dat uitgevoerd wordt door ICTU. Deze combinatie is afwisselend
en uitdagend, maar bovenal biedt het mij de gelegenheid om mijn wetenschappelijke
inzichten te vertalen naar de organisatiepraktijk. Ik wil graag van de gelegenheid gebruik
maken om mijn collega’s van InternetSpiegel te bedanken voor alle inspirerende gesprek-
ken, conceptuele brainstorms en methodologische puzzels. Jullie hebben meer bijgedragen
an dit proefschrift dan jullie wellicht beseffen. De afgelopen jaren heb ik me welkom en
thuis gevoeld bij InternetSpiegel. Ondanks dat ik er maar 1 dag in de week was, werd ik als
onderdeel van het team beschouwd en betrokken bij het reilen en zeilen. Ik kijk er dan ook
naar uit om vanaf 1 januari 2014 meer uur met jullie samen te kunnen gaan werken. Twee
mensen wil ik in het bijzonder bedanken. Om te beginnen Ruud Hogendoorn. Ruud,
na een mailtje van mij aan de VNG dat doorgestuurd werd naar jou, besloot jij contact
met mij op te nemen. Dat was het begin van een prettige samenwerking die we hopelijk
nog vele jaren voort kunnen zetten. Daarnaast wil ik Piet van Montfort graag bedanken.
Piet, jij hebt me destijds een aanbod gedaan om in dienst te treden bij InternetSpiegel. Je
bewondering voor mijn werk en je waardering voor mijn inzet zal ik niet vergeten.

Ook mijn familie en vrienden verdienen het om in dit voorwoord genoemd te worden.

Lieve Robert, meer dan de helft van ons leven zijn we nu samen. Vooral de afgelopen
vijf jaar is er veel gebeurd: een huis gekocht, getrouwd en de geboorte van onze zoon
zijn bijzondere mijlpalen, maar daarnaast gebeurde er ook op werkgebied genoeg. Het
schrijven van het proefschrift, het geven van (extra) onderwijs, het volgen van diverse
cursussen in binnen- en buitenland en mijn tweede baan bij InternetSpiegel. Ik heb de
afgelopen jaren heel wat ballen tegelijk in de lucht willen houden. Zonder jouw steun was dat niet zondermeer gelukt. Daarbij heb je de afgelopen jaren steeds weer geduldig naar mijn proefschriftperikelen geluisterd. In de eindfase van mijn proefschrifttraject hebben wij uren samen achter de computer gezeten om de lay-out aan te passen en zoals je van mij gewend bent: check, check, double check. Ik kijk ernaar uit om nog vele jaren ons leven samen te delen.

Lieve Quinten, van alle mensen die ik bedank, ben jij het kortst in mijn leven, maar in die korte tijd heb je een enorme plek ingenomen en ook al ben je je er niet van bewust je hebt ook zeker een bijdrage geleverd aan de afronding van dit proefschrift. Je hielp mij af en toe afstand te nemen van mijn proefschrift waarna ik er later weer met een frisse blik naar kon kijken. Zo ging het sinds jouw komst bijvoorbeeld wanneer we het thuis over Bram en Ben hadden niet alleen meer over mijn begeleiders, maar ook over de Toet Toet Auto’s ‘Bram Brandweer’ en ‘Bennie Bus’. Deze afleiding was van onschatbare waarde.

Brenda Vermeeren
December 2013
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Chapter 1

General introduction
1.1 INTRODUCING THIS STUDY

Several disciplines (including HRM, marketing, and ICT) are concerned with improving organizational performance. The distinctive feature of Human Resource Management (HRM) is its assumption that improved performance can be achieved through people in the organization. This seems to be especially true for the public sector since this is generally considered to be labor-intensive (Boyne, 2003; Poutvaara & Wagener, 2008).

Since the early 1980s, with the rise of New Public Management (NPM), public organizations are increasingly facing pressure to perform. As such, a more business-oriented management approach has come to play a central role within the public sector (Boyne, Meier, O’Toole & Walker, 2006; Osborne & Gaebler, 1992; Pollitt & Bouckaert, 2004). In this respect, in addition to values such as legitimacy and quality, values such as effectiveness and efficiency have gained importance. The idea is that, using these values, public organizations can better be judged on their performance. Moreover, because of increased individualization and growing emancipation, citizens expect more from government (Sociaal en Cultureel Planbureau, 2004; 2012). They expect public services to be of high quality, to be efficient, and to be customized to their needs (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2001). Lately, the performance of the public sector has come under even more attention as a result of the cuts due to the financial crisis what is forcing public organizations to improve performance while employing fewer staff (A+O fonds Gemeenten, 2010; Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2010; 2013). These developments suggest increasing pressure on public sector organizations with consequences for their role as employers.

From the employment perspective, it can be argued that the Dutch public sector is a major sector. This is evident from the fact that it employs almost one million workers, a number that includes the educational sector but excludes the health sector with the exception of the academic medical centers. That is equivalent to about 13% of total employment in the Netherlands (as of April 2013, the active working population in the Netherlands was 7.3 million). These people work for more than 2300 government employers, ranging from municipalities and water boards to the police and primary schools (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2013). Together, public sector organizations represent the largest employer in the Netherlands. At a time when the employment relationship is being subjected to major challenges, in part caused by organizational restructuring, downsizing, and increasing pressure to provide more efficient and effective services, it is particularly appropriate to assess the degree to which HRM can enhance the performance of public sector organizations (Gould-Williams, 2003; Gould-Williams & Mohamed, 2010). Therefore, the research leading to this thesis has studied the role of HRM in improving the performance of public organizations.
1.2 BACKGROUND TO HRM AND PERFORMANCE RESEARCH

1.2.1 The HRM–performance relationship

In the early 1980s, HRM studies started to focus on the difference between HRM and personnel management, and on the implications of different approaches to the management of people (Paauwe, 2009). However, since 1995, we can observe a significant change in this debate. In that year, Huselid's groundbreaking study showed that a set of HR practices were related to turnover, accounting profits, and a firm’s market value. This article generated a flood of research that attempted to replicate the proclaimed relationship between HRM and performance (see for an overview Becker & Huselid, 2006; Boselie, Dietz & Boon, 2005; Combs, Liu, Hall & Ketchen, 2006; Jiang, Lepak, Hu & Baer, 2012; Wall & Wood, 2005). Despite the fact that several studies did find a link between HRM and performance, significant challenges still exist in gaining a full understanding of this relationship (Guest, 2011; Paauwe, Guest & Wright, 2013). One of the major unanswered questions with respect to the HRM–performance relationship according to Guest (2011:7) is: “What is the process whereby HRM can have an impact on performance?”. Several so-called process models to examine the HRM–performance relationship have been published (e.g., Boselie et al., 2005; Guest, 1997; Paauwe & Richardson, 1997). These models generally assume that the relationship between HRM and organizational performance is, at least partially, mediated by employees’ attitudes and behaviors such as job satisfaction and turnover. In the more recent models (e.g., Nishii & Wright, 2008; Purcell & Kinnie, 2007; Purcell, Kinnie, Swart, Rayton & Hutchinson, 2009) HRM has been divided into different forms, with the categories of intended, actual, and perceived HRM gaining significance. With respect to this distinction, several authors stress that having a well-designed HR system on paper might not be sufficient to positively affect employee and ultimately organizational performance because the rhetoric and reality might be very different (Den Hartog, Boselie & Paauwe, 2004; Legge, 2005; Paauwe, 2009). In this context, the multilevel model by Nishii and Wright (2008) has become particularly popular. Nishii and Wright (2008) point out that besides the intended or designed HR system, often prepared by the HR department and written down in official documents and HR handbooks, the actual HR system (often implemented by line managers), and the perceived HR system (what employees experience) are also important in explaining the performance effects of HRM. In this thesis, Nishii and Wright’s (2008) model is used as a starting point. Consequently, the first research line in this dissertation seeks to gain greater insight into the mechanisms through which HRM has an impact on performance. Following the multilevel character of Nishii and Wright’s model, particular

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1 In this thesis, we have relied on the model by Nishii & Wright presented in 2008. Recently, they also presented this model in the book by Paauwe, Guest & Wright (2013).
attention will be paid to the different levels (i.e., organizational, unit, and employee) within organizations.

1.2.2 The role of the line manager in HRM implementation

Making a distinction between intended, actual, and perceived HRM can provide enhanced insight into the mechanisms through which HRM has an impact on performance. However, above all, it stresses the importance of the line manager in HRM implementation. Following Guest’s (2011) description, HRM implementation includes both the content and the process of HRM. The content addresses what HR practices are implemented. The process of HRM implementation refers to how the HR practices are implemented. Traditionally, HRM implementation was primarily the responsibility of HR professionals although, to some extent, line managers have always had some responsibility for HRM because they have always been held accountable for the work of their subordinates (McConville & Holden, 1999). However, the balance between line managers and HR specialists with respect to HRM implementation seems to have changed. There is clear evidence that, besides their traditional supervisory duties, line managers increasingly execute HRM activities with many traditional personnel practices having been devolved to line managers (Purcell & Hutchinson, 2007). Gilbert’s recent study (2012), however, shows that the degree of devolution varies between countries. Inspired by Purcell and his colleagues (Purcell & Hutchinson, 2007; Purcell & Kinnie, 2007; Purcell, Kinnie, Hutchinson, Rayton & Swart, 2003), Gilbert, De Winne and Sels (2011) state that the role of the line manager in HRM implementation includes both management and leadership components. The management component involves the enactment of specific and formal HR practices that are the responsibility of line managers such as recruitment and selection. This corresponds to the content dimension of HRM implementation referred to earlier. The leadership component requires the continuous display of a wide variety of leadership behaviors in order to influence employees’ attitudes and behavior. This corresponds to the process dimension of HRM implementation. In this perspective, both components are vital for effective HRM implementation by line managers. A second research line in this dissertation therefore focuses on the role of the line manager (i.e., both their management and leadership functions) in HRM implementation. More specifically, the HRM–performance model by Nishii and Wright (2008), where it focuses on what HR practices are implemented (the management component), is extended by adding the role of a line manager’s leadership style.

1.2.3 The public sector context

The aforementioned HRM and performance models (Boselie et al., 2005; Guest, 1997; Nishii & Wright, 2008; Paauwe & Richardson, 1997; Purcell & Kinnie, 2007; Purcell et al., 2009) are general in nature. In other words, they can be applied without taking the
context into account. However, previous research has shown the importance of paying attention to the context in which the HRM–performance relationship is being studied (for an overview see Boselie et al., 2005). In this thesis, specific attention is paid to the public sector context. To date, public sector organizations have received relatively little attention in research on HRM and performance. This is despite the fact that previous research has shown that there are significant differences between public and private sector organizations in terms of HRM (Boyne, Jenkins & Poole, 1999; Emery & Giauque, 2005) and performance (De Bruijn, 2001; Smith, 1990; Van Dooren, De Caluwe & Lonti, 2012; Van Thiel & Leeuw, 2002). The literature (e.g., Boyne et al., 1999; Emery & Giauque, 2005; Farnham & Horton, 1996; Perry, 1996; Pollitt, 2003; Rainey, 2003) describes specific institutional, organizational, and workforce characteristics of public sector organizations that might influence the HRM–performance relationship. This relationship might, for example, be influenced because legislation places restrictions on how managers can deal with HR practices. Moreover, because public employees have different demographic backgrounds and profiles, and appear to have different priorities and expectations at work, they are likely to evaluate and respond to HR practices differently. Therefore, the third research line in this dissertation takes context into account by specifically examining HRM and performance, and their relationship, in the public sector.

1.3 OVERALL AIM, RESEARCH QUESTION, AND RELEVANCE

Following the three academic issues described above, the overall aim of this research is to gain greater insight into the HRM–performance relationship. Here, the focus is on (a) the process through which HRM affects performance, (b) the role of the line manager in implementing HRM, and (c) the public sector context. In line with this aim, the main research question is formulated as:

‘How does the implementation of HRM affect the performance of public sector organizations?’

In answering this research question, this study has theoretical, methodological, and practical relevance. In the subsections below, these aspects will be discussed in more detail.

1.3.1 Theoretical relevance

From a theoretical perspective, an important contribution of this work is the multiple perspective adopted through which three different bodies of knowledge are combined to provide greater insight into the HRM–performance relationship (see Figure 1.1). In this thesis, insights are drawn from the HRM–performance literature, from the leadership literature, and from the public management literature.
Chapter 1

By combining literature on leadership with HRM–performance literature, this dissertation contributes to a better understanding of the role of the line manager in the HRM–performance relationship. By using the public management literature, some of the specific public sector characteristics that are relevant for HRM and performance are brought in. Through this, the dissertation contributes to the understanding of the HRM–performance relationship in a public sector context.

1.3.2 Methodological relevance

Research on the relationship between HRM and performance has seen major advances. Despite this, scholars have noted several methodological concerns with HRM and performance research (Boselie et al., 2005; Guest, 2011; Paauwe, 2009; Wall & Wood, 2005). Frequently mentioned concerns are addressed in this dissertation by the use of multiple actors (respondents from different subpopulations for each unit of analysis: e.g., employees as well as line managers), multiple raters (several respondents for each unit of analysis: e.g., multiple employees), and multiple sources (combining datasets and adding additional collected information).

The mechanisms that the model by Nishii and Wright (2008) suggest that lead to HRM having an impact on performance will be examined to provide greater insight into the HRM–performance relationship. Following the multilevel character of this model, particular attention will be given to the different levels within an organization (i.e., organizational, unit, and employee levels). More specifically, line managers’ HRM implementation and employees’ perceptions of, and reactions to, HRM are hypothesized to play a key role in determining the impact of HRM on organizational performance. To examine these relationships, in addition to regression analysis, we use analysis techniques that enable us to simultaneously analyze the direct and the indirect relationships among the dependent and independent variables (structural equation modeling) and to examine variables that are on different levels of analysis (2-1-2 multilevel mediational analysis). As such, some of the value added by this dissertation lies in the methodology. In Chapter 3, this will be discussed in more detail.

Figure 1.1: Combining three different bodies of knowledge
1.3.3 Practical relevance

Public organizations are increasingly facing pressure to perform (Boyne et al., 2006; Osborne & Gaebler, 1992; Pollitt & Bouckaert, 2004; Sociaal en Cultureel Planbureau, 2012). For the HR department, this implies that they should frequently demonstrate the specific impact of HRM on organizational performance. This may explain the increased interest within organizations in, for example, evidence-based management (Rousseau, 2006) and HR analytics (Cascio & Boudreau, 2012). Evidence-based management is concerned with translating principles into practices that solve organizational problems (Rousseau, 2006). HR analytics is described as identifying and explaining what happens in practice (Cascio & Boudreau, 2012). Both approaches highlight the need to provide managers with information on causal processes between HRM and organizational performance that take place within their organization (Becker & Gerhart, 1996; Rynes, Giluk & Brown, 2007). In this respect, these approaches can be seen as attempting to bridge the intensively debated gap between HRM research and practice (see for example the special issues of the Academy of Management Journal, 5, 2007 and the Journal of Management Studies, 3, 2009). For academics, a step in bridging this gap and giving practitioners greater insight into the HRM–performance relationship is to become more familiar with practitioner needs and interests (Cascio, 2007; Cohen, 2007; Latham, 2007). Previous research has shown that this can lead to academic findings that practitioners are more likely to implement (Mohrman, Gibson & Morhman, 2001). Our research, by largely examining secondary data collected by practitioners, offers increased insight into the HRM–performance relationship. These research results can provide managers and policymakers with insights into how organizational performance can be improved through HRM. Chapter 9 of this study draws conclusions, and from these, specific practical implications are discussed.

1.4 STRUCTURE OF THE DISSERTATION

This dissertation consists of nine chapters that are schematically overviewed in Table 1.1.

Table 1.1: Chapter overview

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Chapter 2 addresses the theoretical framework. The theoretical framework used in this dissertation builds on the HRM and performance literature, the leadership literature, and the public management literature. Relevant models and empirical studies are discussed with the aim of developing a research model.

In Chapter 3, the research design, the analysis techniques, and the measurement of the central concepts are described. The methodological choices made are explained and discussed. In particular, the focus is on some of the methodological concerns that have been raised in previous HRM and performance research and that will be addressed in this dissertation.

Chapters 4, 5, 6, 7, and 8 are based on empirical data related to public sector employees and organizations. In Chapter 4, we focus on the context of HRM implementation by combining ideas from the publicness and the HRM literature streams. In Chapters 5 and 6, the focus is on the role of the line manager in the HRM–performance relationship. Subsequently, in Chapters 7 and 8, the focus shifts from the role of the line manager to specifically studying the HRM–performance relationship in the public sector context. These five chapters are based on five empirical articles published in or submitted to academic journals. An advantage of this is that these empirical chapters are self-contained and can be read without the need to refer to the other chapters/articles. However, an inevitable consequence is that there is some overlap between the chapters, for example in their introductions and theoretical frameworks. As some of these chapters have been published as multi-authored articles, the pronoun ‘we’ is used throughout the dissertation for consistency.
Finally, in *Chapter 9*, an overview of the research results as well as a discussion of the empirical findings are presented. The strengths and weaknesses of the research are discussed, along with its theoretical, methodological, and practical implications.
Chapter 2

Theoretical framework
2.1 INTRODUCTION

In this chapter, we discuss the process through which HRM affects performance. Specific attention will be paid to the role of the line manager in implementing HRM by distinguishing between the management component (i.e., the enactment of HR practices) and the leadership component (i.e., a line manager’s leadership style) of HRM implementation. Moreover, the specific characteristics of HRM and performance in the public sector will be discussed. In this regard, the theoretical framework in this dissertation builds on the HRM and performance literature, the leadership literature, and the public management literature. The three research lines distinguished in the introductory chapter (the HRM–performance relationship, the role of the line manager, and the public sector context) will be discussed in greater depth. Relevant models and empirical studies will be discussed with the aim of developing a central research model that will then be applied in several parts in the various empirical chapters. In this respect, it should be noted that only the main theoretical arguments will be summarized in this chapter. More precise hypotheses will be elaborated in the later empirical chapters.

Before elaborating in more detail on the HRM–performance relationship (Section 2.2.3), we will first describe what we mean by HRM (Section 2.2.1) and by performance (Section 2.2.2). This is relevant as there is no consensus in the literature on HRM and performance on the definition and conceptualization of either concept (Guest, 2011; Paauwe, 2009; Paauwe et al., 2013). Gaining an insight into both HRM and performance is a first step in understanding their relationship. After discussing the HRM–performance relationship, specific attention will be paid to the role of the line manager in HRM implementation (Section 2.3). In this section, the distinction between the management component and the leadership component of HRM implementation will be discussed in detail (Section 2.3.1). Moreover, the role of the line manager in influencing employees’ perceptions of HRM will be discussed (Section 2.3.2). Subsequently, in Section 2.4, we will elaborate on the public sector context. First, the characteristics of the public sector will be discussed in general terms (Section 2.4.1) followed by a discussion on HRM in the public sector (Section 2.4.2). That section ends with a discussion of the HRM–performance relationship in the public sector (Section 2.4.3). Finally, in Section 2.5, the research model will be illustrated where the relationships that are central to this study will be visualized.
2.2 THEORETICAL PERSPECTIVES ON THE HRM–PERFORMANCE RELATIONSHIP

2.2.1 Human Resource Management: Definition and conceptualization

Based on a literature review (Boselie, 2002; Guest, 2011; Paauwe, 2009), there appears to be no single definition of HRM. Nevertheless, there are many similarities between the various definitions offered. In its broadest sense, HRM can be used as a generic term to describe any approach to managing people. In this respect, a commonly used definition of HRM is that of Boxall and Purcell (2011): “all those activities associated with the management of work and people in firms and in other formal organizations”. A similar broad definition, although somewhat more focused on the strategic component of HRM, is by Wright and McMahan (1992). They (1992:298) state that HRM refers to “the pattern of planned human resource deployments and activities intended to enable an organization to achieve its goals”. Finally, there is another frequently used definition by Beer, Spector, Lawrence, Mills, and Walton (1984) in which the employment relationship is emphasized. They (1984:1) define HRM as “all management decisions that affect the nature of the relationship between the organization and employees”. After examining the various definitions of HRM, Boselie (2002) explains how the concept is composed. Human refers to the employment relationship between employer and employee. Resource refers to employees being a source of organizational success. Management refers to the activities of managers toward employees so that the latter exhibit desirable behavior and achieve organizational goals. Based on this decomposition, Boselie (2002) comes to a somewhat more specific, but still broad, definition of HRM. He (2002:28) defines HRM as “management decisions related to policies and practices which together shape the employment relationship and are aimed at achieving individual, organizational and societal goals”. For this dissertation, this is an appropriate definition as it pays attention to both the content (policies and practices) and the process (management decisions) dimensions of HRM. Moreover, it emphasizes the multidimensionality of performance, an aspect that is particularly relevant to this thesis.

There appears to be no general agreement not only with regard to the definition of HRM, but also with regard to its conceptualization. Here, several conceptualizations of HRM can be distinguished in the HRM literature. In this context, a distinction can be made between the instrumental approach and the system approach to HRM. The instrumental approach examines the influence of individual HR practices on performance whereas the system approach adopts the principle that ‘the whole is more than the sum of its parts’ and examines a bundle of HR practices. Adopting the instrumental approach, studies concerning the relationship between HRM and performance first investigated the impact of separate HR practices on performance (Delaney & Huselid, 1996; Delery & Doty, 1996). Nowadays, there is an increasing focus on the internal consistency or ‘fit’ of
different HR practices which is more in line with the system approach (Boxall & Purcell, 2011; Sels & De Winne, 2005). It should however be noted that some authors have again recently stressed the importance of breaking down the HR system variable into distinct HR components to gain greater insight into the HRM–performance relationship on the basis that the various components of an HR system could have unique relationships with various organizational outcomes (Boselie, 2010; Jiang et al., 2012). We will deal in more detail with this issue in Chapter 8 and continue with the system approach here. With respect to the currently dominant HR system approach, there is an ongoing debate regarding the appropriate bundle of HR practices (Boselie et al., 2005). This debate is particularly affected by different views on the question as to whether HR practices that are successful in one context can be copied and be equally successful in any other branch or industry. This theoretical debate has two competing schools: the best-practice (universalism) school versus the best-fit (contingency) school (Boxall & Purcell, 2011). The best-practice school advocates a universalistic approach that implies that one size fits all. In contrast, the best-fit school believes that the success of HRM depends on aligning HR practices with the organizational context. With respect to this debate, Boxall and Purcell (2011) argue that certain HR practices are universally important (best-practice) but that the exact design should depend on the organizational context (best-fit). The broad debate around the merits of universalism and contingency theory dominated the field of strategic HRM in the 1980s and remains important in any kind of theory building. Since the early 1990s however, another line of thought has grown in significance. Since then, the strategic HRM literature has increasingly been influenced by the branch of strategic management known as the resource-based view of the firm (RBV). The RBV focuses on the internal strengths and weaknesses of organizations, paying particular attention to the ways in which organizations can develop valuable resources and erect barriers to their imitation. The RBV has as its starting point a fundamental belief in the decisive value of employees’ input in determining performance. Relating the RBV to the best-practice/best-fit debate, one might say that strategy theorists who work with the RBV aim to discover how an organization can build an exclusive form of fit (Boxall & Purcell, 2011).

2.2.2 Performance

The debate on HRM and performance is very often confined to financial terms (business performance). Based on an overview of 104 HRM and performance studies, Boselie et al. (2005) concluded that financial measures were involved in half of the articles. A study by Jiang et al. (2012) shows that this still seems to be the case. Their meta-analysis included 64 articles published after 2003, and financial measures were prominent in half of the articles (33 articles) and one-in-five (13 articles) only used financial performance indicators. The use of financial performance indicators in HRM research is, however, quite problematic as these can be influenced by a whole range of factors (both internal and external) that have
nothing to do with the workforce (Boselie et al., 2005). Given the causal distance (Guest, 1997) between HRM and financial performance, it becomes difficult to determine the HRM–performance relationship. Moreover, the use of this uniquely shareholder perspective is also problematic as it assumes that financial performance is the sole end goal of HRM. While not denying that adequate financial performance is important for organizations, other goals such as quality and fairness of service delivery are also relevant. This is especially true within the public sector. This emphasizes that looking at performance from a cost or profit perspective is too narrow. A blinkered focus on financial performance may have adverse outcomes if other important performance aspects are negatively affected. If, for instance, employees leave or become ill because of the ‘cost focus’ of their organization, this will eventually negatively affect organizational performance. In this respect, Paauwe (2004) calls for a multidimensional perspective on performance that stresses looking at performance in relation to several stakeholders: not just shareholders, but also for example employees and clients. In this respect, Dyer and Reeves (1995) make a distinction between financial outcomes (e.g., profits), organizational outcomes (e.g., productivity, quality), and HR-related outcomes (e.g., attitudinal and behavioral impacts on employees such as satisfaction and intention to quit). Based on the ‘Harvard model’ of Beer et al. (1984), another dimension that could be added is societal outcomes (reflected in Boselie’s (2002) definition of HRM in Section 2.2.1). These are social interests that go beyond the organizational boundaries such as the relationship between organization and citizens, but also that pay attention to employees’ health and providing good outplacement programs for employees facing redeployment or redundancy. A multidimensional perspective on performance will be used in several chapters of this dissertation when looking at various stakeholders and different types of performance indicators.

2.2.3 Linking HRM and performance

Understanding the relationship between HRM and organizational performance is one of the longstanding goals of HRM research. As a result of the increased focus on the contribution of HRM to organizational performance, the available research on this topic is extensive. During recent decades, several empirical studies (e.g., Delaney & Huselid, 1996; Gelade & Ivery, 2003; Huselid, 1995; Katou & Budhwar, 2010; Purcell & Hutchinson, 2007; Wright, Gardner & Moynihan, 2003), review articles (e.g., Becker & Huselid, 2006; Boselie et al., 2005; Guest, 2011; Paauwe, 2009; Wall & Wood, 2005), and meta-analyses (e.g., Combs et al., 2006; Jiang et al., 2012) have been published. The models describing the HRM–performance relationship have advanced from rather simplistic ones linking HRM directly to (often financial) performance to far more sophisticated ways of thinking about this relationship (Paauwe, 2009). Although there is considerable empirical evidence that HRM and performance are at least weakly related, there is less agreement regarding the causal mechanisms through which HRM influences performance (Paauwe
et al., 2013). Despite repeated calls for more attention to be given to the mechanisms through which HRM impacts on performance, Guest was still able to state in 2011 that there was little insight into what is happening within organizations. In the literature, this is often referred to as the black box issue. In this respect, Guest (2011) emphasizes the need for more theory with respect to the linkage between HRM and performance. In this context, various theoretical perspectives on the HRM–performance relationship can be distinguished (see Boselie et al., 2005, for an overview). Boselie et al. (2005) state that the three most commonly used theories are contingency theory (focusing on the alignment between the internal and external contexts – the outside in approach), the resource-based view (RBV) (focusing on the internal resources as a source of competitive advantage – the inside out approach), and the AMO framework (focusing on the importance of accounting for employees’ abilities, motivation, and opportunity to perform). The contingency approach and the RBV are both primarily interested in performance effects from an organizational perspective. In many authors’ work there is an overlap between these two perspectives. Together, they reflect the central assumption behind the conceptualization of what HRM is and what is does: namely, that it responds accurately and effectively to the organization’s context (contingency theory) and that it delivers added value through the strategic development of the organization’s rare, inimitable, and non-substitutable internal resources embodied in its staff (RBV). In contrast to this organizational perspective, the AMO framework, with its foundations in psychology, focuses on the individual (employee) level. Nowadays, researchers increasingly combine these theoretical frameworks in an overall theory (Boselie et al., 2005; Huselid & Becker, 2011; Paauwe et al., 2013; Van Veldhoven, 2012). This builds on Wright and Boswell’s call (2002) to bridge macro-level (organizational) and micro-level (individual) research. Macro-research reflects the more-strategic HRM view which mainly focuses on the linkage between HRM and organizational performance whereas micro-research reflects the more-functional view and focuses on the effect of HRM on individuals. This combined macro-micro approach aims to gain greater insight into how HRM and performance are linked.

The multilevel process model by Nishii and Wright (2008) reflects this macro-micro approach (see Figure 2.1). A central assumption in this model is that variability in HRM not only exists between organizations but also within organizations. In their model, the authors distinguish among intended, actual, and perceived HR practices. The idea behind this distinction is that there are differences within organizations between the HR policy

\[ \text{Intended HR practices} \rightarrow \text{Actual HR practices} \rightarrow \text{Perceived HR practices} \rightarrow \text{Employee reactions} \rightarrow \text{Organizational performance} \]

**Figure 2.1:** Simplified version of the multilevel causal model proposed by Nishii and Wright (2008)
designed by the HR department (the intended HRM), the HR practices implemented, often by line managers (the actual HRM), and the perceptions of employees (the perceived HRM) (see Table 2.1). As such, this model responds to the criticism that much research examines the ‘HRM rhetoric’ and not the ‘HRM reality’ (Legge, 2005).

Table 2.1: Distinction between intended, actual, and perceived HRM

<table>
<thead>
<tr>
<th>HRM</th>
<th>Characteristic</th>
<th>Main actors</th>
<th>Level of analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intended HRM</td>
<td>The HR policy written down in official documents and HR handbooks</td>
<td>HR department</td>
<td>Organizational level</td>
</tr>
<tr>
<td>Actual HRM</td>
<td>Implemented HR practices</td>
<td>Line managers</td>
<td>Unit level</td>
</tr>
<tr>
<td>Perceived HRM</td>
<td>Perceived HR practices</td>
<td>Employees</td>
<td>Individual level</td>
</tr>
</tbody>
</table>

Over recent decades, numerous studies have observed how line managers play a more prominent role in HRM as an increasing number of HRM activities have been devolved to them (e.g., Bond & Wise, 2003; Budhwar, 2000; Hales, 2005; Hutchinson & Wood, 1995; Larsen & Brewster, 2003; Renwick, 2003). In this respect, line managers have the task of putting the intended HR practices into practice with the aim of influencing the attitudes and behaviors of employees within their work unit (Bos-Nehles, 2010; Gilbert et al., 2011; Gilbert, 2012; Knies, 2012; Knies & Leisink, 2013a). In the model by Nishii and Wright (2008), this execution of HRM activities by line managers is represented by the actual HRM box that is situated between intended and perceived HRM. This indicates that differences between the intended HR practices and the practices perceived by employees will be influenced by the line managers’ implementation of HR practices. Adopting this perspective, scholars increasingly emphasize the need to take account of the role of line managers to achieve a better understanding of the relationship between HRM and performance (Boselie et al., 2005; Bowen & Ostroff, 2004; Paauwe et al., 2013; Purcell & Hutchinson, 2007; Wright, Gardner, Moynihan & Allen, 2005).

In addition, the model by Nishii and Wright (2008) explicitly focuses on employees’ reactions as a mediator between HRM and performance (see Figure 2.1). In the HRM–performance relationship, the role of HRM is considered to be to stimulate the types of employee behavior that enhance performance (Boselie et al., 2005; Den Hartog, Boon, Verburg & Croon, 2013; Knies & Leisink, 2013a; Paauwe et al., 2013). In other words, HR practices are implemented to influence employees, with the ultimate aim of positively influencing the organization’s performance. Accepting this viewpoint, a central thrust becomes that employees’ attitudinal and behavioral reactions to HRM will be one of the mechanisms through which HRM impacts on performance.

However, this model assumes that HRM can lead to positive employee reactions that, in turn, will positively affect organizational performance. This assumption that HRM is beneficial for both the organization and the employee (a mutual gains perspective)
has been criticized (Van de Voorde, 2010; Van Veldhoven, 2012). From a conflicting outcomes perspective, one could argue that HRM might pay off in terms of organizational performance but, at the same time, have no or even a negative effect on employee attitudes and behavior (Peccei, 2004). Further, research has shown that positive employee outcomes do not always lead to positive organizational outcomes (Taris, Schreurs, Eikmans & Van Riet, 2008). Nevertheless, most of the empirical evidence that examines parts of the causal model by Nishii and Wright (2008) supports its assumptions (Van de Voorde, 2010). Therefore, in this dissertation, we assume a positive relationship linking HRM, employee reactions, and organizational performance. In this dissertation, the theoretical presumptions of Nishii and Wright (2008) will be investigated by separating HR practices as implemented by line managers from HR practices as perceived by employees to examine the influence of these two aspects on employees’ attitudes and behavior and, through these, on unit and organizational performance. This responds to recent calls in the literature to examine the mechanism through which HRM affects performance (Guest, 2011; Paauwe et al., 2013). As the model by Nishii and Wright (2008) focuses on what HR practices are actually implemented, it will be expanded in the next section by adding the role of a line manager’s leadership style as an important component of HRM implementation by line managers.

### 2.3 HRM IMPLEMENTATION: THE ROLE OF THE LINE MANAGER

Although the important role of line managers in HRM implementation is recognized by several authors, many HRM and performance studies have concentrated on which HR practices are implemented (content) and not on how these HR practices are implemented (process). Authors that do pay attention to both components of HRM implementation include for example Gilbert et al. (2011), Purcell et al. (2003), Purcell and Hutchinson (2007), and Purcell and Kinnie (2007). As discussed in Section 1.2.2, these authors view the role of the line manager in HRM implementation as including both management and leadership components. The management component refers to the enactment of HR practices by line managers, thus corresponding with the actual HR practices box in the model by Nishii and Wright (2008). The leadership component refers to the leadership behaviors of line managers. Both components are expected to influence employees’ attitudes and behaviors and, through these, organizational performance. In this respect, leadership can be defined as the characteristics, competences, and behaviors of a supervisor or manager (Van Wart, 2003). Making a distinction between the management and the leadership components of HRM implementation enables one to further specify Nishii and Wright's causal HRM and performance model (2008) and, in this dissertation, the role of the line manager in HRM implementation will be conceptualized in two ways (see Figure
2.2). First, it can be argued that there is a relationship between a line manager's leadership style (the leadership component) and the HR practices that are implemented (the management component) within the work units (Section 2.3.1). Second, it could be argued that line managers influence employees’ perceptions of HRM through their enactment of HR practices as well as through their leadership styles (Section 2.3.2).

![Figure 2.2: The role of the line manager in HRM implementation](image)

### 2.3.1 How leadership style influences the enactment of HR practices

The relationship between the leadership component and the management component (Relationship 1 in Figure 2.2) concerns the question as to how line managers influence the implementation of HR practices. In this regard, Purcell et al. (2009) argue that the way line managers undertake their HR duties is inextricably linked to a wider set of what are increasingly called leadership behaviors. Moreover, Den Hartog et al. (2004) stress the important role that line managers play in implementing an intended HRM policy since differences in implementation at this level may be attributable to line managers' differing styles of leadership. More specifically, it has been suggested that line managers will implement those HR practices that fit their leadership style (Guest, 1987). Following this line of reasoning, it can be argued that line managers want HR practices to support their leadership activities and that the way line managers enact these practices is influenced by their leadership style. However, to date, scholars have paid relatively little attention to the role of line managers’ leadership styles in HRM implementation. A focus on leadership style could provide additional insight into how line managers influence the implementation of HR practices. Therefore, in this study, the relationship between a line manager’s leadership style (leadership component) and the implementation of HR practices (management component) will be examined.

### 2.3.2 How line managers influence employees’ perceptions of HRM

The relationship between HRM implementation and perceived HRM (Relationship 2 in Figure 2.2) concerns employees’ perceptions of HRM. Line managers influence employ-
employees’ perceptions of HRM through their role as implementers of organizational policies and practices (Nishii & Wright, 2008). In this respect, line managers have the task of implementing the intended HR practices in order that they influence the attitudes and behaviors of employees within their work unit. More specifically, according to the model by Nishii and Wright (2008), employees’ reactions to HRM will be influenced by the extent to which the HR practices implemented by line managers are perceived by employees. However, line managers also influence employees’ perceptions through their leadership styles (Daniel, 1985; Nishii & Wright, 2008). Here, Purcell and Hutchinson (2007) use the term ‘people management’ to emphasize the importance of taking account of both a supervisor’s leadership style and the application of HR practices. This conceptualization is based on the view that line managers require well-designed HR practices to employ in their people management activities, and that their leadership style will influence the way they enact these practices. Despite empirical support for the HRM implementation by line managers influencing employees’ perceptions of and reactions to HRM (e.g., Den Hartog et al., 2013; Gilbert et al., 2011; Knies & Leisink, 2013a), there are still many unanswered questions such as what, in this context, is the influence of different leadership styles. Therefore, more research is needed to understand how line managers’ enactment of HR practices as well as their leadership styles influence employees’ perceptions of HRM and whether, in turn, these perceptions influence employees’ reactions and performance. These relationships will be examined in the various empirical studies of this dissertation by making a distinction between different leadership styles and by distinguishing between the HR practices implemented by line managers and those perceived by employees.

2.4 HRM AND PERFORMANCE IN THE PUBLIC SECTOR

In the research described so far, context is not specifically considered. However, in the HRM and performance literature, the importance of context is regularly emphasized (e.g., Boxall, Purcell & Wright, 2007; Guest, 2011; Paauwe, 2004). Many of the HRM and performance studies focus on the private sector (Paauwe et al., 2013). Research with respect to the HRM and performance relationship within the public sector context is scarce (Bach & Bordogna, 2011; Bach & Kessler, 2007; Gould-Williams, 2007; Messersmith, Patel & Lepak, 2011). As Bach and Bordogna (2011) observe, limited attention has been paid to the public sector in the HRM literature and, within the public sector literature, little attention has been paid to HRM. Nevertheless, there are several indications that certain public sector characteristics mean that public and private sector organizations cannot be managed in the same way (Boyne, 2002a; Emery & Giauque, 2005; Politt, 2003; Rainey, 2003). In the following sections, we will first describe these specific public sector characteristics (Section 2.4.1) and then focus on HRM in the public sector (Section
Finally, the HRM–performance relationship in the public sector will be discussed (Section 2.4.3).

### 2.4.1 The public sector context

A characteristic of public sector organizations is that their main task is to serve the public interest rather than making a profit as in the private sector (Bovens, ’t Hart, Van Twist & Rosenthal, 2001). Although empirical research has demonstrated significant differences between public and private sector organizations (e.g., Boyne et al., 1999; DeSantis & Durst, 1996; Guest & Conway, 2002), the relatively recent NPM reforms make it increasingly difficult to make a clear distinction between the public and private sectors (Boyne, 2002a; Bozeman & Bretschneider, 1994). In the context of NPM, public sector organizations have been subjected to private sector models, organizational ideas, and values in seeking to improve their efficiency and service-orientation. In the Netherlands, as in many other countries (Pollitt & Bouckaert, 2004), the reforms have notably led to the establishment of independent executive agencies that operate with greater autonomy from government oversight (Van Thiel, 2006). Consequently, there are many hybrid organizations that bridge both sectors. Although Rainey (1997) and Pollitt (2003) acknowledge that the distinction between public and private sector has become increasingly blurred, they presented overviews of the distinctive characteristics of the public sector (see Box 2.1). These characteristics are, to a greater or lesser extent, applicable to all public organizations.

The characteristics displayed in this box pay explicit attention to the environment of public organizations and to the transactions between organizations and their environment. From the perspective of HRM and performance research, it is, in this respect, relevant to bring in the work of Paauwe (2004). The environment of organizations can be seen as somewhat abstract and Paauwe gives more meaning to it by distinguishing two dimensions in the organizational environment that will to some extent influence the strategic choices made by organizations. The first dimension is the product-market-technology dimension (PMT) and the second the social-cultural-legal dimension (SCL). This first, PMT, dimension shows how HRM is associated with the competitive mechanisms in the ‘markets’ in which an organization operates. It refers to the economic rationality with criteria such as efficiency, effectiveness, quality, and innovation. The SCL dimension, focusing on institutional mechanisms, embodies a relational rationality by focusing on moral values such as fairness and legitimacy.

Public organizations are heavily influenced by an institutional context in which economic rationality is rarely the main criterion when determining the desirability of certain

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2 To improve the readability of this thesis, we use the term public sector while acknowledging that there is no single unified public sector.
Theoretical framework

Chapter 2

Box 2.1: Distinctive characteristics of public organizations (derived from Pollitt, 2003 who extensively adapted it from Rainey, 1997)

Environmental factors
1. Not a market environment – revenue comes from budgetary appropriations, not from sale of goods and services
2. Presence of elaborate formal legal constraints
3. Presence of intensive political influences

Organization/environment transactions
4. Public organizations produce ‘public goods’, and tend to deal with situations where there are significant ‘externalities’ (effects on others who are not directly producers or consumers of the service in question)
5. Public services are often monopolistic and/or coercive
6. Public activities tend to have a very broad impact, and often carry a high symbolic significance
7. Public managers are subject to a more intense public scrutiny
8. Public managers are expected to have higher degrees of fairness, honesty, openness, and accountability

Organizational roles, structure, and processes
9. Greater vagueness, intangibility, or unmeasurableness of goals. Also greater multiplicity of goals and a higher incidence of conflict or tension between goals
10. General manager roles involve more political, expository activity. More crisis management
11. Less decision-making autonomy, less authority over subordinates
12. More red tape – more complex organizational structures and procedural requirements
13. Strategic decision-making more vulnerable to interruptions and interventions by external groups
14. Fewer extrinsic incentives (for example higher pay and benefit packages) and a weaker link between performance and rewards
15. Different, more community-oriented, work-related values (the ‘public service ethos’) and lower work satisfaction
16. Greater caution, reluctance to innovate

policies. Notwithstanding the fact that achieving an adequate financial performance is relevant for public organizations, and that public organizations are confronted with a growing need to demonstrate efficiency and cost effectiveness, other goals such as quality and fairness of service delivery are at least equally important (Steijn & Groeneveld, 2013). More specifically, public organizations are expected to deliver services that are not necessarily profitable but that do respond to a political logic and the regulation of society. Their objectives are not always to satisfy customers and are therefore sometimes heavily associated with public policy. Moreover, the goods and services delivered to the population must also be accessible to all in an equitable manner and on equal terms. In the public sector, political actors can, in this regard, be seen as a special stakeholder and one with a major impact on the organizational strategy. In the final analysis, the strategic decisions made by public organizations are largely subordinate to political decisions. In this respect, public organizations are confronted with a restrictive managerial situation because they are economically and politically accountable for their activities (Emery & Giauque, 2005).
As a result, the criteria for evaluating the performance of public organizations are complex and formal (Emery & Giauque, 2005). The multiplicity of goals and the greater incidence of conflict or tension between goals (Pollitt, 2003; Rainey, 2003) requires a multidimensional perspective on performance that stresses the importance of looking at performance in relation to several stakeholders - not just the ‘shareholders’ but also, for example, employees and clients who are likely to have their own definitions of performance (see also Section 2.2.2). However, environmental characteristics do not only influence the measurement of performance as described in this section, they logically also influence the HR policy of public organizations (Bach & Kessler, 2007). While the issue of viability in the sense of survival in the market is not a characteristic of public organizations, the idea that attracting and managing appropriate human resources is strategic for the organization’s success does hold for public as well as private organizations. This will be elaborated upon in more detail in the next section.

2.4.2 HRM in the public sector

In the literature, specific institutional, organizational, and workforce characteristics relating to HRM in the public sector can be found (e.g., Boyne et al., 1999; Brown, 2004; Emery & Giauque, 2005; Farnham & Horton, 1996). First, in many countries, there is an important distinction between workers in the public sector and those in the private sector in terms of their legal status (an aspect of the SCL dimension focusing on the institutional context). Private sector employees are subject to private law whereas many public sector employees are subject to administrative law. This is a crucial difference since it implies a different judicial process in the event of conflicts between employer and employee. In the literature, five additional differences between HRM in the public and private sectors are often mentioned (Steijn & Groeneveld, 2013). In this respect, Farnham and Horton (1996) describe four important differences. First, HRM policy in the public sector has traditionally been paternalistic in nature, purporting to protect and promote the well-being of the workforce. Second, the working conditions are highly standardized such that employees performing the same task have the same terms and conditions. Third, the industrial relations have a strongly collective character. This refers to the extensive scope for staff participation and consultation, and a strong role for trade unions in pay negotiations, which in turn was reflected in higher levels of union coverage in the public sector. Fourth, public organizations are expected to behave like a role model and set standards for private organizations to follow. These differences between public and private organizations were confirmed in a study by Boyne et al. (1999). More recently, Kersley, Alpin, Forth, Bryson, Bewley, Dix, and Oxenholme (2006) showed that more HR practices are to be found in the private than in the public sector, and that this might be the result of centralized collective bargaining and government exerting a homogenizing influence on practice in the latter. Besides these four differences described by Farnham and Horton (1996), a
fifth element can also be distinguished in the literature. This fifth element, located on the individual level rather than the organizational level, is public service motivation (PSM) (Steijn & Groeneveld, 2013). In this respect, a large body of research shows that the motivations of public servants who pursue public service careers differ in important ways from those of other employees (often working outside the public sector) (Perry & Wise, 1990; Perry & Hondeghem, 2008; Steijn, 2008; Vandenabeele, 2009).

2.4.3 The HRM–performance relationship in the public sector

As described above, there are significant differences between the public and private sector contexts. The context of the public sector has consequences for the performance indicators that can be used to evaluate its performance. Moreover, there are indications that there are significant differences in HRM between public and private sector organizations. Recognizing these contextual differences, those adopting a contextual approach (Paauwe, 2004; Paauwe et al., 2013) argue that attention should be given to the public sector context when studying the HRM–performance relationship.

Earlier, it was noted that there is relatively little research on the HRM–performance relationship in the public sector (Bach & Bordogna, 2011; Bach & Kessler, 2007; Gould-Williams, 2007; Messersmith et al., 2011). Further, there is some suggestion that the specific institutional, organizational, and workforce characteristics of public sector organizations, as described in Sections 2.4.1 and 2.4.2, may influence the HRM–performance relationship. In this respect, a study by Boselie, Paauwe and Richardson (2003) explored the role of sectoral/institutional factors in the Netherlands. This study found that HRM had less effect on performance in highly institutionalized sectors (such as hospitals and local government) than in less institutionalized sectors such as hotels. Moreover, traditionally, public sector organizations are relatively highly unionized. Trade unions may enhance the impact of HRM on wellbeing and subsequently on performance through their agency role as monitors and enforcers of employment contracts. In this respect, labor unions play a role in turning agreements on paper into organizational reality for workers (Peccei, Van de Voorde & Van Veldhoven, 2013). Here, there is some evidence of HRM having greater effects on performance in unionized organizations (Bryson, Forth & Kirby, 2005). In addition, according to Schneider’s (1987) ASA model (Attraction, Selection, Attrition), not only do organizations select employees, but employees also select certain jobs and organizations. Thus, there may be sector-specific self-selection mechanisms in place that result in public sector employees having common profiles characterized by specific personal characteristics, orientations, and expectations (such as a public service motivation). As a consequence of their specific priorities and expectations at work, it is possible that they evaluate and respond to HR practices differently than private sector employees. This, in turn, may influence the effect that HR practices have on aspects of employee wellbeing (Peccei et al., 2013) and subsequently on organizational performance.
These specific institutional, organizational, and workforce characteristics of public sector organizations highlight the relevance of studying the HRM–performance relationship in the public sector. In response, this dissertation studies the HRM–performance relationship specifically in the public sector. We consider to what extent the HRM–performance model derived from private sector research is applicable to public sector organizations. In this respect, specific attention will be paid to contextual differences in the HR design and HR content of public sector organizations. Moreover, a multidimensional perspective on performance will be applied that includes various stakeholders and different public values.

2.5 CONCLUSION

In this chapter, the three research lines for this dissertation initially described in the introductory chapter have been theoretically elaborated and the related contemporary discussions have been described. The first research line, the mechanisms through which HRM has an impact on performance, led to discussing the distinction between intended, actual, and perceived HRM. The second research line, concerning the role of the line manager, resulted in discussing the distinction between the management and leadership components of HRM implementation. The third research line, addressing the specific public sector context, led to describing the specific characteristics of HRM and performance in the public sector. Bringing these three research lines together results in the research model presented in Figure 2.3.

This model specifies how the HRM–performance relationship will be studied in this dissertation. As the model suggests, the implementation of HRM by the line managers is the central concept in our study. As HR policies might not be implemented uniformly within organizations, examining HRM implementation is important for understanding the HRM–performance relationship. Further, understanding the implementation of HRM by line managers is more than examining which HR practices are implemented by line managers. In this study, the role of a line manager’s leadership style, seen as an important component of their implementation of HRM, is also taken into account. In other words, we make a distinction between the management component (i.e., the implementation of HR practices) and the leadership component (i.e., a line manager’s leadership style) of HRM implementation. Moreover, to gain greater insight into the HRM–performance relationship, we also focus on employees’ perceptions of HRM in response to their line managers’ implementation of HRM. Employees’ ultimate attitudinal and behavioral responses will logically reflect their perceptions of HRM, rather than their line managers’ actual implementation of HRM. As such, their perceptions are likely to be better predictors of their responses than are HRM ratings provided by line managers. Consequently,
employees' attitudinal and behavioral reactions to HRM are considered the key factor in enhancing unit and organizational performance. In the empirical chapters, we remain loyal to the system approach to HRM by focusing on the bundle of offered HR practices. However, in the final empirical chapter, in response to a recent plea in the literature, we break the HR system variable down into three HR components on the assumption that these different components of an HR system can have unique relationships with various organizational outcomes. Finally, the model is placed within the public sector context. In this respect, we examine whether the HRM–performance model derived from private sector research can be applicable in public sector organizations. Here, specific attention will be paid to contextual differences in the HR design and HR content between organizations within the public sector. Moreover, a multidimensional perspective on performance will be applied in which various stakeholders and a range of public values will be included. As Figure 2.3 indicates, different parts of the model will be further explored in the various empirical chapters where the assumed relationships will be both theoretically and empirically discussed in greater depth.

\[\text{Figure 2.3: Research model}\]
Chapter 3

Methodology
3.1 INTRODUCTION

In this chapter, the focus is on the methodological background of this dissertation. We will describe how we will provide more insight into the HRM-performance relationship in the public sector. Moreover, following the multilevel character of the research model described in Section 2.5, particular attention will be paid to our investigation of the organizational, unit, and individual levels within organizations.

To give greater insight into the methodological background, this chapter consists of three parts. First, in Section 3.2, the research design will be discussed. Here, the importance of studying the HRM-performance relationship using multiple actors, multiple raters, and multiple sources will be emphasized. In addition, specific attention will be paid to the extensive data that were used in this dissertation. Second, in Section 3.3, the focus will shift to the analysis techniques used to appropriately evaluate the hypothesized relationships. In this section, structural equation modeling and multilevel analysis will be explicitly discussed. Third, in Section 3.4, the focus is on the measurement of the central concepts, with particular attention to the HRM scale developed for this dissertation. Finally, in Section 3.5, an overview of the methodological background to this dissertation will be presented.

3.2 STUDYING THE HRM-PERFORMANCE RELATIONSHIP

3.2.1 Multiple actors, multiple raters, and multiple sources

Since the 1990s, survey-based studies have been frequently used as a basis for statistically analyzing the HRM-performance relationship. Many of these can be characterized by the use of assessments from single respondents who rate both HRM and performance within their organizations (Boselie et al., 2005; Nishii & Wright, 2008; Wall & Wood, 2005). In this respect, Wall and Wood (2005) argue that the least satisfactory design, and one which is used in many studies, is to survey HR managers and ask them to rate the HR practices in use (‘intended HRM’ in the terminology of Nishii and Wright (2008) and others) and to estimate the performance of their organization relative to others in their sector.

Measuring HRM by asking a single HR manager has major limitations in terms of reliability and validity when this is the only way HRM is measured within the organization (Gerhart, Wright & McMahan, 2000; Guest, 2001). Moreover, an HR manager rating both the HR practices and the organizational performance is liable to common source bias (Podsakoff & Organ, 1986). Given these limitations, scholars have argued for studying the HRM-performance relationship using 1) multiple actors, 2) multiple raters, and 3) multiple sources (Boselie et al., 2005; Gerhart et al., 2000; Guest, 2011; Paauwe, 2009; Wall & Wood, 2005).
First, we discuss the call to use multiple actors. Measuring HRM by asking a single HR manager can be a useful way in which to measure intended HRM. However, questions have been raised as to whether a single HR manager can provide an accurate description of the practices implemented in the organization. This refers to the idea behind the distinction made between intended, actual, and perceived HRM, as described in Section 2.2.3, in that there may be variability in HRM within organizations (Nishii & Wright, 2008; Purcell & Kinnie, 2007; Purcell et al., 2009). In order to gain greater insight into the process through which HRM affects performance, the involvement of multiple actors is required so as to be able to make a distinction between intended, actual, and perceived HRM. In other words, when measuring HRM, respondents from different subpopulations, namely HR managers, line managers, and employees, should be asked to complete questionnaires.

Second, the involvement of multiple actors automatically contributes to the second aspect, namely the use of multiple raters. However, ‘multiple raters’ does not only refer to involving respondents from different subpopulations within the organization (HR manager versus line manager versus employee) but also to involving several respondents from each subpopulation (e.g., several employees). By determining the inter-rater reliability, one is then able to identify whether respondents are being consistent in their observations. This requires several respondents to respond to the same questions (Gerhart et al., 2000; Wall & Wood, 2005).

Third, we discuss the call to use multiple sources. Many HRM and performance studies have used perceptual survey measures in which dependent and independent variables are collected from the same actors (Boselie et al., 2005; Guest, 2011; Wright & Gardner, 2003). A frequently raised concern of such a design is that it is open to common source bias (Podsakoff & Organ, 1986). For example, more optimistic or organizationally committed individuals when rating both the practices and performance of their own company might give systematically higher scores than their more pessimistic counterparts elsewhere. Such ‘common source variance’ could suggest spurious relationships among HR practices and between them and performance (Wall & Wood, 2005). This leads to the idea that the measures of the dependent variable (performance) should come from a different source than those used to measure HR practices. This other source could for example be another actor rating the performance of the organization or an objective data source (e.g., profit figures).

According to Wall and Wood (2005), addressing all the challenges in HRM and performance research in a single design would require what they call ‘big science’ and 35 person-years of effort. This reflects the reality that HRM and performance research addresses a complex problem that cannot be quickly solved in one all-encompassing study. An important feature of the ‘big science’ required is the need for large datasets. In this respect, Wall and Wood (2005) express the concern that, with small samples, it is difficult to detect main effects. Of the various challenges, three important ones have been discussed above..
(multiple actors, multiple raters, and multiple sources) and these will be addressed in this thesis using several large datasets. In the various empirical chapters, different challenges will be addressed. The multiple actors challenge will be addressed in Chapters 4, 6, and 7. Further, the multiple raters challenge will be addressed in all five empirical chapters. Finally, these empirical chapters respond therefore to the call for using multiple actors, multiple raters, and multiple sources when examining the HRM and performance relationship. In the next section, the research data used for this dissertation will be extensively discussed.

3.2.2 Research data

In line with the aforementioned data requirements, this dissertation largely makes use of survey data collected by industry-wide representative organizations (A+O fonds gemeenten and Vereniging van Nederlandse Gemeenten) and the Ministry of Interior and Kingdom Relations (BZK). These surveys were carried out to gain insight into employees’ perceptions of work-related issues. We were given the opportunity to use these data to examine relationships between the variables in the databases and so answer our research questions. The use of secondary data has several advantages (De Vaus, 1996). A first advantage of using secondary data is an economic one. Someone else has already collected the data, so the researcher does not have to devote time and money to this phase of research. It should however be mentioned that the author has been involved in some of the research projects, and has therefore invested some time in collecting the data (see Table 3.1). A second advantage is the breadth of the data to which the author has access. In this respect, it would have been difficult, perhaps even impossible, to collect them as a sole researcher in a limited timeframe. A third advantage of using secondary data is that it avoids unnecessary pressure on the research population. Finally, a fourth advantage is that the data are more thoroughly analyzed than they might otherwise be. In this respect, the public organizations conducting the studies are more concerned with descriptive statistics and are unlikely to proceed to inferential statistics. However, from a practical point of view, inferential statistics can provide managers and policymakers with insights into how organizational performance can be improved through HRM.

In addition to analyzing available data (in Chapters 4, 5, 7, and 8), we collected data in collaboration with InternetSpiegel (a research organization working as an agency of the Dutch Ministry of Interior and Kingdom Relations) through a survey (Chapter 6) with

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3 Alongside her PhD research, the author has worked as a project manager for InternetSpiegel (a program of the Ministry of Interior and Kingdom Relations). In this position, she was involved in the questionnaire construction, administration, and sampling phase of the research projects. She has thus had contact with research organizations and respondents, and has translated research results into information that can be used within the organizations.
### Table 3.1: Overview of data and data collection

<table>
<thead>
<tr>
<th>Study</th>
<th>Data collection commissioned by/data collected by</th>
<th>Year</th>
<th>Actors</th>
<th>Raters</th>
<th>Coverage</th>
<th>Questionnaire methodology</th>
<th>Type of research (sources)</th>
<th>Author involved in the research?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>Ministry of Interior and Kingdom Relations (BZK) (InternetSpiegel program)</td>
<td>2011</td>
<td>Employees, line managers</td>
<td>34,304 employees of 196 Dutch public sector organizations</td>
<td>Dutch public sector organizations covering all public subsectors</td>
<td>Online survey</td>
<td>Analysis of secondary survey data supplemented by data related to the objective characteristics of the organizations</td>
<td>Yes</td>
</tr>
<tr>
<td>Study 2</td>
<td>A+O fonds Gemeenten</td>
<td>2005</td>
<td>Employees</td>
<td>7918 employees of Dutch municipalities</td>
<td>Dutch municipalities</td>
<td>Online and mail survey</td>
<td>Analysis of secondary survey data</td>
<td>No</td>
</tr>
<tr>
<td>Study 3</td>
<td>The author in collaboration with BZK (InternetSpiegel program)</td>
<td>2009</td>
<td>Employees, line managers</td>
<td>43 line managers and 389 employees of a single Dutch municipality</td>
<td>One Dutch municipality</td>
<td>Online and mail survey</td>
<td>Analysis of secondary survey data</td>
<td>Yes</td>
</tr>
<tr>
<td>Study 4</td>
<td>Vereniging van Nederlandse Gemeenten and BZK (InternetSpiegel program)</td>
<td>2008</td>
<td>Employees, customers</td>
<td>543 front-office employees and 4392 customers of 35 Dutch municipalities</td>
<td>Public service counters of Dutch municipalities</td>
<td>Online survey of employees and oral survey of customers</td>
<td>Analysis of secondary employee survey data combined with customer survey data</td>
<td>No</td>
</tr>
<tr>
<td>Study 5</td>
<td>BZK (InternetSpiegel program)</td>
<td>2010</td>
<td>Employees</td>
<td>1005 Dutch public sector employees</td>
<td>Dutch public sector organizations in all public subsectors</td>
<td>Online survey</td>
<td>Analysis of secondary survey data</td>
<td>Yes</td>
</tr>
</tbody>
</table>
the aim of further analyzing the relationships uncovered in the existing data. This has enabled us to more thoroughly examine the distinction between actual and perceived HRM and its effect on performance. Given that each of the five studies in this dissertation uses different datasets, Table 3.1 provides an overview of the data involved in each study. This table shows that we have used large datasets containing multiple actors, multiple raters, and multiple sources in accordance with the data requirements outlined in Section 3.2.1.

By using existing data, the usual questionnaire construction, administration, and sampling phase is bypassed (De Vaus, 1996). However, as just mentioned, the author was involved in some of the data collection procedures (see Table 3.1) and has therefore had some influence on the research design and questionnaire. However, it should be noted that, in each questionnaire construction, administration, and sampling phase, the interests and needs of the commissioning organization were more important than the academic interests. In some of the research projects, the author kept in close contact with the research organizations and the respondents, for example by answering questions raised by respondents during the survey and by ‘translating’ the research results into information that could be used within the organization concerned. This process of translation, also referred to as evidence-based management (Rousseau, 2006), is useful for both the organization and the researcher. Within the organization, the information can be used by managers and policymakers to solve organizational problems. For the researcher, it is useful because it provides feedback on the reason why certain results are found within an organization.

In all the data collection processes, apart from the customer survey, written questionnaires were used. The members of the research population were asked to complete a questionnaire via a web-based application. Claimed advantages of online questionnaires compared to postal questionnaires are (Wright, 2005): the relatively high response rate, the limited investment of time and the small probability of error in data entry. Another important advantage of an online survey is that the number of missing data is very limited. Respondents are required to answer all the questions in the questionnaire and only in a few exceptional cases (such as privacy-sensitive issues) are respondents allowed to skip a question. However, an important caveat when using online questionnaires is that not everyone has equal access to the Internet. This can result in a biased response. Therefore, in some cases, the potential respondents were given the option to return the questionnaire by mail (see Table 3.1).

### 3.3 ANALYZING THE HRM-PERFORMANCE RELATIONSHIP

Sophisticated analysis techniques are required to properly evaluate the research model described in Section 2.5. To begin with, the model contains mediating variables so as to
be able to gain greater insight into the HRM-performance relationship. Moreover, the model has multiple levels of analysis. Given these model characteristics, a range of analysis techniques will be used. In this thesis, regression analysis, structural equation modeling, and multilevel analysis techniques are all used. For each study, we have selected the most sophisticated methodology possible given the available data and the extent to which hypotheses could be directly derived from theory. In this respect, regression analysis is used when the focus is more on exploring the data, whereas structural equation modeling is used to test clear hypotheses derived from theory. More specifically, in Chapters 4 and 8 we have opted for regression analysis in order to be able to understand which of the independent variables are related to the dependent variable, and to explore the forms of these relationships. In Chapters 5, 6, and 7, structural equation modeling is used to simultaneously analyze both the direct and the indirect relationships among the dependent and independent variables on the basis of specific hypotheses. Our research model assumes that the relationship between HRM and performance is mediated by employees’ perceptions of, and reactions to, HRM. When investigating such mediation models, structural equation modeling (SEM) analysis is preferred to regression analysis (Boselie et al., 2005; Iacobucci, Saldanha & Deng, 2007). In the SEM analysis, a structural model is constructed that shows how the various latent factors relate to one another. SEM allows an overall model in which a variable is both dependent and independent (i.e., has a mediating role) to be tested. Moreover, a model containing multiple dependent variables can be tested (Byrne, 2001). As a result, the robustness of the models presented in these studies will be greater than if regression analysis had been used (Byrne, 2001). In recent years, SEM has been increasingly used in HRM research (Guest, 2011) although these SEM analyses are quite new to most public administration scholars. Given the multilevel character of our research model, the structural equation modeling technique is expanded in Chapter 6 by conducting a 2-1-2 multilevel mediational analysis (Preacher, Zyphur & Zhang, 2010) in which the hierarchical nature of the data is taken into account. Central to the research model is the idea that there are links between a line manager’s HRM implementation (a unit-level variable) and both unit and organizational performances (unit- and organizational-level variables) and that these links are mediated by employees’ perceptions of and reactions to HRM (on the individual level). Multilevel techniques have been recommended for analyzing such hierarchical data (Croon & Van Veldhoven, 2007; Wright & Boswell, 2002). In this dissertation, a particular form of multilevel analysis will be performed, namely a 2-1-2 multilevel mediational analysis (Preacher et al., 2010) in which the dependent variable is situated at the highest level. Table 3.2 outlines the analysis techniques used in each study.
Chapter 3

3.4 Measuring the Central Concepts

In this section, the measurement of the central concepts will be discussed in general terms. Given the predominantly secondary nature of the data analyzed, the measurement of the central concepts varies between the empirical chapters. Moreover, most of the data were collected by organizations representing the ‘industry’ (A+O fonds gemeenten and Vereniging van Nederlandse Gemeenten) and the Ministry of Interior and Kingdom Relations whose aim was to gain greater insight into employees’ perceptions of work-related issues. This aim differs from our more-academic aim of gaining improved insight into the relationship between HRM and performance. In this regard, a disadvantage of using secondary data is that not all the desired research concepts and academically relevant measurements were covered in the surveys. In this section, the focus will be on the similarities and differences in the measurement of the main concepts among the empirical chapters in this dissertation. The specific measurement of the concepts will be discussed in more detail in each of the empirical chapters. In this section, attention will be particularly paid to the concept of HRM since we were able to develop and in some instances use our own scale for measuring this concept. We used this scale in our own study of 2009 (Study 3) and were able to include it in two studies conducted by the Ministry of Interior and Kingdom Relations (Studies 1 and 5). This will be discussed in more detail in the next section.

3.4.1 HRM

A scale to measure HRM has been constructed for use in this thesis that focuses on employees’ abilities (A), motivations (M), and opportunities (O) to perform. To date, there is no single agreed, or fixed, list of HR practices or system of practices that can be used to measure HRM (Paauwe, 2009; Guest, 2011). Although the specific HR practices viewed as being part of an HR system have varied across studies, a commonality in the so-called ‘high-performance approach’ is a focus on promoting employees’ abilities (A), motivation

<table>
<thead>
<tr>
<th>Level of analysis</th>
<th>Analysis technique</th>
<th>Statistical program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1 (Chapter 4)</td>
<td>Regression analysis</td>
<td>SPSS</td>
</tr>
<tr>
<td>Study 2 (Chapter 5)</td>
<td>Structural equation modeling</td>
<td>AMOS</td>
</tr>
<tr>
<td>Study 3 (Chapter 6)</td>
<td>2-1-2 mediational multilevel analysis</td>
<td>MPlus</td>
</tr>
<tr>
<td>Study 4 (Chapter 7)</td>
<td>Structural equation modeling</td>
<td>AMOS</td>
</tr>
<tr>
<td>Study 5 (Chapter 8)</td>
<td>Regression analysis with bootstrap method for testing mediation effects</td>
<td>SPSS</td>
</tr>
</tbody>
</table>
(M), and opportunity (O) (or AMO) to perform (Appelbaum, Bailey, Berg & Kalleberg, 2000; Kehoe & Wright, 2013; Paauwe, 2009). Within these HR systems, two types of HR practices can be distinguished: work-related practices and employment-related practices. Work-related practices have to do with the way the work itself is organized, and with the opportunities offered to employees to participate in decision-making processes. Employment-related practices include all the activities used to recruit, motivate, develop, and retain employees (Boxall & Macky, 2009). Although most existing research focuses on the second type (employment-related practices), both types are important in shaping the employment relationship (Boselie et al., 2005). The work and employment practices embedded in an HR system together influence the abilities (A), motivations (M), and opportunities (O) of employees to perform (Boxall & Macky, 2009). Consequently, both work-related and employment-related practices have been included in our HRM scale. Lepak, Liao, Chung, and Harden (2006) have listed HR practices that influence employees’ AMO. Using these as a guide, the system of HR practices examined included: 1) recruitment and selection, 2) training and development, 3) performance appraisal, 4) rewards, 5) autonomy, and 6) employee participation in decision-making. These six practices have been used in previous research in various combinations and there is no standard measurement instrument available (Boselie et al., 2005). Consequently, an HRM scale has been developed for use in this research.

We followed the recommendations for scale development by DeVellis (2003). Firstly, for each HR practice, items were generated. Each of the six HR practices was measured using several items that we drew from various HRM studies aimed at improving employees’ abilities, motivation, and opportunity to perform (Ahmad & Schroeder, 2003; Appelbaum et al., 2000; Boon, 2008; Gould-Williams, 2003; Huselid, 1995; Wright et al., 2005) and then reformulated with the aim of achieving consistency. These items were formatted on five-point Likert scales with possible answers ranging from strongly disagree to strongly agree. Second, to further increase content validity, we asked five experts (two academics, one project manager in public-sector HRM research, and two HR managers in the public sector) to examine the initial pool of potential items and make suggestions. Following modifications, another five people (one advisor on HRM research in the public sector, one survey system administrator, two HR advisors in the public sector, and an operational employee) tested the questionnaire to check for clarity of the questions, ambiguous wording, technical errors, and the survey’s accessibility. Thirdly, the scale was validated using exploratory factor analysis techniques. We conducted a factor analysis to determine whether it was possible to discern six distinct HR practices based on the proposed items. As criteria for item deletion, we adopted common statistical warning signs, such as items having correlations of less than 0.3 or above 0.9 with other items in the dimension, items loading more than 0.3 onto two factors (or with low overall communalities), and items negatively contributing to Cronbach’s alphas (Field, 2009; Hinkin,
In addition, a confirmatory factor analysis was conducted to test whether the data fitted the hypothesized measurement model (Byrne, 2001).

The constructed HRM scale was first used in this study in 2009 (see Chapter 6). In 2010, the author was asked to add the scale to a study being conducted by the Ministry of Interior and Kingdom Relations. This provided the opportunity to further refine the HRM scale. Based on the validation carried out in 2009 and some specific requirements of the Ministry, some of the initial items in the questionnaire were revised. This revised scale has also been validated and is used in Chapter 8 of this dissertation. Another chance to add the scale to a large-scale study in the public sector conducted by the Ministry of Interior and Kingdom Relations occurred in 2011. Again, some of the items were changed based on the validation results in 2010 and the specific needs of the government organizations. This scale was again validated and is used in this dissertation in Chapter 4. The scale development and the final scale we would recommend for use in further research are presented in Appendices 1 and 2. In contrast to the studies conducted in 2009, 2010, and 2011 and reported in Chapters 4, 6, and 8, the author had no influence on the scale used in the other two studies conducted in 2005 and 2008 and reported in this dissertation in Chapters 5 and 7.

According to Boselie et al. (2005), an HR practice can be measured in three ways: by its presence (i.e., a dichotomous scale for whether it is actually in effect ‘yes’ or ‘no’), by its coverage (i.e., a continuous scale for the proportion of the workforce it covers), or by its intensity (i.e., a continuous scale for the degree to which an individual employee is exposed to the practice or policy). In the measurement used in the 2005 study, employees were asked about the use of ten different HR practices within their organization. As such, the 2005 study (the basis of Chapter 5) measures HRM by looking at its presence. In contrast, the self-created scales used in Chapters 4, 6, and 8 measure the intensity of HRM. Finally, in the study conducted in 2008 (the basis of Chapter 7), HRM was not directly measured but employees were asked about their satisfaction with different work aspects.

### 3.4.2 Leadership

In this dissertation, the leadership concept has been examined in various ways. In this respect, we look at employee satisfaction with line managers (Chapter 7), the distinction between stimulating and correcting leadership (Chapter 5), and the, currently popular, transformational leadership style (Chapters 6 and 8). Further, in the various chapters, self-ratings (Chapter 6) and subordinate ratings (Chapters 5, 7, and 8) of line managers’ leadership have been used. In this area, there is considerable discussion in the literature on the merits of self-ratings versus others’ ratings. Fleenor, McCauley, and Brutus (1996) give a short overview of research results comparing self-ratings and others’ ratings in the context of leadership. They conclude that although others’ ratings are often more valid than self-ratings, others’ ratings should not automatically be considered as “true” scores.
Dunnette (1993) similarly argues that self-ratings do have accurate components, and others’ ratings should not be presumed to be more accurate. Although some research suggests that self-raters often inflate their ratings relative to those made by others (e.g., Mabe & West, 1982; Podsakoff & Organ, 1986), this is not always the case. For example, Atwater and Yammarino (1992) and Van Velsor, Taylor, and Leslie (1993) found that some individuals provide self-ratings that are congruent with others’ ratings, and some self-raters even provide ratings that are considerably lower than others’ ratings. These different categories of self-raters were also found in a study conducted by Fleenor et al. (1996). Later, in the concluding chapter, we will reflect on these measurements in relation to the results obtained in the empirical chapters.

3.4.3 Performance outcomes

In this dissertation, a multidimensional approach to performance is adopted by using various performance outcomes (employee satisfaction, customer satisfaction, effectiveness, efficiency, and fairness) and thereby looking at performance in relation to several stakeholders (employees, line managers, and customers) (Paauwe, 2004). Both HR-related (Chapters 5, 7, and 8) as well as organizational outcomes (Chapters 5, 6, 7, and 8) are included. Moreover, both internal criteria (e.g., ‘my organization is trying to reduce costs in managing the organization and carrying out the work’ – Chapters 5, 6, and 8) as well as external criteria (e.g., ‘my organization adequately conducts relations with external parties’ – Chapter 8) have been used to determine organizational performance (Kim, 2005). In addition, customers have also been directly asked to assess the performance of organizations (Chapter 7). In all the studies used in this thesis, perceptual measures of performance have been used. This is partly because it is difficult to use objective performance measures in the public sector (and especially within public administration) as the outputs of the various organizations and work units differ in many important aspects (Brewer & Selden, 2000; Kim, 2005). As such, there is no single objective performance indicator available that could be used to compare organizational performances. Fortunately, when objective performance data are not available, subjective (i.e., perceptual) performance measures can be a reasonable alternative (Delaney & Huselid, 1996; Kim, 2005). In this respect, there is evidence of a strong correlation between perceptual and objective measures at the organizational level (Wall, Michie, Patterson, Wood, Sheehan, Clegg & West, 2004) although there is always some doubt regarding the validity of perceptual measures of performance (Kim, 2005). In the concluding chapter, we will reflect on these measurements in relation to the results obtained in the empirical chapters.
3.5 CONCLUSION

In this chapter, the research design has been outlined. In this respect, three important challenges facing HRM and performance research have been discussed. Together, the five empirical chapters that follow this respond to the call for using 1) multiple actors, 2) multiple raters, and 3) multiple sources when examining the HRM and performance relationship. In addition, the extensive data that were used for this dissertation, and how they were obtained, have been described. This dissertation largely makes use of survey data collected by organizations representing the industry and by the Ministry of Interior and Kingdom Relations. These data were collected with the aim of gaining greater insight into employees’ perceptions of work-related issues. A different large database has been used in each empirical chapter. Second, the analysis techniques used to fully analyze the hypothesized relationships have been described. In this respect, structural equation modeling and multilevel analysis have been explicitly discussed. Third, the measurement of the central concepts has been described with particular attention to the HRM scale developed for this thesis. In each of the following empirical chapters, the specific research design, analysis techniques, and measurement of the concepts will be discussed in more detail.
Chapter 4

The public context of HRM: HR design and HR content in the NPM age

This chapter has been submitted for review to an international journal (resubmission) as: Vermeeren, B., Kuipers, B.S., & Steijn, A.J. The public context of HRM: HR design and HR content in the NPM age.
4.1 INTRODUCTION

New Public Management (NPM) is a development that has significantly influenced the public sector since the early 1980s. With the rise of NPM, public sector organizations have been subjected to a management approach that is more business-oriented and that has resulted in tighter financial regimes, increased competitive market forces, and closer monitoring of organizational performance (Osborne & Gaebler, 1992; Pollitt & Bouckaert, 2004; Rainey, 2003). Given these reforms, it has been argued that there is no longer a clear boundary between public and private sector organizations and that organizations should be seen as a continuum rather than treated as a binary classification (Bozeman, 1987). This helps explain the growing amount of literature that addresses the degree of publicness of organizations (for an overview, see Andrews, Boyne & Walker, 2011; Boyne, 2002a). The relevant question in this study is what these reforms mean for Human Resource Management (HRM).

The OECD has identified three HRM reform trends as a result of NPM (Shim, 2001). These trends are: 1) increasing flexibility and freedom in HRM through decentralization and devolution policies, 2) increasing accountability of organizations and line managers in return for this greater flexibility and freedom, and 3) public organizations prioritizing maintaining the model of a good employer. The first and second trends relate to the organizing principles of the HR system. We refer to this using the term HR design (Mesch, Perry & Wise, 1995). The third trend is connected to the implementation of HR practices within the organization and we refer to this using the term HR content (Guest, 2011). The basic assumption underlying these HR trends is that they can result in enhanced public organizational performance. More specifically, the assumption is that empowering and motivating managers is essential if one is to improve performance because it lets managers manage. As a counterbalance to giving HRM authority to line managers, organizations have made strong efforts to secure managerial accountability by formulating rules and regulations. Moreover, even in a period of reforms aimed at downsizing the public sector, government organizations tried to maintain the status of being a good employer (Shim, 2001). This can be explained by the then expected labor shortages in the medium and long terms stimulating a need to recruit and retain high quality personnel if the public sector was to perform. Given these three HRM reform trends identified by the OECD, we focus in this study on the influence of the extent of publicness (a characteristic of the institutional environment of organizations that has changed because of NPM) on HR devolution, on personnel red tape, and on fulfilling the role of a model employer.

Traditionally, the public sector has distinguished itself from other employers by being a role model (Boyne et al., 1999; Farnham & Horton, 1996). The notion of the model employer encapsulated the principles of best practice and was supposed to set an example for the private sector in terms of treating employees fairly and providing good
conditions of service (Brown, 2004). In the traditional public sector HRM model, this model employer role is supported by centralization and formalization in order to provide a uniform and unitary HR system to all employees (Boyne et al., 1999; Brown, 2004; Farnham & Horton, 1996; Mesch et al., 1995). However, it is argued that this model has been put under pressure by the NPM reforms (Brown, 2004; Desmarais, 2008). The devolution of HR responsibilities to line managers, with greater flexibility and freedom in dealing with staff issues, challenges the uniform implementation of HR practices. In this respect, a relevant question for public organizations is whether they are able to maintain the role of model employer that has traditionally set them apart from organizations in the private sector (Brown, 2004; Shim, 2001). In addressing this issue, we will relate the HRM reform trends to each other to understand how changes in the HR design influence the HR content. More specifically, we will examine whether and how HR devolution and personnel red tape (i.e., the HR design) influence the model employer role of organizations (i.e., the HR content).

As such, this study has two aims. Our **first aim** is to examine how the institutional context of public organizations (more specifically their degree of publicness) influences the HR design (HR devolution and personnel red tape) and the HR content (model employer role). In this respect, we expect organizations with a lower degree of publicness to have fewer characteristics of the traditional public sector HRM model (Brown, 2004) than organizations with a higher degree of publicness. Our **second aim** is to examine the influence of the HR design on the HR content in more detail in order to gain further insight into the influence of how HRM is organized on the implementation of HR practices within the organization. To reflect these aims, our main research question is formulated as: ‘How are the publicness, HR design, and HR content of public sector organizations related?’ In answering this research question, we will first discuss the existing literature on publicness and HRM. Following this, we will discuss our research design and methods and then explain the measurement of the variables. Third, we will describe the empirical results of a study based on a database of 34,304 employees working in organizations with differing degrees of publicness. Finally, we will discuss the implications of our findings for theory and for practice.

### 4.2 THEORETICAL FRAMEWORK AND HYPOTHESES

#### 4.2.1 Degree of publicness and HRM

Publicness has been defined as “a characteristic of an organization which reflects the extent the organization is influenced by political authority” (Bozeman & Bretschneider, 1994:197). In the publicness literature, a distinction is made between the ‘core approach’ and the ‘dimensional approach’ (Bozeman & Bretschneider, 1994). The core approach assumes
that public and private differences can be captured in a simple distinction based on legal type. The dimensional approach however assumes that organizations are not always purely public or purely private, but that there are also hybrid organizations, for example in terms of funding (Boyne, 2002a; Bozeman & Bretschneider, 1994). In the context of NPM, public sector organizations have been subjected to private-sector models, organizational ideas, and values in seeking to improve their efficiency and service-orientation. This NPM development has had its impact on public organizational forms (Morris & Farrell, 2007; Pollitt & Bouckaert, 2004). For instance, in the Netherlands, the reforms have notably led to the establishment of independent executive agencies that operate with significant autonomy from government oversight (Van Thiel, 2006). In other words, these reforms have resulted in shifts within the public-private continuum, in which the distinctions between various public organizations have themselves increased (Rainey, 2003). Recognizing this situation, we adopt a dimensional approach in this study.

The relevant question in this study is what do these reforms mean for HRM? One would expect the emergence of more-flexible organizational forms in public-sector organizations to have had an impact on HRM (Antonsen & Jørgensen, 1997; Morris & Farrell, 2007). Until now, the related research that has focused on the public sector has mainly examined whether HRM differs between public and private sector organizations (Boyne et al., 1999; Farnham & Horton, 1996). In these studies, a strict distinction between public and private sector organizations is made. However, as already discussed, this distinction has become increasingly blurred due to NPM reforms (Boyne, 2002a; Brown, 2004; Rainey, 2003). Therefore, in this study, we focus on the influence of the degree of publicness on HRM. In this regard, we make a distinction between the HR design and the HR content. The HR design is about the organizing principles of the HR system (Mesch et al., 1995). Here, two aspects are specifically taken into account given the HRM reform trends described by the OECD. First, we focus on the rules and regulations concerning the implementation of HR practices (personnel red tape) and, second, we focus on who is responsible for the implementation of HR practices (HR devolution). The HR content dimension on the other hand focuses on what HR practices are implemented (Guest, 2011) and, here, we will focus on those associated with the role of a model employer.

### 4.2.2 Publicness and personnel red tape

Red tape, defined as “rules, regulations and procedures that remain in force and entail a compliance burden for the organization but have no efficacy for the rules’ functional object” (Bozeman, 1993:283), has become an important concept within public management research. Several empirical studies have sought to determine public-private differences in red tape and the results have been somewhat mixed, partly due to the diversity of measures used to measure red tape (Bozeman, 1993). In one of the earliest empirical studies of red tape, Buchanan (1975) found that private firms experience more red tape than the public
agencies. More recently, the OECD (in Shim, 2001), drawing on experiences in member countries, identified a trend that, in return for providing greater flexibility and freedom to agencies, governments were trying to secure the accountability of line ministries and line managers in HR management by formulating rules and regulations. In contrast, the majority of studies (e.g., Baldwin, 1990; Boyne, 2002a; Pandey & Kingsley, 2000; Rainey, Pandey & Bozeman, 1995) have shown that public managers perceive higher levels of red tape than their private-sector counterparts. However, this overview of empirical results on differences between public- and private-sector organizations fails to answer the question as to why public organizations in general seem to have more red tape. Bozeman (1993) argues that the primary attributes that lead to red tape are external control, homogeneity, and the number of stakeholders. Government organizations generally possess all these attributes to a greater extent than do private organizations. A theoretical explanation is that public organizations produce public services and outputs that have the character of public goods. Evaluating such outputs is laden with value questions and political controversies. In the absence of market-based information, such as sales and profits, public managers lack concise and valid performance indicators. In an attempt to assure accountability and performance, government authorities therefore strive to control their subordinates through extensive rules and regulations (Feeney & Rainey, 2009; Rainey et al., 1995).

In the context of HRM, Rainey et al. (1995) conclude that rules and laws relating to functions such as personnel and procurement are the most important sources of red tape in government. They claim striking differences between public and private managers in terms of personnel rules and constraints. More specifically, public managers perceive personnel rules to be more constraining. Other studies have also found that public managers perceive higher levels of red tape in personnel rules (Baldwin, 1990; Coursey & Rainey, 1990; DeHart-Davis & Pandey, 2005; Rainey, 1983). Moreover, a study by Feeney and Rainey (2009) found that perceptions of personnel red tape differ within the public sector. Their results indicate sharp differences between public and non-profit organizations, with public managers reporting higher levels of perceived personnel red tape. A theoretical rationale behind these results is that the government has seen one of its tasks as being to protect and promote the wellbeing of employees. Further, it is accepted that employees performing the same task should enjoy the same conditions and terms (Boyne et al., 1999). This standardization of employment practices leads to personnel constraints and efforts to ensure institutional and political accountability. Consequently, one could expect those organizations that operate with greater autonomy from government oversight would be less constrained by such protections and restraints, resulting in less personnel red tape. On this basis, we hypothesize that:

H1: The greater an organization’s degree of publicness, the more personnel red tape.
4.2.3 Publicness and HR devolution

Traditionally, HRM implementation has primarily been the responsibility of HR professionals although, to some extent, line managers have always had some responsibility for people management because they have always been held accountable for the work of their subordinates (McConville & Holden, 1999). However, the balance between line managers and HR specialists with respect to HRM implementation seems to have changed and there is clear evidence that, besides their traditional supervisory duties, line managers now have to increasingly execute HRM activities with many traditional personnel practices having been devolved to line managers (Purcell & Hutchinson, 2007). Two important aspects that have contributed to this devolution are the emergence of performance-related HR practices and the general trend toward decentralization. The increasing emphasis on customer needs and financial performance in private-sector organizations is seen as having resulted in this devolution of power to line managers. Line managers, rather than HR specialists, are expected to execute HRM in order to stimulate employees to achieve organizational goals (Bond & Wise, 2003; Boyne et al., 1999).

Traditionally within the public sector, the employment system has been highly centralized and run by powerful central agencies responsible for all the hiring decisions, setting establishment numbers, and formulating rules for employment, training, and career development (Brown, 2004). However, this unitary system came under pressure as a consequence of the economic recessions across the world in the 1980s and early 1990s, and the keenness of governments to contract out their services (Shim, 2001). The demand for a new approach to management that allowed greater flexibility in dealing with staff issues was based on the need for greater responsiveness and efficiency. In line with these developments, the OECD in 2000 (in Shim, 2001) identified a trend within many OECD countries of giving organizations and/or line managers greater flexibility and freedom in HR management through various decentralization and devolution policies. To date, research on HR devolution has primarily focused on private organizations and it is therefore relatively unknown whether this trend can also be witnessed within organizations with higher degrees of publicness. We would expect organizations that are at a greater distance from political control to have devolved more HRM activities to line managers in order to satisfy customer needs and performance goals. Therefore, we hypothesize:

H2: The greater an organization’s degree of publicness, the less that HR is devolved.

4.2.4 Publicness and model employer

In general, there has been a tradition for public sector organizations to act as exemplars of good practice, sometimes described as model employers. This means that they have to demonstrate that they have policies and practices in place to ensure commitment to staff training, trade union and workforce participation in decision-making, promotion of equal opportunities, and a concern for the welfare of employees in meeting their personal
and family needs. The implication of being a model employer was that “above all, those in authority accepted the softer norms and conventions of public employment, which differed from the more thrusting, market and sometimes anti-union values of the private sector” (Farnham & Horton 1996:83). By practicing what they preached, governmental organizations should have better organized those activities associated with the model-employer role than private sector organizations. As Guest and Bos-Nehles (2013) commented, the introduction of HR practices in parts of the public sector may be rather different from that seen in the private sector. Despite the expectations that the introduction of NPM would result in new ways of managing public-sector employees, empirical research conducted by Boyne et al. (1999) suggested that public organizations were still more likely than private organizations to engage in activities associated with being a model employer. As the OECD more recently found, governments still prioritize their role as a model employer (Shim, 2001). However, NPM reforms have resulted in shifts in the public-private continuum, with variations between public organizations themselves increasing. In this respect, organizations that operate with greater autonomy from government oversight are expected to more often import managerial processes and behaviors from the private sector (Rainey, 2003). Consequently, one could expect differences in the extent to which an organization behaves as a model employer within the public sector. Therefore, we hypothesize:

H3: The greater an organization's degree of publicness, the more employees will perceive the organization as a model employer.

Figure 4.1 shows the theoretical model representing the expectations outlined above.

![Figure 4.1: Conceptual model relating publicness and HRM](image)

4.2.5 The relationship between the HR design and the HR content

Although we expect the degree of publicness, as an important institutional context, to affect both the HR design (personnel red tape and HR devolution) and the HR content (model employer role), we also see other challenges for public organizations in retaining their role as a model employer. In this respect, we particularly expect the organizational characteristics regarding the rules and regulations concerning the implementation of HR practices (personnel red tape) and who is responsible for their implementation (HR
devolution), in other words the HR design, to influence this model employer role. Below we elaborate on the mechanisms involved.

First, we describe the relationship between personnel red tape and the model employer role. A characteristic of HRM in the public sector that is conventionally associated with the model employer role is the protection and promotion of employee wellbeing. Traditionally, employees performing the same task had the same conditions and terms (Boyne et al., 1999). For example, to prevent personal favoritism and to promote principles of merit, laws typically prevent the dismissal of troublesome employees unless job-related problems were substantially documented and progressive disciplinary steps carefully followed. Moreover, in the public sector, rules and regulations are central to decisions concerning staff planning, retention, advancement, dismissal, wages, and training. As such, standardization activities are intended to ensure that the role of a model employer is fulfilled. However, if these standardization activities become inflexible criteria that make it very difficult to change the working environment then they become red tape (Bozeman, 1993). For example, formal rules can make it hard to advance a good employee faster than a poor one. Following this line of reasoning, one can expect organizations with more personnel red tape to be less often seen as a model employer. Therefore, we hypothesize:

H4: The greater the amount of personnel red tape within an organization, the less employees will perceive the organization as a model employer.

Second, we describe the relationship between HR devolution and the model employer role. In the literature, there are two perspectives on the consequences of HR devolution. The first expects a strengthening of the model employer role due to HR devolution, whereas the second perspective expects a weakening of this role. Adopting the first perspective, it seems logical to believe that organizations with greater HR devolution will more often be seen as model employers. This is because being a model employer involves activities such as staff training, workforce participation in decision-making, promotion of equal opportunities, and concern for the welfare of employees in meeting their personal and family needs. Further, by devolving HR decision-making, line managers should be better able to make decisions that are tailored to individual circumstances (Bond & Wise, 2003; Budhwar, 2000; Perry & Kulik, 2008). Moreover, devolvement enables HR problems to be solved on lower organizational levels, which leads to more responsible line managers and increased employee efficiency (Budhwar, 2000). Conversely, the second perspective would lead one to assume that greater HR devolution has a negative effect on the model employer role. In this respect, there are studies that note the risk of giving responsibility for the care of the organization's most important assets (its employees) to managers who may have received little or no formal HR training (e.g., McGovern, Gratton, Hope-Hailey, Stiles & Truss, 1997; Bond & Wise, 2003; Renwick, 2003). Moreover, these studies caution that line managers may see resolving HR issues as coming a poor second to their
more immediate business goals, with the result that they devote less attention to HR issues than would HR specialists. As such, the literature is inconclusive as to the effect of HR devolution. Given this situation, Perry and Kulik (2008) carried out a survey to test these two conflicting hypotheses. They concluded that devolution has a positive effect on the perceived effectiveness of management issues related to managing people within an organization, thereby supporting the first perspective. In line with these findings, we therefore initially assume that organizations with greater HR devolution will be seen more as model employers. In other words, we hypothesize:

H5: The greater the HR devolution within the organization, the more employees will perceive the organization as a model employer.

As argued, both personnel red tape and HR devolution can affect the model employer role. However, we also observe that they inherently conflict: the idea behind HR devolution is that line managers have greater flexibility and freedom in dealing with staff issues, whereas personnel red tape amounts to rules and regulations to restrict the freedom and flexibility of line managers. Thus, when HR devolution is implemented in a context characterized by personnel red tape, the potential flexibility and freedom will be curtailed because line managers perceive an excessive amount of personnel red tape. Consequently, the expected positive effect of HR devolution on the model employer role will be negatively affected by personnel red tape. Thus, we expect personnel red tape to have a moderating effect on the relationship between HR devolution and the model employer role, and therefore hypothesize:

H6: Personnel red tape moderates the relationship between HR devolution and the model employer role such that organizations with greater HR devolution are expected to be seen more as a model employer when the degree of personnel red tape is low than when the degree of personnel red tape is high.

Figure 4.2 shows the theoretical model representing the above expectations.
4.3 RESEARCH METHODS

4.3.1 Data
In 2011, a large-scale study aiming to create a benchmark that would enable public sector organizations to compare their personnel policies with other organizations in the same public subsector was carried out by a research organization working as an agency of the Dutch Ministry of Interior and Kingdom Relations (the program InternetSpiegel). Through a survey, supervisors and employees (i.e., multiple actors) were asked about the HR design and HR content of their organization and about their wellbeing. The author of this dissertation was a member of this research team and we have been able to use the data collected for the present study.

4.3.2 Sample and response
The purposes of the original study required a representative sample of the workforce of each participating organization. Two further research conditions were formulated by the research team: first, sufficient organizations in each public subsector needed to participate so that every organization in the public domain could compare its results; second, a distinction should be made between small, medium, and large municipalities. The research team was given the opportunity to approach up to 125,000 employees working in the Dutch public sector (approximately 12.5% of that population). Given these conditions, multistage sampling was conducted using the database of the Dutch pension fund for public sector employees (Algemeen Burgerlijk Pensioenfonds).

The first stage was to select the organizations. Ten organizations were randomly selected from within each subsector (i.e., central government, regional government, municipalities, water boards, primary education, secondary education, lower vocational education, higher vocational education, academic education, academic medical centers, police, judiciary, central-level executive agencies, and local-level executive agencies). If a subsector had fewer than ten organizations, then all organizations were included in the study. For municipalities, a distinction was made between small (<25,000 inhabitants), medium (25,000 - 100,000 inhabitants), and large (> 100,000 inhabitants) municipalities; and ten organizations were randomly selected from each category.

The second stage was to select the employees to be involved. The challenge was to select 125,000 employees from the various organizations to obtain a representative sample. For 106 organizations, it was practical to approach the entire staff and, for the other organizations, a random sample was drawn. All the selected employees received a letter indicating a website and a login code to access a web-based questionnaire. Of the approached employees, 34,304 employees answered the questionnaire (a response rate of 27%). Respondents who failed to answer questions about their organization were removed because of the uncertainty as to whether they were actually working within the organization indicated in the pension
database. This resulted in a database with 30,741 respondents. Moreover, in the database of the Dutch pension fund, employees working for audit organizations and for a large number of executive agencies were expected to be governmental employees and were registered as if they were working for one of the central departments. For example, employees working for the Dutch tax organization were in the database placed as working for the Ministry of Finance. However, based on the answers provided by the respondents with respect to the names of employing organizations, we were able to add some organizations. In addition to the organizations and subsectors indicated above, the final sample included 10 audit organizations and 36 rather than 10 executive agencies at the central level bringing the total number of organizations in our survey to 196. The response rates among the organizations varied considerably. Based on the response rates and sample characteristics, 42 organizations were removed from the database, resulting in a database of 154 organizations. For the remaining organizations, response rates ranged from 10% to 60% with an average of 24%.

4.3.3 Sample characteristics
Of the 30,741 employees who responded satisfactorily, 4916 were in a management function (16%), 58% were male, and 65.5% aged between 40 and 59. The predominant educational level was higher vocational (31.6%), the average number of years worked in the organization was 15.6, and the average working week was 33.5 hours.

We compared the sample to the overall population of public employees, based on statistical data from the Ministry of Interior and Kingdom Relations, with respect to gender, age, and working hours. In terms of these characteristics, the respondents can be regarded as reasonably representative. Men make up 47.6% of Dutch public sector employees so there is some over-representation of men in our sample. With respect to age, the sample’s deviation from the general population is small (the deviations vary from 0.2% to 4.6% based on five-year cohorts). The sample’s deviation from the general population was also small with respect to the number of working hours (0.4%).

4.3.4 Measurements

Degree of publicness
In our study, the respondents were asked about the sector, the organization, and the department in which they were working. Additional information on these organizations was collected by the author regarding the legal status (ownership) and the financial resources (funding). These two elements (ownership and funding) were used to determine an organization’s place along the public-private continuum (Wamsley & Zald, 1973 in Rainey, 2003). We opted to determine the position along the public-private continuum solely on the basis of ownership and funding because adding additional determinants would result in many more categories along the continuum, and the consequent number
of organizations in each category would become rather small. Nevertheless, we note that other elements (such as mode of social control) have been used elsewhere (for an overview see Boyne, 2002a).

If an organization was a foundation or a private- or public-liability company then the organization was classified here as a private organization in terms of ownership, if not it was regarded as a public organization. In considering funding, it proved difficult to categorize based on the percentage of funding coming from government contracts as the question then became where the government ends and the private sector begins. Bozeman (1987) resolved this by treating his subdimensions as continua rather than as dichotomies. However, following Perry and Rainey (1988), we wanted to create an organizational typology by cross-classifying ownership and funding and, therefore, we needed to categorize the funding dimension. Nevertheless, we felt a simple public-private dichotomy would do insufficient justice to the variety seen in this variable in practice. Therefore, we decided to form three categories: public, semi-public, and private (Kickert, Klijn & Koppenjan, 1997). In classifying the studied organizations, we found that even what are regarded as core public sector organizations often derive small amounts of revenue from private financiers, for example because they receive rent on land they own. Therefore, we set a threshold that an organization would be regarded as public (in funding terms) provided more than 95% of its revenues came from public finances. The literature suggests that an organization can be regarded as private when the dominant share of its resources comes from private sources (Rainey, 2003). On this basis, we determined that an organization would be regarded as private provided at least three-quarters of its income came from private financiers. All organizations between these two thresholds (i.e., with between 25% and 95% public revenues) were regarded as semi-public.

Based on the information unearthed concerning the legal status (ownership) and the financial resources of an organization (funding), all the organizations in our study could be classified with respect to their degree of publicness. All the organizations fitted within one of the following five categories: public ownership and public funding (1); public ownership and semi-public funding (2); public ownership and private funding (3); private ownership and public funding (4); and private ownership and semi-public funding (5). As we used the database of the Dutch public-sector employees' pension fund in selecting our sample, there were no organizations in the database classified as combining private ownership with private funding. Based on this classification, the numbers of organizations in two of the five categories (Categories 3 and 4) were rather low and so we decided to simplify these five categories into three categories. Categories 2 and 3 were merged into one category (public ownership with semi-public or private funding), and likewise Categories 4 and 5 to give one category (private ownership with semi-public or public funding). The results of this classification are presented in Table 4.1. In the regression analysis, this categorical publicness variable is coded using two dummy variables.
Personnel red tape
To measure personnel red tape, we used the five-item scale constructed by Rainey et al. (1995). To examine the extent to which line managers perceive red tape during the execution of HRM activities we replaced the word ‘manager’ in the original scale by ‘employee(s)’ in all of the items. Consequently, the five items used to measure personnel red tape were: 1) even if an employee is a poor performer, formal rules make it hard to remove him or her from the organization; 2) the rules governing promotion make it hard for a good employee to move up faster than a poor one; 3) due to rules, employees’ pay raises are based more on longevity than on performance; 4) the formal pay structures and rules make it hard to reward a good employee with higher pay here; and 5) the personnel rules and procedures that govern my organization make it easy for me to reward subordinates for good performance (reversed). We included a screening question in the questionnaire to determine whether a respondent held a supervisory position, and these statements were only put to supervisors. The responses were to be given on a five-point Likert scale ranging from totally disagree (1) to totally agree (5). This scale demonstrated internal reliability (Cronbach’s Alpha .80). Given that we wanted to compare results on the organizational level of analysis, the data needed to be aggregated and so the intra-class correlation (ICC) was computed to determine whether it was valid to aggregate the data. Aggregation is acceptable provided the variance between groups is larger than the variance within groups (Klein & Kozlowski, 2000) and this is the case when the F-value is statistically significantly greater than unity. The F-value for this variable was statistically significantly greater than unity (F = 4.711, p < 0.01) enabling aggregation.

HR devolution
Our measurement concerning responsibility for executing HRM activities was based on Budhwar (2000). Budhwar distinguishes between sole HR decision-making (score 1), HR in consultation with line management (score 2), line management in consultation with HR (score 3), and line management in sole charge of HR (score 4). Table 4.1 provides an overview of the classification of organizations with respect to degree of publicness.

### Table 4.1: Classification of organizations with respect to degree of publicness

<table>
<thead>
<tr>
<th>Degree of publicness</th>
<th>Number of organizations</th>
<th>Percentage of organizations</th>
<th>Types of organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Low publicness</td>
<td>45</td>
<td>29.2%</td>
<td>Primary and secondary education, lower and higher vocational education, executive agencies</td>
</tr>
<tr>
<td></td>
<td>ownership = private; funding = semi-public or public</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Medium publicness</td>
<td>25</td>
<td>16.2%</td>
<td>Executive agencies, academic medical centers, academic education</td>
</tr>
<tr>
<td></td>
<td>ownership = public; funding = semi-public or private</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 High publicness</td>
<td>84</td>
<td>54.5%</td>
<td>Central government, regional government, local government, water boards, police, audit organizations</td>
</tr>
<tr>
<td></td>
<td>ownership = public; funding = public</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


with HR (score 3), and decision-making by line management alone (score 4) for a range of HRM activities. In the survey we used, supervisors were asked to indicate who was responsible for executing seven different HRM activities (pay and reward, recruitment and selection, training and development, health and safety, workforce expansion or reduction, personnel appraisal, and working schedules) using these four possible answers. To reflect the degree of devolution (i.e., the execution of HRM activities by line managers), we summed the scores for the seven aspects providing a scale ranging from ‘7’ for sole HR decision-making to ‘28’ for sole line management decision-taking. For this variable, the F-value was again significantly above unity ($F = 3.817, p < 0.01$) allowing aggregation.

**Model employer**

Boyne et al. (1999) argued that the role of a model employer involves a commitment to staff training, to trade union and workforce participation in decision-making, to the promotion of equal opportunities, and a concern for the welfare of employees. In the more recent HR literature, the AMO framework, proposed by Appelbaum et al. (2000), is gaining prominence and this argues that an organization is a good employer if it gives attention to employees’ abilities, motivation, and opportunity to participate (Katou, 2011; Paauwe, 2009). In this regard, an HR system, for example by providing training facilities, is firstly expected to influence employees’ abilities to perform by boosting their knowledge, skills, and abilities. In addition, an HR system can boost employees’ motivation by providing direct incentives and fair rewards, and by providing guidance regarding the behaviors that are expected, supported, and rewarded. Finally, an HR system can influence employees’ opportunities to use their abilities by providing autonomy in their work and participation in decision-making.

The model employer concept of Boyne et al. (1999) and the AMO perspective have some similarities but also some differences in the HR practices that they highlight and, in this study, we combine aspects of both perspectives. The model employer role, as viewed in this study, includes the following HR practices: 1) the promotion of equal opportunities and a concern for the welfare of employees; 2) the provision of training and development facilities; 3) employee participation in decision-making; 4) careful recruitment and selection procedures; 5) performance appraisal; 6) fair rewards; and 7) autonomy in performing tasks.

In this study, employees were asked to answer questions about the HR practices used in their organization. All the seven HR practices indicated above were included and measured using several items (see Appendix 1), and all the scales demonstrated internal reliability (Cronbach’s Alphas above .78). All the items used were measured on a five-point Likert scale ranging from totally disagree (1) to totally agree (5). The seven scales were

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4 *We did not use one of Budhwar’s HR practices (industrial relations) because, in the Netherlands, this is generally organized beyond the individual organization’s influence.*
then combined to form a single overall ‘model employer’ scale. For our ‘model employer’ variable, the resulting value (F = 5.104, p < 0.01) clearly allowed aggregation.

**Control variables**

Boyne (2002a) noted that an absence of control variables may lead to overstating the impact of publicness. Therefore, several control variables were included in this study to account for organizational and individual factors. Here, we controlled for one organizational characteristic (organizational size) and three characteristics of the respondents (gender, age, and educational level).

Organizational size was treated as a continuous variable, with values ranging from 10 to 30,531 employees. We coded gender as a dummy variable (with 1 = female). Age was subdivided into ten ‘five-year’ categories (from 1 = 15-19 years, to 10 = 60 years and older), and included in the analysis as a continuous variable. Reflecting the Dutch educational system, educational level was subdivided into six categories (1 = primary education; 2 = secondary vocational education; 3 = preparatory academic education; 4 = vocational education; 5 = higher vocational education; 6 = academic education). This variable was, as is generally the approach adopted, again treated as a continuous variable (see Van Jaarsveld, Walker & Skarlicki, 2010).

**4.4 RESULTS**

**4.4.1 Degree of publicness and HRM**

The means, standard deviations, and correlations between the central variables are presented in Table 4.2. The results with respect to the role of a model employer show an average score of 3.34 on a five-point scale. That is, on average, employees in public-sector organizations experience a reasonable amount of those HR practices that are associated with the role of a model employer. With respect to personnel red tape, managers within the public sector organizations perceive significant amounts of red tape during the execution of HRM with an average score of 3.63 on a five-point scale. Turning to HR devolution, the results show that the execution of HRM activities in the public sector is mainly the responsibility of line managers, sometimes in consultation with the HR department. The average score on the scale ranging from 7 to 28 was 22.8. Moreover, the results show that two of the three publicness categories significantly correlate both with personnel red tape and with the model employer role. However, there appears to be no correlation between the medium publicness category (public ownership and semi-public or private funding) and either personnel red tape or the model employer role. Further, the analysis fails to find any statistically significant correlation between publicness and HR devolution. This implies that the extent of HR devolution is not associated with an organization’s degree of
Table 4.2: Means, standard deviations, and correlations (N = 154)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Low publicness</td>
<td>.29</td>
<td>.456</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Medium publicness</td>
<td>.16</td>
<td>.370</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. High publicness</td>
<td>.55</td>
<td>.500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Model employer</td>
<td>3.34</td>
<td>.199</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Personnel red tape</td>
<td>3.63</td>
<td>.422</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. HR devolution</td>
<td>22.84</td>
<td>1.936</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Gender (1 = female)</td>
<td>.45</td>
<td>.183</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Age category</td>
<td>7.07</td>
<td>.600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Educational level</td>
<td>4.62</td>
<td>546</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Organizational size</td>
<td>1392.77</td>
<td>2954.374</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.05; **p < 0.01
publicness. Finally, the results show a strong negative correlation between personnel red tape and the model employer role, while there appears to be no correlation between HR devolution and the model employer role.

To test our hypotheses, we conducted regression analyses on the data using SPSS version 20. The results are presented in Table 4.3.

Table 4.3: Results of regression analyses

<table>
<thead>
<tr>
<th></th>
<th>Personnel red tape</th>
<th>HR devolution</th>
<th>Model employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (1 = female)</td>
<td>.153</td>
<td>.002</td>
<td>.087</td>
</tr>
<tr>
<td>Age category</td>
<td>.142</td>
<td>.037</td>
<td>.004</td>
</tr>
<tr>
<td>Educational level</td>
<td>−.219*</td>
<td>.241*</td>
<td>.309**</td>
</tr>
<tr>
<td>Organizational size</td>
<td>.146</td>
<td>−.090</td>
<td>−.216*</td>
</tr>
<tr>
<td>Low publicness (dummy)</td>
<td>.414**</td>
<td>−.068</td>
<td>−.339**</td>
</tr>
<tr>
<td>(reference category = high publicness)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium publicness (dummy)</td>
<td>.162</td>
<td>.031</td>
<td>−.118</td>
</tr>
<tr>
<td>(reference category = high publicness)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.204</td>
<td>.017</td>
<td>.132</td>
</tr>
</tbody>
</table>

* $p < 0.05$; ** $p < 0.01$; $^*$ $p < 0.01$

First, we tested our first hypothesis that the higher an organization's degree of publicness, the more personnel red tape would be experienced. Although the analysis found a relationship, it was not in the direction expected. Interestingly, the results for organizations with a low degree of publicness in Table 4.3 suggest that line managers in these organizations perceive more personnel red tape than those in organizations with a high degree of publicness ($\beta = .414, p < .01$). However, the medium publicness dummy variable appeared not to be statistically significant ($\beta = .162, p = ns$). Based on these results, our first hypothesis has to be rejected.

Second, we tested the hypothesis that the greater an organization’s publicness, the less it would have devolved HR. However, as was already suggested by the results of the correlation analysis, the regression analysis shows no statistically significant relationship between the degree of publicness and HR devolution using either dummy variable (publicness dummy 1: $\beta = -.068, p = ns$; publicness dummy 2: $\beta = .031, p = ns$). As such, our second hypothesis is rejected.

---

5 The following criteria are satisfied (based on Field, 2009): test of independent errors (Durbin-Watson: 1.97-2.25 (criterion > 1, < 3)), test of no perfect multicollinearity (VIF max values 1.611 (criterion < 10); tolerance min .621 (criterion > 0.1)). No exclusion of influential outlying cases was required (Cook's distance max. 0.36 (criterion < 1)). Criteria of homoscedasticity and normally distributed errors have also been met.
Third, we tested our hypothesis that the greater an organization’s degree of publicness, the more employees will perceive the organization as a model employer. Using our first publicness dummy variable, the regression analysis showed that organizations with the low levels of publicness behave less like a model employer than organizations with a high degree of publicness ($\beta = -0.339, p < .01$). This result thus supports our third hypothesis. However, using our second publicness dummy variable, representing medium publicness, the outcome was not statistically significant ($\beta = -0.118, p = ns$). Therefore, our third hypothesis is only partly supported.

The regression analysis also indicated some important effects related to the control variables. First, the results show a statistically significant negative relationship between educational level and personnel red tape ($\beta = -0.219, p < .05$) implying that less personnel red tape is perceived in organizations with more highly educated supervisors. Further, the results show a statistically significant positive relationship between educational level and HR devolution ($\beta = 0.241, p < .05$) implying that more HR activities are devolved to line managers in organizations with more highly educated supervisors. In addition, there was a statistically significant negative relationship between organizational size and the model employer role ($\beta = -0.216, p < .05$) implying that larger organizations are less seen as model employers. Finally, the results show a statistically significant positive relationship between educational level and the model employer role ($\beta = 0.309, p < .01$) implying that organizations with highly educated employees are more seen as a model employer.

### 4.4.2 The relationships between the HR design and the HR content

In this second part of our analysis, we now focus on whether the organizational characteristics regarding the rules and regulations concerning the implementation of HR practices (personnel red tape) and who is responsible for the implementation of HR practices (HR devolution), which together form the HR design, influence the model employer role (i.e., HR content). To test the associated hypotheses, we again conducted a regression analysis (Table 4.4).

First, we hypothesized that the more personnel red tape within an organization, the less employees will perceive the organization as a model employer. The results show that personnel red tape has a strong negative effect on the model employer role ($\beta = -0.641, p < .01$) supporting our fourth hypothesis. This indicates that a high level of personnel red tape does indeed reduce an organization’s adherence to the role of a model employer.

Second, we hypothesized that the more that HR was devolved within an organization, the more employees will perceive the organization as a model employer. In this respect, as was already suggested by the earlier correlation analysis, the regression results show that HR devolution has no statistically significant effect on the model employer role ($\beta = -0.076, p = ns$). We thus reject Hypothesis 5.
Table 4.4: Results of regression analysis

<table>
<thead>
<tr>
<th></th>
<th>Model employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (female = 1)</td>
<td>.104</td>
</tr>
<tr>
<td>Age category</td>
<td>.033</td>
</tr>
<tr>
<td>Educational level</td>
<td>.163*</td>
</tr>
<tr>
<td>Organizational size</td>
<td>-.165*</td>
</tr>
<tr>
<td>Low publicness (dummy)</td>
<td>-.039</td>
</tr>
<tr>
<td>(reference category = high publicness)</td>
<td></td>
</tr>
<tr>
<td>Medium publicness (dummy)</td>
<td>.066</td>
</tr>
<tr>
<td>(reference category = high publicness)</td>
<td></td>
</tr>
<tr>
<td>Personnel red tape</td>
<td>-.641**</td>
</tr>
<tr>
<td>HR devolution</td>
<td>-.076</td>
</tr>
<tr>
<td>HR devolution * Personnel red tape</td>
<td>-.151*</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.461</td>
</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.01

To test our sixth hypothesis, we have to assess how the two HR design variables together influence the model employer role. Drawing on theory, we hypothesized that the two HR design variables, personnel red tape and HR devolution, might counteract each other. Here, the results do indicate that there is a statistically significant interaction effect. Figure 4.3 illustrates the interaction and, reflecting our hypothesis, the plot shows a less negative slope for the relationship between HR devolution and model employer when personnel red tape is low. As such, Hypothesis 6 is supported by the data.

A further finding of note is that the statistically significant effect of the low publicness dummy variable on the model employer role detailed in Table 4.3 disappears on adding the HR design variables (personnel red tape and HR devolution). This may indicate that these HR design variables mediate the relationship between publicness and the model employer role. To test this possible mediating effect, we employed a bootstrapping method (Hayes, 2009; Preacher & Hayes, 2004). In addition to robust estimates, bootstrapping procedures provide bias-corrected confidence intervals that enable one to evaluate the significance of indirect effects. The reported results are based on bias-corrected and accelerated confidence intervals set at 0.95 with 1000 resamples (with replacement). If the interval between the lower and upper bounds does not span zero this is an indication that the indirect effect is statistically significant. In this respect, the results show a significant indirect effect (B = -.105, BootLLCI = -.1651; BootULCI = -.0593) of personnel red tape...
4.5 DISCUSSION AND CONCLUSION

In this study, we have drawn on the publicness literature and the HRM literature to consider whether variations between organizations in terms of their HR design and HR content could be associated with the degree of publicness of public organizations. In addition, we wondered whether organizational characteristics regarding the rules and regulations concerning the implementation of HR practices (personnel red tape) and who is responsible for the implementation of HR practices (HR devolution) would influence the model employer role (i.e., HR content). With these aims, our main research question was framed as: ‘How are publicness, HR design, and HR content of public sector organizations related?’.

The first of our findings concerned the relationship between the degree of publicness and HR devolution, personnel red tape and the model employer role. With respect to the first of these, HR devolution, the results failed to indicate any statistically significant linear relationship between the degree of publicness and HR devolution. In other words, a higher or lower degree of publicness does not lead to, or reflect, more or less HR devolution. This result suggests that the degree of publicness cannot explain organizational differences in HR devolution. Therefore, in future research, the explanation for these organizational differences needs to be sought in contextual variables other than the degree of publicness, or maybe our measure of publicness failed to appropriately capture the degree of publicness and this needs to be measured in another way.

Figure 4.3: Moderating role of personnel red tape

tape in the relationship between the low publicness dummy variable and the model employer role.

Figure 4.3: Moderating role of personnel red tape
With respect to the second variable, personnel red tape, the results show statistically significant differences between organizations with various degrees of publicness. This result supports the argument that the public sector does not exist, and that there are indeed differences between public organizations. However, contrary to our expectations, the results show that public organizations with a low degree of publicness have more personnel red tape than those with high levels of publicness. Although similar results were previously found by Buchanan (1975) and by Shim (2001) this is in contrast to our expectation, based on the majority of previous studies, that the more public an organization the greater the personnel red tape. This result could indicate that new bureaucracies are created when the distance of political control increases. This would be in line with the observations of some critics of NPM developments who note that central governments that place organizations at a greater distance then formulate strict rules and performance indicators to control them (Hood, 1991; Pollitt, 1993). Moreover, this finding suggests that line managers in organizations that are at a greater distance from political control have less autonomy in implementing HR practices. For example, they have greater difficulty in rewarding a good performer with higher pay and find it harder to fire a weak performer.

With respect to the model employer role, the findings fit our expectations. Based on previous research that compared HRM in public and private organizations (Boyne et al., 1999; Farnham & Horton, 1996), our expectation was that the greater the publicness the more the organization would be seen as a model employer. In our survey-based study, we indeed found significant differences in fulfilling the model employer role between organizations with low and with high degrees of publicness. By demonstrating variations in HRM within the public sector, we add insights to the existing public-sector HRM literature which tends to view the public sector as a unified whole to be compared with the private sector.

Although we expected the degree of publicness, as an important institutional context, to affect the HR design and HR content of organizations, we also assumed that organizational characteristics regarding rules and regulations concerning the implementation of HR practices (personnel red tape) and who is responsible for their implementation (HR devolution), in other words the HR design, would influence the model employer role (i.e., HR content). In this respect, the analysis showed that personnel red tape and the model employer role are related, whereas there appears to be no relationship between HR devolution and the model employer role. The results show that the more personnel red tape that line managers perceive, the less the organization is seen as a model employer. This finding is in line with our expectations and suggests that personnel red tape is an important determinant of the model employer role. This observation is further strengthened by the finding that, against our expectations, line managers in organizations with low publicness perceive more personnel red tape, and this might explain why these organizations are less perceived as a model employer. This suggests that personnel red tape mediates the relation-
ship between publicness and the model employer role. An additional test showed that
the relationship between the degree of publicness and the model employer role is indeed
mediated by line managers’ perceptions of red tape. Thus, this study has found that one
of the two considered HR design variables (personnel red tape) is important in determin-
ing the HR content variable (the employer role model). Moreover, based on theory, we
hypothesized that the two HR design variables considered, personnel red tape and HR
devolution, might counteract each other. That is, when HR devolution is implemented
in a context characterized by personnel red tape, it is possible that flexibility and freedom
might be limited because line managers perceive many rules and constraints. This study
backed this suggestion by showing that personnel red tape influences the relationship
between HR devolution and the model employer role such that when personnel red tape
is low, HR devolution has a less negative effect on the model employer role than when
personnel red tape is high. Based on these findings, personnel red tape seems to be an
important variable because, alongside its mediating role, personnel red tape also has an
important moderating effect on the model employer role.

Despite the contributions made by this study, the results should be interpreted with
cautions given the several limitations. Firstly, in this study, organizations were selected
on the basis of quota sampling. A disadvantage of this form of sampling is that not all
organizations have equal probabilities of being selected. This has potential consequences
for the external validity of this study with respect to certain subsectors. However, in terms
of this study, this issue is of less concern because organizations were compared on the basis
of their degree of publicness. Secondly, we opted to determine the degree of publicness
solely on the basis of ownership and funding. Nevertheless, we note that other elements
(such as mode of social control) have been used elsewhere (Boyne, 2002a). It is possible
that our measure of publicness failed to appropriately capture the degree of publicness and
this could have influenced the results of our study. Therefore, we would recommend rep-
licating our study while measuring the degree of publicness in another way. Thirdly, one
must recognize that the model employer concept is normative in nature: when should one
call an organization a model employer? In this study, we have attempted to be consistent
with the literature on public-sector HRM where this term is commonly used (e.g., Boyne
et al., 1999; Brown, 2004; Farnham & Horton, 1996; Shim, 2001). In measuring this
variable, we relied partly on the operationalization by Boyne et al. (1999) but, based on
more recent literature, extended the measurement to reflect contemporary ideas on being
a good employer. This highlights the reality that this concept is subject to change and this
should be taken into account when interpreting the results.

From a practical point of view, our study showed that executing HRM activities in the
public sector is largely the responsibility of line managers. As such, line managers need to
be given the space to implement HR practices; that is, line managers need to have discre-
tionary power in implementing HR practices. However, our study showed that personnel
red tape limits this discretionary power, with line managers perceiving many rules and constraints. When line managers are given responsibilities for implementing HR practices in an environment characterized by personnel red tape, we saw that fewer HR practices are implemented, and this undermines the model employer role the public sector claims it wants to maintain. In other words, the main challenge facing public organizations (and especially organizations with a low degree of publicness) in this area would seem to be dealing with personnel red tape.
Chapter 5

Does leadership style make a difference? Linking HRM, job satisfaction, and organizational performance

This chapter has been published as: Vermeeren, B., Kuipers, B.S., & Steijn, A.J. (OnlineFirst). Does leadership style make a difference? Linking HRM, job satisfaction, and organizational performance. Review of Public Personnel Administration.
5.1 INTRODUCTION

During the last three decades, public sector performance has become an increasingly important issue. With the rise of New Public Management, targets, performance and a more business-oriented management approach have come to play central roles within the public sector (Boyne et al., 2006; Osborne & Gaebler, 1992; Pollitt & Bouckaert, 2004). Several innovations in the field promised to increase the quality of public service while reducing its costs. However, research into Human Resource Management’s (HRM) contributions to these developments in the public sector has been scarce (Boyne et al., 1999; Gould-Williams, 2003). This neglect persists despite the fact that employees (those who deliver public services) are crucial to achieving superior public performance. High-quality services require highly qualified and motivated personnel (Batt, 2002).

Based on numerous studies in the private sector, we can conclude that Human Resource (HR) practices and organizational performance are at least weakly related (Boselie et al., 2005; Guest, 2011; Paauwe, 2009). However, research comparing HRM in the public and private sectors suggests that the HR policies and practices in these sectors differ in many important areas (Boyne et al., 1999). In particular, public organizations are more likely than private organizations to engage in activities associated with the role of model employer. Such activities imply commitment to staff training, trade union and workforce participation in decision making, promotion of equal opportunities and a concern for the welfare of employees to meet their personal and family needs. Given these empirical findings, we cannot simply assume that the relationship between HRM and performance will be the same in the public sector.

In private sector-based research on HRM and performance, the assumption is that an underlying causal link that runs through employee outcomes (in the form of employee attitudes and behavior) connects HR practices with organizational performance (Boselie et al., 2005; Guest, 2002; Paauwe & Richardson, 1997). In other words, HR practices are implemented to influence employees, with the ultimate aim to positively influence the organization’s performance. Job satisfaction is conceptualized as one of the key indicators of employee outcomes in HRM and performance research (Guest, 2002; Purcell & Hutchinson, 2007). Previous research has demonstrated a positive relationship between HRM and job satisfaction (e.g., Guest, 2002; Steijn, 2004) and between job satisfaction and performance (e.g., Hackman & Oldham, 1975; Judge, Thoresen, Bono & Patton, 2001; Taris & Schreurs, 2009). These findings support the idea that job satisfaction acts as a mediating variable in the relationship between HRM and performance. At this time, only a few studies have examined that mediating relationship (e.g., Ahmad & Schroeder, 2003; Gelade & Ivery, 2003), but more research is needed to understand how HRM and organizational performance are related. Such research is even more important in the context of the public sector, as previous research showed
differences in job satisfaction between public and private sector employees (DeSantis & Durst, 1996).

In general, in the HRM literature is stated that the HR practices perceived or experienced by employees will be those enacted by their line managers (Bowen & Ostroff, 2004; Paauwe, 2009; Purcell & Hutchinson, 2007; Wright et al., 2005). To influence employee outcomes positively, line managers require well-designed HR practices for use in their management activities. Den Hartog et al. (2004) stress the important role that line managers play in implementing an intended HR policy, as differences in implementation at this level may be attributable to line managers’ different leadership styles. Such differences in implementation and communication may lead to variation in employees’ HR perceptions. However, scholars have uncovered little empirical evidence that bears on the role of line managers’ leadership styles in HRM implementation. Focusing on leadership style can provide additional insight into how line managers influence the implementation of HR practices.

This study adds to prior research in three ways. First, we focus specifically on the relationship between HRM and organizational performance in the public sector. Second, we test whether job satisfaction acts within a public context as a mediator between HRM and organizational performance. Third, we focus on the influence of a line manager’s leadership style on the implementation of HR practices. Thus, our main research question is: ‘To what extent is the relationship between HRM and the performance of public organizations mediated by job satisfaction and what is the influence of a line manager’s leadership style on the implementation of HR practices?’ After a theoretical exploration of the literature on HRM, job satisfaction, organizational performance and leadership, we will formulate several hypotheses and test them using survey data from 6,253 employees of Dutch municipalities. We perform these tests using structural equation modeling (SEM). We will then discuss our findings. Finally, we conclude by describing suggestions for future research and implications for theory and practice.

5.2 THEORETICAL FRAMEWORK AND HYPOTHESES

The increased focus on performance in the public sector has encouraged a large amount of research (Halachmi & Bouckaert, 1996; Boyne et al., 2006). In particular, the impact of management on performance in public organizations has been frequently studied (Meier, O’Toole, Boyne & Walker, 2007; Nicholson-Crotty & O’Toole, 2004). The O’Toole and Meier (1999) model of management is well known and has often been used to test the impact managers may have on the performance of public organizations. In one of their articles, O’Toole and Meier (2009) focused on the internal side of management and, in particular, on the contribution of ‘the human side’ of public organizations to organiza-
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ational performance in public education. Their results indicate that the power of HRM in attracting and developing an organization’s human capital is important to organizational performance. Gould-Williams (2003), in turn, examined the relationship between HRM and performance in local government in the UK. He found that the more HR practices are used within an organization, the greater the impact on organizational performance. In both articles, the authors stated that more research is needed to explore the relationship between HRM and organizational performance in the public sector.

As the existing literature has paid little attention to the relationship between HRM and performance in a public context we must turn to the general HRM literature to get more insight. However, that literature contains a very diverse array of theoretical perspectives, definitions, measurements, methodologies and research fields (Boselie et al., 2005). Nevertheless, following Paauwe (2009), we can conclude that there is at least a weak relationship between HR practices and organizational performance. Yet, despite the fact that several studies indicate a link between HRM and performance, significant challenges to a full understanding of this relationship still exist (Boselie et al., 2005; Bowen & Ostroff, 2004; Guest, 2011; Paauwe, 2009).

In this study, we adopt a micro approach to HRM. This approach reflects a more operational view by focusing specifically on the effect of multiple HR practices on individuals (Wright & Boswell, 2002). By using this micro approach, we attempt to acquire more insight into the impact of multiple HR practices on individuals (measured through job satisfaction) and, subsequently, on organizational performance. By focusing on job satisfaction as a mediating factor, our aim is to generate a better understanding of what takes place between HRM and performance. Furthermore, scholars frequently identify the leadership style of line managers (who are increasingly charged with implementing HR practices) as a variable essential to a better understanding of the relationship between HRM and performance (Bowen & Ostroff, 2004; Paauwe, 2009; Purcell & Hutchinson, 2007; Wright et al., 2005). In this respect, Purcell and Hutchinson (2007) use the term ‘people management’ to mark the distinction between a line manager’s leadership style and the application of HR practices. This distinction is based on the assumption that line managers require well-designed HR practices to employ in their people management activities and that their leadership style will influence the way they enact these practices.

5.2.1 The mediating role of job satisfaction

Guest stated in 1999 that, given the growing interest in research on the relationship between HRM and performance, a focus on workers’ viewpoints has become increasingly important. An analysis of 104 articles by Boselie et al., (2005) confirms Guest’s impression that the linking mechanisms between HRM and performance have largely been disregarded. To understand how HR practices influence employees and improve worker
performance in ways that are beneficial to the organization, research is required that concentrates on employee perceptions of HR practices and establishes relationships between their job satisfaction and organizational performance, to take one example (Purcell & Hutchinson, 2007). One model that takes this focus is the Paauwe and Richardson (1997) model on HRM, HRM outcomes and organizational performance. In this model, the first element consists of HR practices such as recruitment, rewards and employee participation. This element influences the so-called HRM outcomes, such as job satisfaction and motivation. Both of these elements affect the third element, organizational performance, which involves performance indicators related to the effectiveness, quality and efficiency of the organization.

A variety of studies have examined separate parts of this model. Focusing specifically on the public sector, a number of studies have explored the relationship between HRM (element 1) and HRM outcomes (element 2) (e.g., Gould-Williams, 2004; Steijn, 2004) and between HRM outcomes (element 2) and organizational performance (element 3) (e.g., Kim, 2005; Ostroff, 1992). The model by Paauwe and Richardson (1997) adds to this research through its explicit focus on the mediating effect of HRM outcomes on the relationship between HRM and organizational performance. Moreover, the Paauwe and Richardson model adds to existing public sector research by promoting an explicit concentration on the concept of HRM itself. This concentration marks an important difference with the aforementioned management model by O’Toole and Meier (2009). Therefore, we use the Paauwe and Richardson model as the starting point for our research. However, while that model offers an exhaustive range of options to consider for each element, we limit ourselves to job satisfaction as the only included HRM outcome.

The introduction of job satisfaction enables us to refine the relationship between HRM and organizational performance. To a large extent, positive employee outcomes depend on employees’ perceptions of how much the organization cares about their well-being and values their contributions (Gould-Williams, 2007; Vermeeren, Kuipers & Steijn, 2011). In this respect, the degree of job satisfaction will depend on the fulfilment of employee’s needs and values (Hackman & Oldham, 1975). To increase organizational performance, it is likely important that the organization must not only meet the needs of customers, but also meet those of employees (Schneider & Bowen, 1993). This assertion is based on the assumption that if organizations care for their employees, these employees will care for the organization (and their customers). In other words, this argument is based on the assumption that a happy worker is a productive worker (Taris & Schreurs, 2009). In this respect, the degree to which certain HR practices are introduced can be conceptualized as a marker of the extent to which an organization values and cares for employees. As noted above, previous research has demonstrated a positive relationship between HRM and job satisfaction (e.g., Guest, 2002; Steijn, 2004) and between job satisfaction and performance (Hackman & Oldham, 1975; Judge et al., 2001; Taris & Schreurs,
Does leadership style make a difference?

These findings support the idea that job satisfaction acts as a mediating variable in the relationship between HRM and performance. However, this relationship is mostly studied in separate parts and seldom examined within one design. We will therefore study the relationships among HRM, job satisfaction and organizational performance in one model. Following this plan, our first hypothesis is:

H1: Job satisfaction acts as a mediating variable in the relationship between HRM and organizational performance.

5.2.2 The role of leadership style

For many years, HRM and leadership were separate research areas. Gradually, interest in combining these two areas has grown. The connection between these areas is based on the proposition that employees are likely to be influenced by both the HR practices they experience and their line manager’s leadership style (Purcell & Hutchinson, 2007). Line managers need HR practices to support their management activities and the way line managers enact these practices is influenced by their leadership style. However, previous research on the relationship between HRM and performance paid little attention to line managers’ leadership styles. One of the few studies that did attend to leadership style demonstrated that both leadership and employee satisfaction with HR practices have a strong and independent impact on such employee attitudes as job satisfaction and commitment (Purcell & Hutchinson, 2007).

However, this demonstration does not allow us to say much about the influence of different leadership styles on the use of HR practices within an organization. It is appropriate to assume a relationship exists between different leadership styles and HRM because the choice of which HR practices to use appears to be linked to leadership style. For example, Zhu, Chew and Spangler (2005) have shown that transformational leaders influence organizational outcomes by their use of ‘human-capital-enhancing HRM’. Human-capital-enhancing HRM is defined as an approach to managing people that achieves competitive advantage through the strategic development of a highly committed and capable workforce (Zhu et al., 2005). Their assumption is that transformational leaders possess a clear vision of what the organization will be, and what it will do, in the future. HRM plays a critical role in the communication process between leaders and employees because without such HRM activities as staffing and training the leader’s vision will not be transmitted effectively.

Today, scholars in the field of leadership research use many and varied conceptualizations of leadership. Despite differences among these conceptualizations, we can detect a certain

7 Although there is some disagreement about the precise relationship between job satisfaction and performance, the literature generally assumes that greater job satisfaction is associated with better individual and organizational performance (Judge et al., 2001; Taris & Schreurs, 2009).
commonality. This commonality is not of jargon, but of the ideas that underpin the language used. Many conceptualizations are based on a distinction between an internally and intrinsically directed, people-oriented and stimulating leadership style versus an externally and extrinsically directed, task-oriented and correcting leadership style (Howell & Avolio, 1993). For example, this distinction underpins the differentiation made between transformational versus transactional leadership (Bass & Avolio, 1994) and participative versus authoritative leadership (Likert, 1961). With respect to the relationship between leadership style and HRM, Guest (1987) has argued that a more correcting leadership style could be linked to hard HRM and that a more stimulating leadership style could be linked to soft HRM. In his research, he refers to the classic distinction of McGregor (1960) between theory X and theory Y. The ‘hard’ version of HRM is widely acknowledged to place little emphasis on workers’ concerns. In contrast, ‘soft’ HRM would be more likely to pay attention to workers’ outcomes (Guest, 1987).

We will also use McGregor’s distinction between theory X and theory Y. This distinction, despite frequent criticism (Bobic & Davies, 2003), still remains useful for distinguishing between the different leadership styles a line manager can adopt. Theory X assumes that employees are not self-motivated and will avoid work if possible. Employees, therefore, must be closely supervised and corrected when necessary. Employees are seen as factors in the production process. Theory Y, in contrast, assumes that employees are ambitious and self-motivated and can play a crucial role within the organization. Line managers must ensure that their employees are properly stimulated by paying attention to their values and needs. It is in this context that Guest (1999) states that if more HR practices are used, the impact on workers will be larger. Based on the idea that an HR system should be designed to meet employees’ needs for skills and motivation and provide them with the opportunity to profile themselves to improve their performance (Appelbaum et al., 2000), we would expect that a stimulating leadership style (theory Y) would be accompanied by the use of a greater number of HR practices tailored to invest in employees and meet their needs than would be the case for a correcting leadership style (theory X), in which employees are seen as factors in the production process. This leads us to our second hypothesis, which consists of two separate parts:

H2a: A stimulating leadership style has a positive effect on the amount of HR practices used within an organization.

H2b: A correcting leadership style has a negative effect on the amount of HR practices used within an organization.

Figure 5.1 shows the overall theoretical model representing the hypotheses developed above. In the following sections, we present the methodology for testing this model and our empirical results.
Does leadership style make a difference?

Chapter 5

5.3 RESEARCH METHODS

A quantitative study was carried out to address our research question. This section describes the data and the measurement procedure, including the results of a confirmatory factor analysis using AMOS version 16.

5.3.1 Data

To test our hypotheses about the direct and indirect relationships between the variables we apply a quantitative research design. For our analysis, we used data from a Dutch national survey on well-being among municipal employees. In 2005, a public sector organization representing municipalities approached 29,626 employees of Dutch municipalities in all functional areas (e.g., administrative, sociocultural, legal and ICT functions), asking them to fill out a questionnaire about employee well-being via internet or mail. Of these employees, 7,918 respondents participated in the research. The respondents with missing data for the analyzed variables were removed from the sample, which resulted in a file with 6,253 respondents. The data for the resulting sample are as follows: 58% are male, the predominant age is 45-54 years (37.5%), and the predominant educational level is secondary (vocational) education (43.1%). When compared with general population data (A+O fonds Gemeenten, 2005), the sample’s deviation from the general population is small (2% to 6%). Despite the response rate of 26.7% the respondents are generally representative of the population with respect to gender, age, and educational level. The respondents also worked in different municipalities spread across the Netherlands and in organizations of various size.

Figure 5.1: Conceptual model
5.3.2 Measures

**HRM**

HRM and performance research exhibits little consistency in the selection of HR practices by which to measure HRM. Boselie et al. (2005) analyzed 104 important HRM and performance studies and identified as many as 26 different HR practices that are used in different studies. No single agreed, or fixed, list of HR practices or systems of practices exists by which to measure HRM (Guest, 2011; Paauwe, 2009). Nevertheless, a certain consensus regarding the measurement of HRM has emerged in the scientific literature on HRM and performance during the last decade. More than half of the articles published after 2000 made use of AMO theory (Paauwe, 2009). AMO (Ability, Motivation and Opportunity) theory proposes that an HR system should be designed to meet employees’ needs for skills and motivation and, after meeting those needs, provide them with opportunities to use their abilities in various roles (Appelbaum et al., 2000). The underlying idea is that employees will perform well if they have the requisite abilities, when they are motivated and when they obtain the opportunity to profile themselves (Appelbaum et al., 2000).

In our study, an existing data set is used for secondary data analysis. Although this data set can be employed to search for the presence of HR practices within organizations, it was not developed for this specific purpose. The survey only measures ten different HR practices used to a limited extent, and it is not able to measure all the aspects of HRM proposed by AMO theory. In particular, the survey does not allow us to determine whether an HR system provides employees with opportunities to use their abilities in various job roles. Despite this limitation, we employ this list of practices as an indicator of the extent to which HR practices were used in public organizations.

Researchers often advocate the study of an HR system instead of individual HR practices (Wright & Boswell, 2002). Organizations rarely use HR practices in isolation; they more typically employ them in combination. This system approach adheres to the principle ‘the whole is more than the sum of its parts’ and examines a bundle of HR practices. In this study, we have followed the system approach. In the survey, employees were asked about the use of ten different HR practices within their organization (job evaluation conversations, assessment interviews, personal development plans, training plans, career plans, competency management, population ageing HR policy, mobility management, job rotation and individual coaching). This particular list has been used in previous research (Steijn, 2004). In accordance with Guest’s suggestion, we counted how many of these practices were present in the organization according to its employees. Cronbach’s alpha is widely used to demonstrate consistency among a set of items and, based on the score, it might be argued that a bundle of HR practices can be observed (Guest, Conway & Dewe, 2004). The Cronbach’s alpha of the HR bundle is .70. This is within the range for acceptable internal consistency. The assumption is that the use of more HR practices
suggests the existence of a better developed HR policy within an organization. In making this assumption, we can only say something about the surplus value of HRM in general terms. However, we do not know whether some individual practices have stronger effects than others, how each of the individual practices affects performance and whether complementarities or synergistic interdependent relationships among such practices can further enhance organizational performance (Delaney & Huselid, 1996; Guest et al., 2004; Sels, De Winne, Maes, Delmotte, Faems & Forrier, 2006).

**Job satisfaction**
Job satisfaction is measured using one item: ‘All things considered, how satisfied are you with your job?’ The answers were given using a five-point Likert scale ranging from very dissatisfied (1) to very satisfied (5). Although there is some disagreement regarding how to measure job satisfaction, previous research shows that job satisfaction can reliably be measured using only one item (Nagy, 2002; Wanous, Reichers & Hudy, 1997).

**Organizational performance**
To measure organizational performance, both perceptions of performance and objective performance indicators can be studied (Delaney & Huselid, 1996; Kim, 2005). In this paper, the focus is on employee perceptions of organizational performance because objective performance data are not available in the database. When objective performance data are not available, subjective (perceptual) performance measures may be a reasonable alternative (Delaney & Huselid, 1996; Kim, 2005). There is evidence of a strong correlation between perceptual and objective measures at the organizational level, although there is always some doubt regarding perceptual measures of performance (Kim, 2005). In this study, we used one item to measure performance, ‘the perception that the organization is doing good work,’ utilizing a five-point Likert scale, ranging from totally disagree (1) to totally agree (5). The use of only one indicator is clearly an important limitation, but at least we are able to characterize how employees assess their organization’s performance.

**Leadership style**
To measure the influence of leadership style, we used two latent variables that correspond to the distinction between stimulating and correcting leadership (cf. Bass & Avolio, 1994; Likert, 1961; McGregor, 1960). The specific items can be found in Appendix 1. All answers were given on a five-point Likert scales ranging from totally disagree (1) to totally agree (5).

Descriptive and reliability statistics were computed for the individual items and the two scales (see Table 5.1). To show the strength of the associations between the items, Table 5.1 displays the correlations matrix. The correlations of the items that measure the same construct are highlighted, and all are significant at the 1% level.
Table 5.1: Measurement Model: Means, standard deviations, correlations, standardized estimates, $R^2$ (N = 6253)

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<thead>
<tr>
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<th>M</th>
<th>SD</th>
<th>X1</th>
<th>X2</th>
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<th>Y1</th>
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<th>Y4</th>
<th>Y5</th>
<th>Y6</th>
<th>Y7</th>
<th>Y8</th>
<th>Y9</th>
<th>Standardized ML Estimates (Standard Errors)</th>
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<td>.544</td>
<td>.533</td>
<td>.711 (.012)</td>
<td>.506</td>
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</table>
To test whether the distinction between the two leadership styles is supported by the data, we performed confirmatory factor analysis using AMOS version 16. Unlike exploratory factor analysis, in which only the number of factors and observed variables are specified, confirmatory factor analysis permits specification and testing of a more complete measurement model (Byrne, 2001). The simultaneous estimation of the measurement models allows us to examine the relationships between the items and their latent constructs as well as the relationships among the constructs themselves. Furthermore, one also receives information on whether the items load only on their target variable, or whether they load on the other dimension as well (unidimensionality of factors). Based on the results of the confirmatory factor analysis, the measurement model was modified where necessary. The modifications made to enhance the model included the introduction of error correlations. Reasons for error correlation include respondents’ inability to answer questions, a lack of effort on the part of the respondents to provide the correct answers or other psychological factors, or inadequately worded questions on the survey questionnaire (Byrne, 2001).

For evaluating the convergent validity of the measurement model, Anderson and Gerbing (1988) suggest examining the construct loading and determining whether each estimator’s coefficient is significant. For this model, the regression weights range from .69 to .89 and all are significant (see Table 5.1). These coefficients may be interpreted as indicators of the validity of the observed variables, that is, how well they measure the latent dimension or factor. For this model, convergent validity has been achieved. With regard to discriminant validity, we note that the items related to the same construct are always more closely correlated with one another than with the items for the other construct. In addition, Bagozzi and Philips (1982) suggest that discriminant validity in SEM is achieved if the unconstrained model has a significantly lower chi-square value than the constrained model. In this study, the chi-square value for the unconstrained model (CMIN 1711.061/df 62) appears to be significantly lower than for the constrained model (CMIN 2722.621/df 63). Thus, for this model, discriminant validity has been achieved. Finally, the $R^2$ in Table 5.1 is a measure of reliability, which indicates how consistently the observed variable measures the latent dimension. The explained variance corresponding to the observed variables indicates that the respective factor explains an adequate portion of the variance (between 47% and 78%) (Perry, 1996).

The overall fit of the measurement model was tested using absolute and relative fit indices, which indicated a good fit. In general, a chi-square test is used to assess the sample data in relation to the implied population data. However, there are concerns about using the chi-square test because its probability is sensitive to sample size (Jöreskog, 1993). In larger 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 popula-
tion covariances will lead to a higher chi-square value if the sample size increases\textsuperscript{9}. As a result, a number of alternative fit measures have been developed (Hu & Bentler, 1999), including the Goodness of Fit Index (GFI), the Adjusted Goodness of Fit Index (AGFI), the Normed Fit Index (NFI) and the Comparative Fit Index (CFI). The values for this model were .959 (GFI), .940 (AGFI), .972 (NFI), and .973 (CFI). In the social sciences, a cutoff value of .95 is the prescribed norm (Hu & Bentler, 1999). Based on these fit indices, one can conclude that the model is a good fit. In addition, the Root Mean Square Error of Approximation (RMSEA) value of .065 indicates that the model is a reasonable fit (Byrne, 2001).

Finally, a traditional measure of scale reliability is Cronbach’s alpha, which measures internal consistency among items on a scale. The Cronbach’s alpha for the stimulating leadership scale is .95 and for the correcting leadership scale is .78. Based on these results, one may conclude that the reliability coefficients provide independent corroboration for the results obtained from the use of confirmatory factor analysis. The results show that the distinction between the two leadership styles is supported by the data.

**Control variables**

Of course, several other variables can affect HRM, job satisfaction, and organizational performance. Therefore, Guest (1999) emphasized that several controls must be in place to take account of individual and organizational factors. Following Guest, our control variables are divided into two groups. In the first group, we controlled for individual characteristics (gender, age, and educational level). These controls are based on the assumption that different groups within organizations may be managed differently with the result that their perceptions will be different. Then, we controlled for one important organizational characteristic: organizational size. This control is based on the assumption that large organizations pursuing improved performance have more resources with which to provide their employees a large HR policy.

We coded gender as a dummy variable (1 = female). The category of age was subdivided into five categories (1 = 15-24 years; 2 = 25-34 years; 3 = 35-44 years; 4 = 45-54 years; 5 = 55 years and older). Educational level was also subdivided into five categories (1 = primary education; 2 = lower vocational education; 3 = higher general secondary education, preparatory academic education; 4 = higher vocational education, candidate exam; 5 = scientific education). Finally, the category of organizational size was subdivided into seven categories (1 = fewer than 100 employees; 2 = 101-500 employees; 3 = 501-1000 employees; 4 = 1001-5000 employees; 5 = 5001-10,000 employees; 6 = 10,001-20,000 employees; 7 = more than 20,000 employees). Because we used secondary data analysis, we were restricted to these categories in measuring the control variables.

\textsuperscript{9} Chi-square value = N * difference between sample covariances and implied population covariances.
5.4 RESULTS

The hypothesized relationships among the variables were analyzed using SEM. This statistical methodology allows us to test the full conceptual model in a simultaneous analysis. In addition, SEM enables us to analyze simultaneously the direct and indirect relationships among the dependent and independent variables. Finally, SEM also enables us to compare different models (Byrne, 2001). We built our SEM model using AMOS version 16. To examine whether the data were normally distributed, the index of multivariate kurtosis was considered. Bentler (2005) has suggested that, in practice, values above 5.00 are indicative of non-normality. Our data have a score of 4.94, which indicates that it is normally distributed.

In Table 5.2, the means, standard deviations and correlations of the study variables are presented.

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<th>7</th>
<th>8</th>
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<td>.493</td>
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<td>.958</td>
<td>-.223**</td>
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<td>(3) Educational level</td>
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<td>1.169</td>
<td>.071**</td>
<td>-.116**</td>
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<td>(4) Organizational size</td>
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<td>.045**</td>
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<td>3.78</td>
<td>.933</td>
<td>.037**</td>
<td>-.014</td>
<td>.008</td>
<td>-.016</td>
<td>.150**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7) Organizational performance</td>
<td>3.48</td>
<td>.956</td>
<td>-.011</td>
<td>.005</td>
<td>.040**</td>
<td>.043**</td>
<td>.206**</td>
<td>.319**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) Stimulating leadership</td>
<td>3.46</td>
<td>.914</td>
<td>.008</td>
<td>-.002</td>
<td>-.008</td>
<td>.000</td>
<td>.251**</td>
<td>.416**</td>
<td>.443**</td>
<td></td>
</tr>
<tr>
<td>(9) Correcting leadership</td>
<td>3.47</td>
<td>.854</td>
<td>-.007</td>
<td>.014</td>
<td>-.045**</td>
<td>.016</td>
<td>.188**</td>
<td>.240**</td>
<td>.325**</td>
<td>.649**</td>
</tr>
</tbody>
</table>

** p < 0.01

The results show that, of the ten HR practices, employees observed, on average, the use of four HR practices within their organization. The most frequently observed HR practice was job evaluation conversations, and the least frequently observed practice was job rotation. Employees were generally satisfied with their jobs. The average score for this variable on a five-point scale was 3.78. Moreover, employees perceive the organization to be doing good work, with the average score on a five-point scale being 3.48. Finally, the average
score for the stimulating leadership style was 3.46 on a five-point scale; the average score for the correcting leadership style was 3.47.

To test the proposed relationships, a causal structure was posited that resulted in a structural equation model. First, we tested the hypothesis that job satisfaction acts as a mediating variable in the relationship between HRM and organizational performance. A distinction can be made between fully mediated and partially mediated models (Wood, Goodman, Beckman & Cook, 2008). Therefore, in SEM, two different models must be created. In the first model, the direct relationship between HRM and organizational performance was fixed at zero. In the second model, the direct relationship and indirect relationship between HRM and organizational performance were estimated. By using the chi-square difference test and other global-fit measures, one can test the models against each other. In Table 5.3, the fit indices are presented. The chi-square difference test implies that the relationship between HRM and organizational performance is partially mediated by job satisfaction. Furthermore, the partially mediated model shows a better model fit than the fully mediated model.

**Table 5.3: Fit indices for the fully and partially mediated models**

<table>
<thead>
<tr>
<th>Model</th>
<th>Chi²</th>
<th>df</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully mediated model</td>
<td>189.389</td>
<td>7</td>
<td>.990</td>
<td>.970</td>
<td>.874</td>
<td>.877</td>
<td>.065</td>
</tr>
<tr>
<td>Partially mediated model</td>
<td>8.670</td>
<td>6</td>
<td>.999</td>
<td>.998</td>
<td>.994</td>
<td>.998</td>
<td>.008</td>
</tr>
</tbody>
</table>

In Figure 5.2, the partially mediated model is shown. Only the statistically significant relationships are described (with a significance level of 0.01). The numerical scores on all lines indicate standardized regression coefficients (beta), and the scores in brackets are the explained variance.

**Figure 5.2: Result of structural equation modeling**

Second, we analyzed the effect of leadership style on HRM. We assumed that the amount of HR practices perceived by employees would be influenced by their line managers’ leadership styles. We distinguished between stimulating and correcting leadership to test our
hypotheses that a) a stimulating leadership style has a positive effect on the amount of HR practices used within an organization, and b) a correcting leadership style has a negative effect on the amount of HR practices used within an organization. The overall model fit was tested using several fit indices. The model fit values were .999 (GFI), .997 (AGFI), .996 (NFI), and .998 (CFI), implying that the model was a very good fit. Additionally, the RMSEA, with a value of .015, also indicated that the model is a good fit. The model in Figure 5.3 is the result. Only the statistically significant relationships are shown (with a significance level of 0.01). The numerical scores on all lines indicate standardized regression coefficients (beta), and the scores in brackets are the explained variance. The results show that a stimulating leadership style has a significant positive effect on the implementation of HR practices, supporting Hypothesis 2a, whereas a correcting leadership style appears to have no effect on the amount of HR practices used, rejecting Hypothesis 2b.

When we compare the model in Figure 5.2 with the model in Figure 5.3, we see that the first model shows a statistically significant and positive relationship between HRM and organizational performance. However, the model in Figure 5.3 shows that this relationship becomes weaker when the variables related to leadership style are included. Therefore, we also examined whether line managers’ leadership style influences the relationship between HRM and performance (moderating effect). However, these effects do not appear to be significant. These results imply that leadership style has its own, independent, effect.

Finally, model validity was achieved through cross-model validation. Camilleri (2006) suggests attaining cross-validation in three phases. In the first phase, data is divided into two data sets. One data set consists of a random selection of 20% of the data collected from respondents; the second data set consists of a random selection of 80% of the data collected. In the second phase, SEM by means of a path analysis that calculates the structural fit index (measured by $R^2$) is conducted for both the data sets. The third
phase consists of examining the differences between the calculated structural fit indices obtained for each data set. The extent of model validity is determined by the similarity in the variance accounted for by each data set. The results of the cross-model validation are presented in Table 5.4. Given the fact that the differences in the explained variance are small, the cross-model validation provided satisfactory results.

Table 5.4: Results of cross-model validation showing $R^2$ for the three samples

<table>
<thead>
<tr>
<th>Predicted variable</th>
<th>Full sample</th>
<th>20% sample</th>
<th>80% sample</th>
<th>Difference in $R^2$ for 20-80% sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM</td>
<td>.102</td>
<td>.109</td>
<td>.100</td>
<td>.009</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>.177</td>
<td>.197</td>
<td>.173</td>
<td>.024</td>
</tr>
<tr>
<td>Organizational</td>
<td>.229</td>
<td>.240</td>
<td>.231</td>
<td>.009</td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5.5 DISCUSSION AND CONCLUSION

#### 5.5.1 Discussion

Looking at the main independent and dependent variables, we expected that a line managers' leadership style has an influence on the implementation of HR practices. Our research provides empirical evidence that a line manager’s leadership style, and specifically a stimulating leadership style, is important to the HRM-performance relationship within an organization. When we compare Figure 5.2 with Figure 5.3, we see that adding 'leadership' importantly increases explained variance. As such, the results of this study emphasize the important role of line managers in the HRM and performance model, as was previously suggested by Wright et al. (2005) and Paauwe (2009), among others. When we look at the results in greater detail, we find evidence of the positive relationship between a line manager’s leadership style and the HR practices conducted within the organization, as previously shown by Purcell and Hutchinson (2007) and Zhu et al. (2005). More specifically, a stimulating leadership style is demonstrated to have an important effect on the implementation of HR practices. In contrast, a correcting leadership style appears to have no effect on the amount of HR practices used. Thus, our hypothesis that a stimulating leadership style has a positive effect on the amount of HR practices used within an organization is confirmed, whereas our hypothesis that a correcting leadership style has a negative effect on the amount of HR practices used within an organization must be rejected. Nevertheless, the results are in line with the research discussed by Guest (1987), which argued that a stimulating leadership style (Theory Y) could be linked to soft HRM (HRM focusing on the development, motivation and commitment of employees). Further, it would be interesting in future research to test Guest’s (1987) idea that Theory
X (with a correcting role for the line manager) is linked to hard HRM (a focus on rewards and determinations of whether employees do what the organization requires). To study this relationship, data must include such elements of HRM as performance-related pay. An additional interesting result is that a stimulating leadership style appears to be very important to employees’ degree of satisfaction, while the correcting leadership style has a negative influence on job satisfaction. Finally, both a stimulating leadership style and a correcting leadership style have a positive effect on organizational performance, although the effect of the stimulating leadership style is much larger.

Our research also provides empirical evidence for the mediating relationship between HRM and organizational performance. The results indicate both a direct effect and an indirect effect of HR practices on organizational performance, as is already assumed in the Paauwe and Richardson (1997) model. Our analysis shows that when employees perceive a more elaborate use of HR practices, organizations do achieve a better score for their performance. Moreover, when more HR practices are used, employees experience greater satisfaction, which positively influences organizational performance. This study adds to previous research by confirming the hypothesis that job satisfaction acts as a mediating variable in the relationship between HRM and organizational performance. This important finding provides more insight into employees’ reactions to HRM and its effect on organization performance. These reactions have been largely disregarded in previous research (Boselie et al., 2005).

Looking at the results in greater detail, we see that older employees and employees with higher education levels perceive a greater use of HR practices. This suggests that different groups within organizations (e.g., younger and older employees) are managed differently. In addition, organizational size has a relatively large effect on HRM, as can be concluded from its high beta weight. In line with Guest’s (1999) assumption, this finding indicates that the HR policy of organizations is influenced by such contextual variables as the size of the organization.

Finally, our study supports the idea that a focus on HRM as a method of increasing organizational performance is also relevant in the public sector. Based on this study, conclusions regarding the relationship between HR practices and organizational performance in private organizations (cf. Paauwe, 2009) also appear applicable to public sector organizations. In line with the results of previous research (e.g., Gould-Williams, 2003; Kim, 2005; O’Toole & Meier, 2009), public organizations appear to be more successful if they value their employees and if they utilize a more extended set of HR practices. In addition, this study illustrates the important role line managers play in this relationship in the public sector.
5.5.2 Conclusion

In the introduction, we stated that public sector performance has become an increasingly important issue over the past three decades. Several innovations in the field have promised to increase the quality of public service while reducing its costs. However, research into the contributions of HRM to these developments has been scarce. Our main research question, therefore, was: ‘To what extent is the relationship between HRM and the performance of public organizations mediated by job satisfaction and what is the influence of a line manager’s leadership style on the implementation of HR practices?’

Based on the data and arguments presented in this study, one can conclude that a positive relationship exists between HRM and organizational performance in the public sector. Specifically, by studying the relationships among HRM, job satisfaction, and organizational performance in a single model, this research showed that job satisfaction partly mediates the relationship between HRM and organizational performance. Moreover, this study showed that the choice to use HR practices is influenced by a line manager’s leadership style.

Despite these findings, the limits of this paper suggest lines of further research. This study used a cross-sectional dataset restricted to Dutch municipalities. Its findings, therefore, have limitations with respect to internal and external validity. A longitudinal data set would increase internal validity, as such data enable researchers to make stronger causal claims. HRM-performance research is dominated by cross-sectional research, which generates considerable discussion of questions regarding ‘what came first?’ (Guest, 2011). Are public organizations more successful if they value their employees, or do public organizations value their employees if they are more successful? Or are both propositions true? A similar problem can be observed with respect to the relationship between job satisfaction and performance (Judge et al., 2001; Taris & Schreurs, 2009). For this reason, a longitudinal research design would be preferable in further research. With respect to external validity, we have examined the HRM and performance relationship in the public sector by focusing on Dutch municipalities. More research is needed to determine whether the HRM-performance relationship holds for different kinds of public sector organizations and different countries. Finally, the selection of the data source (survey) may have influenced some of the results. The use of only one survey instrument may create distortions in the data, in particular regarding common method bias (Podsakoff & Organ, 1986). This is specifically a question with respect to the connection between job satisfaction and organizational performance. The strong relationship between these two variables may be attributable to the fact that employees were asked to rate both their job satisfaction and their perceptions of organizational performance. This potential problem highlights the importance of replicating our research, ideally by using objective performance indicators.

This study not only generates recommendations to further enhance HRM and performance research in the public sector. Based on its observations, this study also provides possible starting points for improving the performance of public organizations through
their employees. To increase organizational performance, it appears important that organizations invest in employees’ needs by implementing HR practices. Moreover, this study suggests that the stimulating leadership style is very important to employee satisfaction, while the correcting leadership style negatively influences job satisfaction. This suggestion further implies that when a public sector organization wishes to acquire a satisfied staff, its line managers must assume a stimulating role. Based on our findings, attention to a line manager’s leadership style appears to be a prerequisite for successfully implementing HRM within an organization. More specifically, this study indicates that there is an important role for line managers to play in implementing HRM, developing a satisfied workforce and enhancing organizational performance.

Note: The authors would like to thank A+O fonds Gemeenten and especially George Evers for providing the data.
Chapter 6

Variability in HRM implementation among line managers and its effect on performance: A 2-1-2 mediational multilevel approach

This chapter has been conditionally accepted for publication in an international journal as: Vermeeren, B. Variability in HRM implementation among line managers and its effect on performance: A 2-1-2 mediational multilevel approach.
Chapter 6

6.1 INTRODUCTION

Over the last few decades, a substantial body of research has examined the relationship between Human Resource Management (HRM) and organizational performance (see Boselie et al., 2005; Guest, 2011; Paauwe et al., 2013). Although the relationship between HRM and performance outcomes appears to be quite robust, the mechanisms by which HRM affects performance remain puzzling (Bowen & Ostroff, 2004; Huselid & Becker, 2011). In this area, previous research has paid little attention to HRM implementation within organizations (Guest, 2011; Paauwe et al., 2013). However, as HR policies may not be implemented (uniformly) within organizations, an examination of HRM implementation is important for understanding the HRM-performance relationship.

With respect to the HRM implementation process, line managers and employees play important roles. In the case of line managers, there is substantial evidence that line managers have to increasingly execute several HRM activities (Purcell & Hutchinson, 2007). Employees inherently play an important role because HR practices are implemented to affect their behavior, with the ultimate aim of positively affecting organizational performance (Bowen & Ostroff, 2004; Kehoe & Wright, 2013). Following this line of reasoning, Nishii and Wright (2008) have observed that, in addition to the intended HR system designed by the HR department, actual (i.e., the system implemented by line managers) and perceived (i.e., how employees interpret the system) HR systems are important in explaining the effects of HRM on performance. However, to date, few studies have considered this process within an organization (Paauwe et al., 2013).

Much research that has examined the HRM-performance relationship has done so at the organizational level of analysis and thereby neglected variability in HRM implementation at the work unit level. Variability often exists at the work unit level because line managers may differ in how they implement HRM (Nishii & Wright, 2008). As a result, insight into the content of HR policies of organizations is not sufficient to enable an understanding of how HRM and performance are related. To understand the variability in HRM implementation, more insight into line managers’ leadership behavior is needed (Den Hartog et al., 2004; Paauwe et al., 2013). In this respect, previous research has emphasized that the behavior of line managers can be explained by their leadership styles (Bass, 1990; Podsakoff, MacKenzie, Moorman & Fetter, 1990), as line managers will implement the specific HR practices that fit their leadership style (Guest, 1987). However, little research has sought to relate the role of line managers’ leadership styles to their implementation of HR practices.

Therefore, this study aims to contribute to the HRM and performance literature in two ways. First, in examining unit performance, we will empirically test some of the theoretical assumptions of Nishii and Wright (2008) by separating HR practices as implemented by line managers from HR practices as perceived by employees. This responds to recent calls...
in the literature to examine the process by which HRM affects performance (Guest, 2011; Pauwwe et al., 2013). Second, we will show that the implementation of HR practices of line managers is affected by their leadership styles. Although this relationship is suggested in the literature (Bass, 1990; Guest, 1987; Zhu et al., 2005), it has seldom been tested. Our research question is: ‘To what extent do line managers’ implementation of HRM and its perception by employees affect perceived unit performance?’. To answer this question, we will develop a model and test it, using a relatively new multilevel mediational analysis technique that takes both work unit and employee levels into account.

6.2 THEORETICAL FRAMEWORK AND HYPOTHESES

6.2.1 The relationship between HRM and performance

Understanding the relationship between HRM and organizational performance is one of the longstanding goals of HRM research. The available research on this topic is therefore extensive (for an overview, see Boselie et al., 2005; Combs et al., 2006; Jiang et al., 2012). A distinguishing feature of strategic HRM is an emphasis on HR systems rather than on individual HR practices as drivers of performance (Lepak et al., 2006). In this respect, Wright and Boswell (2002) argue that it is the overall collective interaction of HR practices that affects employees and ultimately organizational performance. In this study, we follow this system approach by examining the overall level of HRM and its impact on performance. Although specific HR practices included in HR systems vary across studies, a commonality across all so-called ‘high-performance approaches’ is a focus on promoting employees’ abilities (A), motivations (M) and opportunities (O) (AMO) to perform (Appelbaum et al., 2000; Kehoe & Wright, 2013; Pauwwe, 2009). In previous years, several studies have shown a relationship between HRM and organizational performance (e.g., Gelade & Ivery, 2003; Huselid, 1995). Nevertheless, there are no clear conclusions regarding the mechanisms behind this relationship (Bowen & Ostroff, 2004; Huselid & Becker, 2011), a situation often referred to as the black box issue. To an extent, the situation arises from the fact that much of the research on HRM and performance has focused on two variables that are quite far apart, namely, intended HRM and organizational performance, both situated at the organizational level (Boselie et al., 2005). In this respect, Guest was still able to state in 2011 that there was little empirical insight into what is happening within organizations. One of the main unanswered questions according to Guest (2011:7) is: “What is the process whereby HRM can have an impact on performance?”.

In previous years, many so-called process models to examine the HRM-performance relationship have been proposed (Boselie et al., 2005; Guest, 1997; Pauwwe & Richardson, 1997). In these models, it is assumed that the relationship between HRM and organizational performance is (partially) mediated by employees’ attitudes and behavior, for
example, by job satisfaction and turnover. In more recent models (Nishii & Wright, 2008; Purcell & Kinnie, 2007; Purcell et al., 2009), the concept of HRM has been refined, and differences between intended, actual and perceived HRM have been suggested. Nishii and Wright (2008) observe that, in addition to the intended or designed HR system, as specified in official documents and HR handbooks, the actual HR system (i.e., as implemented by line managers) and the perceived HR system (i.e., as experienced by employees) are also important in explaining the effects of HRM on performance. In other words, in these models, the different levels (i.e., organizational, work unit, and employee level) within organizations are highlighted. As a result, recent studies increasingly address levels other than the organizational level (i.e., unit level and employee level) in examining the HRM-performance relationship (Aryee, Walumbwa, Seidu & Olaye, 2012; Den Hartog et al., 2013; Kehoe & Wright, 2013; Liao, Toya, Lepak & Hong, 2009; Takeuchi, Chen & Lepak, 2009). This builds on Wright and Boswell’s call (2002) to bridge macro (organizational level) and micro (individual level) research. Macro research reflects the more strategic HRM view, which mainly focuses on the linkage between HRM and organizational performance, while micro research reflects the more functional view and focuses on the effect of HRM on individuals. A model that combines this macro-micro approach is the multilevel process model of Nishii and Wright (2008), cited above. A central assumption of Nishii and Wright’s (2008) model is that variability in HRM not only exists between organizations but also within organizations and that any variations between line manager implementation and employees’ perceptions of HR practices should be taken into account when examining the HRM-performance relationship.

Following the model by Nishii and Wright (2008), we address the need for more research that focuses on differences in HRM implementation within organizations to gain better insight into the mechanism underlying the HRM-performance relationship. However, the concept of ‘actual practices’ in Nishii & Wright’s (2008) model may cause confusion. In some studies (e.g., Den Hartog et al., 2013; Khilji & Wang, 2006), as in the present one, actual practices are determined by asking line managers what HR practices they undertake. As actual practices, thus, are not measured objectively, in this study, we will use the concept of implemented HR practices to indicate this component of the HRM-performance relationship. The conceptual model used to study the mechanisms is shown in Figure 6.1.

In this model, we distinguish between HR practices as implemented by line managers and HR practices as subsequently perceived by employees. Moreover, we focus on the influence of a line manager’s leadership style (transformational leadership) on the implementation of HR practices. In the following sections, this conceptual model will be discussed in greater depth.
6.2.2 Variability in implemented and perceived HRM between work units

In the conceptual model, we distinguish between implemented and perceived HRM. Although employees’ perceptions of HRM are formed at the individual level, it is reasonable to assume a certain commonality in HRM perceptions within employee groups (Aryee et al., 2012; Bowen & Ostroff, 2004; Nishii & Wright, 2008). In this study, we therefore focus on differences between work units (groups) rather than individuals. A work unit is defined as a single well-defined organizational component within an organization with a definite place on the organizational chart and that has been assigned specific tasks to accomplish within the domain of a line manager. As line managers increasingly execute HRM activities (Purcell & Hutchinson, 2007), several authors (Den Hartog et al., 2004; Harney & Jordan, 2008; Knies & Leisink, 2013b; Nehles, Van Riemsdijk, Kok & Looise, 2006; Purcell & Hutchinson, 2007) have stressed the important role that line managers play in implementing an HR system designed by the HR department. The argument is that differences in implementation that might occur at this work unit level may lead to variations in employees’ perceptions of HRM. More specifically, as line managers have discretion over how they implement (intended) HR practices (Harney & Jordan, 2008; Purcell & Hutchinson, 2007), HR practices will vary between work units (Nishii & Wright, 2008). Following this line of reasoning, the fact that different line managers implement HR practices differently would explain why the perceptions of HR practices of employees differ between work units (Bowen & Ostroff, 2004; Nishii & Wright, 2008). The shared perceptions of employees within work units develop in part due to the social and structural stimuli to which all members of the same unit are exposed (e.g., unit norms, leadership and HRM) (Den Hartog et al., 2013). In this respect, line managers’ interpretations of HRM at the unit level provide the context in which employee perceptions of HRM are formed (Aryee et al., 2012; Den Hartog et al., 2013). This leads to our first hypothesis:

H1: Variability in implemented HRM is associated with variability in perceived HRM between work units.
6.2.3 Employees’ perceptions mediating the implemented HRM-performance relationship

Early theoretical work has focused on the mediating process between HRM and performance through employees’ attitudes and behavior (e.g., Becker & Huselid, 1998; Delery & Shaw, 2001). The attitudes of employees are thus important, as they have been seen as the drivers of discretionary behavior (Appelbaum et al., 2000). This theoretical model has been tested in studies examining, for example, collective human capital and social exchange climate (Takeuchi, Lepak, Wang & Takeuchi, 2007), organizational commitment (Gong, Law, Chang & Xin, 2009), and service oriented citizenship behavior (Sun, Aryee & Law, 2007) as mediating links in the HRM-performance relationship. As noted above, more recent theoretical work has emphasized employees’ perceptions of HRM in examining the HRM-performance relationship (Nishii & Wright, 2008). To date, however, research has yielded only limited insights into the influence of employees’ perceptions of HRM on performance outcomes measured at the unit and organizational levels (Aryee et al., 2012). However, as employees’ perceptions of HRM will be a response to their line managers’ implementation of HRM, employee perceptions are closer to and thus likely to be more predictive of their ultimate attitudinal and behavioral responses than are HRM ratings provided by line managers (Kehoe & Wright, 2013). This suggests that employees’ perceptions of HRM act as a mediating variable in the relationship between implemented HRM and perceived unit performance. Therefore, we hypothesize:

H2: The relationship between implemented HRM and perceived unit performance is mediated by perceived HRM.

6.2.4 The role of the line manager’s leadership style in HRM implementation

Line managers have the task of putting intended HR practices into practice to influence the attitudes and behaviors of employees within their work units (Gilbert et al., 2011; Pereira & Gomes, 2012). However, as seen above, there may be variability between work units in HR practices used because line managers differ in how they implement an organization’s intended HR policy. In this respect, line managers do not simply act as “robotic conformists” in enacting HR policies (Marchington & Grugulis, 2000). To understand the enactment of HR practices by line managers, Becker and Gerhart (1996) argue that more effort should be focused on determining what managers are thinking and why they make the decisions they do. In this respect, Boxall and Purcell (2011) note that there are many examples of line manager adjustments of HR policies to make them more suitable for specific work settings or, on the dark side, their own personal or political ends. Purcell et al. (2009) argue that the way line managers undertake their HR duties is inextricably linked to leadership behavior. Leadership has been defined as the characteristics, competences, and behavior of a supervisor or manager (Van Wart, 2003) and has become a much researched subject in recent decades. In particular, it has been suggested that line
managers favor HR practices that fit their leadership styles (Bass, 1990; Guest, 1987; Zhu et al., 2005). More insight into the relationship between a line manager’s leadership style and HR practices implemented is found in Harney and Jordan (2008). Their study shows that in an organization in which the leadership style is transactional and task-oriented, line managers are highly quantity-focused (focus on numbers) and pay little attention to their employees, apart from monitoring their performance. As a result, limited attention was given to HR practices focusing on, for example, employee development and participation. At some point, the line managers came to recognize that their performance-driven orientation was not sufficient to ensure successful operations, an altered perspective that was accompanied by the use of HR practices such as employee development practices and employee participation practices. This example illustrates how a line manager’s leadership style may influence the use of HR practices. The change described can be seen as a shift from a more administrative or controlling approach to managing employees to the use of commitment-oriented HR practices, focusing on high performance through investment in employees (Lepak et al., 2006).

Currently, there are many views in the literature of what leadership is. An approach to leadership that has dominated the literature since the 1980s is the concept of transformational leadership (Bass, 1990; Podsakoff et al., 1990). The basic idea behind this leadership concept is that “effective leaders transform or change the basic values, beliefs, and attitudes of followers so that they are willing to perform beyond the minimum levels specified by the organization” (Podsakoff et al., 1990:108). We assume a relationship between transformational leadership and the implementation of commitment-oriented HR practices because the activities that transformational leaders carry out to enhance individual and organizational performance accord with those HRM activities that the HRM literature views as important. That is, meeting employees’ needs for skills and motivation and providing them with opportunities to profile themselves and thereby improve their performance (Appelbaum et al., 2000; Kehoe & Wright, 2013; Paauwe, 2009). This fits with what transformational leaders are expected to do, given their focus on people (Burke, Stagl, Klein, Goodwin, Salas & Halpin, 2006): such leaders empathize with the developmental needs of their employees and provide them with opportunities to learn and grow (Jung, Yammarino & Lee, 2009). Moreover, transformational leaders aim to motivate people to perform while improving the quality of life of organizational members (Tucker & Russell, 2004), and they strive to create opportunities for employees in an organization (Tucker & Russell, 2004). Following this line of reasoning, it is expected that the more line managers focus on changing employees to achieve better performance, the more they will search for tools that develop, motivate, and provide opportunities for employees. Thus, it is likely that line managers with a transformational leadership style will tend to employ more commitment-oriented HR practices to influence employees’ abilities, motivations, and opportunities to perform. Although this relationship has not
been explicitly examined in previous research, indirect support for it can be found in a study of Zhu et al. (2005), which shows how transformational leaders affect organizational outcomes through the use of larger numbers of so-called human capital enhancing HR practices. This leads to our third hypothesis:

**H3:** Line managers with a more transformational leadership style implement more commitment-oriented HR practices within their work unit than line managers with a less transformational leadership style.

### 6.3 RESEARCH METHODS

#### 6.3.1 Data

To answer our research question and test our hypotheses, a Dutch municipality was studied. This municipality is a medium-sized municipality, fairly centrally located in the Netherlands. By using data from a single organization, the HR system as intended by the HR department is a constant in our analysis, which makes it easier than in traditional multi-organization studies to examine the sources of variance in implemented and perceived HRM and their effects on perceived unit performance. Relevant to this study is that within this municipality, operational HR tasks are devolved to line managers, who are responsible for selecting new employees, periodically reviewing employees’ performance, rewarding employees, offering employees development opportunities, creating space for employees to perform and providing employees with opportunities to participate in decision-making within the work unit.

All 674 managers and employees of the municipality were asked to complete a web-based questionnaire. Of these, 43 line managers (86% of those employed) and 389 employees (63% of those employed) completed the questionnaire (an overall response rate of 64%). To relate the answers of a line manager to the answers of employees within their work unit, line managers and employees were linked by a code prior to the survey. By administering the questionnaire to both line managers and employees, we involved multiple actors in the study, in contrast to the more frequently used method in HRM-performance research, namely, determining (intended) HRM by asking a single HR manager (Boselie et al., 2005). Asking a single HR manager has increasingly been criticized, as this method implicitly assumes that a single organizational respondent can accurately represent the opinions and experiences of all organization members with regard to the HR practices (e.g., Bowen & Ostroff, 2004; Nishii & Wright, 2008).

In the present study, the variables analyzed reside on different levels. In analyzing the relationship between implemented and perceived HRM, only those units where both the line manager and at least 40% of employees completed the questionnaire were selected, resulting in a database of 41 work units (or 79.6% of the work units in the municipality,
including policy units such as Communications and ICT and operational units such as Public Service Delivery and Environmental Maintenance).

The responding line managers were characterized as follows: 73% were male, 69.8% were aged between 40 and 54 years, the predominant educational level was higher vocational education (67%), and the average time working for the municipality was 13.2 years. Their span of control ranged from 2 to 34 employees, with an average of 15.3 employees. Of the responding employees, 51.7% were male, 64.8% were aged between 35 and 54 years, the predominant educational levels were secondary vocational (40.6%) and higher vocational (41.9%) education, and the average number of years working for the municipality was 12.7 years. According to the municipality’s personnel information system, the respondents, based on these characteristics, constitute a representative sample. The sample’s deviation from the general population is small (0.7 to 2.4%).

6.3.2 Analysis

The assumption that employees mediate the relationship between HRM and performance implies the need to take variables on various levels into account (Nishii & Wright, 2008; Sanders & Frenkel, 2011; Van Veldhoven, 2012). The proposed relationships between the variables, as reflected in the hypotheses, are shown in Figure 6.2 below.

![Figure 6.2: Analysis model](image)

In Figure 6.2, Level 2 represents the work unit level, and Level 1 represents the individual level. In this study, transformational leadership, implemented HRM, and perceived unit performance are measured on the higher level (Level 2), while perceived HRM is measured on the individual level (Level 1). To date, upward and mixed models have received relatively little attention in the literature on multilevel mediation (Preacher et al., 2010). Nevertheless, in HRM and performance research, one is often confronted with a situation in which at least part of the hypothesized mediation process operates from the lower
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In our model, the final outcome variable is measured at the higher (work unit) level. In previous HRM and performance research, data from such a design have often been analyzed by aggregating the lower level (employee) data into the higher (organizational) level of analysis by computing group means and conducting the analysis at the higher level. However, aggregating individual data in this way may yield misleading results, as the variances and covariances computed at the group level not only represent between-group variation but also within-group variation (Croon & Van Veldhoven, 2007). Multilevel techniques have been recommended for analyzing data of such a hierarchical nature (Croon & Van Veldhoven, 2007; Wright & Boswell, 2002). In our study, we therefore perform what is referred to as a 2-1-2 multilevel mediational analysis (Preacher et al., 2010), in which the lower-level variable (perceived HRM) is clearly separated into within- and between-group components so that the entire relationship can be formulated as a two-level SEM model. Thus, in this analysis, the between-group estimations are no longer clouded by within-group variations. In this respect, the methodological contribution of our study is that the 2-1-2 analysis technique involves the micro-macro variant of multilevel models rather than the more common macro-micro variant. We used the Mplus statistical software package, version 6.11 (Muthén & Muthén, 2010), in these analyses.

6.3.3 Measurement

HRM

Lepak et al. (2006) have listed concrete HR practices that influence employees’ AMO. Using these as a guide, the system of high performance HR practices examined in the present study includes: 1) recruitment and selection, 2) training and development, 3) performance appraisal, 4) rewards, 5) autonomy, and 6) employee participation in decision-making. By adopting these practices, an HR system is expected to influence employees’ abilities to perform by boosting their knowledge, skills, and abilities. Moreover, organizations do not acquire abilities only by training their existing employees. They can also bring knowledge into the organization through recruitment and selection. In addition, an HR system can influence employees’ motivation to perform by providing direct incentives and rewards as well as guidance regarding what behaviors are expected, supported, and rewarded. Finally, an HR system can influence employees’ performance by providing them with opportunities to use their abilities. In existing HRM and performance research, there remains little agreement about how such HR practices should be measured. The six practices selected have been used in previous research in various combinations, and there is no standard measurement instrument available. Consequently, in our study, each of the six HR practices was measured using several items that we drew from various HRM studies aimed at improving employees’ abilities, motivations, and opportunities to perform (Ahmad &
Schroeder, 2003; Appelbaum et al., 2000; Boon, 2008; Gould-Williams, 2003; Huselid, 1995; Wright et al., 2005), which we then reformulated with the aim of maintaining consistency (see Appendix 1 for the items). Overall, the chosen HR practices are predominantly commitment-oriented, in contrast to a more control-oriented operationalization of HR practices (Lepak et al., 2006). Moreover, we did not include questions about group-specific HRM, such as age-related personnel policies. The items were formatted on five-point Likert scales, with possible answers ranging from (1) strongly disagree to (5) strongly agree. To increase content validity, we asked five experts to examine the initial pool of potential items and make suggestions. Following modifications, another group of five experts tested the questionnaire for clarity of the questions, ambiguous wording, technical errors, and accessibility of the survey.

To measure implemented HRM, line managers were asked to rate the HR practices (question formulation: In this unit, employees […..]). We measured the perception of what was being implemented (perceived HRM) by asking employees to rate the same practices (question formulation: I have […..]). To examine whether the assumed underlying factor structure was justified, we first conducted an exploratory factor analysis, using a principle components approach with oblique rotation. We adopted three common statistical warning signs as criteria for item deletion: 1) items correlating at less than .3 or more than .9 with other items in the same dimension, 2) items loading more than .3 on two factors, and 3) items contributing negatively to Cronbach’s alpha (Field, 2009). On this basis, we deleted eight items (see Appendix 1). Following this, a dimensional structure representing the six HR practices described above could be clearly identified. In line with the HR system approach, Cronbach’s alpha is a traditional measure of scale reliability used to demonstrate consistency within sets of items (Guest et al., 2004). Cronbach’s alpha for the resulting scales was .92 and .90, respectively.

In addition, a confirmatory factor analysis was conducted, showing that the data are adequately represented by a hierarchical factorial structure ($\chi^2 = 672.138/421, p < .01, \text{CFI} = .94, \text{RMSEA} = .044$). In other words, the six first-order factors are explained by some higher order structure, which we call the HRM variable. Therefore, we combined the full set of items into six HR practices and then combined these into one aggregate HR system measure. This finding fits into the HR system approach in which it is argued that the bundle of HR practices amounts to more than the sum of the separate parts (Wright & Boswell, 2002).

In line with previous research, we expected the bundle of HR practices to affect performance. In particular, we assumed that the more HR practices (aimed at influencing employees’ abilities, motivations, and opportunities to perform) are used, the more highly developed the HR policy is. In making this assumption, we are commenting about the additional value of HRM only in general terms. We do not know whether specific individual practices have stronger effects than others, how each of the individual practices
affects performance, or whether complementarities or synergistic relationships among such practices further enhance organizational performance (Delaney & Huselid, 1996; Guest et al., 2004).

Transformational leadership
Our measurement of transformational leadership is based on Podsakoff et al. (1990), who discern six dimensions (articulating vision, role modeling, fostering acceptance goals, exhibiting high performance expectations, individualized support, and intellectual stimulation) and 23 items. As an example, one of the items was “I show employees that I expect a lot from them”. Line managers were asked to rate their leadership activities for each item on a five-point Likert scale that ranges from (1) strongly disagree to (5) strongly agree. A confirmatory factor analysis was conducted, with the results showing that the data are adequately represented by a hierarchical factorial structure ($\chi^2 = 439.162/223$, $p < .01$, CFI = .97, RMSEA = .056). In other words, the six first-order factors are explained by some higher order structure, which we can call transformational leadership. The internal reliability was .82.

Work unit performance
Both perceptions of performance and objective performance indicators can be used to measure performance (Delaney & Huselid, 1996). When objective performance data are not available, subjective (perceptual) performance measures can be an acceptable alternative, and there is evidence of a strong correlation between subjective and objective measures of performance as well as that the relationships between subjective and objective measures with various independent variables are equivalent (Delaney & Huselid, 1996; Wall et al., 2004). Nevertheless, there is always some doubt about perceptual measures (Kim, 2005). In this study, line managers were asked to assess the performance of their unit. We used five items to measure perceived unit performance, based on Bernardin (2003), namely: 1) the quantity of the work of your unit, 2) the quality of the work of your unit, 3) the timeframe in which your team completes tasks, 4) the extent of goal achievement by your unit, and 5) the overall performance of your unit. Answers were provided on a five-point Likert scale ranging from (1) very poor to (5) very good. All the standardized loadings were above 0.5, and all were statistically significant. Cronbach’s alpha was .81. Within organizations with diverse tasks (as in municipalities), it is difficult to use an alternative for the perceptual measurement of performance, as the outputs of the various work units differ in many important respects. For example, the timeframe in which tasks should be completed for a work unit providing a public good, such as a passport to a citizen, differs from that for a work unit maintaining the landscape in a given neighborhood. There is thus no single objective performance indicator that can be used to compare performance across different work units. In this respect, asking about perceptions
of the timeframe in which a work unit completes its tasks enables a respondent to take into account various contingencies. Given that it might be in a line manager’s interest to provide an overoptimistic picture of his or her unit’s performance, we explicitly mentioned in the survey that line managers’ answers would not be traceable to specific units.

**Control variables**

Control variables used included line managers’ gender, age, educational level, and tenure. Past research has shown a link between line managers’ demographic characteristics and both their transformational leadership and effectiveness in managerial roles (Cavazotte, Moreno & Hickmann, 2011). Further, we controlled for span of control, as a review of the literature indicates that this factor has an effect on leadership, team processes, and outcomes (e.g., Simons, Pelled & Smith, 1999). In this respect, Yukl (2012) argues that, as the span of control increases, opportunities for interactions with subordinates decrease, and managers become less participative. Finally, we controlled for four characteristics of team members (gender, age, educational level, and tenure), as the literature has also observed the effects of such variables on team processes and outcomes (e.g., Simons et al., 1999).

We coded gender as a dummy variable (with 1 = female). Age was subdivided into ten categories (from 1 = 15-19 years to 10 = 60 years and older) and included in the analysis as a continuous variable. In line with the Dutch educational system, educational level was subdivided into 4 categories (1 = primary education; 2 = secondary vocational education, preparatory academic education; 3 = higher vocational education; 4 = academic education). This variable was, as in previous research, included in the analysis as a continuous variable (see Van Jaarsveld et al., 2010). Tenure was also included as a continuous variable, expressed as the number of years worked for the municipality. Finally, span of control was treated as a continuous variable, with values ranging from 2 to 34 employees.

**6.4 RESULTS**

The hypothesized relationships among the variables were tested using structural equation modeling (SEM) with a Robust Maximum Likelihood estimation method. Ideally, a two-step approach to SEM would have been adopted where, first, the measurement model would have been examined to test the fit of the confirmatory factor analytic model, and then the structural model would have been examined to test the proposed relationships among the constructs (Anderson & Gerbing, 1988). However, our sample size made this two-step approach impracticable, as Bentler and Chou (1987) have shown that structural equation modeling is acceptable provided the sample to parameter ratio is between 5:1 and 10:1. Given our sample size (41 units on the higher level), it was necessary to reduce
the number of parameters to be estimated below that which we would ideally have liked. Therefore, here we present only the structural model, while for each latent variable developed and presented in the measurement section, we calculate the composite score of the multiple items, using the composite score as a single indicator in the structural model (see also Kehoe & Wright, 2013; Wright, 2004).

In Table 6.1, the means, standard deviations, and correlations between the constructs are presented. The results show an average score for implemented HRM on a five-point Likert scale of 3.72. This score implies that, on average, line managers do actively implement HR practices. However, significant variation between work units are seen (the scores range from 2.11 to 4.70), implying that line managers do not implement HRM in similar ways. With respect to perceived HRM, the average score on the five-point Likert scale was 3.39, which suggests that employees perceive a fairly high level of HRM implementation. Furthermore, implemented HRM and perceived HRM are positively correlated (.175**). The average score for transformational leadership was 3.99, indicating that line managers in general exhibit transformational leader behavior. The results show that implemented HRM is also positively correlated with transformational leadership (.486**). This suggests that, when line managers adopt a more transformational leadership style, they more actively implement (commitment-oriented) HR practices. Given this strong correlation, we assessed collinearity statistics. Variance inflation factors above 10 and tolerance values below 0.1 are indicative of serious multicollinearity problems. However, the results in our study (VIF 1.047; tolerance .955) do not give cause for concern (Field, 2009). Finally, the results indicate that transformational leadership, implemented HRM, and perceived HRM are all positively associated with perceived unit performance.

To test the proposed relationships, a causal structure was posited, resulting in a structural equation model (see Figure 6.2). In the present study, Level 2 represents the work unit level, and Level 1 represents the individual level. For the Level 1 variable (perceived HRM), there is a corresponding latent variable on the unit level. The model outlined here is thus a mediational model at the group level in which perceived HRM is assumed to mediate between implemented HRM and perceived unit performance. Given that variance in the independent and dependent variables exists only on Level 2, the interpretation of the estimated effects is at the group level, when using a 2-1-2 model. The intraclass correlation, ICC(1), is a measure of the relative strength of the between-group variation. The ICC(1) for perceived HRM is .077, and although this seems to be somewhat low, it can be seen as reasonable in an organizational context (Hox, 2002), and a similar score can be found in the study of Den Hartog et al. (2013). This result supports the idea that, because line managers have some discretion over how they implement HRM, there will be diversity between work units’ perceptions of HRM. As such, this result supports the need for multilevel analysis. Note that the model depicted in Figure 6.3 includes only
Table 6.1: Means, standard deviations, and correlations

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Transformational leadership</td>
<td>3.99</td>
<td>0.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Implemented HRM</td>
<td>3.72</td>
<td>0.43</td>
<td>.486**</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>3. Perceived HRM</td>
<td>3.39</td>
<td>0.42</td>
<td></td>
<td>.105</td>
<td>.175**</td>
<td></td>
<td></td>
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<tr>
<td>4. Perceived unit performance</td>
<td>3.94</td>
<td>0.39</td>
<td></td>
<td>.197**</td>
<td>.261**</td>
<td>.139*</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. Gender employee</td>
<td>.483</td>
<td>0.50</td>
<td></td>
<td>.024</td>
<td></td>
<td>-.138*</td>
<td>-.044</td>
<td>-.097</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>6. Age employee</td>
<td>6.55</td>
<td>1.92</td>
<td>-.174**</td>
<td>-.038</td>
<td>-.049</td>
<td>.067</td>
<td>-.134*</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. Educational level employee</td>
<td>2.75</td>
<td>0.73</td>
<td></td>
<td>.107</td>
<td>.085</td>
<td>.203**</td>
<td>-.040</td>
<td>-.060</td>
<td>-.177**</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>8. Tenure employee</td>
<td>12.68</td>
<td>10.83</td>
<td>-.195**</td>
<td>-.010</td>
<td>-.151**</td>
<td>.020</td>
<td>-.137*</td>
<td>.603**</td>
<td>-.263**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Gender line manager (lm)</td>
<td>.269</td>
<td>0.45</td>
<td></td>
<td>.091</td>
<td>.043</td>
<td>-.181**</td>
<td>.025</td>
<td>.114*</td>
<td>.042</td>
<td>.032</td>
<td>-.012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Age (lm)</td>
<td>7.47</td>
<td>1.41</td>
<td>-.190**</td>
<td>-.067</td>
<td>.055</td>
<td>.146**</td>
<td>.005</td>
<td>.088</td>
<td>.041</td>
<td>.093</td>
<td>-.321**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Educational level (lm)</td>
<td>3.33</td>
<td>0.47</td>
<td></td>
<td>.037</td>
<td>.040</td>
<td>.033</td>
<td>-.212**</td>
<td>.133*</td>
<td>-.064</td>
<td>.268**</td>
<td>-.057</td>
<td>.014</td>
<td>.152**</td>
<td></td>
</tr>
<tr>
<td>12. Tenure (lm)</td>
<td>13.17</td>
<td>9.98</td>
<td></td>
<td>.011</td>
<td>-.067</td>
<td>.050</td>
<td>.234**</td>
<td>-.144*</td>
<td>-.002</td>
<td>-.043</td>
<td>.047</td>
<td>-.334**</td>
<td>.565**</td>
<td>-.121*</td>
</tr>
<tr>
<td>13. Span of control</td>
<td>15.29</td>
<td>7.39</td>
<td></td>
<td>.151**</td>
<td>-.103</td>
<td>-.126*</td>
<td>-.017</td>
<td>.255**</td>
<td>.014</td>
<td>.013</td>
<td>-.005</td>
<td>.547**</td>
<td>-.235**</td>
<td>-.106</td>
</tr>
</tbody>
</table>

*p < .05; ** p < .01
statistically significant relationships. The numeric values on the lines are the standardized regression coefficients (beta), and the values in brackets indicate explained variance.

This study has tested three hypotheses, with the overall model fit assessed using several fit indices. The model fit values were $\chi^2 = 16.028/6, p < .05$, CFI = 1.00, RMSEA = .000, and the SRMR values were .000 (for within units) and .030 (for between units). These values indicate that the model provides a good explanation of the relationships between the variables.

We first tested Hypothesis 1 that variability in implemented HRM is associated with variability in perceived HRM between work units. The model results show a positive and significant relationship between implemented and perceived HRM ($\beta = .583, p < .05$), supporting this hypothesis.

Hypothesis 2 proposes a mediating role for perceived HRM in the relationship between implemented HRM and perceived unit performance. To test this hypothesis, we used the method suggested by Baron and Kenny (1986). Examining the direct effect of implemented HRM on perceived unit performance, the results show a significant direct relationship between implemented HRM and perceived unit performance ($\beta = .240, p < .01$). When we add the proposed mediating variable to the analysis, the results show that implemented HRM has a positive effect on perceived HRM ($\beta = .583, p < .05$) and that perceived HRM has a positive effect on perceived unit performance ($\beta = .512, p < .05$). Moreover, the relationship between implemented HRM and perceived unit performance is no longer significant after controlling for the mediating variable. This indicates that Hypothesis 2 is supported by the data showing that the relationship between implemented HRM and perceived unit performance is fully mediated by perceived HRM.

Finally, we tested the third hypothesis that line managers with a more transformational leadership style implement more commitment-oriented HR practices within their work
units. Indeed, Figure 6.3 shows a positive relationship between transformational leadership and implemented HRM ($\beta = .431, p < .01$), supporting the hypothesis that differences in implemented HRM between work units are (partly) determined by line managers’ leadership styles.

The final step in the analysis was a post hoc examination of the control variables. Control variables initially considered but dropped from the final model because they produced non-significant results were gender, age, educational level and tenure of line managers, and their span of control; plus the gender, age, and tenure of employees. As such, in the final model, the only control variable that justified inclusion was the educational level of employees. Examining the effect of this control variable shows that employees with higher educational levels perceived higher levels of HRM implementation ($\beta = .169, p < .01$). This suggests that different groups within the organization are managed differently, with the result that their perceptions of the HR practices implemented differ.

### 6.5 DISCUSSION AND CONCLUSION

The relationship between HRM and organizational performance has frequently been examined, but there have been no clear conclusions regarding the mechanisms behind this relationship. Our focus on the role of line managers in HRM implementation and on the effect of employees' perceptions of HRM in the HRM-performance relationship responds to a perceived need expressed in the HRM and performance literature (e.g., Bowen & Ostroff, 2004; Nishii & Wright, 2008). As such, we paid particular attention to the role of line managers’ leadership styles. Our findings indicate that in attempting to explain differences in perceived unit performance within an organization, it is indeed important to study the HRM implementation process by examining the roles of line managers and employees.

More specifically, our findings support the view that differences in HRM implementation and employees’ perceptions of HRM are visible at the work unit level. This conclusion supports Nishii and Wright’s (2008) suggestion that both implemented and perceived HRM are important in explaining the effects of HRM on performance. Our findings also stress the need to go beyond the organizational level, where it is assumed that HRM is consistently implemented within an organization (compare Kehoe & Wright, 2013). In previous research (e.g., Gilbert et al., 2011; Nishii & Wright, 2008), various explanations have been offered to explain the differences between work units in terms of HRM implementation. Such explanations have included, for example, differences in leadership style, in values, and in experiences of line managers. Our study supports the view that leadership style plays a role by showing that line managers who adopt a more transformational leadership style use more commitment-oriented HR practices within their work unit. As such,
the results of this study emphasize the important role of line managers in HRM and in the related performance model, a view previously expressed by various scholars, including Paauwe (2009), Purcell and Hutchinson (2007), and Wright et al. (2005).

Beyond examining differences in HRM implementation and employees’ perceptions of HRM between work units, we have also tested whether employees’ perceptions of HRM mediate the relationship between line managers’ implementation of HR practices and perceived unit performance. In this study, we opted for structural equation modeling because that approach enables us to examine relationships between these variables in a single model. Our findings show positive relationships between implemented and perceived HRM and between perceived HRM and perceived unit performance. This empirical support for our model suggests that employees’ perceptions of HRM do indeed mediate the relationship between line managers’ HRM implementation and perceived unit performance, a relationship suggested by Nishii and Wright (2008). This implies that it is important to consider employees’ perceptions of HRM when trying to enhance performance.

In addition to the theoretical contribution our study makes to the literature, it makes a methodological contribution in its use of a multilevel approach that integrates different levels of analysis. Although recently, an increasing number of studies have involved multilevel analysis (e.g., Liao et al., 2009; Tackeuchi et al., 2009), few studies have conducted multilevel HRM and performance analysis in which the final outcome variable is measured at the higher (work unit) level. The value of the 2-1-2 mediational multilevel analysis method is demonstrated in the analysis of the variances and covariances between work units, achieved by aggregating our data at the work unit level by computing group means. In so doing, we found that the aggregated data could not explain the differences between the work units’ performances through the mediating role of differences in HRM perceptions between work units because the group means reflect not only differences between groups but also, to a significant extent, within-group differences. In our two-level SEM model, the estimated between-group variance is no longer contaminated by the within-group variance. By considering unit-level HRM perceptions in this way, we capture significant variance in this variable, enabling us to conclude that contextual characteristics of the work unit level do influence employees’ perceptions. This result again highlights the importance in HRM and performance research of considering the HRM implementation process as it occurs within an organization. Moreover, because the higher-level variables (rated by line managers) were measured independently of the lower-level variable (rated by employees) in this study, the risk of common method bias is reduced (Podsakoff & Organ, 1986). The finding that the relationship between line managers’ implementation of HRM and perceived unit performance is mediated by employees’ perceptions of HRM supports the argument that common method bias is not a significant danger in our study.

Despite the contributions of this study, the results should be interpreted with some caution, given several limitations that also suggest lines of further research. First, this study
used a cross-sectional dataset limited to a single Dutch municipality. The small scope of the study entails concerns with respect to both internal and external validity. The collection and analysis of a longitudinal dataset would increase internal validity, as such data enable researchers to make stronger causal claims. With respect to external validity, we have examined the relationship between HRM and performance by focusing on a single Dutch municipality. An advantage of this decision is that the intended HR system, as set out by the HR department, is held constant. As a result, we can be more confident than we would be in a multi-organization study that variations between work units are indeed due to differences in implementation by work unit managers and in employees’ perceptions. However, the generalizability of the findings to other organizations or sectors suffers from limiting this study to a single organization with its unique policy. Therefore, additional research in other contexts is needed before the results of this study can be generalized. Another limitation of a single organization study is that the intermediate-level sample size (the line managers) is almost certain to be rather small, which can affect the statistical power and precision of a model's parameter estimates. Moreover, it should be noted that, although we used different actors (line managers and employees) for the various variables in our model to avoid common method bias, the variables in the relationship between transformational leadership and HR practices are both rated by line managers. Therefore, the results should be interpreted with an awareness of this limitation, although we would add that the relationships found do correspond with sensible theoretical explanations.

Second, in this study, we have focused on leadership style as a possible explanation of differences between work units in HRM implementation. However, it is unlikely that all the variance in HRM implementation results from different managers’ leadership styles. Indeed, our results show an explained variance of transformational leadership on implemented HRM of only 18.6%. An interesting direction for future research would therefore be to examine other attributes of line managers that might affect their implementation of HR practices. In this respect, previous research has suggested examining, for example, differences in the values or experiences of line managers (e.g., Gilbert et al., 2011; Nehles et al., 2006; Nishii & Wright) and line managers’ willingness, capacity, and competence to implement HRM (Nehles et al., 2006). Moreover, in this study, we focused on differences between work units in HRM implementation rather than on differences between individuals. However, our ICC of .077 suggests that there is also significant variation in employees’ HRM perceptions within work units. It is thus plausible that implemented HR practices within work units differ because line managers treat employees differently (e.g., Liao et al., 2009). Measuring whether HR practices enacted by line managers vary from employee to employee would be an interesting avenue for future research.

Third, in this study, we focused on perceptions of performance. Although there is evidence of a strong correlation between perceptual and objective measures of performance, some doubt always remains when perceptual measures of performance are used (Delaney
Variability in HRM implementation

& Huselid, 1996; Kim, 2005; Wall et al., 2004). A suggestion for further research would therefore be to replicate our research in an organization where it is possible to use objective performance indicators to compare the performances of different work units. Moreover, for future studies in which the use of objective performance indicators is not possible, we would recommend that some supporting evidence of subjective ratings would be obtained by asking the (HR) manager for some indicators of unit performance that could provide evidence of the validity of the unit managers’ rankings.

From a practical point of view, our findings show that implementation of HRM within an organization is important in enhancing performance. To improve unit, and subsequently organizational, performance, attention should be paid to a supervisor’s leadership style, as it appears that a more transformational leadership style is accompanied by the use of a larger number of commitment-oriented HR practices that can change employees in ways that enhance performance. In addition, the wide variation in HRM implementation and in HRM perceptions between and even within work units points to the need for HR departments to move beyond a focus on the design of the HR system to an emphasis on consistent implementation of HRM. Our results also show an important role for employees’ perceptions of HRM. In this respect, it is evidently advantageous for managers to ensure that employees’ perceptions of HRM reflect the desired reality as such perceptions positively affect unit, and thus organizational, performance.

Note: The author would like to thank dr. Marcel Croon for his expert assistance in carrying out the 2-1-2 mediational multilevel analysis. The author would also like to thank prof.dr. Marc van Veldhoven for his helpful comments and suggestions on an earlier version of this chapter.
Chapter 7

Two faces of the satisfaction mirror. A study of work environment, job satisfaction, and customer satisfaction in Dutch municipalities

7.1 INTRODUCTION

With the rise of New Public Management, the public sector is confronted with growing demand to show its efficiency and cost effectiveness, resulting in an increased interest in the quality of public performance (Boyne & Chen, 2007; Osborne & Gaebler, 1992). These interests exist at both national and local levels. In recent years, it has become common to view municipalities as public service providers that act as a front-office for the entire government. Due to this, municipalities are forced to meet the requirements and wishes of their customers as much as possible. In effect, performance outcomes such as customer satisfaction have become increasingly important. With respect to public service delivery in municipalities, individual employee behavior can affect customer satisfaction, since service delivery often takes place during contact moments between employees and customers (Guest, 1997; Schneider & Bowen, 1993). The job performance of dissatisfied employees is likely to be inferior to that of satisfied employees. It is often stated in the literature that ‘a happy worker is a productive worker’. Empirical research confirms this happy-productive worker hypothesis (for an overview see Judge et al., 2001) and shows a positive relationship between employee and customer satisfaction (Heskett, Sasser & Schlesinger, 1997; 2002; see for an overview also Gelade & Young, 2005).

Despite the aforementioned finding of a positive relationship between employee satisfaction and employee performance, the existing research has some limitations. A first limitation is that previous research has paid little attention to the relationship between job satisfaction and performance at the organizational level of analysis, focusing instead on an individual-level of analysis (Judge et al., 2001; Ostroff, 1992; Taris & Schreurs, 2009). In this context, in the literature it is stated that organizational performance cannot be seen as the sum of the individual performances (Ostroff, 1992; Taris & Schreurs, 2009). It is thus unclear to what extent organizations with dissatisfied employees perform worse than organizations with satisfied employees. The limited availability of performance data at the organizational level is one important explanation for this limitation. A second limitation deals with the fact that the relationship between employee satisfaction and customer satisfaction has to this point mainly been demonstrated by asking external customers about their satisfaction with service delivery. This external focus disregards the role of the employee as an internal customer of services provided within the organization. To increase organizational performance, it is likely important not only to meet the needs of customers but also to meet the needs of employees (Schneider & Bowen, 1993). Few researchers have explored complete models that focus on both these faces of the satisfaction mirror. However, focusing on the complete mediating relationship between the characteristics of the work environment, job satisfaction, and customer satisfaction might provide important information that can be used by Human Resource Management (HRM) to positively influence organizational performance (Paauwe & Richardson, 1997; Steijn, 2004). A third
limitation is that previous studies focus mainly on the private sector. However, the position of the customer is somewhat different in the public sector and especially within municipalities (Davis, 2006; Fountain, 2001; Heintzman & Marson, 2005), since government agencies have a monopoly on delivering public services; customers cannot choose where to purchase government-provided goods, such as passports (Pollitt, 2003; Rainey, 2003).

The aim of this study is to meet these limitations within the present research. We first examine the relationship between job satisfaction and customer satisfaction at the organizational level of analysis. The availability of data on the performance of public organizations enables us to determine the extent to which organizations with less-satisfied employees perform worse than organizations with satisfied employees. This information may help public organizations to improve their performance. Second, we examine the relationship between the characteristics of the work environment and job satisfaction at the organizational level of analysis. More insight into the determinants of job satisfaction could provide important practical information for HRM, based on the assumption that if organizations care for their employees, these employees will care for customers. To meet these aims, we compare data on the well-being of front-office employees in 35 Dutch municipalities with corresponding customer satisfaction data. Our main research questions are: (1) ‘To what extent is customer satisfaction in Dutch municipalities influenced by job satisfaction’, (2) and ‘To what extent is job satisfaction in Dutch municipalities influenced by work environment characteristics?’. We answer these questions in four stages. First, we discuss what the existing literature has to say about these relationships. This discussion leads to two hypotheses, which are detailed below. Second, we discuss our research design and methods and explain the measurement of the variables in the study. Third, we test our hypotheses using structural equation modeling and we present our findings. Fourth, we discuss the implications of our findings for theory and practice.

### 7.2 THEORETICAL FRAMEWORK AND HYPOTHESES

#### 7.2.1 The external satisfaction mirror

The well-known adage that a happy worker is a productive worker was mentioned in the introduction to this paper. The literature generally assumes that higher job satisfaction is associated with higher individual and organizational performance (Hackman & Oldham, 1975; Judge et al., 2001; Taris & Schreurs, 2009). In line with this assumption, previous research showed a positive association between employee satisfaction and customer satisfaction (e.g., Koys, 2001; Taris & Schreurs, 2009). It is in this context that Heskett et al. (1997) introduced the satisfaction mirror, the positive relationship between front-line service provider job satisfaction and overall customer satisfaction in service environments. Public service delivery takes place during moments of contact between employees and
customers (Guest, 1997; Schneider & Bowen, 1993). This interaction is called the transaction moment of the transactional fit (Van Wijk, 2007). The transactional fit is expressed in the degree of overall customer satisfaction, which refers to how customers assess the process of public service delivery. Customers’ perceptions of the service process depend heavily on how service is delivered by front-office employees (Hsieh & Guy, 2009). In this research, the assumption is that if employees are satisfied with their jobs, they are likely to behave toward customers in ways that yield positive service experiences. This proposed relationship brings us to our first hypothesis:

H1: In organizations in which employees are more satisfied with their jobs, customers tend to be more satisfied with public service provision.

7.2.2 The internal satisfaction mirror

The previous section discussed the external satisfaction mirror. Here, citizens and companies are external customers, since they are not members of the service-providing organization. However, employees providing external services to customers can be considered internal customers of the services provided within the organization. To increase organizational performance, it is likely important not only to meet the needs of customers but also to meet the needs of employees (Schneider & Bowen, 1993) based on the assumption that if organizations care for their employees, these employees will care for customers. Figure 7.1 visualizes the relationships implied by both satisfaction mirrors.

Figure 7.1: Conceptual model

To understand the internal satisfaction mirror, more insight into job satisfaction and its determinants is needed. Hackman and Oldham (1980) developed the famous Job Characteristics Model in which they identified several key factors in the work environment that determine job satisfaction. An important element in this model is that job satisfaction is determined not only by objective characteristics of the work environment, but also by the needs and work values of employees. As early as the 1960s, Fishbein (1963) stressed the importance of employees’ perceptions. He explained that individual attitudes would be shaped by employee beliefs about the object. In other words, when developing explanations for job satisfaction, employee perceptions about the work environment should be taken into account. A second reason to focus on employees’ perceptions of the work
environment is based on the idea that the objective presence of certain work environment characteristics does not necessarily say anything about the quality of their implementation (Guest, 1997; Steijn, 2004).

Previous research has mainly examined the relationship between the characteristics of the work environment and job satisfaction at an individual level of analysis. Inspired by the person-environment-fit approach (Kristof-Brown, Zimmerman & Johnson, 2005), this research assumes that a fit between a person and his or her environment is important for fostering positive attitudes and behaviors. A further refinement of the person-environment-fit approach is the Attraction-Selection-Attrition (ASA) model (Schneider, 1987; Schneider, Goldstein & Smith, 1995). The attraction process in this model refers to the idea that people's preferences for an organization are based on an implicit estimate of the fit between their personal characteristics and the attributes of the potential work organization. Selection refers to organizations and candidates choosing one another on the basis of the extent to which they fulfill each others' needs. Finally, the attrition process refers to the idea that people will leave an organization if the fit is not good. The theory is that over time, as a result of the attraction, selection, attrition process, people within an organization will become more homogenous in their attitudes. This theory calls for an examination of the relationship between job satisfaction and the characteristics of the work environment on the organizational level of analysis. The preceding argument leads to our second hypothesis:

H2: In organizations in which employees experience the characteristics of the work environment more positively, job satisfaction will be higher.

7.3 RESEARCH METHODS

7.3.1 Data

A quantitative study was carried out to analyze the extent to which there is a relationship between characteristics of the work environment, job satisfaction and customer satisfaction in Dutch municipalities. For the analysis, we used a database that was created as the result of cooperation between a research organization working as an agency of the Dutch Ministry of Interior and Kingdom Relations and a public sector organization representing the municipalities. In 2008, the Dutch municipalities were approached and asked to participate in a research project in which both employees delivering public services and customers at public service counters were interviewed. Thirty five municipalities decided to participate in this project. Due to the limitations implied by secondary data analysis we were only able to include these municipalities into our study.

In spring 2008, the research organization working as an agency of the Dutch Ministry of Interior and Kingdom Relations asked 1450 public service front-office and back-office
employees of Dutch municipalities to fill out a web-based questionnaire about their well-being. Of these, 902 employees completed the questionnaire (response rate, 62 percent). For our analysis, only the answers of front-office employees were used because only these people had direct interaction with customers, like in particular the obtaining of documents, permits and financial assistance, the reporting of births, deaths and marriage, the changing of addresses and the obtaining of information on previous topics. The final dataset was a file with information from 543 respondents in 35 municipalities. The response rate within each municipality was at least 40 percent. The data collection took place over a period of two weeks.

In the same period that the front-office employees were asked about their well-being, customers at public service counters were interviewed. After a public service counter visit, they were asked if they were willing to answer some questions about their satisfaction with the service delivery. Participating in the research were 4392 respondents in 35 different municipalities, with a minimum of 100 respondents in each municipality. All respondents were 18 years of age or older. Because customer satisfaction and employee satisfaction were measured independently, the problem of common method bias was avoided (Podsakoff & Organ, 1986).

7.3.2 Sample characteristics
In the sample of front-office employees, 83.6% are female, 65.7% are aged 40 to 59 years, and the predominant educational level is secondary (vocational) education (57.3%). These characteristics are dominant in the overall sample as well within each of the 35 different municipalities.

In the customer satisfaction survey, 52.7% of respondents are female, 54.4% are aged 40 to 70 years, and the predominant educational level is secondary (vocational) education (38.6%). These characteristics are dominant in the overall sample as well within each of the 35 different municipalities. Except for the respondents’ ages, the sample can be regarded as representative of the Dutch population (based on the statistical population data of Statistics Netherlands). Due to the restriction that respondents had to be a minimum of 18 years of age, the group of respondents younger than 20 years of age is underrepresented.

7.3.3 Measures

Characteristics of the work environment
Our database contains different variables to measure employees’ experiences with various characteristics of the work environment. These satisfaction variables combine the objective situation on the one hand with work values and expectations of employees on the other hand, as suggested by Hackman and Oldham (1975). For example, satisfaction with secondary rewards is likely to be a result of the presence of secondary rewards within an
organization and the needs of employees to receive certain secondary rewards. Because of the small number of cases, we could not include too many variables in our analysis (Byrne, 2001). From a theoretical point of view, at a minimum, employees expect the organization to provide fair pay, safe working conditions, and fair treatment (Beer et al., 1984). Because we want to compare results at the organizational level of analysis, we include only those items with more variance between organizations than within organizations. To determine whether the data could be aggregated to the organizational level, the intraclass correlation (ICC) was computed. Aggregation is allowed when the variance between groups is larger than the variance within groups (Klein & Kozlowski, 2000). This is the case when the F-value is statistically significant above one. The work environment variables included in the analysis are (1) satisfaction with secondary rewards ($F = 1.464, p < 0.05$) (how satisfied are you with your secondary rewards?), (2) satisfaction with the amount of work ($F = 1.792, p < 0.05$) (how satisfied are you with the amount of work?), and (3) satisfaction with the direct supervisor ($F = 3.192, p < 0.05$) (how satisfied are you with your direct supervisor?). These three variables are in line with the aforementioned characteristics of the work environment described by Beer et al. (1984). The responses on the selected items were given using a five-point Likert scale, ranging from very dissatisfied (1) to very satisfied (5).

### Job satisfaction

Job satisfaction is measured by one item: ‘All things considered, how satisfied are you with your job?’ ($F = 2.407, p < 0.05$). The answers were given on a five-point Likert scale, ranging from very dissatisfied (1) to very satisfied (5). Although there is some disagreement about how to measure job satisfaction (e.g., Scarpello & Campbell, 1983; Wanous et al., 1997) previous research shows that job satisfaction can reliably be measured with only one item (Nagy, 2002; Wanous et al., 1997).

### Customer satisfaction

To measure customer satisfaction within the process of public service delivery, we used two different performance indicators (Heintzman & Marson, 2005). The first indicator is a latent variable we called ‘interaction quality’. As said before, public service delivery takes place during moments of contact between employees and customers (Schneider & Bowen, 1993; Guest, 1997). Because services are inherently intangible, the interpersonal interactions that take place during service delivery often have the greatest effect on service quality perceptions (Brady & Cronin Jr., 2001). Brady and Cronin Jr. (2001) indicate that interaction quality refers to customer perceptions of the attitude, behavior, and expertise of the service personnel. Based on this definition, we included four items in the analysis to measure this interaction quality: perception of the customer with respect to (1) the kindness of the employee ($F = 10.109, p < 0.05$), (2) the knowledge of the employee ($F = 6.629, p < 0.05$), (3) the empathy of the employee ($F = 4.189, p < 0.05$), and (4) the clarity
of information provided by the employee (F = 6.499, p < 0.05). The answers were given on a ten-point scale ranging from 1 (extremely bad) to 10 (excellent).

Next to the employee characteristics, ‘service timeliness’ (F = 29.494, p < 0.05) seems to be an important performance indicator of public sector service satisfaction (Heintzman & Marson, 2005). After the customers had visited the public service counters they were asked how long they had to wait to be served. The customers could answer (1) less than 5 minutes, (2) between 5 and 15 minutes, (3) between 15 and 30 minutes, (4) between 30 and 60 minutes or (5) more than 60 minutes. In contrast to the first performance indicator (interaction quality), service timeliness is not only dependent on the service delivery of the individual employee but it is dependent on the performance of the entire team involved in the service delivery.

Control variables
Several control variables were included in the analysis. The control variables are divided into two groups. First, we controlled for personnel characteristics on the organizational level (gender, age, and educational level of the employees) and customer characteristics (gender, age, and educational level of the customers). Although previous research showed that personal characteristics are only minimally relevant for employee satisfaction (Jung, Moon & Hahm, 2007; Steijn, 2004), we included these variables to reduce any possible influence on the results. Second, we controlled for one important organizational characteristic: the population size of the municipality. It is expected that the organizational size is proportional to the population size of the municipality. Previous research shows a negative relationship between organizational size and job satisfaction (Indik, 1963). This finding can be explained by the fact that the quantitative growth of an organization results in a bureaucratic process that is characterized by an increasing division of labor and a formalization of communication, both of which negatively influence job satisfaction. Subsequently, it is expected that more anonymity decreases not only employee satisfaction but also the satisfaction of customers at the service counters.

We coded gender as a dummy variable (1 = female). Age was subdivided into ten classes (1 = 15-19 years; 2 = 20-24 years; 3 = 25-29 years; 4 = 30-34 years; 5 = 35-39 years; 6 = 40-44 years; 7 = 45-49 years; 8 = 50-54 years; 9 = 55-59 years and 10 = 60 years and older). Educational level was subdivided into five classes (1 = primary education; 2 = lower vocational education; 3 = higher general secondary education, preparatory scientific education, secondary vocational education; 4 = higher vocational education, candidate exam and 5 = scientific education). Finally, municipality size is a continuous variable ranging from 15,306 to 209,699 inhabitants. Because we performed secondary analysis on a pre-existing dataset, we were restricted to the aforementioned answer categories for measuring the control variables.
7.4 RESULTS

A quantitative study was carried out to explore our research question and to test our hypotheses. A structural equation model (SEM) positing causal relations among the variables was tested. All estimates were produced using AMOS version 16. To examine whether the data were normally distributed, the index of multivariate kurtosis was considered. Bentler (2005) has suggested that, in practice, values above 5.00 are indicative of non-normality (Byrne, 2001). Our data had a score of 1.576, which indicates that it is normally distributed.

In Table 7.1, the means, standard deviations, and organizational level correlations of the study variables are presented. The results show that employees are on average satisfied with both their work environments and their jobs. The average score on the five-point scale was at least 3.68 for all of the items. For the ten-point scale measuring customer satisfaction, the mean score was at least 7.99 for all of the items, indicating that customers are on average satisfied with public service delivery.

To test the proposed relationships between the variables, a causal structure was posited, resulting in the structural equation model shown in Figure 7.2. Following the usual conventions, observed variables are depicted as rectangles and latent (unobserved) variables as ovals (Byrne, 2001). Figure 7.2 shows only the statistically-significant relationships (significance level 0.05). The numerical scores on all lines indicate standardized regression coefficients (beta), and the scores in brackets are the explained variances.

After an intensive analysis of the modification indices, significance tests, standard errors, and several intermediate model modifications, the model in Figure 7.2 is regarded as the best-fitting model (Hu & Bentler, 1999). The overall model fit was tested using several fit indices. In general, the chi-squared test is used to assess sample data in proportion to implied population data. The result of the chi-squared test was CMIN 62.034; df 59; $p$ 0.369 and CMIN/df 1.051, with a CMIN/df between 1.0 and 3.0 indicating a good fit. A number of alternative fit measures have been developed. However, not all of these fit measures were used in our analysis because some of them (e.g., Goodness of Fit Index (GFI) and Normed Fit Index (NFI)) are sensitive to small sample sizes. Our data had a Root Mean Square Error of Approximation (RMSEA) of 0.039 and a Pclose of 0.544, indicating a good fit. The Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI) values were 0.990 and 0.987, whereas the popular cutoff level in social sciences is 0.900, implying that the model is a good fit. The information theoretical measures (AIC, BIC, BCC and CAIC) all showed a better fit in the default model than in the saturated model, also indicating a good fit.

Examination of the effects of the control variables in Figure 7.2 shows that two of the control variables (age of the customer and educational level of the customer) have been removed from the model as a result of the significance tests. The results show that there
Table 7.1: Means, standard deviations, and correlations (N = 35)

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<tr>
<th>Variables</th>
<th>Mean</th>
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<td>Satisfaction with the secondary rewards</td>
<td>4.00</td>
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<td>Satisfaction with the amount of work</td>
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<td>Satisfaction with role of the line manager</td>
<td>3.70</td>
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<td>Job satisfaction</td>
<td>4.13</td>
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<td>.538** .436** .702**</td>
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<td>Kindness employee</td>
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<td>Knowledge employee</td>
<td>8.10</td>
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<td>.071 .160 −.099 .170 .917**</td>
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<td>Empathy employee</td>
<td>7.99</td>
<td>.21</td>
<td>.176 .110 .032 .339* .877** .867**</td>
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<td>Clarity employee</td>
<td>8.07</td>
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<td>.051 .093 −.094 .165 .917** .926** .874**</td>
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<td>Service timeliness</td>
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<td>Gender employee</td>
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<td>−.027 .334* .070 .007 −.151 −.268 −.245 −.344* −.134</td>
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<td>Age employee</td>
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<td>Educational level employee</td>
<td>3.71</td>
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<td>.094 −.102 .144 .364* .113 .114 .163 .119 .235 −.564** −.121</td>
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<td>Gender customer</td>
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<td>Age customer</td>
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<td>Educational level customer</td>
<td>3.75</td>
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<td>.002 −.107 −.042 .037 −.186 −.140 −.243 −.226 .195 −.212 −.130 .424* .206 −.075</td>
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<td>Population size municipality</td>
<td>65137.77</td>
<td>49613.34</td>
<td>−.115 .155 −.086 −.212 −.247 −.139 −.374* −.245 −.046 .247 −.465** .150 .001 −.380* .284</td>
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*p < 0.05; **p < 0.01
are some significant correlations between these control variables, but more interesting is the effect of the control variables on the variables of interest. First, in organizations with more educated employees, employees are more satisfied with their jobs. Second, customers are more satisfied with the kindness of employees in organizations in which more women are delivering public services. Third, in organizations with older employees, customers are more satisfied with the clarity of information provided by employees. Fourth, female customers tend to be more satisfied with the knowledge of employees. Finally, as the population size of a municipality increases, employees become less satisfied with their jobs and customers become less satisfied with the empathy of the employees.

Based on the analysis, our first hypothesis, that customers are more satisfied with public service when they deal with organizations in which employees are more satisfied with their jobs.
jobs, must be rejected. In our model there are two indicators of customer satisfaction. The first indicator is interaction quality. The relationship between job satisfaction and interaction quality is not statistically significant. In other words, there appears to be no direct relationship between job satisfaction and customer satisfaction with respect to interaction quality. With respect to our second indicator of customer satisfaction (service timeliness), the results show that job satisfaction has an important effect on the waiting times of customers, as can be concluded from its high beta weight, but this appears to be a negative effect. In organizations in which employees are more satisfied with their jobs, waiting times appear to increase. This result directly contradicts our hypothesis. Although our first hypothesis must ultimately be rejected, there are some interesting results concerning the relationship between job satisfaction and customer satisfaction. The analysis shows that job satisfaction has an effect on one of the indicators of interaction quality: the perception of customers with respect to the degree of empathy of the employee. This finding suggests that in organizations in which employees are more satisfied with their jobs, customers perceive more empathy in the employees. This result provides some support for our first hypothesis, that customers are more satisfied with public service when they deal with organizations in which employees are more satisfied with their jobs. In addition, the influence of job satisfaction on customer satisfaction, both positive and negative, suggests that when employees are more satisfied with their jobs, they pay more attention to customers, with the result that customers are more satisfied with the empathy of the employee but must wait longer to receive service.

According to our second hypothesis, we expected that in organizations in which employees experience the characteristics of the work environment more positively, job satisfaction will be higher. The results of our analysis confirm this hypothesis. However, not all of the characteristics of the work environment appear to have a significant effect on job satisfaction. There appears to be no significant direct effect of secondary rewards on job satisfaction, therefore this variable has been removed from the model. The role of the line manager appears to be very important for job satisfaction, as can be concluded from its high beta weight. Satisfaction with the amount of work also has a high beta weight, indicating that this variable is important in determining job satisfaction among employees.

7.5 DISCUSSION AND CONCLUSION

In this research, we studied the relationship between work environment characteristics, job satisfaction, and customer satisfaction in Dutch municipalities. This research explores the two faces of the satisfaction mirror, providing a more elaborate picture of the complete mediating process between internal organization and organizational performance. The
results of this research provide support for extending the concept of the external satisfaction mirror by considering both the external and internal satisfaction mirrors together. However, the results also show us the two faces of the external satisfaction mirror since job satisfaction has both positive and negative impacts on customer satisfaction. This unexpected finding calls for a nuanced explanation.

In the first place, we want to focus on the external satisfaction mirror. The relationship between job satisfaction and customer satisfaction is complicated. As mentioned before, job satisfaction appears to have a *positive* as well as a *negative* influence on customer satisfaction. We begin with the negative influence of job satisfaction on service timeliness. The results show that when employees are more satisfied with their jobs, waiting times increase. This result might imply that when employees are more satisfied, they pay more attention to customers and therefore work more slowly. Our starting point was the adage that a happy worker is a productive worker. However, the results show that a happy worker is not necessarily a productive worker. This result mirrors the result of a study by Taris et al. (2008). They found a positive relationship between employee satisfaction and customer satisfaction with respect to service quality, but a negative relationship between employee satisfaction and efficiency in the care sector. A possible explanation for these results can be found in the literature on active and passive performance (Frese & Fay, 2001). In this literature it is stated that employees who are satisfied with their jobs tend to have nice conversations with customers and pay more attention to customers. However, by doing so, they decrease organizational efficiency by increasing waiting times. A similar line of reasoning can be found in the organizational literature, where it is stated that promoting employee well-being and organizational performance can be conflicting goals. For instance, the competing values model by Quinn (1988) shows that the values in various organizational cultures can be contradictory: organizations might stress the importance of human capital but at the same time focus on higher efficiency and productivity.

Second, a nuanced explanation is needed for the finding of a positive influence of job satisfaction on customer satisfaction. When we look at the results in more detail, there appears to be a *positive* effect of job satisfaction on customer satisfaction, but only with respect to customers’ perceptions of the empathy of the employee. This finding of the important role of the empathy of the employee is in accordance with research of Hsieh and Guy (2009). Their findings indicated that clients rate higher levels of satisfaction when services are provided by employees with more emotion work skills.

In research on customer satisfaction, it is quite common to interpret the personnel-customer interaction as the satisfaction of customers with, for example, the kindness, knowledge, empathy and clarity of the employee (for an overview see Brady & Cronin Jr., 2001). Our finding that there appears to be no direct relationship between on the one hand job satisfaction and on the other hand interaction quality, is therefore at first sight a bit surprising. When we look at our result in more detail, this finding is not
really surprising. Job satisfaction is expected to motivate employees to perform, but it is not expected to influence the knowledge, skills and abilities of employees. Subsequently, customer satisfaction with respect to knowledge and clarity of the information provided by the employee should not be affected by job satisfaction. In other words, job satisfaction might influence the willingness to perform, but not the ability to perform. Therefore, further research which focuses on a more elaborate model is necessary. Delery and Shaw (2001) outline three groups of work force characteristics: 1) knowledge, skills and abilities, 2) motivation and 3) empowerment. In future research, this more detailed framework can help to examine the relationship between the characteristics of the work force on the one hand and customer satisfaction on the other hand.

The external satisfaction mirror aside, our results also provide more insight into the internal satisfaction mirror by focusing on the characteristics of the work environment and their effect on job satisfaction. Our findings on the determinants of job satisfaction are not entirely novel, since prior research has indicated similar relationships (e.g., Ting, 1997; Steijn, 2004). Accordingly, this study contributes to existing research by providing additional empirical support and by examining the relationship at the organizational level of analysis instead of at the individual level of analysis. More insight into the determinants of job satisfaction provides important practical information for HRM, based on the assumption that if organizations care for their employees, these employees will care for customers. With respect to determinants of job satisfaction, the main finding in our study is the strong effect of the role of the line manager on overall job satisfaction. The finding of the important role of the line manager for job satisfaction is in line with research of for example Reiner and Zhao (1999) and Lee, Cayer, and Lan (2006). It further underlines the importance of the role of the line manager, especially with respect to the implementation of HRM, as already mentioned in the literature (e.g., Podsakoff, MacKenzie & Bommer, 1996; Purcell & Hutchinson, 2007).

7.5.1 Study limitations
Our research found interesting results regarding the relationship between the characteristics of the work environment, job satisfaction and customer satisfaction in Dutch municipalities. Nevertheless, this research has some limitations. In the first place, we used existing data to analyze the aforementioned relationships. The secondary nature of the data limited the researcher, since it was necessary to work with the variables provided. For example, customer satisfaction in this study is measured by asking customers about the process of public service delivery. From the literature (Zeithaml, Parasuraman & Berry, 1990), we know that customer satisfaction is not only influenced by the process of service delivery, but also by the output of service delivery (did the customer get what he or she wanted). Although we used several different indicators to measure customer satisfaction, we believe there is a need for measuring customer satisfaction with additional indicators.
In addition, customer satisfaction is only one dimension of organizational performance (e.g., Boyne, 2003). With respect to this, there is also a need for additional indicators.

A second limitation concerns the multilevel problem. Although our results show, for example, that organizations with satisfied employees were perceived by customers as having more empathetic employees, we cannot be sure that our proposed explanation for this relationship is correct. We believe that if employees rate their work environment favorably, their job satisfaction will increase with the result that they will behave toward customers in a way that will yield positive service experiences. However, this assumption is based on notions and findings that pertain to a lower aggregation level. The individual-level relationships among work environment characteristics, job satisfaction and performance have already been supported in previous research (Judge et al., 2001; Steijn, 2004). But moving the analysis from the individual level to the organizational level may be problematic. Preferably, we had analyzed the relationship between job satisfaction and customer satisfaction both on the individual level and on the organizational level of analysis but the data did not allow this. However, some evidence of the relationship at the organizational level of analysis has already been produced in a study by Taris and Schreurs (2009).

A third limitation of this research is that the sample size is rather small. Although the underlying data are based on more than four thousand respondents, the data were aggregated at the level of 35 municipalities. A small sample size could affect the statistical power and precision of the model’s parameter estimates as well as the indices of the overall model fit. However, our model seemed to have significant explanatory power, and the relationships the model pointed correspond with sensible theoretical explanations. Therefore, this problem does not appear to be serious.

7.5.2 Study implications

In spite of the aforementioned limitations, this research extends current knowledge in at least three ways. In this research, we have addressed the three main limitations of previous research, as mentioned in the introduction. First, our research provides evidence that employee satisfaction has an effect on organizational performance. Note that previous research focused mainly on individual-level performance. Our organizational-level analysis shows some starting points from which it might be possible to improve organizational performance in public organizations. The research findings imply that managing human resources plays an important role in the performance management of organizations. A first step toward improved organizational performance might be to bring together the different elements of management (e.g., human resource management and quality management) so that an integrated management strategy can be pursued.

Second, our research focuses specifically on the public sector, while previous research focused mainly on the private sector. The public sector has specific characteristics such that the public sector and the private sector cannot necessarily be managed in the same way.
However, with the rise of New Public Management, the public and private sector have grown more alike. Performance indicators such as efficiency have become more important in the public sector. Our research shows that job satisfaction has a different effect on the more qualitative performance indicators (kindness, knowledge, empathy and clarity of the employee) than on the quantitative performance indicator (service timeliness). These two faces of the external satisfaction mirror imply that customer satisfaction should be measured in two ways: by means of more subjective performance indicators and by means of more objective performance indicators, because they yield different results.

Third, our research supports the use of theories and models that combine the external satisfaction mirror with the internal satisfaction mirror. An increased understanding of the complete mediating relationship between characteristics of the work environment, job satisfaction and customer satisfaction can provide valuable information to help organizations manage their human resources effectively and thereby improve organizational performance. In other words, this study provides insight into possible strategies for maximizing the strength of the satisfaction mirror. HRM must carry out the important task of supporting human capital within an organization to encourage desired behaviors and thereby achieve organizational success. Our research specifically underlines the importance of the role of the line manager with respect to the implementation of HRM. However, HRM also faces the challenge of balancing conflicting values and transforming the negative influence of job satisfaction on service delivery into a positive effect.

Note: The authors would like to thank InternetSpiegel, a program of the Dutch Ministry of Interior and Kingdom Relations, and Team Benchmarking Publiekszaken for providing the data.
Chapter 8

Decomposing HRM and performance: Studying the impact of AMO-enhancing HR practices on various performance outcomes in the public sector

This chapter is based on: Vermeeren, B. (2013). Decomposing HRM and Performance: Studying the impact of AMO-enhancing HR practices on various performance outcomes in the public sector. Presented at the EGPA Conference: Edinburgh, Scotland, United Kingdom (2013, September 11 - 2013, September 13). This paper was runner-up for the best paper award for young research talent in the Public Personnel Policies study group. Manuscript under review by an international journal.
8.1 INTRODUCTION

Understanding the relationship between Human Resource Management (HRM) and organizational performance is one of the longstanding goals of HRM research (Guest, 2011; Jiang et al., 2012; Paauwe, 2009). Despite the robust evidence for a positive relationship between HRM and various performance outcomes (Combs et al., 2006), important issues remain regarding the mechanisms through which HRM is associated with various outcomes. Currently, researchers increasingly draw on the AMO (Ability, Motivation, Opportunity) model of HRM in examining the HRM–performance relationship.

According to Boselie (2010), the real challenge for HRM and performance research is to link the AMO model to critical HR goals (e.g., efficiency and social legitimacy) using HR outcomes (employee attitudes and behaviors) as mediating variables between HRM and performance. In this respect, Jiang et al. (2012) recommend breaking down the HR system into three HR components (ability-enhancing, motivation-enhancing, and opportunity-enhancing HR practices) because different sets of HR practices may impact on the same outcomes in heterogeneous ways. In other words, these authors encourage additional research into the influence of these three components of HRM in order to advance knowledge on the relationship between HRM and performance. In line with this suggestion, this chapter decomposes the HR system into three components in order to address the separate effects of ability-enhancing, motivation-enhancing, and opportunity-enhancing HR practices on performance outcomes.

Further, although previous research has provided some insight into the mechanisms through which HRM relates to certain organizational performance outcomes, it remains relatively unclear as to how HRM relates to different types of organizational performance outcomes including both proximal (HRM) outcomes and distal (organizational) outcomes (Jiang et al., 2012). In this respect, organizational performance outcomes are viewed as multidimensional. Drawing on Dyer and Reeves’s (1995) work, researchers have categorized performance outcomes into three primary groups related to HRM: HRM outcomes (e.g., satisfaction), organizational outcomes (e.g., efficiency), and financial outcomes (e.g., profit) (Boselie et al., 2005; Paauwe, 2009). In HRM and performance research, the focus is often on financial performance (Boselie et al., 2005) and, while fully recognizing that adequate financial performance is crucial, other goals such as effectiveness and fairness of service delivery are also important for organizations. This is especially true within the public sector. In this respect, Brewer and Selden (2000) have broadened the concept of organizational performance in the public sector by including effectiveness, efficiency, and fairness. In our study, we embrace the multidimensionality of performance by studying the relationship between HRM and efficiency, effectiveness, and fairness. Moreover, we assume that this relationship between HRM and organizational outcomes is at least partially mediated by the HRM outcome job satisfaction.
By combining the aforementioned insights, our aim is to enhance insight into the HRM–performance relationship by decomposing both the HR system and performance. In short, by drawing on the ability-motivation-opportunity model, this study examines the relationships between the three components of the HR system and effectiveness, efficiency, and fairness of public organizations while viewing job satisfaction as a mediating variable. Our main research question thus became: ‘What is the impact of ability-enhancing, motivation-enhancing, and opportunity-enhancing HR practices on various performance outcomes in the public sector?’ In answering this research question, we formulated several hypotheses based on a theoretical exploration of the literature on HRM, on performance, and on their relationship. These hypotheses are tested using survey data from 822 employees of Dutch public sector organizations. In this, we used SPSS to carry out hierarchical multiple regression analysis. Following the analysis, we discuss our findings and then conclude with suggestions for future research and a reflection on the implications for theory and practice.

8.2 THEORETICAL FRAMEWORK AND HYPOTHESES

With the increasing focus on the HRM–performance relationship, there are now extensive research findings on this topic (for overviews, see Becker & Huselid, 2006; Boselie et al., 2005; Combs et al., 2006; Jiang et al., 2012; Wall & Wood, 2005). Nevertheless, despite several studies indicating a link between HRM and performance, significant challenges remain to achieving a full understanding of this relationship (Guest, 2011; Paauwe et al., 2013). In this respect, more research is needed into how different HR components (ability, motivation, and opportunity enhancing HR practices) relate to various organizational performance outcomes (Jiang et al., 2012). Therefore, in Section 8.2.1, we address breaking down the HR system into three HR components. Then, in Section 8.2.2, several performance outcomes will be discussed with specific attention being paid to performance outcomes in a public sector context. Finally, in Section 8.2.3, the focus moves to linking the HR components (Section 8.2.1) to a range of performance outcomes (Section 8.2.2).

8.2.1 The abilities-motivation-opportunity framework

Research into the HRM–performance relationship have increased since Huselid’s groundbreaking 1995 study in which he showed that a set of HR practices were related to turnover, accounting profits, and a firm’s market value. While HRM research had traditionally focused on the impact of individual HR practices (the instrumental approach), HRM research nowadays emphasizes bundles of HR practices in examining the effects of HRM on employee and organizational outcomes (the system approach) (Wright & McMahan, 1992). In this respect, researchers increasingly draw upon the AMO model of HRM in
examining the HRM–performance relationship (Boselie et al., 2005; Paauwe, 2009). Boxall and Purcell (2011) observe that, according to the AMO model, people perform well when: they are able to do so (i.e., they can do the job because they possess the necessary knowledge and skills - Abilities); they have the motivation to do so (i.e., they will do the job because they want to and are adequately incentivized - Motivation); and their work environment provides the necessary support and avenues for expression (for example the opportunity to be heard when problems occur - Opportunity to perform). Extending this argument, HR systems designed to maximize performance can be viewed as a combination of specific HR practices intended to enhance employees’ abilities, motivation, and opportunity to perform (Jiang et al., 2012). Lepak et al. (2006) suggested that it could be fruitful to conceptualize HR practices as falling into one of these three components. HR practices that enhance ability include skills training, general training, job enrichment, and coaching. Common HR practices that enhance motivation include high wages, fair pay, and pay for performance. Finally, HR practices that enhance the opportunity to perform include employee involvement in decision-making, participation, job and team autonomy, and decentralization.

Several empirical studies have adopted and validated this AMO framework by showing that an HR system composed of elements to enhance employees’ abilities, motivation, and opportunity to perform do affect employees’ attitudes and behaviors, and that these attitudes and behaviors in turn have an impact on performance (for an overview, see Jiang et al., 2012). In these studies, the HR system is often portrayed as an additive index of a set of individual practices (Combs et al., 2006). In this respect, each component of the system is treated as if it exerts equal influence on the outcome variables (e.g., Delaney & Huselid, 1996; Sels et al., 2006). Although this possibly reflects how HR systems operate, scholars have recently challenged this assumption and argued that although employees are exposed to HR systems rather than to individual practices, the components of these systems are not necessarily equivalent in their impact (Gardner, Wright & Moynihan, 2011; Jiang et al., 2012). In other words, one should assume that the components of HR systems can have unique relationships with various organizational outcomes. This has been examined by, for example, Jiang et al. (2012) who, in a meta-analysis of 116 articles, concluded that the three HR components can have different impacts on the outcome variables. More specifically, their results indicate that ability-enhancing HR practices are more positively related to human capital (the combination of employee skills, knowledge, and abilities) and less positively related to employee motivation than are motivation-enhancing HR practices and opportunity-enhancing HR practices. Moreover, their results show that a model in which the three HR components are distinguished is better able to explain variation in performance outcomes than a model in which a composite HRM score is used. Based on these results, they recommended decomposing the HR system variable in future research in order to enhance insight into the HRM–performance relationship. In our study, we
respond to this recommendation by breaking down the HR system variable into three HR components and studying the separate effects of ability-enhancing, motivation-enhancing, and opportunity-enhancing HR practices on performance outcomes.

8.2.2 Various performance outcomes in the public sector

The term organizational performance is comprehensive in that it includes both short and long term economic outcomes as well as wider notions of social legitimacy or corporate social responsibility (Boxall & Macky, 2009). However, in HRM and performance research, the focus often remains on financial performance (Boselie et al., 2005). Nowadays, there is much criticism with respect to this kind of performance indicator. First, because this pure shareholder perspective reflects a very narrow focus in performance. Second, because there is perceived to be a significant causal distance between HRM and financial performance. In this respect, Paauwe (2004) calls for a multidimensional perspective on performance in which one should look at performance in relation to several stakeholders: not just shareholders, but also, for example, employees and clients. In this respect, the distinction made between financial outcomes, organizational outcomes, and HRM outcomes by Dyer and Reeves (1995) is useful in giving substance to this multidimensional perspective on performance.

This multidimensional view of performance is especially important within the public sector. In the context of the New Public Management developments in the governance of public service sectors, performance criteria have largely focused on efficiency and effectiveness. However, relying on such narrow output-oriented performance criteria in public service sectors may lead to misleading conclusions concerning organizational performance (Brewer & Selden, 2000). In this respect, Brewer and Selden (2000) have broadened the concept of organizational performance to include efficiency, effectiveness, and fairness. The argument for examining fairness, in combination with the more management-related concepts of effectiveness and efficiency, is that public organizations should balance the needs for efficiency, for effectiveness, and for fairness (Frederickson, 1990). In this respect, a fundamental purpose of government organizations is to distribute resources in a different manner to that anticipated of private markets. The public sector is expected to allocate services using criteria related to need rather than ability to pay. Indicators of fairness, which refer to equity and the rule of law, can help to establish whether this has been achieved (Boyne, 2002b). Consequently, many authors have argued that a key criterion in the evaluation of public sector organizational performance should be the fairness in service provision (Brewer & Selden, 2000; Boyne, 2002b). In addition to the efficiency, effectiveness, and fairness organizational outcomes, the HRM outcomes are also assumed to be important in explaining the effects of HRM on organizational performance (Boselie et al., 2005; Guest, 2011; Nishii & Wright, 2008). In the next section, the focus shifts to linking HR components to the organizational performance outcomes, to an extent through their influence on the ‘job satisfaction’ HRM outcome.
8.2.3 Linking HR components to multiple outcomes

The mediating link between HRM and organizational performance is often referred to as a 'black box'. In recent years, many suggestions about the nature of the contents of this black box have been made (Bowen & Ostroff, 2004; Nishii & Wright, 2008) with most hypothesizing that employees' perceptions and reactions are the primary mediating variables (Boselie et al., 2005). In this respect, Taris and Schreurs (2009) refer to equity theory as a way of explaining this. They use job satisfaction not as an outcome in itself, but as a determinant of organizational performance and justify this by arguing that satisfied employees feel obliged to do their employer a favor by working hard. In other words, HRM outcomes such as job satisfaction are seen as intermediate outcomes within the black box between HRM and organizational and financial outcomes.

In this study, job satisfaction will be used as a mediating HRM outcome to refine the relationship between the HR components and organizational performance outcomes. Positive employee outcomes largely depend on employees' perceptions of how much the organization cares about their well-being and values their contributions (Gould-Williams, 2007; Vermeeren et al., 2011). In this respect, the degree of job satisfaction will depend on the fulfillment of employee's needs and values (Hackman & Oldham, 1975). Therefore, to increase organizational performance, it is likely that an organization must not only meet the needs of its customers, but also those of its employees (Schneider & Bowen, 1993). This assertion is based on the assumption that if organizations care for their employees then these employees will care for the organization (and their customers). In other words, this argument is based on the premise that a happy worker is a productive worker (Taris & Schreurs, 2009). In this respect, the extent to which certain HR practices are introduced can be conceptualized as a marker of the extent to which an organization values and cares for employees. Previous research has demonstrated a positive relationship between HRM and job satisfaction (e.g., Guest, 2002; Steijn, 2004) and between job satisfaction and performance (Hackman & Oldham, 1975; Judge et al., 2001; Kim, 2005; Taris & Schreurs, 2009). However, the relationship between HRM and performance, as mediated by job satisfaction, does not appear to have been examined in detail by decomposing AMO-enhancing HRM and performance. To fill this gap, we study the relationships among the AMO components, job satisfaction, and organizational performance outcomes (see Figure 8.1).

As indicated earlier, it is likely that the various AMO components will have different effects on the various outcome variables. Based on previous research, we can anticipate two distinct kinds of effect. The first is related to the difference between a direct and an

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10 Although there is some disagreement as to the precise relationship between job satisfaction and performance, the literature generally assumes that greater job satisfaction is associated with better individual and organizational performance (Judge et al., 2001; Kim, 2005; Taris & Schreurs, 2009).
indirect relationship between HRM and performance. The second has to do with the relative importance of the AMO components in influencing various performance outcomes.

First, we address the direct and indirect relationships between the AMO components and organizational performance outcomes. Many causal models on the HRM–performance relationship have been published (e.g., Boselie et al., 2005; Guest, 1997; Paauwe & Richardson, 1997). In these models, both direct as well as indirect relationships between HRM and performance are assumed. Boxall and Macky (2009) specified these relationships by distinguishing between the cognitive (direct) path and the motivational (indirect) path. The cognitive path refers to enhancing employees’ skill-levels and their organization-specific knowledge of the organization’s services, stakeholders, and work processes that enable them to interact effectively with stakeholders. In other words, these ability-enhancing HR practices are expected to influence organizational performance outcomes directly. The motivational path refers to enhancing employee motivation and satisfaction, and lowering turnover rates to ensure that employees want to solve work problems and continue to take responsibility for doing so (see also Batt, 2002; Vandenbergh, Richardson & Eastman, 1999). In this respect, as mentioned above, perceiving that your organization is willing to invest in your abilities, motivation, and opportunities to perform will increase your employee satisfaction, which subsequently influences performance outcomes. In other words, one can expect the three HR components to influence organizational performance outcomes indirectly through their influence on employees’ attitudes and behavior.

Linking this distinction between the cognitive and the motivational paths to the AMO framework, we can expect ability-enhancing HR practices to have both direct and indirect relationships with organizational outcomes (through the cognitive and motivational
paths), whereas indirect relationships are expected between motivation-enhancing and opportunity-enhancing HR practices and organizational outcomes through employees’ attitudes and behavior (the motivational path). Therefore, we hypothesize:

H1: The relationship between ability-enhancing HR practices and organizational performance outcomes is partially mediated by job satisfaction.

H2a: The relationship between motivation-enhancing HR practices and organizational performance outcomes is fully mediated by job satisfaction.

H2b: The relationship between opportunity-enhancing HR practices and organizational performance outcomes is fully mediated by job satisfaction.

In these hypotheses, we do not distinguish between the three organizational performance outcomes. The reason for this is that the literature offers no specific theories with regard to the effect of HRM, or more specifically to the effect of the three AMO components, on the various performance outcomes. Therefore, in our analyses, the investigation into the relationships between the AMO components and the three distinct organizational performance outcomes will be exploratory in nature rather than testing specific hypotheses.

Second, we turn to the relative importance of the AMO components in influencing various performance outcomes. Based on empirical results from previous research, it seems unlikely that the AMO components are all equally important in explaining HRM and organizational outcomes. In this respect, the meta-analysis of Jiang et al. (2012) found that ability-enhancing HR practices were more positively related to human capital and less positively related to employee motivation than both motivation-enhancing and opportunity-enhancing HR practices. Of particular relevance for our public sector study is the empirical study by Boselie (2010) who found that motivation-enhancing HRM does not make a significant contribution to employees’ attitudes and behavior in the public health sector. A literature review on motivating employees in the public sector (Perry, Mesch & Paarlberg, 2006) suggests two possible explanations for why motivation-enhancing HR practices are less important in explaining HRM and organizational outcomes in the public sector context. First, it could be a consequence of the institutionalized context in which Dutch public organizations operate (see also Paauwe & Boselie, 2003). The institutional mechanisms that affect HRM, and in particular HR practices relating to appraisal and rewards, are shaped by Dutch legislation (e.g., a statutory minimum wage, unemployment benefit, and sick pay) and sector-level collective bargaining agreements. This results in there being only limited flexibility with regard to pay issues in the Dutch public sector. Second, differences may exist in employees’ reward preferences and this will influence how employees’ evaluate and respond to these HR practices. In this respect, the literature review by Perry et al. (2006) suggests that financial rewards have stronger effects on employees’ motivation in private organizations than in public organizations. Based on these results, we hypothesize:
H3: Ability-enhancing and opportunity-enhancing HR practices are more positively related to HRM outcomes and organizational performance outcomes than motivation-enhancing HR practices.

8.3 RESEARCH METHODS

8.3.1 Data
To test our hypotheses, we used data from a Dutch national survey on labor productivity conducted by InternetSpiegel (a program of the Ministry of Interior and Kingdom Relations) in November 2010. For this survey, a web panel was used (the so-called Flitspanel) that had been established by the Ministry of Interior and Kingdom Relations with the aim of enabling quick and effective information collection. This panel consists of more than 35,000 employees working in the Dutch public sector. For the survey that we used, 2005 public sector employees were invited to take part and 1005 employees participated (a response rate of 50%). Of the 1005 respondents, 181 had managerial positions and these were excluded from the database for our study because, in the context of HRM and performance research, the assumption is that employees and managers are two very different groups (Nishii & Wright, 2008). Moreover, we removed two respondents where data were missing on background variables resulting in a database of 822 respondents.

The overall characteristics of the resulting sample were as follows: 50.9% were male, the average age was 49.8 years, and the predominant educational level was higher vocational (45.5%). The sample broadly reflected the overall public sector data (arbeidenoverheid.nl). There was a small (3.3%) overrepresentation of men in our sample. In terms of age, the sample’s deviation from the general population in five-year categories was also small (0.3 to 4.4%) with a small overrepresentation of older employees. The employees came from various public sector organizations. A large group came from the ‘core’ of the civil service: central government (14.1%), regional governments (3.5%), municipalities (12.5%), and water boards (3.3%). Further, a large number of respondents were employed in the educational sector: universities (3.2%), higher vocational education (9.0%), vocational education (10.0%), secondary schools (15.3%), and primary schools (17.0%). A limited number of respondents could be characterized as belonging to the judiciary sector (1.0%), research organizations (1.8%), the police (6.0%), and the academic medical sector (3.4%). When compared with the overall public sector population, the deviations in the sample’s distribution were small (0.6 to 4.7%).
8.3.2 Measurement

**AMO-enhancing HR practices**

As noted above, HRM and performance research increasingly makes use of AMO theory to operationalize HRM (Paauwe, 2009). However, there is little consistency in how HRM is measured. In the dataset used, HRM was measured using items drawn from an earlier study the author had conducted in 2009. With some changes based on the validation check in 2009 and the specific needs of the government organization, these items were included in a measurement of HRM in the study conducted by the Ministry of Interior and Kingdom Relations in 2010. The items in the initial study of 2009 were drawn from previous empirical research into HRM that had investigated improving employees’ abilities, motivation, and opportunity to perform (Ahmad & Schroeder, 2003; Appelbaum et al., 2000; Boon, 2008; Gould-Williams, 2003; Huselid, 1995; Wright et al., 2005). Inspired by Lepak et al. (2006), two distinct HR practices were used to measure ability-enhancing HRM, two HR practices were used to measure motivation-enhancing HRM, and two HR practices were used to measure opportunity-enhancing HRM. The two HR practices used to measure ability-enhancing HRM were (1) training and development and (2) recruitment and selection. Whereas most of the scholars referenced above put recruitment and selection outside the ability component, we consider selection to be part of this component because organizations not only obtain abilities by training their employees, they can also bring knowledge into the organization through recruitment and selection (Gould-Williams, 2003; Wright & Boswell, 2002). The two HR practices focusing on the motivation of employees to carry out their function in a good manner that we included were (3) performance appraisal and (4) rewards. Finally, the HR practices used to reflect the employees’ opportunities to perform were (5) autonomy and (6) participation. Each of these six practices was measured using several items (see Appendix 1). These items were formatted as five-point Likert scales with answers ranging from strongly disagree (1) to strongly agree (5).

To examine whether there was any justification for the assumed underlying factor structure, we conducted an exploratory factor analysis using a principle components approach with oblique rotation. We adopted three common statistical warning signs as criteria for item deletion: 1) items correlating at less than .3 or more than .9 with other items in the same dimension, 2) items loading more than .3 on to two factors, and 3) items making a negative contribution to Cronbach’s alpha (Field, 2009). On this basis, we deleted two items from our original 41. Following this, a dimensional structure could be clearly identified that represented the six HR practices described above. A standard test is to calculate Cronbach’s alpha to demonstrate consistency among a set of items. The Cronbach’s alphas of the six scales were .89 (training and development), .84 (recruitment and selection), .89 (performance appraisal), .77 (rewards), .89 (autonomy), and .89 (participation). As such,
the Cronbach’s alphas were all within the range for acceptable internal consistency (i.e., > .70). To test whether the distinction made between the HR practices is supported by the data, we carried out a confirmatory factor analysis using AMOS version 21. Unlike with exploratory factor analysis, where only the number of factors and observed variables are specified, confirmatory factor analysis permits the specification and testing of a more complete measurement model (Byrne, 2001). The simultaneous estimation of measurement models allows us to examine the relationships between the items and their latent constructs as well as the relationships among the constructs themselves. Furthermore, it is indicated whether the items load only on to their target variable, or whether they load on to the other dimension as well (‘unidimensionality of factors’). To evaluate the convergent validity of the measurement model, Anderson and Gerbing (1988) suggest examining the construct loading and determining whether each estimator’s coefficient is significant. With our data, the regression weights using this model ranged from .42 to .86 and all were significant. These coefficients may be interpreted as indicators of the validity of the observed variables: that is, how well they measure the latent dimension or factor. With our data and model, convergent validity was achieved. In terms of discriminant validity, we observed that items related to the same construct were always more closely correlated with one another than with items for the other constructs. Further, Bagozzi and Philips (1982) suggest that discriminant validity in structural equation modeling is achieved provided the unconstrained model has a significantly lower chi-square value than the constrained model. In our study, the chi-square value for the unconstrained model (CMIN = 2003.148, df = 687) is significantly lower than that for the constrained model (CMIN = 8200.347; df = 702). Thus, discriminant validity has been achieved. Finally, $R^2$ is a measure of reliability, an indication of how consistently the observed variable measures the latent dimension. The explained variance corresponding to the observed variables indicates that the related factor explains an adequate portion (Perry, 1996) of the variance (between 17% and 75%). The overall fit of the measurement model was tested using several fit indices, all of which indicated a relatively good fit. The chi-squared test resulted in the following values: CMIN 2003.148; df 687; $p = 0.000$, and CMIN/df = 2.281 (where CMIN/df 1.0 > < 3.0 is indicative of a good fit). Nevertheless, there are concerns about using the chi-square test because the resulting probability is sensitive to sample size (Jöreskog, 1993). With a large sample (as in our case), the chi-square test almost always leads to a rejection of the model because the difference between the sample’s covariance and the implied population’s covariance leads to a high chi-square value as the sample size increases. As a result of these concerns, alternative fit measures (e.g., NFI and CFI) have been developed (Hu & Bentler, 1999). In the social sciences,

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11 Chi-square is calculated by multiplying the sample size (N) by the difference between the sample and implied population covariances.
values above .95 are the prescribed norm (Hu & Bentler, 1999). Their values, using our model, were .88 (NFI), and .92 (CFI) from which one can conclude that the model is a reasonable fit. In addition, the root-mean-square error of approximation (RMSEA) value of .048 is indicative of a good fit as the prescribed norm is to have a score below .05 (Byrne, 2001).

**Job satisfaction**

In our study, job satisfaction was measured using a single item: ‘All things considered, how satisfied are you with your job?; and the answers were to be given on a five-point Likert scale ranging from very dissatisfied (1) to very satisfied (5). Although there is some discussion on how to measure job satisfaction (e.g., Scarpello & Campbell, 1983; Wanous et al., 1997), previous research has shown that job satisfaction can reliably be measured with only one item (Wanous et al., 1997; Nagy, 2002). In this respect, Nagy (2002: 85) noted that measuring job satisfaction with one item “is more efficient, is more cost-effective, contains more face validity, and is better able to measure changes in job satisfaction”.

**Organizational outcomes**

Three performance-related values (efficiency, effectiveness, and fairness), that correspond to distinctions made by Brewer and Selden (2000) and Kim (2005), were used to measure organizational outcome. Traditionally, objective data have been favored in evaluating performance because they are believed to be less biased. However, such data are not always available, especially in the public sector (Brewer & Selden, 2000; Kim, 2005). When objective performance data are not available, subjective (perceptual) performance measures can be a reasonable alternative (Brewer & Selden, 2000; Delaney & Huselid, 1996; Kim, 2005; Wall et al., 2004). There is evidence of a strong correlation between perceptual and objective performance measures (Wall et al., 2004), although there is always some doubt regarding perceptual measures of performance (Kim, 2005). In this paper, given the lack of available objective data, the focus is on employee perceptions of performance.

The three values used in this study (efficiency, effectiveness, and fairness) were all measured using several items (see Appendix 1) that were based on the measurement devised by Kim (2005) although some changes were made with respect to the original set of statements. First, in the original measurement (Kim, 2005), employees were asked in a number of statements to assess the organization’s performance and in another set of statements to assess the unit’s performance. Given that the distance between an employee’s work activities and the unit’s performance is, in general, smaller than that between the employee’s work activities and the organization’s performance, employees were asked in our survey to assess only their work unit’s performance. Second, in our survey, all the statements were formulated in the present tense, and statements referring to the past were removed, to ensure that all employees could make valid responses. Third, the measurement
was extended from a policy perspective by adding some specific questions with respect to performing an task with minimal time and money and to successfully contributing to organizational goals. This resulted in a set of 21 questions to measure organizational performance, including 9 of the original 12 statements by Kim (2005). Due to the changes made to the questionnaire, the distinction between internal and external performance made by Kim (2005) was no longer so clear.

In our study, effectiveness refers to whether the unit meets its objectives. Effectiveness was measured using eight items. Efficiency refers to whether the unit uses the fewest possible resources to meet its objectives and was measured using seven items. The six items measuring fairness refer to equity and the rule of law in dealing with stakeholders. All the items were formatted using five-point Likert scales ranging from strongly disagree to strongly agree. Based on the exploratory factor analysis and a reliability analysis, we deleted eight items (including four of the six fairness items). Following this, a dimensional structure representing the three organizational outcomes described above could be clearly identified. The Cronbach’s alphas were .82 for effectiveness and .88 for efficiency. The correlation between the two fairness items was .493. In addition to the exploratory factor analysis, we carried out a confirmatory factor analysis. In this measurement model, the regression weights ranged from .64 to .79 and all were significant indicating that convergent validity had been achieved (Anderson & Gerbing, 1988). In addition, the chi-square value for the unconstrained model (CMIN 265.435; df 62) was significantly lower than for the constrained model (CMIN 793.535; df 65). Thus, the model had also achieved discriminant validity (Bagozzi & Philips, 1982). Finally, the R² measure of reliability, indicating how consistently an observed variable measures a latent dimension was assessed. The variances corresponding to the observed variables indicate that the respective factor explained an adequate portion (between 42% and 62%) of the variance (Perry, 1996). The overall fit of the model was tested using several fit indices. The chi-squared test produced values of CMIN 265.435; df 62; $p = 0.000$ and CMIN/df = 4.281. Although this final value is above the upper bound for what is normally viewed as a reasonable fit (3.0), there are, as discussed earlier, concerns about using the chi-square test because the resulting probability is sensitive to sample size (Jöreskog, 1993). Using the alternative fit measures (Hu & Bentler, 1999), the resulting values of .943 (NFI) and .956 (CFI) indicate that the model has a good fit. In addition, the RMSEA value of .063 is indicative of a reasonable fit (Byrne, 2001).

**Control variables**

Guest (1999) emphasized the need to include several controls to take account of individual and organizational factors that influence HRM, HRM outcomes, and performance. Following Guest, our control variables are divided into two groups. In this study, we controlled for three individual characteristics (gender, age, and educational level) on the
assumption that different employee groups within organizations may be managed differently with the result that their perceptions will be different. We coded gender as a dummy variable (with 1 = female). Age was a continuous variable ranging from 25 to 69 years old. Reflecting the Dutch educational system, educational level was subdivided into six categories (1 = primary education; 2 = secondary vocational education; 3 = preparatory academic education; 4 = vocational education; 5 = higher vocational education; and 6 = academic education). This variable was, as is generally the approach, treated as a continuous variable (see Van Jaarsveld et al., 2010). In addition to the individual controls, we controlled for one organizational characteristic: the sector representing the core tasks of the organization. Following Steijn and Leisink (2006), we decided to create a three-category sector variable: 1) public administration (including national, regional, and local government plus the water boards); 2) educational sector (employees in the educational sector and in academic–teaching–hospitals); and 3) public security (the police and the judicial system). In our analyses, this differentiation into three subsectors will be measured through the use of two dummy variables (‘educational sector’ and ‘public security sector’).

8.4 RESULTS

The hypothesized relationships among the variables were analyzed using SPSS version 20. Table 8.1 presents the means, standard deviations, and correlations of the study variables. The results show that, of the AMO-enhancing HR practices, employees most strongly perceived the presence of ability-enhancing HR practices (average score 3.43 on the five-point scale) and were least aware of motivation-enhancing HR practices (average score 2.91). Further, the results show that employees were generally satisfied with their jobs with an average score of 4.05 on a five-point scale. The results with respect to the three organizational outcomes (efficiency, effectiveness, and fairness) indicate that employees generally perceived their work unit’s activities as reasonably efficient, effective, and fair although they saw room for improvement. The work units were felt to perform best in terms of fairness (average score 4.07 on the five-point scale) and the worst in terms of efficiency (average score 3.25). A correlation analysis between the variables found significant relationships between the AMO components, job satisfaction, and organizational outcomes. With such reasonably strong correlations, one should assess the collinearity statistics. In this respect, variance inflation factors above 10 or tolerance values below 0.1 would be indicative of a serious problem (Field, 2009). Fortunately, the values from our study (VIFmax = 1.908; tolerance min = .524) do not give cause for concern.

To test the hypothesized mediating effects, we employed a bootstrapping method (Hayes, 2009; Preacher & Hayes, 2004). In its simplest form, this method estimates the parameters of a model and their standard errors from the sample without reference to
Table 8.1: Means, standard deviations, and correlations (N = 822)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
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</thead>
<tbody>
<tr>
<td>1. Gender (1=f)</td>
<td>0.49</td>
<td>0.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Age (years)</td>
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<td>10.45</td>
<td>-.060</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Educational</td>
<td>4.88</td>
<td>1.08</td>
<td>.006</td>
<td>.053</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>4. Public</td>
<td>0.33</td>
<td>0.47</td>
<td>-.124**</td>
<td>.421**</td>
<td>-.035</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>5. Educational</td>
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<td>0.49</td>
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<td>-.241**</td>
<td>.133**</td>
<td>-.861**</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. Public</td>
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<td>-.317**</td>
<td>-.192**</td>
<td>-.193**</td>
<td>-.332**</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>7. Ability-enhanc</td>
<td>3.43</td>
<td>0.72</td>
<td>.007</td>
<td>.090</td>
<td>.052</td>
<td>.131</td>
<td>-.062</td>
<td>-.124*</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>8. Motivation-enh</td>
<td>2.91</td>
<td>0.64</td>
<td>-.003</td>
<td>.105**</td>
<td>-.012</td>
<td>.279**</td>
<td>-.260**</td>
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<td>.609**</td>
<td></td>
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<td>9. Opportunity-en</td>
<td>3.22</td>
<td>0.67</td>
<td>-.081*</td>
<td>.144**</td>
<td>.100**</td>
<td>.221**</td>
<td>-.153**</td>
<td>-.115**</td>
<td>.494**</td>
<td>.457**</td>
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<td></td>
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</tr>
<tr>
<td>10. Job satisfaction</td>
<td>4.05</td>
<td>0.87</td>
<td>-.013</td>
<td>.062</td>
<td>.012</td>
<td>-.032</td>
<td>.031</td>
<td>.000</td>
<td>.511**</td>
<td>.390**</td>
<td>.408**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Effectiveness</td>
<td>3.72</td>
<td>0.60</td>
<td>.059</td>
<td>-.015</td>
<td>-.033</td>
<td>.015</td>
<td>-.003</td>
<td>-.023</td>
<td>.423**</td>
<td>.283**</td>
<td>.292**</td>
<td>.389**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Efficiency</td>
<td>3.25</td>
<td>0.72</td>
<td>.083*</td>
<td>-.005</td>
<td>-.043</td>
<td>.015</td>
<td>.001</td>
<td>-.029</td>
<td>.470**</td>
<td>.337**</td>
<td>.351**</td>
<td>.404**</td>
<td>.612**</td>
<td></td>
</tr>
<tr>
<td>13. Fairness</td>
<td>4.07</td>
<td>0.66</td>
<td>.043</td>
<td>.008</td>
<td>.062</td>
<td>-.036</td>
<td>.048</td>
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<td>.109**</td>
<td>.194**</td>
<td>.234**</td>
<td>.444**</td>
<td>.428**</td>
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</tbody>
</table>

* p < 0.05; ** p < 0.01
any theoretical sampling distribution (Efron & Tibshirani, 1993). The regression results of this process are presented in Table 8.2. This table presents both the total effect (model 1) and the direct effects (model 2). In Table 8.3, the bootstrap results from testing the indirect effects are presented. In addition to robust estimates, bootstrapping procedures also provide bias-corrected confidence intervals that enable one to evaluate the significance of indirect effects. The reported results are based on bias-corrected and accelerated confidence intervals set at 0.95 with 1000 resamples (with replacement). If the interval between the lower and upper bounds does not span zero then one can claim that the indirect effect is statistically significant.

First, we tested the hypothesis (H1) that the relationship between ability-enhancing HR practices and organizational performance outcomes is partially mediated by job satisfaction. The results indeed show a positive direct relationship between ability-enhancing HR practices and all three organizational performance outcomes (for effectiveness: $\beta = .245$, $p < .01$; for efficiency: $\beta = .273$, $p < .01$; for fairness $\beta = .230$, $p < .01$). In addition to this direct effect, Table 8.3 indicates a significant indirect effect of ability-enhancing HR practices through job satisfaction on organizational performance although this indirect effect is much smaller than the direct effect. Based on these results, our first hypothesis is supported by the data.

Second, we tested the hypothesis that the relationship between motivation-enhancing HR practices and organizational performance outcomes is fully mediated by job satisfaction (H2a). The finding that the total effect of motivation-enhancing HRM on the three performance outcomes is not significant is striking. In the traditional, widely used, method by Baron and Kenny (1986), evidence of a total effect is a prerequisite for mediation. In our situation, we would not have been allowed to test for an indirect effect. However, in the more recent bootstrapping method suggested by Hayes (2009), a significant total effect is not required to proceed to testing for indirect effects. Hayes in fact argues that not testing for indirect effects in the absence of a total effect can lead to missing some potentially interesting mechanisms. Therefore, we continued by seeking indirect effects. The results in Table 8.3 show a statistically significant indirect effect of motivation-enhancing HR practices on two of the three performance outcomes: there appears to be significant indirect effects on both effectiveness and efficiency but not on fairness. These results partly support Hypothesis 2a in that there appears to be no indirect relationship with fairness. With respect to Hypothesis 2b, that the relationship between opportunity-enhancing HR practices and organizational performance outcomes is fully mediated by job satisfaction, the results show a statistically significant indirect effect on all three performance outcomes.

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12 If the size of $c$ (the direct effect) constrains the sizes of $a$ and $b$ (the indirect effects), and therefore their product, this logic would make sense. However, no such constraints exist and, as our results show, the assertion that $x$ cannot affect $y$ indirectly in the absence of a detectable total effect is false (see for more information Hayes, 2009).
### Table 8.2: Results of regression analysis

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
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<td></td>
<td>Job satisfaction</td>
<td>Effectiveness</td>
<td>Efficiency</td>
<td>Job satisfaction</td>
<td>Effectiveness</td>
<td>Efficiency</td>
<td>Fairness</td>
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<tr>
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<td>B</td>
<td>β</td>
<td>B</td>
<td>β</td>
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<td>Gender (1=female)</td>
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<tr>
<td>Age</td>
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<td>.177**</td>
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<td>Educational level</td>
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<td>-.108**</td>
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<td>ns</td>
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<td>Public security</td>
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<td>.211**</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
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<tr>
<td>Ability-enhancing</td>
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<td>.319**</td>
<td>.269**</td>
<td>.326**</td>
<td>.203**</td>
<td>.245**</td>
<td>.366**</td>
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<td>HRM</td>
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<tr>
<td>Motivation-enhancing</td>
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<td>.141*</td>
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<td>ns</td>
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<td>HRM</td>
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</tr>
<tr>
<td>Opportunity-enhancing</td>
<td>.357**</td>
<td>.271**</td>
<td>.143**</td>
<td>.169**</td>
<td>ns</td>
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<td>.197**</td>
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<td>HRM</td>
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<td></td>
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</tr>
<tr>
<td>Job satisfaction</td>
<td>.162**</td>
<td>.252**</td>
<td>.191**</td>
<td>.233**</td>
<td>.109*</td>
<td>.151*</td>
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<tr>
<td>Adjusted R²</td>
<td>.367</td>
<td>.205</td>
<td>.243</td>
<td>.252</td>
<td>.284</td>
<td>.158</td>
<td>.169</td>
</tr>
</tbody>
</table>

¹ reference category = public administration

*p < 0.05; ** p < 0.01; The following criteria are met (based on Field, 2009): test of independent errors (Durbin-Watson: 1.85–1.98 (criterion > 1, < 3)), test of no perfect multicollinearity (VIFmax values < 1.908 (criterion < 10); tolerancemin: .524 (criterion > 0.1)). No exclusion of influential outlying cases were required (Cook’s distance max. 0.02 (criterion < 1)). Further, criteria related to homoscedasticity and normally distributed errors were met.
### Table 8.3: Bootstrap results for mediation analysis

<table>
<thead>
<tr>
<th></th>
<th>Effectiveness</th>
<th></th>
<th></th>
<th></th>
<th>Efficiency</th>
<th></th>
<th></th>
<th></th>
<th>Fairness</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Effect</td>
<td>SE</td>
<td>BootLLCI</td>
<td>BootULCI</td>
<td>Effect</td>
<td>SE</td>
<td>BootLLCI</td>
<td>BootULCI</td>
<td>Effect</td>
<td>SE</td>
<td>BootLLCI</td>
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<tr>
<td>Ability-enhancing HRM</td>
<td>Total effect</td>
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<td>.0540</td>
<td></td>
<td>.366**</td>
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<td></td>
<td></td>
<td>.259**</td>
<td>.0625</td>
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<td></td>
<td>Direct effect</td>
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<td>.0551</td>
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<td>.288**</td>
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<td></td>
<td></td>
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<td>.0227</td>
<td>.0310</td>
<td>.1200</td>
<td>.078*</td>
<td>.0268</td>
<td>.0343</td>
<td>.1379</td>
<td>.045*</td>
<td>.0241</td>
</tr>
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<td>Motivation-enhancing HRM</td>
<td>Total effect</td>
<td>.059</td>
<td>.0608</td>
<td></td>
<td>.106</td>
<td>.0749</td>
<td></td>
<td></td>
<td>−.055</td>
<td>.0705</td>
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<tr>
<td></td>
<td>Direct effect</td>
<td>.026</td>
<td>.0599</td>
<td></td>
<td>.068</td>
<td>.0739</td>
<td></td>
<td></td>
<td>−.077</td>
<td>.0706</td>
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<td></td>
<td>Indirect effect</td>
<td>.032*</td>
<td>.0190</td>
<td>.0012</td>
<td>.0734</td>
<td>.038*</td>
<td>.0223</td>
<td>.0026</td>
<td>.0898</td>
<td>.022</td>
<td>.0161</td>
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<tr>
<td>Opportunity-enhancing HRM</td>
<td>Total effect</td>
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<td>.0517</td>
<td></td>
<td>.197**</td>
<td>.0637</td>
<td></td>
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<td></td>
<td>Direct effect</td>
<td>.085</td>
<td>.0524</td>
<td></td>
<td>.129*</td>
<td>.0646</td>
<td></td>
<td></td>
<td>.198**</td>
<td>.0618</td>
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<tr>
<td></td>
<td>Indirect effect</td>
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<td>.0201</td>
<td>.0233</td>
<td>.1007</td>
<td>.068*</td>
<td>.0261</td>
<td>.0273</td>
<td>.1346</td>
<td>.039*</td>
<td>.0217</td>
</tr>
</tbody>
</table>

1 mediated through job satisfaction

* p < 0.05; ** p < 0.01; Unstandardized regression coefficients
However, in addition to these indirect effects, the results also indicate two significant direct effects of opportunity-enhancing HR practices on efficiency ($\beta = .120, p < .05$) and on fairness ($\beta = .207, p < .01$). As such, Hypothesis 2b, assuming that the relationship is fully mediated, has to be rejected.

Our third hypothesis (H3) was that ability-enhancing and opportunity-enhancing HR practices are more positively related to HRM outcomes and organizational performance outcomes than are motivation-enhancing HR practices. The results in Table 8.2 show that, of the three AMO components, the beta coefficient for motivation-enhancing HR practices, on job satisfaction, is the lowest ($\beta = .141, p < .05$, compared to $\beta = .319, p < .01$ for ability-enhancing HR practices and $\beta = .271, p < .01$ for opportunity-enhancing HR practices). Moreover, the results fail to show any statistically significant direct effect of motivation-enhancing HR practices on the three performance outcomes. Although the effect sizes and reliability statistics in Table 8.3 show that motivation-enhancing HR practices have a small indirect effect on effectiveness and efficiency, this effect is smaller than the effects of ability-enhancing and opportunity-enhancing HR practices. Based on these results, this third hypothesis is supported by the data.

Finally, the analysis of the control variables showed a significant relationship between age and job satisfaction that indicated that older employees are somewhat more satisfied with their job than their younger colleagues. Further, the results show that employees working in the education and public security sectors are more satisfied with their job than employees working in public administration. Lastly, the analysis of the control variables shows that the higher educated employees are least positive about their work unit’s effectiveness.

### 8.5 DISCUSSION AND CONCLUSION

In this study, insights from HRM and performance research, which was largely conducted in the private sector, have been combined with public management literature. The inspiration for this study came from two very different articles. Firstly, an article by Jiang et al. (2012) in which they recommended decomposing the HR system variable into three HR components representing ability-enhancing, motivation-enhancing, and opportunity-enhancing HRM. Secondly an article by Brewer and Selden (2000) in which they broadened the concept of organizational performance in the public sector by including effectiveness, efficiency, and fairness. By combining these insights, the aim was to gain greater insight into the HRM–performance relationship by decomposing both the HR system and performance. In addition, we assumed that this relationship between HRM and organizational performance would be at least partially mediated by a more proximal outcome, namely the HRM outcome job satisfaction. Following this, our main research
question became: ‘What is the impact of ability-enhancing, motivation-enhancing, and opportunity-enhancing HR practices on various performance outcomes in the public sector?’.

As explained in the theoretical framework, previous research has assumed both direct and indirect relationships between HRM and performance (e.g., Boselie et al., 2005; Guest, 1997; Paauwe & Richardson, 1997). Based on the distinction made by Boxall and Macky (2009) between the cognitive (direct) path and the motivational (indirect) path, we expected ability-enhancing HR practices to have both direct and indirect relationships with organizational outcomes (through cognitive and motivational paths). However, we expected the relationships between motivation-enhancing and opportunity-enhancing HR practices on the one hand and organizational outcomes on the other to be only indirect through employees’ attitudes and behavior (the motivational path). Our research results largely confirmed these expectations and also showed that the three AMO components have unequal impacts on the three performance outcomes. This finding supports the view of Jiang et al. (2012) that decomposing the HR system into three HR components (ability-enhancing, motivation-enhancing, and opportunity-enhancing HR practices) can provide greater insight into the HRM–performance relationship.

In addition to the anticipated relationships, we detected two others: direct relationships between opportunity-enhancing HR practices and two of the performance outcomes (efficiency and fairness). This is maybe because if employees are involved in decision-making and are given autonomy in carrying out their work activities this is directly visible in the performance outcomes because they have direct experience from the workplace regarding what could be better and how this could be achieved.

Following Boselie (2010), we further assumed that ability-enhancing and opportunity-enhancing HR practices would be more positively related to HRM and organizational performance outcomes than would motivation-enhancing HR practices. Our study supported this assumption. As noted in the theoretical framework, this might be explained by specific public sector characteristics, specifically the institutional context and/or workforce characteristics (Perry et al., 2006). Further research could focus on whether these possible explanations are the correct reasoning or if other forces are at play in the public sector.

Beyond offering further justification for decomposing the HR system in future research, this study also indicates that decomposing performance would have benefits. This is because the AMO components do not influence the performance outcomes in a homogeneous way. More specifically, this study showed that opportunity-enhancing HR practices do not have a significant direct relationship with effectiveness and that motivation-enhancing HR practices do not have either a significant direct or indirect relationship with fairness. As already observed, there is little research on decomposing performance in relation to HRM. For example, although Brewer and Selden (2000) and Kim (2005) conceptually distinguish three different organizational outcomes (efficiency, effectiveness, and fairness) in their analyses, they then use a composite score labelled organizational performance. Our
study constitutes a first attempt to examine whether it would be relevant to decompose the performance variable in relation to HRM. Although decomposing performance seems to be relevant, future research needs to test the robustness of these results and to unearth explanations.

Notwithstanding our findings, the limitations of this study suggest lines for further research. In the first place, this study used a cross-sectional dataset. While a cross-sectional approach often allows large samples to be used, which enhances external validity, the resulting findings have limitations with respect to internal validity. A longitudinal dataset would increase internal validity since such data enable researchers to make stronger causal claims. In general, HRM–performance research is dominated by cross-sectional studies and this generates considerable discussion on whether public organizations are more successful because they value their employees or whether public organizations value their employees if they are more successful. It has also been suggested that both propositions can be true (Guest, 2011). A longitudinal research design would enable such issues to be resolved.

A second point to recognize is that the data we used may be subject to common method bias (Meier & O’Toole, 2013) because all the measures were self-reported and collected among a single group of employees. Given this possibility, we conducted a Harman one-factor test (Podsakoff & Organ, 1986; Podsakoff, MacKenzie, Lee & Podsakoff, 2003) to see if the majority of the variance could be explained by a single factor. A factor analysis was conducted on all 53 items. The factors together accounted for 63% of the total variance (using the eigenvalues >1 criterion) and the largest factor explained less than 50% (only 28%). While these results do not preclude the possibility of common-source bias, they do indicate that such a bias is unlikely to have confounded the interpretation of the results. However, this potential risk highlights the importance of replicating our research, ideally using objective performance indicators.

From a practitioner point of view, the results of our study show that investing in HRM is important in that it can positively influence performance outcomes. Moreover, our results show that various aspects of public performance require different HR approaches. More specifically, investing in ability-enhancing HR practices seems to be particularly relevant if one wants to enhance effectiveness. All the HR practices, but again especially ability-enhancing ones, seem to be relevant in enhancing efficiency. However, investing in motivation-enhancing HR practices seems to make little sense if one is seeking to enhance fairness.
Chapter 9

Conclusions and discussion
9.1 INTRODUCTION

The overall aim of this dissertation is to enhance insight into the HRM–performance relationship in the public sector by focusing on how the enactment of HR practices as well as line managers’ leadership styles influence employees’ perceptions of HRM and whether, in turn, these perceptions influence employees’ reactions and, through this, unit and organizational performance. In this respect, three research lines have been formulated. The first is to gain greater insight into the mechanisms through which HRM has an impact on performance. The second research line examines the role of the line manager in HRM implementation. Finally, the third research line takes context into account by examining HRM, performance, and their relationship specifically in the public sector. Following the overall aim, the main research question was formulated as: ‘How does the implementation of HRM affect the performance of public sector organizations?’

In this final chapter, the main findings will be summarized (Section 9.2). Based on these findings, the central research question will be answered in Section 9.3. Then, in Section 9.4, the contribution of our research to each of the three research lines will be assessed. Following this, we reflect on the methodology (Section 9.5) and suggest a future research agenda and make recommendations for practice (Section 9.6).

9.2 SUMMARY OF THE MAIN FINDINGS

This dissertation includes five empirical chapters that all contribute to answering our main research question. In this section, we provide a summary of the main findings from each empirical chapter and, by describing these findings, show how the chapters relate to each other.

First of all, in Chapter 4, we focused on the public sector context of HRM by examining whether an organization’s degree of publicness influences its HR design and the associated HR content. The HR design addresses the organizing principles of the HR system. With respect to the HR design, we examined differences within the public sector due to different degrees of publicness in (1) the devolution of HRM activities to line managers and in (2) line managers’ perceived rules and constraints in implementing HR practices (personnel red tape). The HR content dimension focuses on which HR practices are implemented and, here, we focused on differences within the public sector in the implementation of HR practices associated with the role of being a model employer due to different degrees of publicness. In addition to examining the influence of the degree of publicness on the HR design and the HR content, we examined whether the HR design influences the HR content. In other words, we examined whether the way HRM is organized within the organization (i.e., HR devolution and personnel red tape) influences
the implementation of HR practices (i.e., the model employer role). The analysis of a database of 30,741 employees working for 154 public organizations showed that the HR design and the HR content do indeed to some extent vary between organizations with different degrees of publicness. Moreover, the results showed that, on average, there is a reasonably high degree of HR devolution within the public sector such that the execution of HRM activities is largely the responsibility of line managers. At the same time, however, line managers perceive a significant amount of personnel red tape. We saw that these two aspects of the HR design inherently conflict: the idea behind HR devolution is that line managers have greater flexibility and freedom in dealing with staff issues, whereas personnel red tape amounts to rules and constraints to restrict the freedom and flexibility of line managers. The combination of these characteristics (considerable HR devolution and significant personnel red tape) resulted in employees having negative perceptions of the HR practices used within the organization. This appears to be especially true for organizations with a low degree of publicness. This shows that it is relevant to pay attention to the context in which HR practices are implemented.

After having gained insight into the context influencing the HR design and HR content of public sector organizations, we focused more particularly on the role of line managers in the HRM and performance model. In this respect, we looked at how line managers give substance to their HRM responsibilities by focusing on the management component (i.e., enactment of HR practices) and the leadership component (i.e., their leadership style) of HRM implementation. In Chapter 5, we examined the relationship between HRM and organizational performance by focusing on the influence of a line manager's leadership style on the number of HR practices used. Further, we investigated job satisfaction as a possible mediating variable between HRM and organizational performance. Through an analysis of data from a national survey incorporating the views of 6,253 employees of Dutch municipalities, we tested our hypotheses using structural equation modeling. The findings indicate that (a) job satisfaction acts as a mediating variable in the relationship between HRM and organizational performance and (b) a stimulating leadership style has a positive effect on the number of HR practices used, whereas (c) a correcting leadership style has no effect on the number of HR practices used. Moreover, by including both the management and the leadership components, we were able to show that a line manager's leadership style has a greater influence on job satisfaction and performance than does the number of HR practices used.

Then, in Chapter 6, we focused more specifically on the line managers by examining their role in implementing HR practices within the work unit, and subsequently their influence on employees' perceptions of HR practices and unit performance. In a 2-1-2 mediational multilevel study of 315 employees and 41 line managers drawn from various work units of a Dutch municipality, we tested whether HR practices, as implemented by line managers, affect employees' perceptions of HR practices, and whether these
perceptions, in turn, can be related to unit performance. As we had hypothesized, the analysis showed that the enactment of HR practices varied between work units. This finding stresses the importance of going beyond the organizational level when studying the HRM–performance relationship. More specifically, our study showed that the enactment of HR practices varied between work units because of differences in leadership style. As such, the results of this study emphasize the important role of line managers in HRM and in the related performance model. Moreover, our findings indicate that employees’ perceptions of HR practices mediate the relationship between HR practices as implemented by line managers and unit performance.

With this enhanced insight into the role of the line manager in the implementation of HRM, and subsequently unit and organizational performances, we specifically addressed the multidimensional character of public performances. In Chapter 7, stakeholders’ perceptions of public service delivery were included in our HRM–performance study. In that chapter, work environment characteristics, job satisfaction, and customer satisfaction were studied by comparing customer satisfaction data with data on the wellbeing of front-office employees in 35 Dutch municipalities. We tested our hypotheses using structural equation modeling. Our findings indicate that these work environment characteristics influence job satisfaction. Moreover, contrary to what we had expected, the findings indicated that job satisfaction has a twofold effect on customer satisfaction. In organizations where employees are more satisfied with their jobs, customers are more satisfied with the empathy received from employees but, at the same time, the waiting times for services tend to increase.

In the four empirical chapters just discussed, by focusing on the bundle of HR practices, we followed the system approach to HRM in examining the HRM–performance relationship. However, in the final empirical chapter, following recent calls in the literature, we decomposed the HR system variable into three HR components on the premise that the different components of an HR system can have unique relationships with various organizational outcomes. Moreover, as the literature (and supported by the findings of Chapter 7) emphasizes the importance of including multiple performance indicators in examining the HRM–performance relationship, we decomposed the performance variable in this chapter and focused on three distinct values. In this respect, in Chapter 8, we have examined the effects of ability-enhancing, motivation-enhancing, and opportunity-enhancing HR practices on the effectiveness, efficiency, and fairness of public organizations, while treating job satisfaction as a mediating variable. The analysis of a database of 822 employees working in the Dutch public sector showed that these three HR components are not equal in their impact on the three performance outcomes. More specifically, ability-enhancing HR practices have positive direct and indirect effects on all three performance outcomes (effectiveness, efficiency, and fairness). In comparison, opportunity-enhancing HR practices only have direct effects on two, efficiency and fairness, but do have indirect effects on all three. Motivation-enhancing HR practices have no direct effects on any
of the three performance outcomes, but do have indirect effects on effectiveness and efficiency. Further, the results showed that ability-enhancing and opportunity-enhancing HR practices are more positively related than motivation-enhancing HR practices to both the HRM outcome and the organizational performance outcomes.

### 9.3 ANSWERING THE CENTRAL RESEARCH QUESTION

Based on the findings of this research (Section 9.2), we can now answer the central question of this dissertation: ‘How does the implementation of HRM affect the performance of public sector organizations?’. Our results show that the implementation of HRM, as expected, affects the performance of public sector organizations. In this regard, this dissertation gives more insight into how the implementation of HRM affects the performance of public organizations. Figure 9.1 summarizes the most important relationships uncovered.

**Figure 9.1: Overview of the study’s most important relationships uncovered**

First of all, it is important to take the public sector context into account in understanding the HRM–performance relationship. Line managers are increasingly responsible for the implementation of HR practices. It was seen that the implementation of HR practices by line managers is influenced by the degree to which them being given HR responsibilities is accompanied by sufficient discretionary power in implementing HR practices. We saw that personnel red tape reduces this discretionary power, and that this resulted in employees having more-negative perceptions of the implemented HR practices.
The implementation of HRM by line managers includes both management and leadership components. The management component of HRM implementation, in the sense of the HR content (i.e., the implementation of HR practices), is important in that it influences performance. This study found that the more that HR practices aimed at increasing employees’ abilities, motivation, and opportunity to perform are implemented, the greater the unit’s and the organization’s performance. Furthermore, this study shows that it is relevant to make distinctions between these ability-, motivation-, and opportunity-enhancing HR practices as various public performances require different approaches.

However, HRM implementation is more than just implementing HR practices. Comparing the management component and the leadership component of HRM implementation, it can be concluded that leadership style is a stronger predictor of performance than the simple use of HR practices by line managers. Furthermore, it appears that the implementation of HR practices is shaped by the leadership style of line managers in implementing these HR practices.

Then, by combining the macro- (focusing on the linkage between HRM and organizational performance) and the micro- (focusing on the effect of HRM on individuals) perspectives, our research demonstrates the important role of the employee in the HRM–performance relationship. Employees’ perceptions of HRM (i.e., the perceived HRM) play an important role in the relationship between the implementation of HRM by line managers and the performance of work units. Employees’ perceptions of HRM are a reaction to their line managers’ implementation of HRM and, therefore, employee perceptions are closer to and consequently more predictive of performance than are HRM ratings provided by line managers. Moreover, employees’ perceptions of HRM are predictive of their ultimate attitudinal responses. In this respect, it can be concluded that employees’ perceptions of HRM influence their job satisfaction, which subsequently influences performance.

When looking at performance, it is important to distinguish between unit and organizational performance. It is not enough to just look at organizational performance as performance can vary between units. In this respect, it can be concluded that work unit performance is an important link in the HRM–performance chain. Finally, our research indicates that the extent to which the HR practices implemented affect organizational performance depends on the performance indictors chosen. In this regard, this study showed that when assessing public sector performance that one should define performance indicators in such a way that they are relevant to the public sector context.
9.4 CONTRIBUTION TO THE THREE RESEARCH LINES

In the introductory chapter, three research lines were distinguished: (1) the process through which HRM affects performance, (2) the role of the line manager in implementing HRM, and (3) the public sector context. In this section, the contributions of our research to these three research lines will be described in more detail.

9.4.1 The HRM–performance relationship

One of the main concerns regarding the HRM–performance relationship is the need to gain greater insight into the mechanisms through which HRM impacts on performance (Guest, 2011; Paauwe et al., 2013). In this respect, in this dissertation we have examined the theoretical premises in the model by Nishii and Wright (2008). This dissertation contributes in three ways.

First, our study contributes to HRM and performance research by empirically supporting the theoretical distinction made by Nishii and Wright (2008) between actual and perceived HRM and, more than that, it also specifies how actual HRM is shaped by the leadership style of line managers in implementing HRM. This research shows that there are indeed differences between line managers’ and employees’ perceptions of the HR practices implemented. This finding confirms the relevance of clearly distinguishing between actual and perceived HRM in future research. Moreover, by showing differences between work units in implemented and perceived HR practices, our research highlights the importance of focusing on these differences between work units when examining HRM implementation. Although this aspect has not been examined that often, we are not the first to come to this conclusion (see, for example, Aryee et al., 2012; Den Hartog et al., 2013; Knies, 2012). Anticipating the contribution made to the second research line, our research further contributes to this literature by considering the influence of leadership style. In this respect, the results suggest that differences between work units in perceived HRM can to some extent be explained by differences in the implementation of the HR practices (the actual HRM) by line managers due to their different leadership styles. Further, our results suggest that employees’ perceptions of implemented HR practices mediate the relationship between the HR practices as implemented by line managers and unit performance, thus adding insight into the HRM-performance relationship.

Second, our study shows that job satisfaction can both positively and negatively mediate the HRM–performance relationship. In this dissertation, based on the happy worker-productive worker adage, we have focused on job satisfaction in specifying the mediating relationship between HRM and performance. An important finding of our study is that job satisfaction mediates the HRM–performance relationship both positively and negatively. Specifically, our research suggests that job satisfaction has a positive effect on employee empathy, a somewhat qualitative performance indicator, but a negative effect on
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Service timeliness, a quantitative efficiency-related performance indicator. This result is an important addition to the existing literature because it adds a critical warning regarding the assumption in many HRM–performance process models (e.g., Nishii & Wright, 2008; Paauwe & Richardson, 1997) that employees’ positive attitudes and behavior will result in positive organizational outcomes. As such, this result emphasizes the importance of retaining a multidimensional perspective on performance. In Chapter 2, we discussed the distinction sometimes made between the mutual gains perspective and the conflicting outcomes perspective (Van de Voorde, 2010; Van Veldhoven, 2012). Although our results do not contradict the mutual gains perspective, this specific result does hint that, in some circumstances, there could indeed be conflicting outcomes.

Third, greater insight into the process through which HRM has an impact on performance has been obtained by decomposing HRM – an aspect that has also been recently suggested by Jiang et al. (2012). Whereas traditional HRM research has focused on the impact of individual HR practices, the research that adopts the strategic perspective on HRM, including ours reported in Chapters 4 to 7, emphasizes bundles of HR practices (the HR system) in examining the effects of HRM on employee and organizational outcomes (Wright & McMahan, 1992). In this respect, researchers nowadays increasingly draw upon the AMO model of HRM in examining the HRM–performance relationship (Boselie et al., 2005; Paauwe, 2009). However, in previous HRM and performance research it has often been assumed that the various components of an HR system have identical impacts on outcomes (e.g., Delaney & Huselid, 1996; Sels et al., 2006). Scholars have recently challenged this assumption and have argued that although employees are exposed to HR systems rather than to individual practices, the components of these systems do not necessarily have equal impacts (Gardner et al., 2011; Jiang et al., 2012). The results of our study illustrate the value of decomposing the HR system variable into three HR components (ability-enhancing, motivation-enhancing, and opportunity-enhancing HR practices). In this respect, this study shows that HRM has both direct as well as indirect (through job satisfaction) effects on performance, and that the paths between HRM and performance are not the same for each of the three AMO components.

9.4.2 The role of the line manager in HRM implementation

Until recently, there has been little empirical evidence that bears on the role of the line manager in the HRM–performance relationship. In recent years, however, greater interest has been seen in this topic and this is related to the fact that line managers have increasingly to execute HRM activities alongside their traditional supervisory duties (Bos-Nehles, 2010; Gilbert, 2012; Knies, 2012; Purcell & Hutchinson, 2007; Zhu et al., 2005). In this respect, our study shows that there is indeed a reasonably high degree of HR devolution within the public sector: today, the execution of HRM activities in the public sector is largely the responsibility of line managers. Therefore, the second research line of this dis-
sertation is to gain greater insight into this role of the line manager in HRM implement-
ation. We have done this by combining two bodies of knowledge, namely the research on
HRM and on leadership. Here, we build on the multilevel HRM and performance process
model by Nishii and Wright (2008) by adding the leadership component (leadership style)
of HRM implementation to the management component (enactment of HR practices)
of HRM implementation already indicated in this model. Through this approach, this
dissertation contributes to this second research line in two ways.

First, our study shows that the role of the line manager in HRM implementation consists of
distinct management and leadership components. In the HRM–performance relationship,
the line managers have an important role through (1) their enactment of HR practices and
(2) their leadership behavior. From a theoretical perspective, this study therefore departs
from the existing research that tends to focus only on the HR content (i.e., the enactment
of HR practices) (e.g., Liao et al., 2009), an approach that has also been suggested by for
example Gilbert et al. (2011), Den Hartog et al. (2013), and Knies and Leisink (2013a).
The findings of our study suggest that there is a need to take both the management and the
leadership components of HRM implementation into account, and that it is not enough
to focus on the implemented HR practices because line managers play an important role
in the HRM–performance relationship through their leadership behaviors. In this respect,
our research shows that both a line manager’s leadership style and the HR practices used
affect employee satisfaction and performance. Our results suggest that leadership style
is even a stronger predictor of job satisfaction and performance than is the use of HR
practices. This indicates that leadership is more important in terms of its influence on
employees’ perceptions of HRM and on employee and organizational outcomes than has
generally been recognized in HRM and performance research.

Second, our study shows that different leadership styles have different effects on the imple-
mentation of HR practices and on employee and organizational outcomes. Although leader-
ship behavior has been taken into account in previous research (e.g., Gilbert et al., 2011;
Knies & Leisink, 2013b; Purcell & Hutchinson, 2007), no distinction has been made
between different leadership styles. An important contribution of this study is, therefore,
the specification of what is meant by leadership behavior. In this respect, our study shows
that a stimulating leadership style has a positive influence on the number of HR practices
used within the organization whereas a correcting leadership style has no influence on the
number used. Moreover, line managers with a more transformational style of leadership
implement more commitment-oriented HR practices than do line managers with a less
transformational leadership style. This suggests that line managers tend to implement
those HR practices that fit their leadership style. In addition, our study shows that dif-
ferent leadership styles affect job satisfaction and performance in different ways. This
highlights the importance of making a distinction between the various leadership styles
when attempting to increase insight into the HRM–performance relationship.
9.4.3 The public sector context

This dissertation’s third research line is to specifically study HRM, performance, and their relationship in the public sector context. Previous research has shown that there are significant differences in HRM (Boyne et al., 1999; Emery & Giauque, 2005) and in performance (De Bruijn, 2001; Smith, 1990; Van Dooren et al., 2012; Van Thiel & Leeuw, 2002) between public sector and private sector organizations. Despite this, the relationship between HRM and performance is rarely examined in the public sector (as similarly noted by Bach & Bordogna, 2011; Bach & Kessler, 2007; Gould-Williams, 2007; Messersmith et al., 2011). As a result, the extent to which the HRM–performance relationship in the public sector mirrors that of the private sector is uncertain. Therefore, in our research, we have combined two bodies of knowledge: the HRM and performance literature with the public management literature. Although our results show that the key mechanisms underlying the HRM and performance relationship in the private sector generally seem also to be applicable in public sector organizations as was previously also suggested by Messersmith et al. (2011), three of our findings are specifically important for understanding the HRM–performance relationship in the public sector. In this respect, our study contributes to the third research line in three ways.

First, our study contributes to the literature by showing that there is no such thing as ‘the’ public sector; and that the implementation of HR practices is dependent on institutional and organizational characteristics, and that brings the role of model employer into play. In this respect, the results show that organizations with a higher degree of publicness are seen more as model employers. Furthermore, the results show that personnel red tape negatively influences the ability to fulfill the model employer role. This is especially so when the responsibility for implementing HR practices is devolved to line managers in an organization characterized by personnel red tape. Previous research comparing HRM in the public and private sectors tends to have made a strict binary distinction between public and private sector organizations (Boyne et al., 1999; Farnham & Horton, 1996). However, our research suggests that greater attention should be given to differences within the public sector when examining HRM and its effect on performance.

Second, just as there is not only one type of public sector organization, there is also more than one type of public sector organizational performance and this research shows how HRM affects these performances differently. Our research showed that the relationship, mediated by job satisfaction, between HRM and performance in terms of customer satisfaction differs when considering the more-qualitative performance indicator of employee empathy and the more quantitative efficiency-related performance indicator of service timeliness. In organizations where employees are more satisfied with their jobs, customers are more satisfied with the empathy shown by employees, but that there is also a downside in that waiting times for services tend to increase. Moreover, our study showed that the three performance values considered (efficiency, effectiveness, and fairness) are all affected differently by different
HR components. These results highlight the importance of adopting a multidimensional perspective on performance that is specifically tailored to the public sector in which the issue of conflicting values is often dominant (Boyne, 2003; Pollitt, 2003; Rainey, 2003).

Third, our study shows that, in public sector organizations, ability-enhancing and opportunity-enhancing HR practices are more important than motivation-enhancing HR practices in achieving performance outcomes. A similar result was previously found by Boselie (2010) who found that motivation-enhancing HRM did not make a significant contribution to employees’ attitudes and behavior in the public health sector. A literature review on motivating employees in the public sector by Perry et al. (2006) suggests two possible explanations as to why motivation-enhancing HR practices were least important in explaining HRM and organizational outcomes in a public sector context in our research.

First, it might be linked to the institutionalized context in which Dutch public organizations operate (see also Paauwe & Boselie, 2003). Here, the institutional mechanisms that affect HRM, and in particular HR practices relating to appraisal and rewards (e.g., statutory minimum wage, unemployment benefit, and sick pay), are shaped by Dutch legislation and sector-level collective bargaining agreements. As such, there is only limited flexibility with regard to pay in the Dutch public sector. Second, employees have different preferences in terms of rewards, and this will likely influence how employees evaluate and respond to related HR practices. In this respect, Perry et al. (2006) found evidence that financial rewards have stronger effects on employees’ motivation in private organizations than in public organizations.

**9.5 METHODOLOGICAL REFLECTION**

In Chapter 3, we made a distinction between the research design, the analysis techniques, and the measurement of the central concepts of this study. In this section, we maintain this distinction while reflecting on the study. In Section 9.5.1, we reflect on the research design. In Section 9.5.2 we discuss the analysis techniques and in Section 9.5.3 we will reflect on the measurement of the central concepts. These sections address both the methodological contributions as well as the methodological limitations of the study.

**9.5.1 Reflection on the research design**

A different dataset has been used in each of the five empirical studies reported in this dissertation. By using these various datasets, several frequently uttered methodological concerns with respect to HRM and performance research have been addressed by including multiple actors, multiple raters, and multiple sources (Boselie et al., 2005; Guest, 2011; Paauwe, 2009; Wall & Wood, 2005). First, the combination of data sourced from multiple actors (line managers and employees) has shown that there is a difference between the
perceptions of line managers and of employees regarding the implemented HR practices. This result emphasizes the importance of making a clear distinction between different actor groups in future research. Second, we have used ratings from many line managers and employees on HRM in contrast to studies that rely on a single viewpoint (see, for an overview, Boselie et al., 2005). By asking several respondents from each sub-population, we could determine whether respondents were consistent in their observations and this is important with respect to the reliability and validity of the research results (Gerhart et al., 2000). Third, a strength of the current study is that different data sources are used to measure the various variables in our research model and this avoids the risk of common source bias (Podsakoff & Organ, 1986).

Despite these strengths in the data and the contribution this has made to the quality of this study, the data also have an important limitation in that all the studies used have a cross-sectional design. In a cross-sectional design, all the measurements are made at one point in time and, since this lacks a time dimension, there are far-reaching restrictions on making causal claims. In this respect, the research data used in this dissertation do not respond to the call in recent HRM and performance literature to carry out more longitudinal research (Guest, 2011; Wall & Wood, 2005). Nevertheless, it should be noted that according to Cook and Campbell (1979, in Wright et al., 2005) there are three criteria for causality: (1) covariation between the presumed cause and effect, (2) the temporal precedence of the cause, and (3) the ability to rule out alternative explanations for a possible cause-and-effect connection. As such, establishing causality not only requires gathering data at multiple points in time but also taking account of the possibility that so-called ‘third variables’ influence the considered relationship (here, between HRM and organizational performance) leading to a spurious relationship (Paauwe, 2009; Wright et al., 2005). In this respect, the role of the leadership style of line managers is frequently mentioned (Paauwe, 2009; Purcell & Hutchinson, 2007; Wright et al., 2005). Therefore, in this dissertation, we focused on the role of leadership as a possible alternative explanation for a supposed cause-and-effect link between HRM and performance. In this respect, the results show that the apparent effect of HRM on performance is reduced, but still present, when leadership is included in the analysis. As such, this study fulfills two of the three criteria for causality.

9.5.2 Reflection on the analysis techniques

In this thesis, we carried out three types of analysis: regression analysis, structural equation modeling, and multilevel analysis. In each study, we chose the most sophisticated methodology possible given the available data and the extent to which hypotheses could be directly derived from theory. In this respect, regression analysis was used when the focus was more on exploring the data (Chapters 4 and 8) and structural equation modeling was used to test clear hypotheses derived from theory (Chapters 5, 6, and 7). The advantage of
structural equation modeling is that the models developed are more robust than when regression analysis is used (Byrne, 2001). In Chapter 6, we expanded on the structural equation modeling technique by conducting a 2-1-2 multilevel mediational analysis (Preacher et al., 2010) in which the hierarchical nature of the data is taken into account. Here, the presumption that employees mediate the relationship between HRM and performance implies an analysis on various levels (Nishii & Wright, 2008; Sanders & Frenkel, 2011; Van Veldhoven, 2012). In this respect, our study is one of the few analyses to adopt a 2-1-2 design. So far, most studies on employee perceptions have focused either on the individual level or on the aggregated level of analysis, thereby ignoring the possibility of multilevel effects.

However, the complexity of the adopted analysis techniques also delivers statistical and interpretational challenges and potential problems. In this respect, a problem that our research has had to deal with is the sample size. This has largely been to do with the multilevel nature of our data in which it is difficult, and sometimes even impossible (for example with respect to the number of work units within an organization), to have a large number of cases at the highest (i.e., organizational or work unit) level. In terms of an appropriate sample size when using structural equation modeling, many researchers have argued that latent variable models require an absolute minimum of 100 subjects, and that 200 subjects is the desirable minimum (e.g., Boomsma, 1987; Harris & Schaubroeck, 1990). As an alternative approach, Bentler and Chou (1987) recommended that the ratio of sample size to free parameters should be no less than 5:1. Several published small-sample studies that use structural equation modeling satisfy only this latter condition (e.g., Feldman & Bolino, 1999; Bakker, Demerouti & Verbeke, 2004; Verplanken, 2004). While some of our samples were also small, the models tested were simple, and the ratio of cases to free parameters was acceptable. As such, our findings have some credence although we would recommend replicating our research using larger samples (i.e., with more cases on the unit and/or organizational levels).

9.5.3 Reflection on the measurements

This dissertation largely makes use of survey data collected by industry-wide representative organizations (A+O fonds gemeenten and Vereniging van Nederlandse Gemeenten) and the Ministry of Interior and Kingdom Relations. In addition to these secondary data sources, we collected data ourselves to study some additional relationships. As a result, the measurements of the main concepts are not identical in each empirical chapter. However, in all the studies, a relationship was found between HRM and performance. This increases the reliability of the findings. At the same time, the use of different measurements limits the comparability of the results. This is related to another measurement aspect worth mentioning in that two types of scales were used in this research. On the one hand, there were scales developed by the industry-wide representative organizations and the Ministry
of Interior and Kingdom Relations. These scales are not based on academic insights, but developed with the primary goal of being practically useful for the organizations involved. On the other hand, scientifically validated and widely used scales are also included in this study. The HRM scale developed for this study is an example of drawing on the scientific literature to develop a scale. The validated scale of transformational leadership by Podsakoff et al. (1990) is a similar example and this enabled our results to be compared with other studies. In this respect, there seems to be some tension between the use of validated concepts with high scores on generalizability but low scores on contextual recognition on the one hand, and context-sensitive concepts that score highly on contextual recognition but that are difficult to generalize on the other.

An additional aspect worth noting with respect to the measurement of HRM is that, in this dissertation and following the model by Nishii and Wright (2008), a distinction has been made between actual HRM and perceived HRM. Although this distinction has both theoretical and empirical value, the standard English interpretations of the terms used do not exactly express what is actually meant. The HR practices implemented by line managers are conceptualized by Nishii and Wright (2008) as actual HR practices, and the perceptions that employees have of these practices are labelled perceived HR practices. This might suggest that, when actual practices are defined, this will give an adequate picture of the HR practices that objectively exist (Nishii & Wright, 2008). As in many studies (e.g., Den Hartog et al., 2013; Khilji & Wang, 2006; Knies, 2012), actual HRM is, in this dissertation, measured by asking line managers what HR practices they undertake in practice. Therefore, we are not really measuring which HR practices objectively exist but only the perceptions of line managers regarding their HRM activities. One might infer that the term ‘actual practices’ indicates a degree of objectivity that in reality cannot be realized through self-reporting. For this reason, this dissertation uses the terms implemented/enacted HR practices to indicate this link in the HRM–performance chain. On this basis, a recommendation for further research is to objectively determine which HR practices line managers implement. Possibly, a case study design would be preferable in which the activities of line managers are observed over a period of time.

In this study, employee satisfaction is treated as a mediating variable in the HRM–performance relationship. However, in the academic debate there is increasing criticism regarding this variable. First, satisfaction is a narrow conceptualization of wellbeing as it mainly addresses the psychological side of wellbeing. With this concept, the focus is only to a lesser extent on health and relationship wellbeing (Pececi et al., 2013; Van de Voorde, 2010). Second, a distinction that is increasingly made in the literature is between negative/passive and positive/active aspects of wellbeing (Pececi et al., 2013). Satisfied employees can be passive employees who are happy doing nothing. In this respect, the literature (e.g., Schaufeli & Bakker, 2004) increasingly argues for a focus on the positive/active perspective by emphasizing discretionary behaviors at work.
In all our studies, perceptual measures of performance were used throughout. We tried to address the objections to the use of perceptual data wherever possible. In this respect, independent and dependent variables were measured among different groups of actors in order to avoid common method bias. Moreover, in the different studies, various actors (employees, line managers, and customers) were asked to assess performance. In this regard, a comparison of the research results shows that a relationship between HRM and performance was found in all our studies regardless of the actors used to rate performance. Finally, multiple raters often assessed performance, and this enabled us to calculate the inter-rater reliability. Nevertheless, objective data are widely believed to be less biased (Kim, 2005). This highlights the value of replicating our research using objective performance indicators and of comparing perceptions of an organization’s performance with objective performance data.

In this dissertation, leadership style was measured in various ways. In Chapter 5, stimulating and correcting leadership were measured whereas, in Chapter 6, the focus was on transformational leadership. Despite the different leadership styles and measurements, this research shows that, compared to a more task-oriented leadership style (correcting leadership), the more people-oriented leadership styles (stimulating or transformational leadership) are associated with the use of a greater number of those HR practices that are related to enhancing employees’ abilities, motivation, and opportunity to perform. In this dissertation, both self-ratings and ratings-by-others are used in the assessment of leadership style. Self-ratings are frequently discussed in terms of the tendency of self-raters to inflate their own ratings relative to others (e.g., Mabe & West, 1982; Podsakoff & Organ, 1986). To reduce the risk of socially desirable answers, the confidentiality of provided answers was stressed wherever possible in the introduction to our questionnaires. Moreover, the questionnaire asked for concrete behaviors, which is seen as an approach to reduce the likelihood of self-inflation. Although, one should be cautious in comparing studies using different scales, a comparison of the studies in Chapters 5 and 6 showed that line managers indeed rated their own leadership more highly than did their employees. This may have somewhat affected the results of our studies. This remains a general limitation of survey research, especially when respondents are asked to rate their own attitudes and behaviors. A combination of self and others’ ratings is recommended for future research.

**9.6 FUTURE RESEARCH AGENDA AND RECOMMENDATIONS FOR PRACTICE**

**9.6.1 Future research agenda**

In this section, we reflect on a number of theoretical issues from which recommendations for future research will be derived.
Conclusions and discussion

Chapter 9

Differences between and within work units in implemented and perceived HRM

This research shows that there are differences in line managers’ enactment of HR practices and employees’ perceptions of HR practices between as well as within work units. In terms of differences between work units, we looked at leadership style as a possible explanation. However, it is unlikely that all the variance in HR practices as implemented is a result of different leadership styles. Indeed, our results indicated that transformational leadership only explained 18.6% of the variance in the HR practices implemented. In future research, it would therefore be relevant to examine other aspects that might explain the differences between work units in HR practices implemented. In this respect, one can, for example, think of other attributes of line managers such as differences in values or in experiences, or of team characteristics such as the diversity in a team’s composition. Turning to differences between line managers’ enactment of HR practices and employees’ perceptions of HR practices within work units, it would be relevant to examine whether these differences could be due to line managers assessing the HR practices that they implement to the whole group of employees they supervise whereas individual employees only assess the practices they perceive. It is possible that a line manager makes a distinction between employees when implementing HR practices and this aspect was not addressed in our study. More in-depth qualitative research could give greater insight into these differences within work units.

The influence of leadership style on implementing HR practices

Our study suggests that a more people-oriented leadership style (stimulating or transformational leadership) is accompanied by the use of a greater number of those HR practices that are associated with enhancing employees’ abilities, motivation, and opportunity than is a more task-oriented leadership style (correcting leadership). In this respect, it should be noted that the HR practices included in this study are all associated with the softer HRM models (Appelbaum et al., 2000; Guest, 1987). If a more transactional HR system, including for example tight monitoring and low job security HR practices (Ramsay, Scholarios & Harley, 2000), was studied, the results could be different. Many studies on transformational leadership have stressed its positive effects, for instance on performance (Wang, Oh, Courtright & Colbert, 2011) and employee outcomes (Whittington, Goodwin & Murray, 2004), although it should be noted that some studies have stressed the negative effects. For instance, Harrison (1987) warned of a risk of burnout and Stevens, D’Intino, and Victor (1995) noted that the theory is biased towards certain stakeholders (top management and customers) at the expense of employees. Other critics have warned of an over-emphasis on universal applicability (Van Wart, 2011). For future research, this emphasizes the relevance of distinguishing between different types of HR systems and different leadership styles when examining the influence of HRM on performance to gain greater insight into the HRM–performance relationship. Moreover, although our
measurement of transformational leadership included six dimensions (Podsakoff et al., 1990), we opted to compute a composite score, and thereby examine the effect of the transformational leadership construct, because of the small number of cases in our study. This is a not uncommon way to look at transformational leadership (e.g., Masi & Cooke, 2000; Moynihan, Pandey & Wright, 2012) but Van Knippenberg and Sitkin (2013) have recently criticized this approach. They argue that the associated theories fail to adequately specify the causal model capturing how each dimension has a distinct influence on the mediating processes and outcomes. In this respect, to enhance insight into the role of the line manager, a recommendation for future research is to examine the impact of each dimension on implementing HR practices and subsequently on employee and organizational outcomes.

The influence of a line manager’s traits and skills on the effective implementation of HRM
In this study, a distinction has been made between the leadership component and the management component of HRM implementation. In the leadership literature, there is considerable debate on the relationship between leadership and management (Yukl, 2012). In this dissertation, the management component is seen as involving the enactment of specific formal HR practices that are the responsibility of the line manager, such as recruitment practices, performance appraisals, and training activities. The leadership component, on the other hand, requires a continuous display of a wide variety of leadership behaviors in order to influence employees’ attitudes and behavior (e.g., providing support to employees, intellectual stimulation of employees, recognizing valuable contributions, and articulating a vision). In this respect, the ability of line managers to influence employees towards attaining organizational goals (displaying leadership) partly depends on the HR practices (management tools) that line managers use. Following this line of reasoning, one would expect that the more line managers are focused on changing employees in order to achieve better performance, the more they will search for HR tools. In this respect, it is important to note that the focus of this research has been on one aspect of leadership behavior, the leadership style, and that as such the focus is on what leaders do rather than on what characteristics successful leaders have. From the literature (Bass, 1990; Glynn & DeJordy, 2010; Van Wart, 2011), we know that other aspects such as their traits and skills influence a line manager’s leadership behavior. It would be interesting in future research to include these line managers’ characteristics when examining their implementation of HR practices (see also Bos-Nehles, 2010) and the influence on performance.

The influence of the public sector context on the HRM–performance relationship
In essence, the HRM and performance model derived from private sector organizations also appears to be applicable to public sector organizations. However, this study does not make an empirical comparison between public sector and private sector organizations.
This could be a useful avenue for future research. Besides public-private differences, future research could also give attention to differences within the public sector in terms of HRM and performance. Based on our study, there are three suggestions for future research.

The first recommendation is to use the HRM scale developed in this study and conduct a public-private comparison of the HRM–performance relationship. In this respect, it would be relevant to examine whether the relative importance of the AMO components differs across contexts (public sector versus private sector organizations) due to institutional, organizational, and workforce characteristics.

The second recommendation is to more thoroughly examine the effects of personnel red tape. We found that personnel red tape is an important factor in influencing employees’ perceptions of HRM. Moreover, we found that when HR devolution is implemented in a context characterized by personnel red tape, the discretionary power of line managers might be limited because they perceive many rules and constraints that then negatively influence employees’ perceptions of the implemented HR practices. Following the distinction made by Nishii and Wright (2008) between intended, actual, and perceived HRM, it would be interesting to examine whether differences between the intended HR policy and the implemented HR practices could be explained by the degree of personnel red tape. In other words, it would be interesting to examine whether personnel red tape moderates the relationship between intended and actual HRM as this could give further insight into the influence of context on the HRM–performance relationship.

The third recommendation is to replicate our study but to use objective performance indicators. However, this apparently clear recommendation is more difficult in practice. What do we actually mean by objective performance indicators? There are three frequently noted problems with respect to objectively measuring public sector performance. First, because economic criteria such as profit rate, as a measure of efficiency and effectiveness, are not feasible in many public sector organizations, they often lack an overarching criterion that can be used to measure success (De Bruijn, 2001; Smith, 1990). Second, if the quality is not adequately reflected in the output then developments such as smaller groups in education and more employees per patient in hospitals are interpreted as a decrease in productivity. In a similar way, more highly educated, and therefore more expensive, teachers or fewer patients per room in hospitals result in an increase in costs (Pollitt, 2003; Rainey, 2003; Sociaal en Cultureel Planbureau, 2004; Sociaal en Cultureel Planbureau, 2012). Third, the output of the various public sector organizations and the work units within these organizations differ in so many important aspects that there is no single objective performance indicator available that can be used to compare performance (Brewer & Selden, 2000). Despite these problems, there are certainly initiatives to collect more objective and comparable performance indicators of public sector organizations (e.g., Netherlands Court of Audit; SCP; IPSE studies TU Delft). In future HRM research in the public sector it would be interesting to examine whether these data could be combined...
with HRM data on public sector organizations. In this respect, there are three conditions that need to be addressed. The first is to obtain both HRM and objective performance data on as many organizations as possible so as to be able to statistically analyze the relationships. A second condition is to collect the HRM data in advance of the performance data so that one can address causality. The third condition is to use multiple performance indicators in assessing the performance of public organizations because of their different and sometimes conflicting goals (Boyne, 2003; Pollitt, 2003; Rainey, 2003; and see also the two faces of the satisfaction mirror in Chapter 7).

### 9.6.2 Recommendations for practice

This study has several implications for practice that can be summarized as advice to (1) give line managers discretionary power that reflects the increased responsibility of line managers in implementing HRM, (2) ensure that employees’ perceptions of HRM reflect the desired reality, and (3) support line managers in effectively implementing HRM.

With respect to the first point, there is clear evidence that, besides their traditional supervisory duties, line managers, including in the public sector, have increasingly to execute HRM activities as many traditional personnel duties have been devolved to line managers. Based on our research, an important recommendation for organizations is that they should ensure that when devolving HR responsibilities to line managers this is accompanied by discretionary power in enacting these duties. As such, personnel red tape should be reduced when devolving HRM activities to line managers. If not, it seems that employees perceive fewer HR practices, and this will negatively influence organizational performance.

With respect to the second point, the employees’ perceptions of HRM, it seems advantageous for organizations to ensure that employees’ perceptions of HRM reflect the intended reality as their perceptions are closer to, and consequently more predictive of, performance than are HRM ratings provided by HR and line managers. In this respect, it is important to frequently monitor employees’ perceptions of HRM and their attitudes and behavior (for example by conducting employee surveys). Such data can then be used by both HR and line managers to sharpen HR policy and to improve their own roles in the implementation of HRM within the organization.

Third, the wide variation in HRM implementation between and within work units points to the need for HR management to move beyond a focus on the design of the HR system to an emphasis on the consistent implementation of HR practices. Given the important role of line managers in HRM implementation, a role for HR policymakers should be to focus on the development of these line managers to ensure they are effective in implementing HRM. In this respect, based on our findings, giving attention to a supervisor’s leadership style, and attempting to modify it if necessary, appears to be a prerequisite for successfully implementing HRM within an organization. It appears that a
more people-oriented leadership style is suited to the implementation of HR practices. As such, investing in leadership programs that focus on the development of people-oriented leadership would seem an important recommendation for organizations.
References


References


Appendices
APPENDIX 1 MEASUREMENT SCALES

1. Measurement scales Chapter 4

a. HR devolution – answers ranging from sole HR decision-making (1) via HR in consultation with line management (2) and line management in consultation with HR (3) to sole line management decision-making (4)

<table>
<thead>
<tr>
<th>HR devolution (index variable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay and reward</td>
</tr>
<tr>
<td>Recruitment and selection</td>
</tr>
<tr>
<td>Training and development</td>
</tr>
<tr>
<td>Health and safety</td>
</tr>
<tr>
<td>Workforce expansion or reduction</td>
</tr>
<tr>
<td>Personnel appraisal</td>
</tr>
<tr>
<td>Working schedules</td>
</tr>
</tbody>
</table>

b. Personnel red tape – answers ranging from totally disagree (1) to totally agree (5)

<table>
<thead>
<tr>
<th>Personnel red tape (CA .80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Even if an employee is a poor performer, formal rules make it hard to remove him or her from the organization</td>
</tr>
<tr>
<td>The rules governing promotion make it hard for a good employee to move up faster than a poor one</td>
</tr>
<tr>
<td>Due to rules, pay raises for employees are based more on longevity than on performance</td>
</tr>
<tr>
<td>The formal pay structures and rules make it hard to reward a good employee with higher pay here</td>
</tr>
<tr>
<td>The personnel rules and procedures that govern my organization make it easy for me to reward subordinates for good performance (reversed)</td>
</tr>
</tbody>
</table>

c. Model employer – answers ranging from totally disagree (1) to totally agree (5)

<table>
<thead>
<tr>
<th>Welfare and equal opportunities (CA .80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>My organization promotes an equal opportunities culture</td>
</tr>
<tr>
<td>My organization assists employees in meeting personal and family needs</td>
</tr>
<tr>
<td>My organization ensures employees pursue good health</td>
</tr>
<tr>
<td>My organization has flexible outplacement programs for all employees</td>
</tr>
<tr>
<td>My organization provides flexible retirement opportunities</td>
</tr>
<tr>
<td>I experienced a careful selection procedure before I was employed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Training and development (CA .89)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have the opportunity to take part in training, courses and workshops if I want to</td>
</tr>
<tr>
<td>I have the opportunity to progress in position if I want to</td>
</tr>
<tr>
<td>Career appointments are well respected</td>
</tr>
<tr>
<td>I am able to work anywhere else within the organization if I want to</td>
</tr>
</tbody>
</table>
My development opportunities are tailored to the needs of the organization
I am encouraged in my development
I am supported in my future development plans

**Participation (CA .84)**
I have the opportunity to be involved in decision-making within the organization
I have the opportunity to give my opinion on work-related issues
I may contribute to the development of policy within the organization
In a working meeting, I am involved in the decisions that are made

*In the event of potential problems, I have the opportunity to involve people from other departments*
*I have the opportunity to discuss with others how tasks should be distributed*
*I have the opportunity to discuss with others how the tasks should be planned*

**Recruitment and selection (CA .86)**
I experienced a careful selection procedure before I was employed
During the selection procedure, the organization verified carefully whether my skills were in line with the function
During the selection procedure, the organization verified carefully whether I fitted within the department
During the selection procedure, the organization verified carefully whether my training was in line with the functional requirements

**Performance appraisal (CA .88)**
My performance is periodically reviewed with me
My assessment forms the basis for my further development
I know the performance criteria
I receive my assessment on paper
My functioning is addressed in a formal meeting
There is a clear procedure for my assessment
My appraisal procedure is fair

**Rewards (CA .78)**
My performance plays a role in my rewards
The organization gives me a good salary compared to similar organizations
There are sufficient opportunities for my financial growth within this organization
The reward system encourages me to achieve the departmental goals
Team performance plays a role in my rewards
I have influence on the composition of my employment package

**Autonomy (CA .75)**
I can decide how I execute my duties
I can decide when I execute my duties
I can decide where I execute my duties
I can decide with whom I execute my duties

2. Measurement scales Chapter 5

a. Leadership style – answers ranging from totally disagree (1) to totally agree (5)

Correcting leadership (CA .78)
My supervisor keeps an eye on my work to check if I do my work well
My supervisor tells me when I do not do my work well
My supervisor controls whether work is finished on time

Stimulating leadership (CA .95)
My supervisor is aware of employees’ welfare
I get enough support from my supervisor
My supervisor allows people to cooperate well
My supervisor lets me know if (s)he is satisfied with my work
My supervisor consults his staff about issues that are important to them
My supervisor provides support as needed
My supervisor creates a work climate in which I can develop new ideas about my work
My supervisor is accessible
My supervisor lets us participate in conversations that are relevant to me and my colleagues
My supervisor protects me from high work pressure

b. HRM – answer categories were ‘no’ or ‘yes’

HR practices (index variable)
Job evaluation conversations
Assessment interviews
Personal development plans
Training plans
Career plans
Competency management
Population ageing HRM policy
Mobility management
Job rotation
Individual coaching

c. Job satisfaction – answers ranging from very dissatisfied (1) to very satisfied (5)

Job satisfaction
All things considered, how satisfied are you with your job
d. **Performance** – answers ranging from totally disagree (1) to totally agree (5)

<table>
<thead>
<tr>
<th>Organizational performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>My organization is doing good work</td>
</tr>
</tbody>
</table>

3. **Measurement scales Chapter 6**

a. **HRM** – answers ranging from totally disagree (1) to totally agree (5). To measure implemented HRM, line managers were asked to rate the HR practices (question formulation: In this unit, employees [……]). We measured the perception of what was being implemented (perceived HRM) by asking employees to rate the same practices (question formulation: I have [……]). The measurement scale of perceived HRM is presented below.

<table>
<thead>
<tr>
<th>Recruitment and selection (CA .85)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I experienced a careful selection procedure before I was employed</td>
</tr>
<tr>
<td>During the selection procedure, the organization verified carefully whether my skills were in line with the function</td>
</tr>
<tr>
<td>During the selection procedure, the organization verified carefully whether I fitted within the department</td>
</tr>
<tr>
<td>During the selection procedure, the organization verified carefully whether my training was in line with the functional requirements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Training and development (CA .87)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have the opportunity to take part in training, courses, and workshops</td>
</tr>
<tr>
<td>I have the opportunity to climb in position.</td>
</tr>
<tr>
<td>My responsibilities will increase if I perform well</td>
</tr>
<tr>
<td>Career appointments are well respected</td>
</tr>
<tr>
<td>I am able to work anywhere else within the organization</td>
</tr>
<tr>
<td>My development opportunities are tailored to the needs of the organization</td>
</tr>
<tr>
<td>I am encouraged in my development</td>
</tr>
<tr>
<td>I am supported in my future development plans</td>
</tr>
<tr>
<td>I was offered an introduction program to be able to execute my current job*</td>
</tr>
<tr>
<td>There is a specific training program with respect to my job*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance appraisal (CA .86)</th>
</tr>
</thead>
<tbody>
<tr>
<td>My performance is periodically reviewed with me</td>
</tr>
<tr>
<td>My assessment is the basis for my further development</td>
</tr>
<tr>
<td>I know the performance criteria</td>
</tr>
<tr>
<td>I receive my assessment on paper</td>
</tr>
<tr>
<td>Both my functioning as well as the organization's functioning are addressed in a formal meeting</td>
</tr>
<tr>
<td>There is a clear procedure for my assessment</td>
</tr>
<tr>
<td>It is clear to me how my work contributes to achieving the goals of the organization*</td>
</tr>
</tbody>
</table>
Rewards (CA .59)

<table>
<thead>
<tr>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>My performance plays a role in my rewards</td>
<td></td>
</tr>
<tr>
<td>The organization gives me a good salary compared to similar organizations</td>
<td></td>
</tr>
<tr>
<td>There are sufficient opportunities for financial growth for me within this organization</td>
<td></td>
</tr>
<tr>
<td><em>The organization offers me attractive fringe benefits (e.g. working hours, holidays, pension scheme, childcare, parental leave, compensation for travel costs)</em></td>
<td></td>
</tr>
<tr>
<td>I have influence on the composition of my employment package</td>
<td></td>
</tr>
<tr>
<td><em>The organization gives me the opportunity to achieve a balance between my work and my private life</em></td>
<td></td>
</tr>
</tbody>
</table>

Autonomy (CA .84)

<table>
<thead>
<tr>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can decide how I execute my duties</td>
<td></td>
</tr>
<tr>
<td>I can set my own work pace</td>
<td></td>
</tr>
<tr>
<td>I have influence over the fulfillment of my role</td>
<td></td>
</tr>
<tr>
<td>I have the opportunity to further develop my own ideas</td>
<td></td>
</tr>
<tr>
<td>I can decide in what order to do my work</td>
<td></td>
</tr>
<tr>
<td>I have the opportunity of flexible working hours</td>
<td></td>
</tr>
</tbody>
</table>

Participation (CA .72)

<table>
<thead>
<tr>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have the opportunity to be involved in decision-making within this organization</td>
<td></td>
</tr>
<tr>
<td>I have the opportunity to give my opinion on work-related issues</td>
<td></td>
</tr>
<tr>
<td>In a working meeting, I am involved in the decisions that are made</td>
<td></td>
</tr>
<tr>
<td>I am well informed about the views and policies of the organization</td>
<td></td>
</tr>
<tr>
<td><em>I can participate through the works council</em></td>
<td></td>
</tr>
<tr>
<td><em>During working meetings, clear agreements are made</em></td>
<td></td>
</tr>
</tbody>
</table>

b. Unit performance – answers ranging from very poor (1) to very good (5)

<table>
<thead>
<tr>
<th>Unit performance (CA .81)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>The quantity of the work of your unit</td>
<td></td>
</tr>
<tr>
<td>The quality of the work of your unit</td>
<td></td>
</tr>
<tr>
<td>The timeframe in which your team completes tasks</td>
<td></td>
</tr>
<tr>
<td>The extent of goal achievement by your unit</td>
<td></td>
</tr>
<tr>
<td>The overall performance of your unit</td>
<td></td>
</tr>
</tbody>
</table>

c. Leadership style - answers ranging from strongly disagree (1) to strongly agree (5)

<table>
<thead>
<tr>
<th>Transformational leadership (CA .82)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a clear understanding of where we are going</td>
<td></td>
</tr>
<tr>
<td>I paint an interesting picture of the future for our Group</td>
<td></td>
</tr>
<tr>
<td>I am always seeking new opportunities for the organization</td>
<td></td>
</tr>
<tr>
<td>I inspire others with my plans for the future</td>
<td></td>
</tr>
<tr>
<td>I am able to get others committed to my dream</td>
<td></td>
</tr>
</tbody>
</table>
I lead by “doing,” rather than simply by “telling”
I provide a good model to follow
I lead by example
I foster collaboration among work groups
I encourage employees to be “team players”
I get the group to work together for the same goal
I develop a team attitude and spirit among employees
I show that I expect a lot from them
I insist on only the best performance
I will not settle for second best
I act without considering employees’ feelings (reversed)
I show respect for employee’s personal feelings
I behave in a manner thoughtful of employee’s personal needs
I treat employees without considering their personal feelings (reversed)
I challenge employees to think about old problems in new ways
I ask questions that prompt employees to think
I stimulate employees to rethink the way they do things
I have ideas that have challenged employees to reexamine some of the basic assumptions about their work

4. Measurement scales Chapter 7
a. Work environment characteristics – answers ranging from very dissatisfied (1) to very satisfied (5)

<table>
<thead>
<tr>
<th>Rewards</th>
</tr>
</thead>
<tbody>
<tr>
<td>How satisfied are you with your secondary rewards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amount of work</th>
</tr>
</thead>
<tbody>
<tr>
<td>How satisfied are you with the amount of work</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>How satisfied are you with your direct supervisor</td>
</tr>
</tbody>
</table>

b. Job satisfaction – answers ranging from very dissatisfied (1) to very satisfied (5)

<table>
<thead>
<tr>
<th>Job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>All things considered, how satisfied are you with your job</td>
</tr>
</tbody>
</table>

c. Interaction quality – answers ranging from extremely bad (1) to excellent (10)

<table>
<thead>
<tr>
<th>Interaction quality (CA .97)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The kindness of the employee</td>
</tr>
<tr>
<td>The knowledge of the employee</td>
</tr>
<tr>
<td>The empathy of the employee</td>
</tr>
<tr>
<td>The clarity of information provided by the employee</td>
</tr>
</tbody>
</table>
d. **Service timeliness** – answer categories are (1) less than 5 minutes, (2) between 5 and 15 minutes, (3) between 15 and 30 minutes, (4) between 30 and 60 minutes or (5) more than 60 minutes

<table>
<thead>
<tr>
<th>Service timeliness</th>
</tr>
</thead>
<tbody>
<tr>
<td>How long have you been waiting to be served</td>
</tr>
</tbody>
</table>

5. **Measurement scales Chapter 8**

a. **Ability-enhancing HR practices** - answers ranging from strongly disagree (1) to strongly agree (5)

<table>
<thead>
<tr>
<th>Training and development (CA .89)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have the opportunity to take part in training, courses, and workshops</td>
</tr>
<tr>
<td>I have the opportunity to climb in position</td>
</tr>
<tr>
<td>Career appointments are well respected</td>
</tr>
<tr>
<td>I am able to work anywhere else within the organization</td>
</tr>
<tr>
<td>My development opportunities are tailored to the needs of the organization</td>
</tr>
<tr>
<td>I am encouraged in my development</td>
</tr>
<tr>
<td>I am supported in my future development plans</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recruitment and selection (CA .84)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I experienced a careful selection procedure before I was employed</td>
</tr>
<tr>
<td>During the selection procedure, the organization verified carefully whether my skills were in line with the function</td>
</tr>
<tr>
<td>During the selection procedure, the organization verified carefully whether I fitted within the department</td>
</tr>
<tr>
<td>During the selection procedure, the organization verified carefully whether my training was in line with the functional requirements</td>
</tr>
</tbody>
</table>

b. **Motivation-enhancing HR practices** - answers ranging from strongly disagree (1) to strongly agree (5)

<table>
<thead>
<tr>
<th>Performance appraisal (CA .89)</th>
</tr>
</thead>
<tbody>
<tr>
<td>My performance is periodically reviewed with me</td>
</tr>
<tr>
<td>My assessment is the basis for my further development</td>
</tr>
<tr>
<td>I know the performance criteria</td>
</tr>
<tr>
<td>I receive my assessment on paper</td>
</tr>
<tr>
<td>My functioning is addressed in a formal meeting</td>
</tr>
<tr>
<td>There is a clear procedure for my assessment</td>
</tr>
<tr>
<td>My appraisal procedure is fair</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rewards (CA .77)</th>
</tr>
</thead>
<tbody>
<tr>
<td>My performance plays a role in my rewards</td>
</tr>
<tr>
<td>The organization gives me a good salary compared to similar organizations</td>
</tr>
<tr>
<td>There are sufficient opportunities for financial growth for me within this organization</td>
</tr>
<tr>
<td>I have influence on the composition of my employment package</td>
</tr>
</tbody>
</table>
The reward system encourages me to achieve the departmental goals
Team performance plays a role in my rewards

The organization offers me attractive fringe benefits (e.g. working hours, holidays, pension scheme, childcare, parental leave, compensation for travel costs)*
I have job and income security*

c. Opportunity-enhancing HR practices - answers ranging from strongly disagree (1) to strongly agree (5)

**Autonomy (CA .89)**
I can decide how I execute my duties
I can decide in what order to do my work
I have the opportunity of flexible working hours
I can decide when I am doing my work
I can decide where I do my work
I can choose a work environment that suits my work activity
I can decide with whom I am doing my work
I enter into various partnerships

**Participation (CA .89)**
I have the opportunity to be involved in decision-making within this organization
I have the opportunity to give my opinion on work-related issues
In a working meeting, I am involved in the decisions that are made
I am well informed about the views and policies of the organization
I may contribute to the development of policy within the organization
My ideas and suggestions are seriously considered
My organization provides me the space to implement ideas for improvement

d. Job satisfaction - answers ranging from very dissatisfied (1) to very satisfied (5)

**Job satisfaction**
All things considered, how satisfied are you with your job?

e. Unit performance - answers ranging from strongly disagree (1) to strongly agree (5)

**Effectiveness (CA .82)**
My work unit achieves the goals that are set
My work unit performs high quality work
My work unit successfully contributes to the achievement of organizational goals
In my work unit activities/projects are successfully completed
My work unit performs large amounts of work*
The work performed by my work unit provides the public a worthwhile return on their tax dollars*
My work unit rarely gets complaints from stakeholders about our work activities*

Overall, my work unit performs well*

---

**Efficiency (CA .88)**

- My work unit makes sure that an effort is performed with minimal time and money
- In my work unit no time is wasted
- My work unit makes good use of employees’ knowledge and skills
- In my work unit no money is wasted
- My work unit learns from mistakes
- In my work unit, people and resources are properly deployed
- My work unit adequately conducts relations with external parties

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**Fairness**

- My work unit treats stakeholders in a fair and equitable manner
- In the service delivery to citizens, businesses and other governments no laws or rules are violated
  
  *The work of my work unit is important for society*
  
  *The work of my work unit makes an important contribution to the quality of the organization as a whole*
  
  *The customer satisfaction toward my work unit is very high*
  
  *In general, my work unit has a good image in the organization*

* Items deleted based on factor analysis
APPENDIX 2 RECOMMENDED HRM SCALE BASED ON AMO THEORY

In this appendix, the scale we offer for use in further research is presented. As described in Chapter 3, each of the five studies in this dissertation used a different dataset. Given the predominantly secondary nature of the data analyzed, the measurement of the central concepts varied between the empirical chapters (see Appendix 1). However, for measuring HRM, we were able to develop, and in some instances use, our own scale.

In operationalizing HRM, we made use of AMO theory that focuses on employees’ abilities (A), motivations (M), and opportunities (O) to perform. Lepak et al. (2006) listed HR practices that influence these aspects of an employee’s performance. Using these as a guide, the system of HR practices examined included: 1) recruitment and selection, 2) training and development, 3) performance appraisal, 4) rewards, 5) autonomy, and 6) employee participation in decision-making. Each of these six HR practices was measured using several items that we drew from various HRM studies that had focused on improving employees’ abilities, motivation, and opportunity to perform (Ahmad & Schroeder, 2003; Appelbaum et al., 2000; Boon, 2008; Gould-Williams, 2003; Huselid, 1995; Wright et al., 2005). These items were formatted as five-point Likert scales with the possible answer categories ranging from strongly disagree to strongly agree.

Our constructed HRM scale was first used in a study in 2009 (see Chapter 6). In 2010, the author was asked to add the scale to a study being conducted by the Ministry of Interior and Kingdom Relations. This provided an opportunity to further refine the HRM scale based on the validation carried out in 2009 (exploratory and confirmatory factor analyses) and some specific requirements of the Ministry. As such, some of the initial items in the questionnaire were revised. This revised scale has also been validated and is used in Chapter 8 of this dissertation. Another opportunity to add the scale to a large-scale public-sector study conducted by the Ministry of Interior and Kingdom Relations occurred in 2011. Again, some of the items were modified based on the validation results of 2010 (exploratory and confirmatory factor analyses) and the specific needs of the government organizations. This scale was again validated and is used in this dissertation in Chapter 4. Thus, based on these validation procedures, we have developed, tested, and refined a scale that we would recommend for use in further research. This scale is presented below.
**Recommended HRM scale based on AMO theory**

### Recruitment and selection
- I experienced a careful selection procedure before I was employed
- During the selection procedure, the organization verified carefully whether my skills were in line with the function
- During the selection procedure, the organization verified carefully whether I fitted within the department
- During the selection procedure, the organization verified carefully whether my training was in line with the functional requirements

### Training and development
- I have the opportunity to take part in training, courses and workshops if I want to
- I have the opportunity to progress in position if I want to
- Career appointments are well respected
- I am able to work anywhere else within the organization if I want to
- My development opportunities are tailored to the needs of the organization
- I am encouraged in my development
- I am supported in my future development plans

### Performance appraisal
- My performance is periodically reviewed with me
- My assessment forms the basis for my further development
- I know the performance criteria
- I receive my assessment on paper
- My functioning is addressed in a formal meeting
- There is a clear procedure for my assessment

### Rewards
- My performance plays a role in my rewards
- The organization gives me a good salary compared to similar organizations
- There are sufficient opportunities for my financial growth within this organization
- The reward system encourages me to achieve the departmental goals
- Team performance plays a role in my rewards
- I have influence on the composition of my employment package

### Autonomy
- I can decide how I execute my duties
- I can decide in what order to do my work
- I have the opportunity of flexible working hours*
- I can decide when I am doing my work *
- I can decide where I do my work*
- I can choose a work environment that suits my work activity*
I can decide with whom I am doing my work*
I enter into various partnerships*

<table>
<thead>
<tr>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have the opportunity to be involved in decision-making within this organization</td>
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<td>I may contribute to the development of policy within the organization</td>
</tr>
<tr>
<td>My ideas and suggestions are seriously considered</td>
</tr>
<tr>
<td>My organization provides me the space to implement ideas for improvement</td>
</tr>
</tbody>
</table>

*Before using these items, one should consider whether these questions are appropriate, or whether they should be adapted or removed, given their job characteristics of the potential respondents.*
APPENDIX 3 LIST OF TRANSLATIONS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABP</td>
<td>Algemeen Burgerlijk Pensioenfonds (Pension fund for employees in the government, public and education sectors)</td>
</tr>
<tr>
<td>AGFI</td>
<td>Adjusted Goodness of Fit Index</td>
</tr>
<tr>
<td>AIC</td>
<td>Akaike Information Criterion</td>
</tr>
<tr>
<td>AMO</td>
<td>Ability-Motivation-Opportunity</td>
</tr>
<tr>
<td>AMOS</td>
<td>Analysis of Moment Structures</td>
</tr>
<tr>
<td>ASA</td>
<td>Attraction-Selection-Attrition</td>
</tr>
<tr>
<td>β</td>
<td>Beta coefficient</td>
</tr>
<tr>
<td>BCC</td>
<td>Browne-Cudeck Criterion</td>
</tr>
<tr>
<td>BIC</td>
<td>Bayes Information Criterion</td>
</tr>
<tr>
<td>BZK</td>
<td>Ministerie van Binnenlandse Zaken en Koninkrijksrelaties (Ministry of Interior and Kingdom Relations)</td>
</tr>
<tr>
<td>CA</td>
<td>Cronbach’s Alpha</td>
</tr>
<tr>
<td>CAIC</td>
<td>Consistent Akaike Information Criterion</td>
</tr>
<tr>
<td>CFI</td>
<td>Comparative Fit Index</td>
</tr>
<tr>
<td>CMIN</td>
<td>Chi-square Minimum</td>
</tr>
<tr>
<td>df</td>
<td>Degrees of freedom</td>
</tr>
<tr>
<td>F-value</td>
<td>Fisher value</td>
</tr>
<tr>
<td>GFI</td>
<td>Goodness of Fit Index</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resource</td>
</tr>
<tr>
<td>HRM</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>ICC</td>
<td>Intra-Class Correlation</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>N</td>
<td>Number of respondents</td>
</tr>
<tr>
<td>NFI</td>
<td>Normed Fit Index</td>
</tr>
<tr>
<td>NPM</td>
<td>New Public Management</td>
</tr>
<tr>
<td>Ns</td>
<td>Not significant</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>p</td>
<td>Probability</td>
</tr>
<tr>
<td>PMT</td>
<td>Product Market Technology</td>
</tr>
<tr>
<td>PSM</td>
<td>Public Service Motivation</td>
</tr>
<tr>
<td>R²</td>
<td>Coefficient of determination</td>
</tr>
<tr>
<td>RBV</td>
<td>Resource Based View</td>
</tr>
<tr>
<td>RMSEA</td>
<td>Root Mean Square Error of Approximation</td>
</tr>
<tr>
<td>SCL</td>
<td>Social Cultural Legal</td>
</tr>
</tbody>
</table>
SCP  Sociaal en Cultureel Planbureau (The Netherlands Institute for Social Research)
SEM  Structural Equation Modeling
SRMR Standardized Root Mean Square Residual
SPSS Statistical Package for the Social Sciences
TLI  Tucker-Lewis Coefficient
VNG  Vereniging van Nederlandse Gemeenten (Association of Dutch Municipalities)
$X^2$  Chi-square value
Samenvatting (Summary in Dutch)
Inleiding

Verschillende disciplines, zoals HRM, marketing en ICT, houden zich bezig met het verbeteren van de organisatieprestaties. Human Resource Management (HRM) onderscheidt zich door het uitgangspunt dat verbeterde prestaties kunnen worden bereikt door de mensen in de organisatie. Dit is zeker ook relevant voor de, veelal arbeidsintensieve, publieke sector.

In de Nederlandse publieke sector is circa een miljoen mensen werkzaam. Daarmee vormt de werkgelegenheid in de publieke sector circa 13% van de totale werkgelegenheid in Nederland. Deze mensen werken voor meer dan 2.300 overheidswerkgevers, variërend van gemeenten en waterschappen tot de politie en basisscholen. Samen vormen deze organisaties de grootste werkgever in Nederland (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2013).

Vanuit die rol staat de publieke sector voor grote uitdagingen op het gebied van de arbeidsrelaties. Deze worden onder meer veroorzaakt als gevolg van zowel de New Public Management beweging die zorgt voor organisatorische herstructurering, inkrimping en druk op meer efficiënte en effectieve dienstverlening, als door veranderingen in de samenleving waarbij burgers meer van de overheid verwachten (Sociaal en Cultureel Planbureau, 2004; 2012). Deze ontwikkelingen maken het relevant om na te gaan hoe door middel van HRM, de prestaties van publieke organisaties beïnvloed kunnen worden. Het onderzoeken van de relatie tussen HRM en prestaties van publieke organisaties vormt dan ook de kern van dit proefschrift.

Achtergrond onderzoek HRM en prestaties van publieke organisaties

De relatie tussen HRM en prestaties

In 1995 publiceerde Huselid een baanbrekende studie waarin hij liet zien dat er een relatie is tussen een set aan HRM-activiteiten en de omzet, de winst en de marktwarde van de organisatie. Dit artikel leidde tot een stortvloed aan onderzoek dat probeerde om de gevonden relatie tussen HRM en organisatieprestaties te repliceren. Ondanks dat verscheidene studies een relatie hebben gevonden tussen HRM en prestaties zijn er nog steeds voldoende vragen wat betreft deze relatie. Een belangrijke vraag in dat verband, is de vraag wat het mechanisme (proces) is waarlangs HRM van invloed is op de organisatieprestaties. Om meer inzicht te krijgen in deze relatie zijn er diverse procesmodellen gepubliceerd. Een algemene aanname in deze modellen is dat de relatie tussen HRM en organisatieprestaties, op zijn minst gedeeltelijk, loopt via de houding en het gedrag van werknemers, zoals hun tevredenheid en het verloop. In recentere modellen wordt bovendien een onderscheid gemaakt tussen verschillende vormen van HRM door deze op te splitsen in beoogd (intended), geïmplementeerd (actual) en ervaren (perceived) HRM. In dit verband stellen Nishii & Wright (2008) dat inzicht in het beoogd HR-beleid dat
door de organisatie is ontwikkeld om een bepaald doel te behalen en dat veelal beschreven is in officiële documenten en HR-handboeken onvoldoende is om prestaties vanuit het perspectief van HRM te verklaren. Zij stellen dat naast beoogd HRM, aandacht voor (veelal door lijnmanagers) geïmplementeerd HRM en door medewerkers ervaren HRM belangrijk zijn om inzicht te krijgen in de relatie tussen HRM en organisatieprestaties. In dit proefschrift is het model van Nishii en Wright (2008) gebruikt als uitgangspunt. De eerste onderzoekslijn in dit proefschrift is dan ook om meer inzicht te krijgen in het mechanisme waarlangs HRM van invloed is op de organisatieprestaties door aandacht te besteden aan de verschillende niveaus (organisatie-, afdeling- en werknemersniveau) binnen organisaties.

De rol van de lijnmanager bij de implementatie van HRM

Het onderscheid tussen beoogd, geïmplementeerd en ervaren HRM kan meer inzicht bieden in het mechanisme waarlangs HRM van invloed is op de organisatieprestaties, maar bovenal benadrukt dit onderscheid de belangrijke rol van de lijnmanager bij de implementatie van HRM. In navolging van Guest (2011) heeft de implementatie van HRM zowel een inhoudelijke als een procesmatige component. De inhoudelijke component verwijst naar welke HR-praktijken geïmplementeerd worden en de procescomponent verwijst naar de wijze waarop de HR-praktijken geïmplementeerd worden. Traditioneel was de implementatie van HRM primair de verantwoordelijkheid van HR-professionals, hoewel lijnmanagers tot op zekere hoogte altijd een HR-verantwoordelijkheid hebben gehad, aangezien zij verantwoordelijk zijn voor het werk van hun ondergeschikten. Er zijn echter duidelijke aanwijzingen dat lijnmanagers naast hun traditionele leidinggevende taken in toenemende mate HRM-taken uit dienen te voeren, waarbij veel van de traditionele taken van de HR-afdeling zijn overgedragen aan lijnmanagers. Geïnspireerd door Purcell en zijn collega’s, stellen Gilbert, De Winne en Sels in 2011 dat de rol van de lijnmanager bij de implementatie van HRM zowel een management component als een leiderschapcomponent kent. De managementcomponent heeft betrekking op de implementatie van HR-praktijken die onder de verantwoordelijkheid van lijnmanagers vallen, zoals de selectie en beoordeling van personeel. Dit sluit aan bij de inhoudscomponent van HRM-implementatie, zoals eerder besproken is. De leiderschapcomponent omvat de leiderschapsgedragingen van lijnmanagers om de houding en het gedrag van werknemers te beïnvloeden. Dit komt overeen met de eerder besproken procesdimensie van HRM-implementatie. In de literatuur wordt ervan uitgegaan dat beide componenten van belang zijn voor een effectieve implementatie van HRM door lijnmanagers. De tweede onderzoekslijn in dit proefschrift richt zich daarom op de rol van de leidinggevende bij de implementatie van HRM.
De publieke sector context

De hiervoor beschreven HRM en prestatiemodellen zijn van algemene aard. Met andere woorden, ze kunnen worden toegepast zonder rekening te houden met de context. Eerder onderzoek heeft echter aangetoond dat het bij het onderzoeken van de relatie tussen HRM en prestaties van belang is om aandacht te besteden aan de context. In dit proefschrift wordt specifiek aandacht besteed aan de publieke sector context. Tot op heden hebben publieke sector organisaties relatief weinig aandacht gekregen in onderzoek naar de relatie tussen HRM en organisatieprestaties. Dit ondanks het feit dat eerder onderzoek heeft aangetoond dat er significante verschillen zijn tussen publieke en private organisaties op het gebied van HRM en prestaties. In de literatuur worden specifieke institutionele- en organisatiekenmerken en kenmerken van het personeelsbestand van publieke organisaties beschreven die de relatie tussen HRM en prestaties kunnen beïnvloeden. De derde onderzoekslijn van dit proefschrift is dan ook om de context in beschouwing te nemen door de relatie tussen HRM en organisatieprestaties specifiek in de publieke sector te onderzoeken.

Doelstelling, vraagstelling en relevantie van het onderzoek

Gegeven de drie onderzoekslijnen die hierboven beschreven zijn, is het doel van dit proefschrift om meer inzicht in de relatie tussen HRM en organisatieprestaties te krijgen. Hierbij ligt de focus op (a) het mechanisme waarlangs HRM van invloed is op de organisatieprestaties, (b) de rol van de lijnmanager bij de implementatie van HRM, en (c) de publieke sector context. De centrale onderzoeksvraag is daarbij als volgt:

Hoe beïnvloedt de implementatie van HRM de prestaties van publieke organisaties?

De belangrijkste bevindingen

Dit proefschrift bevat naast een inleidend, een theoretisch, een methodologisch en een concluderend hoofdstuk, 5 empirische hoofdstukken om de onderzoeksvraag te beantwoorden (de hoofdstukken 4 tot en met 8).

In hoofdstuk 4 hebben we ons gericht op de publieke sector context door te onderzoeken of de mate van “publiekheid” (degree of publicness) van organisaties van invloed is op de inrichting (HR-design) en op de inhoud van HRM (HR-content) in deze organisaties. Wat betreft het HR-design onderzochten we of er tussen organisaties met een verschillende mate van publiekheid verschillen zijn in 1) de mate waarin HRM-activiteiten gedecentraliseerd zijn naar lijnmanagers en in 2) de mate waarin lijnmanagers beperkende regels ervaren bij het uitvoeren van de HRM-activiteiten. Wat betreft de HR-content onderzochten we of er tussen organisaties met een verschillende mate van publiekheid verschillen zijn in de implementatie van HR-praktijken. De analyse van een dataset van 30.741 werknemers van 154 publieke organisaties laat zien dat het HR-design en de HR-content verschillen tussen organisaties met een verschillende mate van publiekheid.
Daarnaast laten de resultaten zien dat de implementatie van HR-praktijken in de publieke sector in hoge mate de verantwoordelijkheid is van lijnmanagers. Tegelijkertijd ervaren lijnmanagers vrij veel bureaucratie bij de implementatie van HRM. Het onderzoek laat zien dat deze twee kenmerken van het HR-design kunnen conflicteren: het idee achter decentralisatie van HRM-activiteiten naar lijnmanagers is dat lijnmanagers meer verantwoordelijkheid krijgen in de implementatie van HRM, terwijl regels en beperkingen de vrijheid en flexibiliteit van lijnmanagers juist inperken. Bovendien leidt deze combinatie tot een negatieve perceptie van werknemers over de mate van goed werkgeverschap. Dit lijkt met name op te gaan voor organisaties met een lage mate van publiekheid.

Nadat we meer inzicht hebben gekregen in de context waarin HRM geïmplementeerd wordt, hebben we ons gericht op de rol van de lijnmanager in de relatie tussen HRM en prestaties. In dit kader hebben we in hoofdstuk 5 gekeken naar hoe lijnmanagers invulling geven aan hun HR-verantwoordelijkheden door te focussen op hun leiderschapsgedrag (leiderschapscomponent) en op de implementatie van HR-praktijken (management-component). Daarnaast hebben we onderzocht of medewerkertevredenheid de relatie tussen HRM en organisatieprestaties (deels) kan verklaren. Daarvoor hebben we gebruik gemaakt van data van 6253 werknemers in de publieke sector afkomstig van een nationaal werkbelevingsonderzoek. De resultaten laten zien dat a) medewerkertevredenheid de relatie tussen HRM en organisatieprestaties deels verklaart en b) dat een stimulerende leiderschapsstijl een positief effect heeft op de hoeveelheid ervaren HR-praktijken, terwijl c) een corrigerende leiderschapsstijl geen effect heeft op de hoeveelheid ervaren HR-praktijken. De resultaten van dit onderzoek laten bovendien zien dat de leiderschapsstijl van de lijnmanager belangrijker is in het beïnvloeden van medewerkertevredenheid en organisatieprestaties dan het aantal HR-praktijken dat gebruikt wordt.

Vervolgens hebben we in hoofdstuk 6 nader ingezoomd op de rol van de lijnmanager bij de implementatie van HRM op de afdeling en daarmee de invloed op de percepties van werknemers ten aanzien van de geïmplementeerde HR-praktijken en op de afdelingsprestaties. In een onderzoek onder 317 werknemers en 41 lijnmanagers afkomstig van verschillende afdelingen binnen een Nederlandse gemeente, hebben we onderzocht of de HR-praktijken, zoals door lijnmanagers geïmplementeerd werden, invloed hebben op de percepties die werknemers hebben van deze HR-praktijken en of deze percepties vervolgens samenhangen met de afdelingsprestaties. De bevinding dat de implementatie van HR-praktijken verschilt tussen afdelingen benadrukt het belang om de relatie tussen HRM en prestaties niet alleen op het organisatie niveau te onderzoeken, maar door deze relatie ook binnen organisaties te onderzoeken, bijvoorbeeld op afdelingsniveau. Meer in het bijzonder laat ons onderzoek zien dat de implementatie van HR-praktijken verschilt tussen afdelingen als gevolg van verschillen in leiderschapsstijl van de lijnmanagers. Als zodanig benadrukken deze resultaten de belangrijke rol van de lijnmanager bij de implementatie van HRM en mede daarmee de prestaties. Verder laat ons onderzoek zien dat de
percepties die werknemers hebben van HRM een belangrijke verklaring vormen van hoe de implementatie van HRM door lijnmanagers de afdelingsprestaties beïnvloedt.

Nadat we meer inzicht hebben gekregen in de rol van de lijnmanager bij de implementatie van HRM en vervolgens de afdelings- en organisatieprestaties, hebben we specifiek aandacht besteed aan het multidimensionale karakter van publieke prestaties. In hoofdstuk 7 hebben we de percepties die externe stakeholders hebben van de publieke dienstverlening betrokken in onze studie naar de relatie tussen HRM en prestaties. In dit hoofdstuk onderzochten we de kenmerken van de werkomgeving, baantevredenheid en klanttevredenheid door klanttevredenheidsgegevens van de balie publiekszaken te vergelijken met gegevens over het welzijn van front-office werknemers in 35 Nederlandse gemeenten. Onze resultaten laten zien dat de kenmerken van de werkomgeving van invloed zijn op de baantevredenheid van publieksbaliemedewerkers. Daarnaast laten de resultaten, in tegenstelling tot onze verwachting, zien dat de relatie tussen baantevredenheid en klanttevredenheid tweeledig is. In organisaties waar werknemers tevredener zijn met hun baan, zijn klanten (burgers) tevredener met het inlevingsvermogen van de medewerker, maar de wachttijden van de dienstverlening nemen tegelijkertijd toe. De resultaten van dit onderzoek impliceren dat het managen van medewerkers een belangrijke rol speelt in het beïnvloeden van de prestaties van publieke organisaties. Bovendien benadrukken deze resultaten het belang van een multidimensionaal perspectief op prestaties waarbij wordt gepleit voor het opnemen van meerdere prestatie-indicatoren en om de prestaties te bezien vanuit het perspectief van verschillende stakeholders.

In de voorgaande empirische hoofdstukken hebben we vastgehouden aan de zogenaamde systeembenadering van HRM door te focussen op een bundel van HR-praktijken in de relatie tussen HRM en prestaties. In navolging van inzichten uit de recente literatuur, hebben we in het laatste hoofdstuk de HR-systeemvariabele opgesplitst in drie HR-componenten. Dit vanuit de veronderstelling dat de verschillende componenten van een HR-systeem unieke relaties kunnen hebben met verschillende organisatieprestaties. Bovendien wordt in de literatuur het belang benadrukt om meerdere prestatie-indicatoren op te nemen in onderzoek naar de relatie tussen HRM en prestaties (zie voor de relevantie hiervan ook de resultaten van hoofdstuk 7). In lijn hiermee hebben we in hoofdstuk 8 de prestatievariabele opgesplitst in drie verschillende publieke waarden. Met andere woorden, in hoofdstuk 8 onderzochten we de relatie tussen aan de ene kant 3 HR-componenten gebaseerd op de AMO-theorie, namelijk de Ability-verhogende (kennis en vaardigheden – in dit onderzoek werving en selectie en training en loopbaanontwikkeling), de Motivatie-verhogende (in dit onderzoek beoordeling en beloning) en de Opportunity-verhogende (in dit onderzoek autonomie en participatie) HR-praktijken en aan de andere kant de effectiviteit, efficiëntie en rechtvaardigheid van de werkzaamheden van publieke organisaties, waarbij baantevredenheid verondersteld wordt de relatie deels te verbinden. De analyse van een dataset bestaande uit 822 werknemers uit de publieke sector laat zien
dat de drie HR-componenten geen eenduidige invloed hebben op de drie prestatie-indicatoren. Specifiek laten de resultaten zien dat de ability-gerichte HR-praktijken een positief *directe en indirecte* effect hebben op alle drie de prestatie-indicatoren. Opportunity-gerichte HR-praktijken hebben slechts een *directe* invloed op twee prestatie-indicatoren, namelijk efficiëntie en rechtvaardigheid, maar ze hebben wel een *indirecte* invloed op alle drie de prestatie-indicatoren. Motivatie-gerichte HR-praktijken hebben geen *direct* effect op alle drie de prestatie-indicatoren, maar ze hebben wel een *indirect* effect op effectiviteit en efficiëntie. Verder laten de resultaten zien dat ability-gerichte en opportunity-gerichte HR-praktijken positiever samenhangen met baantevredenheid en de drie prestatie-indicatoren dan motivatie-gerichte HR-praktijken. Deze resultaten impliceren dat het belangrijk is om zowel HRM als prestaties op te splitsen in verschillende componenten om beter inzicht te krijgen in de relatie tussen HRM en prestaties. Bovendien impliceren deze resultaten dat het van belang is om een onderscheid te maken tussen verschillende typen HR-praktijken aangezien de verschillende publieke prestaties om een andere HR-benadering vragen.

**Conclusies en discussie**

Op basis van dit onderzoek kan geconcludeerd worden dat de implementatie van HRM van invloed is op de prestaties van publieke organisaties. Om de prestaties van publieke organisaties te beïnvloeden, is het van belang om zowel aandacht te besteden aan de inhoud van HRM (de managementcomponent) als aan leiderschap (de leiderschapscomponent).

Hoe meer HR-praktijken geïmplementeerd worden die erop gericht zijn dat werknemers hun werk kunnen (ability), willen (motivatie) en mogen (opportunity) doen, hoe hoger de afdelings- en organisatieprestaties. Bovendien vragen verschillende typen publieke prestaties om een verschillende invulling van HRM. De implementatie van HRM is echter meer dan alleen het implementeren van HR-praktijken. De leiderschapsstijl blijkt een belangrijkere voorspeller te zijn van prestaties dan de HR-praktijken die geïmplementeerd worden door lijnmanagers. Verder blijkt de leiderschapsstijl van de lijnmanager van invloed te zijn op de implementatie van HR-praktijken door de lijnmanager. Naast de belangrijke rol van de lijnmanager, speelt de werknemer een cruciale rol in de relatie tussen HRM en prestaties. Aangezien de HRM-percepties van werknemers van invloed zijn op hun houding (baantevredenheid) en daarmee de prestaties, zijn deze percepties een grotere voorspeller van prestaties dan de implementatie van HRM door leidinggevenden. Tot slot blijkt het niet voldoende te zijn om alleen naar organisatieprestaties te kijken aangezien de prestaties tussen afdelingen kunnen verschillen. In dit verband vormen de afdelingsprestaties een belangrijke verbindende schakel in de relatie tussen HRM en organisatieprestaties. De mate waarin de geïmplementeerde HR-praktijken van invloed zijn op de organisatieprestaties hangt af van de prestatie-indicatoren die centraal gesteld worden. In dit verband laat dit onderzoek zien dat het van belang is om prestatie-indicatoren zodanig te definiëren dat zij passen bij de publieke sector context. Voor het begrijpen van de relatie tussen
HRM en prestaties is het van belang om deze publieke sector context in beschouwing te nemen. De implementatie van HR-praktijken door lijnmanagers wordt beïnvloed door de mate waarin hun HR-verantwoordelijkheden gepaard gaan met voldoende discretionaire bevoegdheden. Als lijnmanagers geconfronteerd worden met bureaucratie op het gebied van personeelsbeleid dan heeft dat een negatieve invloed op de manier waarop werknemers de implementatie van HR-praktijken ervaren.

**Methodologische reflectie**

Ondanks dat onderzoek naar de relatie tussen HRM en organisatieprestaties grote vooruitgang heeft doorgemaakt, hebben wetenschappers diverse methodologische problemen beschreven ten aanzien van het huidige onderzoek. Een aantal vaak genoemde bezwaren is in dit proefschrift aangepakt door het gebruik van meerdere actoren (respondenten uit verschillende subpopulaties), meerdere beoordelaars (meerdere respondenten voor elke analyse-eenheid), en meerdere bronnen (een combinatie van datasets en aanvullend verzamelde gegevens). Om de veronderstelde relaties te onderzoeken, is daarom in dit proefschrift onder meer gebruik gemaakt van analysetechnieken die ons in staat stellen om de directe en indirecte relaties tussen onafhankelijke en afhankelijke variabelen gelijktijdig te onderzoeken (structural equation modeling) en om variabelen op verschillende analyseniveaus te onderzoeken (2-1-2 mediational multilevel analyse).

Dit onderzoek kent echter ook een aantal beperkingen, die van belang zijn bij het interpreteren van de onderzoeksuitkomsten. Om te beginnen hebben alle studies in dit proefschrift een cross-sectioneel design, wat inhoudt dat alle variabelen op hetzelfde tijdstip gemeten zijn. Het feit dat een cross-sectioneel design geen tijdsdimensie heeft, stelt grenzen aan het doen van uitspraken over oorzaken en gevolgen. Een andere beperking van dit onderzoek heeft betrekking op de steekproefgrootte in een aantal studies. Deze beperking hangt samen met de meerdere niveaus in onze data waardoor het moeilijk en soms zelfs onmogelijk was om over veel cases op het hoogst analyseeniveau (afdelings- en organisatieniveau) te beschikken.

Ondanks dat de getoetste modellen eenvoudig waren en daarmee vanuit methodologisch oogpunt acceptabel zijn, adviseren wij om dit onderzoek (waar mogelijk) te herhalen met meer cases. Dit geldt met name voor de studies in de hoofdstukken 4, 6 en 7. Verder is het merendeel van de resultaten in dit proefschrift gebaseerd op secundaire data-analyse. Een nadeel van het gebruik van secundaire gegevens is dat niet alle gewenste concepten en wetenschappelijk gangbare metingen aanwezig waren. Bovendien varieert de meting van de centrale concepten tussen de empirische hoofdstukken. In dit kader dient zorgvuldig omgegaan te worden met het vergelijken van de resultaten uit de verschillende studies. Tot slot is de meting van prestaties in alle studies gebaseerd op percepties, al zijn deze percepties wel afkomstig van verschillende groepen, namelijk werknemers, het management en burgers (met andere woorden meerdere stakeholders). Voor toekomstig onderzoek adviseren wij om ons onderzoek (waar mogelijk) te repliceren met objectieve data.
Aanbevelingen voor de praktijk
In toenemende mate wordt van de HR-afdeling gevraagd de specifieke impact van HRM op de prestaties van de organisatie aan te tonen. Dit kan de toegenomen aandacht voor bijvoorbeeld evidence-based management en HR analytics verklaren. Beide benaderingen benadrukken het belang om managers te voorzien van informatie over de causale processen tussen HRM en organisatieprestaties die binnen organisaties plaatsvinden. In dit opzicht kunnen deze benaderingen worden gezien als een poging om de veelvuldig besproken kloof tussen onderzoek en praktijk te overbruggen. Volgens academici is een stap in het overbruggen van deze kloof om meer vertrouwd te raken met de behoeften en belangen van professionals. Ons onderzoek, dat grotendeels gebruik maakt van secundaire data verzameld door professionals, biedt professionals meer inzicht in de relatie tussen HRM en prestaties. Deze onderzoeksresultaten kunnen managers en beleidsmakers daarmee voorzien van inzichten over hoe de organisatieprestaties beïnvloed kunnen worden door middel van HRM. Op basis van dit onderzoek hebben we verscheidene aanbevelingen voor de praktijk. Om te beginnen; geef lijnmanagers discretionaire bevoegdheid die past bij hun verantwoordelijkheden op het gebied van HRM. Als zodanig dient kritisch gekeken te worden naar de bureaucratie op het gebied van personeelsbeleid wanneer lijnmanagers HR-verantwoordelijkheden krijgen. Zorg er daarnaast voor dat werknemers HRM ervaren zoals het bedoeld is. In dit verband is het belangrijk om de percepties die werknemers hebben van HRM en hun houding en gedrag te monitoren. Tot slot; ondersteun lijnmanagers bij de implementatie van HRM en investeer in leiderschapsprogramma’s die gericht zijn op de ontwikkeling van mensgericht leiderschap.
ABOUT THE AUTHOR

Brenda Vermeeren (1982) studied Personnel and Labor at Rotterdam University (Bachelor’s degree - graduating in 2005) and Public Administration at Erasmus University Rotterdam (EUR) (Master’s degree - graduating in 2007; cum laude). During her time at EUR, she also worked as a student assistant in the Department of Public Administration. After graduation, she joined the staff as an junior lecturer for one year. In September 2008, she started as a PhD student examining the relationship between HRM and the performance of public sector organizations. Alongside her PhD research, she worked as a project manager at InternetSpiegel (a program of the Ministry of Interior and Kingdom Relations) where she has been involved in HRM policy analyses for the Ministry of Interior and Kingdom Relations and applied research for several public sector organizations.

During this period of PhD study, Brenda presented her research at several national and international public administration and HRM conferences. In addition, she has published her work, some based on her PhD research, in academic and professional journals. Further, she has co-authored chapters in the books ‘Strategisch HRM in de publieke sector’ and ‘New Steering Concepts in Public Management’. Moreover, she has served as a chair of the Public Administration PhD Platform, has co-organized a conference on ‘Transforming Public Services: Caught between Efficiency and Legitimacy’ at EUR in 2011, and has been a reviewer for several Public Management and Human Resource Management journals.

In her teaching role, Brenda obtained the university teaching qualification (BKO) and has been involved in several Bachelor and Master courses. She has taught courses on Public Management, Human Resource Management, and quantitative research methods and she has supervised Master’s theses at EUR. Moreover, she has coordinated and taught a master-level course on Human Resource Management in the Public Sector at Leiden University. Finally, she has given guest lectures about HRM in the public sector at Amsterdam University and has served as an external examiner on the oral defense committee of graduation students in Personnel and Labor at Rotterdam University.

In the near future, Brenda will continue to combine working for both employers. From January 2014, she will be working as a project manager at InternetSpiegel and as an academic researcher and teacher at Erasmus University Rotterdam.

Publications


