Job demands, job resources, and consequences for managerial sustainability in the public sector

A contextual approach

Linda Corin

UNIVERSITY OF GOTHENBURG
DEPARTMENT OF SOCIOLOGY AND WORK SCIENCE

To my family

ABSTRACT

The aims of this thesis were threefold: to explore and increase knowledge of managerial working conditions in Swedish municipalities, to extend the job demands-resources (JD-R) model, and to provide information that public sector decision-makers and human resources departments can use and apply in promoting sustainable managerial working conditions. The argument in this thesis is that a contextual perspective on managerial work is needed, entailing a shift in focus from managers and their individual differences, to the conditions that public sector managers work under.

In order to address these questions, a strategic sample of organizations and managers that allowed for comparison and examined systematic differences and similarities among them was used, accompanied by contextual quantitative and qualitative methods that included both subjective appraisals and more objective assessments and data on several levels.

The main theoretical framework was based on the latest development in the work stress field, where theoretical and empirical insights from several decades have been developed into the JD-R model. The model takes a balanced approach in explaining negative as well as positive aspects of occupational well-being. Unlike previous models, the JD-R model can be adapted and tailored to the specific context and study group.

This thesis comprises four empirical studies with specific aims. In the first study, the main aim was to explore different types of naturally occurring psychosocial work situations for municipal managers, based on the combination of job demands and job resources, by means of cluster analysis. Certain focus was also given to investigating how the work situations could be differentiated regarding sustainability indicators for managerial health, motivation, and performance. In the second study, these psychosocial work situations were followed up 2 years later, and the main aim was to investigate how the situations longitudinally predict managerial turnover using logistic regression and thereby identify groups that are at a high risk or a low risk for turnover, actual as well as

intended. The main aim of the third study was to establish how the span of control – that is, the number of subordinates per manager as one of several possible organizational determinants of psychosocial working conditions – affects operational public sector managers' job demands, using multilevel regression analysis. In the fourth and final study, the main aim was to deepen the understanding of first-line human service managers' work assignment and psychosocial working conditions by qualitatively and externally assessing the job demands and job resources as well as the balance between them, through work content analysis, in order to provide explanations of the current work strain of this group of managers.

The first overall conclusion of this thesis is that public sector managers work in a wide array of diverse situations, including balanced as well as unbalanced psychosocial working conditions in terms of job demands and job resources. An unbalanced work situation, characterized by a lack of correspondence between the job demands posed and the job resources provided, was found to be a reality for a large number of the managers, especially within human services. The psychosocial working conditions were found to be related to consequences for managerial sustainability in terms of health, performance, motivation, and turnover. In addition, the contextual approach applied contributed to identifying organizational and structuring factors – in other words, the type of service the manager works in and the manager's span of control, managerial position, gender, age, and managerial experience – that provide reasons for the variation in psychosocial working conditions and their consequences. Taken together, the results can provide guidance for actions to be taken in order to promote sustainable psychosocial working conditions for public sector managers, thus reducing both significant individual and organizational costs.

CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF PUBLICATIONS

This thesis is based on four studies, referred to in the text by their Roman numerals:

Study I   Berntson, E., Wallin, L., & Härenstam, A. (2012). Typical situations for managers in the Swedish public sector: Cluster analysis of working conditions using the job demands-resources model. *International Public Management Journal*, *15*(1), 100–130.

         Reprinted with permission from International Public Management Journal, (© Taylor & Francis)

Study II   Corin, L., Berntson, E., & Härenstam, A. (2016, January 14). Managers' turnover in the public sector – The role of psychosocial working conditions. *International Journal of Public Administration*. Advance online publication. doi:10.1080/01900692.2015.1035786

         Reprinted with permission from International Journal of Public Administration, (© Taylor & Francis)

Study III   Wallin, L., Pousette, A., & Dellve, L. (2014). Span of control and the significance for public sector managers' job demands: A multilevel study. *Economic and Industrial Democracy*, *35*(3), 455–481.

         Reprinted with permission from Economic and Industrial Democracy, (© SAGE Publications)

Study IV   Corin, L., & Björk, L. (2016). *Job demands and job resources in human service managerial work – An external assessment through work content analysis*. Manuscript submitted for publication.

LIST OF ABBREVIATIONS

α	Cronbach's alpha
ANOVA	Analysis of variance
CI	Confidence interval
e.g.	For example (*exempli gratia*)
EM	Expectation maximation
ERI	Effort-reward imbalance model
ESS	Error sum of squares
GMSI	Gothenburg Manager Stress Inventory
HR	Human resources
HRM	Human resource management
HSO	Human service organizations
ICC	Intraclass correlation coefficient
i.e.	That is (*id est*)
IGLS	Iterative generalized least squares
JDC	Job demand-control model
JDCS	Job demand-control-support model
JD-R	Job demands-resources model
MANOVA	Multivariate analysis of variance
MANCOVA	Multivariate analysis of covariance
MDSD	Most different systems design
MLM	Multilevel modeling
MOA	Moderna arbets- och livsvillkor för kvinnor och män [Modern work and living conditions for women and men]
MSSD	Most similar systems design
NPM	New public management
OLS	Ordinary least squares
OR	Odds ratio
PASW	Predictive Analytics Software (formerly Statistical Package for the Social Sciences, or SPSS)
RIGLS	Restricted iterative generalized least squares
SOC	Span of control
TSO	Technical service organizations
WHO	World Health Organization

TACKORD

Det har hänt mycket i mitt liv de senaste åren. Jag har träffat och gift mig med mitt livs kärlek, fått en underbar son och dotter, köpt hus, flyttat ut på landet, fyllt 30, blivit faster fyra gånger och sist men inte minst, skrivit en bok. Jag kan inte med ord beskriva hur stolt och tacksam jag känner mig för att du nu håller denna bok i din hand. Även om jag ensam är ansvarig för slutresultatet så hade slutförandet av denna bok inte varit möjligt utan det fantastiskt stöd jag fått från handledare, kollegor och familj. Er vill jag nu tacka.

Först och främst vill jag rikta mitt varmaste tack till alla chefer som så generöst har delat med sig av sin vardag genom åren. Utan era bidrag hade det inte funnits någon avhandling att skriva. Jag hoppas att mitt tack kommer ta sig i uttryck i mer än ord, att er vardag med hjälp av denna avhandling kommer att bli enklare.

Jag har haft förmånen att vägledas av en fantastiskt kompetent handledartrio bestående av Professor Annika Härenstam, Professor Lotta Dellve och Doktor Anders Pousette. Era kunskaper och kloka ord har betytt otroligt mycket och ni har kompletterat varandra på ett oerhört givande sätt under dessa år. Framförallt vill jag tacka Anders för all din fenomenala metodsupport och Lotta för din lysande förmåga att vässa en text! Jag vill rikta ett särskilt varmt tack till Annika, min huvudhandledare, för att du alltid funnits tillhands och för att du på ett enastående generöst sätt delat med dig av din vishet, ditt nätverk och ditt rampljus. Jag är dig evigt tacksam.

Jag vill också passa på att rikta ett stort tack till de medförfattare jag har haft nöjet att samarbeta med under åren, såväl innanför som utanför avhandlingens ram. Erik Berntson, Katrin Skagert och Anna Cregård. Ni har inte bara gjort mitt arbete enklare, ni har också visat att forskning kan vara riktigt roligt!

Lisa Björk, du har visserligen varit medförfattare men också så mycket mer än så. Vi har gråtit, vi har skrattat, vi har tänkt och vi har tänkt om. Vi har flamsat och varit på krigsstigen, vi har stått i begrepp att ge upp, men ofta landat i nu jävlar! Du är en fantastisk vän och kollega och du har utan tvekan varit ett av mina största stöd under den här tiden.

Jag har haft den stora förmånen att få skriva mitt avhandlingsarbete inom ett stort forskningsprojekt och jag vill tacka alla som ingått i CHEFiOS för ett fantastiskt samarbete och för att ni med era unika egenskaper skapat en lärorik och stimulerande forskningsmiljö. Till de CHEFiOS deltagare jag redan tackat vill jag addera Gunnar Ahlborg Jr, Eva Bejerot, Mats Eklöf, Mats Eriksson, Tina Forsberg Kankkunen, Hans Lindgren, Johanna Stengård, Stefan Szücs och John Ylander. Jag vill rikta ett särskilt tack till CHEFiOS projektkoordinator Anders Östebo, utan dig hade vi aldrig seglat i hamn. Stort tack också till Måns och Kerstin Waldenström för att ni så generöst delat med er av era kunskaper och erfarenheter. *"Det är du själv som väljer förstoringsgrad när du granskar ditt eget arbete"* är en visdom som du uttalat Måns som jag alltid kommer att bära med mig, såväl när det gäller min forskning som min trädgård.

INTRODUCTION

A well-functioning management is a highly important precondition when it comes to creating healthy and productive public sector organizations. Operational managers hold key positions in the public sector through their responsibility to lead, manage, and develop their welfare organizations. Managerial work in the public sector is challenging, since the levels of complexity, demands, and expectations are generally high. The interests from numerous stakeholders such as politicians, senior management, audit authorities, employees, clients, and their relatives must constantly be balanced. Managerial work in the public sector may also be especially rewarding, with the notion of doing good and making a difference for the public, particularly benefiting the welfare of the whole society, as discussed by public service motivation theorists (e.g., Rainey & Bozeman, 2000).

Changed managerial work – Is there a problem?

Managerial work in the public sector appears to have changed radically during recent decades, pointing toward a troublesome work situation in which organizational changes, economic constraints, and disadvantageous psychosocial working conditions have become a larger part of managerial work (Ball, 2003; Trydegård, 2000). Managers have been shown to be negatively affected by their work situation (Swedish Work Environment Authority, 2011), and maintaining managers' health, as well as attracting and retaining skilled managers, has become an area of great concern for managerial sustainability in the public sector (e.g., Björklund, Lohela-Karlsson, Jensen, & Bergström, 2013; Danielsson et al., 2012; Härenstam & MOA Research Group, 2005; Skagert, Dellve, & Ahlborg Jr, 2012; Vinberg & Landstad, 2013).

A knowledge gap

Despite these findings, research is scarce within this area and few studies have focused on the working conditions and sustainability of public sector managers. Although the studies on this specific group of employees are few, they have signaled problems with job strain, stress, and fatigue (Ahlborg et al., 2006; Björklund et al., 2013), as well as with high levels of sick leave (Lidwall, 2010; Lindholm, Dejin-Karlsson, Westin, Hagström, & Uden, 2004; Westerlund, Ferrie, Jeding, Oxenstierna, & Theorell, 2004). In addition, there is a push to acquire more knowledge, since a high proportion of managers are approaching retirement, in combination with a number of managers wanting to leave their jobs voluntarily. This problem has been highlighted by several public sector representatives, such as unions and employer organizations, and further confirmed by several recent scientific studies (Cregård & Solli, 2012; Skagert et al., 2012).

Thus, the conditions that public sector managers work under might be questioned and their sustainability might be threatened. Managers who are able to, as well as want to, work as managers over the long term are crucial, especially in times characterized by challenging developments in public organizations, the

14

increased demands of an aging population, increased immigration and urbanization, and financial deficits in many societies. Managerial work in the public sector must be attributed significance in order to promote healthy and attractive jobs and to not jeopardize the future of public sector organizations and thus the welfare society.

A contextual approach

The present thesis applies a contextual approach in order to shed new light on managerial working conditions in the public sector. Within this thesis, a contextual approach means that the focus is turned from managers and their individual differences, to the conditions that public sector managers work under. Furthermore, context is considered a layered concept wherein managers are influenced both by the context immediately proximal to them, i.e., their psychosocial working conditions, and by the larger organizational context. The context and its layers are reflected in theory, design, and method. Managerial working conditions in the public sector are investigated through strategic sampling and methods that take into account the context in which managers work, as well as the variations in that context. The results are directed toward public sector decision-makers and human resources departments, where the knowledge provided and the ways in which it is presented are aimed at helping them to understand the conditions that managers work under. Such knowledge is a valuable basis for planning improvements to unsatisfactory work situations and thereby for promoting the creation of sustainable managerial work. It is also crucial in attracting and retaining skilled managers and securing the future of the public sector.

15

Aims of the thesis

The aims of this thesis were first, to explore and increase the knowledge of managerial working conditions in Swedish municipalities. Second, the aims included extending and developing the job demands-resources (JD-R) model by applying contextual methods and placing special emphasis on public sector managers. Finally, the aspiration was also to provide information that public sector decision-makers and human resources departments can use and apply in promoting sustainable managerial working conditions. The argument in this thesis is that a contextual perspective on managerial work is needed.

The specific aims of the included studies were as follows:

– To identify and describe different types of managerial work situations, based on the combination of job demands and job resources from several sources, and thereby to detect high-risk and low-risk work situations in terms of managerial sustainability (Study I and II).
– To determine whether organizational characteristics can explain differences in psychosocial working conditions among operational public sector managers (Study III).
– To apply a method for externally assessing job demands and job resources as well as the balance between them in public sector managerial work (Study IV).

Organization of the thesis

The first section of the body of this thesis consists of a theoretical and empirical background. After the Theoretical and Empirical Background section, the research design of the overarching project[1] that this thesis is a part of is presented in the Materials and Methods section, together with the specific methodology and empirical material used in the studies making up this thesis. In the Main Findings section, the results of the four studies are summarized and then the general contributions from them are examined in the Discussion section. The Conclusions section completes the thesis.

---

[1] This thesis is part of a large research and development project referred to CHEFiOS (Härenstam & Östebo, 2014a), which is a Swedish acronym for Management, Health, Efficiency, and Prerequisites in the Public Sector.

THEORETICAL AND EMPIRICAL BACKGROUND

The understanding of managerial work as a context-bound practice is underestimated in management research and theory (e.g., Dierdorff, Rubin, & Morgeson; 2009; Johns, 2006; Mintzberg, 2006). Individual characteristics have historically been the main attention of the leadership and management research field (Vroom & Jago, 2007), although mainstream research has differed in its focus over time (e.g., Bass & Stogdill, 1990; Northouse, 2007; Yukl, 2010). Initially, the attention was turned to the personality characteristics of the leader (Stogdill, 1948), which later shifted to the skills of the leader and the conviction that leadership could be taught and trained (Katz, 1974; Yukl, 2010). Efficient leadership behaviors in terms of task orientation and relationship orientation were later highlighted (Blake & Mouton, 1964), followed by the notion that efficient leadership may vary between situations. Hence, situational characteristics were then put in the spotlight of the leadership research, mainly through Fiedler's (1967) contingency theory and Hersey and Blanchard's (1969) situational theory. The commonly used situational approach to leadership, which has been used extensively in organizational leadership training and development (Northouse, 2007, p. 91), focuses on situational influences, thus constraining the leader who must then adapt his or her style of leadership to the situation at hand (Hersey & Blanchard, 1969). Thereafter, a line of leadership theories with an emphasis on motivating employees and consisting of different leadership styles was introduced by Bass (1985). Leadership style theories are still the most researched today (Avolio, Walumbwa, & Weber, 2009), with the main emphasis on transformational leadership as the supreme leadership style (Yukl, 2010). As a result, the concentration on managers' styles and strategies within the leadership literature has largely come to overshadow the way in which managers are influenced by the situation or context in which they are functioning (Vroom & Jago, 2007), which is the focus of this thesis.

Although an overall definition of context is missing in the literature (Mowday & Sutton, 1993), the organizational context has, for instance, been defined as "situational opportunities and constraints that affect the occurrence and meaning of organizational behavior as well as functional relationships between variables" (Johns, 2006 p. 386) and "stimuli and phenomena that surround and thus exist in the environment external to the individual, most often at a different level of analysis" (Mowday & Sutton, 1993 p. 198). These phenomena have for the most part been studied separately from the individual and his or her work (Barley & Kunda, 2001; Cappelli, 2006; Mowday & Sutton, 1993). However, in order to understand how the organizational context shapes individual working conditions and health, both features need to be addressed (Bejerot & Härenstam, 2010; Härenstam, 2008). The resulting gap between perspectives and traditions has further led to less being known about how working conditions in the organization influence managers (Brazier, 2005). Management is part of the organizational

context, made up by the structures and cultures within which individuals work (Fullan, 2006; Mowday & Sutton, 1993; Nyberg, 2009), but managers are also, like any other employee, affected by the context (Brazier, 2005; Vroom & Jago, 2007; Yammarino & Bass, 1991). The organizational context is a reality that must be taken into account, and it can be considered a helpful counterpoint to the individual-centered theories (Johns, 2001). Although differences between managers are not irrelevant, the effects of the situation or context can dwarf these variations (Vroom, 2000; Vroom & Jago, 2007). Therefore, it is of great importance to incorporate the context into the field of management research (Brazier, 2005).

With this backdrop, the theoretical and empirical background consists of and is organized around four aspects of managerial work in the public sector. In line with the contextual approach of this thesis, knowledge of the setting in which managerial work takes place in the public sector is needed. Hence, the first section of the theoretical and empirical background consists of an introduction to (1) the organizational context of managerial work, providing an introduction to the public sector and the changes it has undergone in general and the organizational context of municipalities in particular. In the two sections that follow, the main focus of the thesis is framed by elaborating on (2) the content of managerial work and (3) the conditions of managerial work. Thereafter, some of (4) the consequences of managerial work in terms of sustainability are summarized. The theoretical and empirical section concludes in a section on the contextual approach that frames the scope of this thesis and the guiding theoretical and analytical model derived from that approach.

The Organizational Context of Managerial Work

Today, most researchers acknowledge that management is an interaction between the manager and the situation in which the manager takes part (Fiedler, 1996; Johns, 2001; Vroom, 2000). Johns (2001) has argued that consideration of context is essential in understanding and developing meso-level connections such as person–situation interactions. The organizational context can provide restrictions on or opportunities for certain behaviors and attitudes, and thus influence its employees in several ways (Härenstam, 2008; Johns, 2001). A favorable context can, for example, assist the individual to find ways to cope with different kinds of work-related challenges (Ekman & Arnetz, 2005). And whereas good organizational structures may help prevent disease or contribute to health, less favorable structures can generate ill health among employees (Thulin Skantze, 2006). Bennis (2007) stressed that "if we have learned anything in the decades psychologists have now devoted to the study of leadership, it is that leaders do not exist in a vacuum" (p. 3). These days, it is more or less taken for granted that the organizational context and conditions matter.

Studies focusing on these organizational factors are less common, however, although such knowledge has strong implications for the prevention of job stress, and very little is thus known about which organizational factors are the most

18

important (Härenstam, 2008). It has been argued that more research needs to be done on how country-specific institutional characteristics manifest themselves at the level of the individual manager (Noordegraaf & Stewart, 2000).

The public sector

Generally, organizations in the public sector have been found to have many similarities with private sector organizations, but they also face special requirements and have some unique prerequisites (Boyne, 2002; Noordegraaf & Abma, 2003; Rainey & Bozeman, 2000). Hence, managers who work in the public sector also face unique prerequisites (Boyne, 2002; Pollitt, 1993; Rainey, 1991; Ranson & Stewart, 1989). It has been argued that public and private management are fundamentally different in the rules that each sector rests on. In the public sector, traditional public sector values, including representativeness, justice, and equality before the law, are intermingled with modern managerial ideals on economy and efficiency (Noordegraaf & Stewart, 2000). Hence, public sector organizations are more multifaceted, with more objectives and stakeholders to consider, thus creating a high level of complexity for those who work there (Hagström, 1990). Organizations in the public sector, for instance, have external actors, such as politicians, with extensive influence over resources and decisions that impact on public organizations and their workforce (Pandey & Wright, 2006; Ranson & Stewart, 1989). Many public sector organizations are also characterized by their special relationships with their recipients or clients (Söderfeldt et al., 1996), and a very large part of the public sector is oriented toward human services, a welfare sector that includes care and education (Hasenfeld, 1983; Thylefors, 2007).

Furthermore, the public sector in Sweden has, like in many other countries, undergone big changes on several levels during recent decades. Cost-effectiveness has been suggested to be the main incentive for the changes in the public sector in general (Bach & Della Rocca, 2000), and Sweden is no exception. Since the 1990s, financial difficulties and fewer resources have increased demands on the public sector in Sweden that it be cost-effective and still be able to offer services of high quality. It has led to aggressive cost-cutting initiatives that in most cases have involved downsizing (Montin, 2004).

New public management (NPM) – in other words, introducing economic and managerial ideas from private companies into public organizations (Hood, 1991) – has often been launched at times of financial crisis accompanied by downsizing (Bach & Della Rocca, 2000). At a higher level, NPM is a general theory and model postulating that the public sector can be improved by imitating and copying managerial methods from the private sector, where management approaches such as scientific management have long traditions (Taylor, 1911). At a more practical level, however, NPM is an array of specific concepts and practices including, for example, a greater emphasis on performance, decentralized and flattened organizations, and market-type mechanisms (Pollitt & Sorin, 2011). NPM

19

is thus inspired by capitalist ideas of efficiency and customer satisfaction (Rolland, 2005). The customers are put first, usually by giving customers a voice and a choice, but also by making service organizations compete (Gore, 1993). Thus, rationality, productivity, effectiveness, efficiency, and transparency have become central values in many public sector organizations, reflected in the current economic discourse of products, consumers, targets, facts, evidence, planning, and control. The purpose is to establish a transparent and effective administration by implementing businesslike measurement models (Noordegraaf & Abma, 2003). NPM has been implemented in countries at all levels of economic development (Borins, 1998), and the organizational changes in the public sector in Sweden have generally been made in line with NPM (Montin, 2004).

Researchers, however, have argued that these reforms have been far from entirely positive (e.g., Rolland, 2005; Steane, 1997; Szücs, Hemström, & Marklund, 2003). Critics of the reforms in the public sector usually put forward that NPM misinterprets the distinctive nature of public organizations (e.g., Noordegraaf & Abma; 2003; Pollitt, 1993; Rainey, 1991) and that there is a complex political nature of public sector that does not harmonize with NPM (e.g., Montin, 2005; Pollitt & Bouckaert, 2000). NPM neglects the qualitative data and dialogue that are so important in the public sector, especially in human service organizations (HSOs; Noordegraaf & Abma, 2003). The undesirable and often counterintuitive effects that NPM produces are frequently highlighted (e.g., Steane, 1997). For instance, although the main aspirations of the NPM movement were to create a more cost-effective, efficient, and customer-focused public sector by borrowing business methods from the private sphere, empirical results display another image. In a meta-analysis conducted by Pollitt and Sorin (2011), more than half of the studies conducted with NPM and its outcomes as their focus showed no change in performance or even an actual worsening of performance after NPM reforms. Even the academic who are often said to have discovered the development of NPM has reflected on whether it works as a theory:

> Indeed, what will surprise many readers is how little we seem to know after decades of research about whether and how far NPM worked in what is commonly said to have been its main original concern, namely to cut costs and improve efficiency. (Hood, 2011, p. 738)

Generally, researchers have argued that NPM has major consequences for employees in the public sector, causing an intensification of labour and an increased workload in general in several public sector domains (Chandler, Barry, & Clark, 2002; Farrell & Morris, 2003). In the Swedish public sector context, the reforms have generally had negative consequences, especially when considering the working conditions that employees in the public sector now work under (Szücs et al., 2003). A degradation of the working conditions within the Swedish public sector has taken place in general since the mid-1990s (Härenstam & MOA Research Group, 2005; Härenstam et al., 2004), especially for women in professional posts (Härenstam et al., 1999; Härenstam & MOA Research Group, 2005; Härenstam et al., 2004), and the working conditions for managers in the

public sector have been shown to be worse than for the corresponding management positions in the private sector (Härenstam et al., 2004; Höckertin, 2007). These new requirements and new working conditions may impact managers' health, adversely affecting not only the managers, but also the overall organization and its ability to recruit managers for the future, and putting the development of the public sector in danger. The perspective in this thesis is that although general trends in the governance of the public sector impact managers' work content and working conditions, there are variations within the sector and between organizations in different municipalities. Researchers need to search for relevant aspects in variations in the way work is organized locally in different types of public services.

Municipal organizations

Municipalities, as part of the general public sector, have their own specific features. The municipalities are directed toward different types of services and providers of important welfare services including health and social care services, education through HSOs, and technical services such as infrastructure, sanitation, emergency services, and water. These services are normally governed by service-specific political boards and committees. They are administered through service departments, typically directed by a head of department who is responsible for the service delivery. Service departments also include a team of senior administrative officers with specific expertise in HR, IT, and finance (Szücs & Strömberg, 2009). Each jurisdiction is headed by an operations manager (a middle manager) and comprises smaller units headed by unit managers (first-line managers). Several large cities are divided into district administrations tied to neighborhood councils. Within Sweden, 290 municipalities (Statistics Sweden, 2013) are governed by almost 30,000 managers at different levels (Ivarsson Westerberg, 2013).

Managerial work in municipal human service organizations has changed especially radically during recent decades, not least in the health care and education sectors (e.g., Ball, 2003; Trydegård, 2000). For example, and in line with NPM, it is common that in an ongoing effort to reduce costs, public sector organizations flatten their structure, resulting in fewer management positions with wide spans of control (Ohlsson & Rombach, 1998). The new organizational forms have generally resulted in fewer managers with larger responsibilities and more subordinates (Hildingsson & Krafft, 2001; Swedish Work Environment Authority, 2011), although there have been indications that this trend is changing (Ivarsson Westerberg, 2013). However, the local take on NPM in Sweden varies to a great extent (Montin, 2005). Although different types of municipal organizations display similarities in the formal adoption of NPM, the application of NPM looks different in practice between different types of municipal services (Björk, Forsberg Kankkunen, & Bejerot, 2011; Kankkunen, 2009). A recent study within the Swedish public sector has shown that within HSOs, detailed business plans and the performance and quality are systematically followed and evaluated in line with NPM. In technical service organizations (TSOs), these control instruments are on

21

the contrary resisted (Björk et al., 2011), which is surprising, since NPM ought to rhyme better with the characteristic and more easily measured tasks of the TSOs (Noordegraaf & Abma, 2003). In practice, managerial work in HSOs and TSOs has been shown to differ regarding those entities' organizational prerequisites (Kankkunen, 2009). For instance, managers in Sweden's public sector have been given responsibility for a large number of subordinates, where groups of staff from 50 to 100 employees are common, especially within the female- dominated HSOs (Harder, Svärd, Wigforss, & Hedén, 2000; Kankkunen, 2009; Swedish Work Environment Authority, 2014; Thylefors, 2007; Westerberg & Armelius, 2000).

The present thesis takes into account how public sector managers are influenced by the organizational context in which they work, and thereby addresses a gap in the research literature (Vroom & Jago, 2007). With some previous studies on organizational conditions providing the impetus (e.g. Bejerot, Söderfeldt, Härenstam, Aronsson, & Söderfeldt, 1998; Härenstam & MOA Research Group, 2005; Kankkunen, 2009; Westerberg & Armelius, 2000), different organizational factors previously shown of importance in the public sector are used in this thesis. These factors include, for instance, the type of municipal service involved, the size of the operation or unit, the number of units, the geographical distribution of the units, and the span of control of the management team and the individual manager, as well as the administrative support provided. In this thesis, a contextual perspective implies that the context affects what managers in fact do and what the conditions for the performance of these actions are. Thus, researchers need to know more about the link between the conditions for and the content of managerial work that helps to explain variations in managers' sustainability.

The Content of Managerial Work

Leadership and management

Research on public management is a relatively recent and developing field (Van Wart, 2003), and that on leadership as distinct from management is even sparser (Lawler, 2007). There is a significant overlap between the concepts of leadership and management, but they represent partially different roles (Bass & Stogdill, 1990), and exercising leadership can be seen as a part of management (Bass & Stogdill, 1990; Hagström, 1990; Henning, 2000). Just as leadership is seen as one of several ways to achieve successful management, such management also serves as the basis for good leadership (Hagström, 1990). Managers lead in the sense that leadership is one of several managerial tasks such as planning and organizing (Bass & Stogdill, 1990; Thylefors, 2007), and can in some aspects be seen as a further development of management (Lawler, 2007). Management focuses mainly on maintaining the organization's existing systems, while leadership's main focus is change management (Kotter, 1999; Lawler, 2007). Although some researchers view leadership and management as interchangeable concepts (see, for example, Fiedler, 1996; Henning, 2000; Thylefors, 2007), a central theme in much

of the contemporary literature on leadership is that leadership is something distinct from management (see, for example, Bass & Stogdill, 1990; Kotter, 1999; Lawler, 2007). While managers hold formal positions of authority, leaders may be both formally and informally designated. Thus, leaders may hold formal positions of authority, but such a position is not a criterion (Kellerman & Webster, 2001; Yukl, 2010). Generally, there is a decreasing proportion of leadership and an increasing proportion of management at lower management levels. With the increasing pace of change in society, however, leadership has in general become an increasing part of management (Kotter, 1999), and therefore both management and leadership are needed in order to avoid stagnation and achieve success in an organization (Kotter, 1999; Lawler, 2007). The present thesis focuses on the formal managerial position according to Statistics Sweden's (2012) definition of a manager including responsibility for the operation, finances and personnel. This definition does not exclude the possibility that managers also exercise leadership in practice. However, since the purpose of this thesis is to increase knowledge of managerial work and not to specifically investigate managers' leadership practices, the term manager is considered more appropriate than leader.

Managerial work and the managerial behavior approach

A few classical studies make up the foundation of the managerial work tradition, or the managerial behavior approach, aimed at understanding what managers actually do and how their work is constituted in order to gain knowledge of what management could and should be like in order to improve it (Carlson, 1991; Kotter, 1982; Mintzberg, 1973; Sayles, 1964; Stewart, 1967, 1976, 1982). The managerial behavior approach takes a holistic view, with the individual manager as study object studying the day-to-day work of managers (Noordegraaf & Stewart, 2000). It is a highly empirical approach focusing mainly on the work characteristics, demands, hindrances, and choices associated with managerial work (Stewart, 1976). In line with this holistic take on managers and their work, the organizational context in which they work is seen as highly relevant (e.g., Hales, 1986; Kotter, 1982). The individual manager acts as the starting point, with the focus turned to both the content and form of the manager's work, and the context. For example, the expectations and organizational characteristics of the environment in which the manager works and thus is influenced by are seen as highly important (Noordegraaf & Stewart, 2000). Even so, further attention directed toward the contextualization of managerial work is needed, especially in the public sector (Dargie, 1998; Noordegraaf & Stewart, 2000).

Hence, studying managers' everyday work and use of time to find out what their workday consists of is not a new area of interest (e.g., Carlson, 1991; Mintzberg, 1973; Stewart, 1967, 1989), and more recently interest has increased once again (Tengblad, 2012). Most of the early work in this field was focused on private sector managers, and the lack of attention to public sector embeddedness has been argued to be a shortcoming (Dargie, 1998). More recently, however, a

23

similar approach was adopted to look at health care managers (Arman, Dellve, Wikström, & Törnström, 2009; Tengelin, 2012). Contemporary knowledge of the work content in managerial work in other parts of the public sector such as municipalities is still scarce, however, and updated studies are thus needed. The present thesis borrows from the managerial behavior approach and the research tradition of managerial work studies, not only by focusing on organizational context and work characteristics in municipalities, but also by concretely investigating what managers actually do in their daily work, through work content analysis (Waldenström, 2007).Work content analysis was developed by Swedish researchers in the late 1990s, based on the German work psychology tradition (e.g., Greiner & Leitner, 1989; Hacker, 1982; Oesterreich & Volpert, 1986), which was inspired by action theory and the particular concept of action regulation for workers (Frese & Zapf, 1994; Hacker, 2003). The work content of managers could be considered an important potential stressor in addition to more classically studied job demands (Sauter, Murphy, & Hurrell, 1990; Swedish Work Environment Authority, 2014), and investigating their work activities and contribute to new, empirically grounded perspectives (Waldenström, 2007). Such a non-normative, descriptive approach of what actually constitutes work is one way of bringing the gap between work research and organizational research (Barley & Kunda, 2001).

The Conditions of Managerial Work

Exploring psychosocial working conditions

The original definition of the term psychosocial environment is usually attributed to psychiatrist Erik H. Erikson. According to his definition, the psychosocial environment is the conditions in the human environment and culture that are relevant to an individual's mental health and development (Erikson, 1959). With this backdrop, the psychosocial work environment can thus be considered to be the working conditions that are relevant to employees' mental health and development. In a similar vein, Theorell (2007) has argued that the interplay between social/environmental and psychological/individual factors makes up the core of psychosocial research (p. 20). In a proposition drafted for the Swedish Work Environment Act (Sweden. Work Environment Act, 1977), psychosocial factors were defined as follows: "Psychosocial factors appear when the work environment is regarded from psychological and sociological perspectives, which means a perspective including physical, organizational, and social work environmental factors" (Fälldin & Ahlmark, 1976/77:149, p. 223). Despite several suggested definitions and a vast amount of research on psychosocial working conditions, the concept of psychosocial working conditions is still a difficult one to define. However, psychosocial working conditions are often assessed and discussed in terms of balance, where the basic idea is that the demands posed by work should be in balance with the resources available to the employee (Karasek & Theorell, 1990; Siegrist, 1996). The research field containing psychosocial work

environment and occupational health has for some time been guided by theoretical models characterized by such a balanced approach in an attempt to shed light on the relationship between job characteristics and employee health/well-being (for an overview see, for example, Cooper, Dewe, & O'Driscoll, 2001).

Balance models

Two of the most predominant work stress models within the field of psychosocial working conditions are the job demand-control (JDC) model (Karasek, 1979; Karasek & Theorell, 1990) and the effort-reward imbalance (ERI) model (Siegrist, 1996; Siegrist, Siegrist, & Weber, 1986). In 1979, the JDC model was introduced by the sociologist Karasek (1979), who drew upon two research traditions: the occupational stress tradition (e.g., Kahn, 1981), where the individual is the focal unit for measurement and analysis (Selye, 1974), and sociological theories on alienation and participation (e.g., Blauner, 1964; Braverman, 1974; Hacker, 1982; Volpert, 1974), where the meso-level, such as the workplace, is the main focal unit (Burke, 2002). The JDC model further rests on the job redesign tradition (e.g., Hackman & Oldham, 1980). The JDC model, also known as the job strain model, combines job demands from the stress tradition (amount of work, complexity of work, and internal and external demands at work) and decision latitude from the alienation tradition (level of influence at work, and the capacity to use one's qualifications and to develop new skills) to describe four types of work situation. The basic proposition of the model is that job strain results from a combination of increased psychological exposures/demands and low decision latitude at work, which in turn might cause ill health. Thus, stress-inducing work conditions are not detrimental if they are paired with working conditions that assist coping. Thus, according to the model, the healthiest jobs are those in which decision latitude is high (Karasek, 1979; Karasek & Theorell, 1990). Later, in reaction to criticism regarding the simplicity of the JDC model, the model was further supplemented with social support as a modifying factor (e.g., cooperation, and assistance from colleagues and supervisors), in order to take social relationships at the workplace into consideration (e.g., Johnson & Hall, 1988). The extended model is referred to as the job demand-control-support (JDCS) model (Karasek & Theorell, 1990).

During the 1990s, the common organization of the workplace, highlighted in the JDCS model, lost in importance in favor of the individual employment contract. Thereby, inequality in working conditions were created that the JDCS model, with its explicit focus on situational characteristics, had difficulty capturing. By adding personal characteristics to the situational characteristics, the effort-reward imbalance (ERI) model became increasingly relevant in modern working life and thus gained in popularity within work environment research (Allvin, Aronsson, Hagström, Johansson, & Lundberg, 2006). The ERI model has its origins in medical sociology and emphasizes the relationship between effort and reward at work in terms of reciprocity or social exchange (Marmot, Siegrist, Theorell, &

Feeney, 1999; Siegrist, 1996). The model is based on the hypothesis that a high level of expended extrinsic effort at work (job demands and/or obligations that are imposed on the employee) and little reward received (e.g., appreciation, skills development, status, career, and salary) represent a reciprocity deficit between "costs" and "gains" that may result in stress and adverse health effects (Siegrist, 1996). As a result, the ERI model shifts the focus from control in work to include material, social, and psychological rewards from work. The concept of commitment, in addition to effort and reward, is also a core component of the ERI model. Overcommitment is a personal coping style that reflects excessive striving in combination with a strong desire for approval (Siegrist, 1996). However, the operationalization of commitment, along with the associated hypotheses, has shifted over the years from being part of the effort component, in terms of intrinsic effort, to being an independent concept influencing the perception of both effort and rewards, as well as displaying a direct effect on health, thus resulting in several possible models to be tested (van Vegchel, 2005).

Empirical results obtained by the balance models

These influential balance models have been used to measure stressful psychosocial work environments (Peter et al., 2002), and both models have generated a considerable amount of empirical research (for an overview see, for example, de Lange, Taris, Kompier, Houtman, & Bongers, 2003; van Vegchel, de Jonge, Bosma, & Schaufeli, 2005). Even though the JDC model has been said to be the most widely used model in the field – as shown, for instance, by its use in more than 100 studies only 5 years after its introduction (Kristensen, 1995) – the JDC model and the ERI model display a comparable foundation. The most basic similarity between the models is the interaction between job-related demands (psychological job demands and job-related effort) on the one hand and job-related resources (job control and occupational rewards) used to cope with the demands of work (van Vegchel, de Jonge, & Landsbergis, 2005) on the other hand. And in addition to a conceptual overlap, the JDC and ERI models have been shown to complement each other (Siegrist & Marmot, 2004), and the combined effects of the models have proven to be a stronger predictor of outcomes (Peter et al., 2002).

The balance models have traditionally been focused on outcomes in terms of different aspects of ill health (Schaufeli & Bakker, 2004), with occupational cardiovascular health being most widely studied. Other endpoints used have been, for instance, exhaustion, sleeping problems, and absence from work in JDC(S) studies (Kristensen, 1995), and exhaustion in ERI studies (Appels, Siegriest, & De Vos, 1997). However, the JDC(S) model has focused on health in a broader sense through its strain dimension related to health and a learning dimension related to personal development (van Vegchel, 2005). Kasl (1996) has further argued that the models have relevance for other more general outcomes such as psychological functioning and mental health.

Criticisms of the dominant balance models

Despite their wide distribution and their ability to explain health variations in the working population (Siegrist & Marmot, 2004), both the JDC(S) model and the ERI model have been criticized. The criticism have focused on their very broad and general operationalizations (e.g., de Jonge & Dormann, 2003; van Vegchel, de Jonge, Bosma, & Schaufeli, 2005), as well as discrepancy between their theoretical underpinnings and operationalization of job demands and job resources respectively (de Jonge & Kompier, 1997; Oxenstierna, Widmark, Finnholm, & Elofsson, 2008).

As early as in the mid-1990s, it was argued that the instruments used to capture the theoretical assumptions of these models in the research needed adaptation to a changed working life. Although both the JDC(S) and ERI models are general models, with instruments intended for use in all kinds of contexts for all types of professions, it has been shown that many of the questionnaire items were constructed several decades ago and thus are not adapted to the work life of today, especially not outside traditional industries (e.g., Ekenvall, Härenstam, Karlqvist, Nise, & Vingård, 1993; Oxenstierna et al., 2008). For instance, the JDC(S) model has been shown to fall short when it comes to capturing the relationship between the complex psychosocial work environment and health among employees who work directly with other people, such as in the public sector (Kristensen, 1995; Marshall, Barnett, & Sayer, 1997; Söderfeldt et al., 1996; van Vegchel, de Jonge, Söderfeldt, Dormann, & Schaufeli, 2004), and specific jobs such as those held by managers (Kristensen, 1995).

In addition, although the additive effects of job demands, control, and social support have received considerable cross-sectional support, the results of longitudinal studies are not as conclusive. Evidence for joint effects or interactions as predicted by the buffer hypothesis is even weaker (de Jonge & Kompier, 1997; Häusser, Mojzisch, Niesel, & Schultz-Hardt, 2010; Kristensen, 1995). In a similar manner, although the importance of balance between extrinsic effort and reward for health outcomes constituting the basic principal of the ERI model has been frequently supported, the role of the personality characteristic of overcommitment is not as well established (van Vegschel, 2005). Addressing these shortcomings, some researchers have argued that the classical psychosocial work environment models need to be supplemented and adapted (de Jonge, Mulder, & Nijhuis, 1999; Peeters & Le Blanc, 2001; Schnall, Landsbergis, & Baker, 1994; Schwartz, Pickering, & Landsbergis, 1996; Söderfeldt et al., 1996), not least when it comes to the specificity of the job demands and job resources measures (e.g., van Vegchel, 2005). To overcome some of the limitations in these earlier theoretical models, the job demands-resources (JD-R) model was developed by Demerouti and colleagues (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).

27

A new balance model – the job demands-resources (JD-R) model

The JD-R model expands and integrates previous balance models such as the JDCS model (Karasek, 1979; Karasek & Theorell, 1990) and the ERI model (Siegrist, 1996). Even though employees' work environment can vary significantly, the authors of the JD-R model have argued that the characteristics of these sometimes widely different working conditions can be categorized into job demands and job resources (Bakker, Demerouti, de Boer, & Schaufeli, 2003). The comprehensive JD-R model can thus, according to the authors, independent of the specific job demands and job resources, serve as a useful framework for categorizing and exploring predictors of work stress, and be applied in a wider variety of occupational settings (Bakker et al., 2003) than has been argued for the more classical models. The JD-R model includes, for instance, a wider span of work aspects, job demands, and job resources related to employees' well-being (Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008). Unlike the JDCS and ERI models, the JD-R model is based on instruments and measures that can vary and should be adapted and tailored to the groups under study (e.g., Bakker & Demerouti, 2007). Hence, the JD-R model has proven to be robust and applicable not only in a wide variety of occupational contexts such as private and public organizational settings, but also in different countries using a range of methods and measurements (Llorens, Bakker, Schaufeli, & Salanova, 2006).

In line with its ancestors, the JD-R model takes a balanced approach in explaining negative as well as positive aspects of occupational well-being, and the model has gained considerable support (for an overview, see Schaufeli & Taris, 2014). In the JD-R model, job demands refer to "those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort and are therefore associated with certain physiological and/or psychological costs" (Bakker, Demerouti, & Verbeke, 2004, p. 86). Whereas a certain level of job demands is beneficial, job demands reflect a broad category of potential stressors in the work environment (Demerouti et al., 2001; Schaufeli & Taris, 2014) when meeting those demands calls for significant effort from which the employee has difficulty recovering (Meijman & Mulder, 1998). Examples of job demands brought forward within the JD-R tradition are physical workload, role overload, emotionally demanding recipient contacts, and time pressure (Bakker & Demerouti, 2007; de Jonge et al., 1999; Demerouti et al., 2001; Söderfeldt et al., 1996), poor environmental conditions and problematic reorganizations (Bakker et al., 2003), and managing budget costs (Peeters & Le Blanc, 2001).

As demands represent the potential stressor side of the work environment, resources at work, on the other hand, refer to "those physical, psychological, social, or organizational aspects of the job that are (1) functional in achieving work goals; (2) reduce job demands and the associated physiological and psychological costs; or (3) stimulate personal growth and development" (Bakker et al., 2004, p. 86). Thus job resources are, besides being important in their own right, needed in

dealing with job demands (Demerouti & Bakker, 2011). The job resources can be found structurally in the organization, as well as on the interpersonal and individual level (Bakker & Demerouti, 2007). Feedback, control, supervisory support, rewards, role clarity, and participation have been brought forward as important indicators of job resources in previous JD-R research (e.g. Bakker et al., 2003; Demerouti et al., 2001).

According to the underlying JD-R theory and model, job demands and job resources are assumed to cause two separate psychological processes, irrespective of the occupation involved. Thus, while various high job demands cause health problems through a health impairment process, various resources facilitate the achievement of objectives and thereby increase engagement and commitment through a motivational process (e.g., Bakker, van Veldhoven, & Xanthopoulou, 2010; Van den Broeck, Van Ruysseveldt, Vanbelle, & De Witte, 2013). Strain and well-being are considered to be mediators, at least partly, of the relationship between high job demands and health problems, and low job resources and turnover intention, respectively (Schaufeli & Bakker, 2004). The reasons for these relatively separate processes are that job demands cost effort and consume energetic resources, whereas job resources fulfill basic psychological needs, such as the need for autonomy, for relatedness, and for competence (Bakker, 2011; Nahrgang, Morgeson, & Hofmann, 2011). The JD-R model is presented in Figure 1.
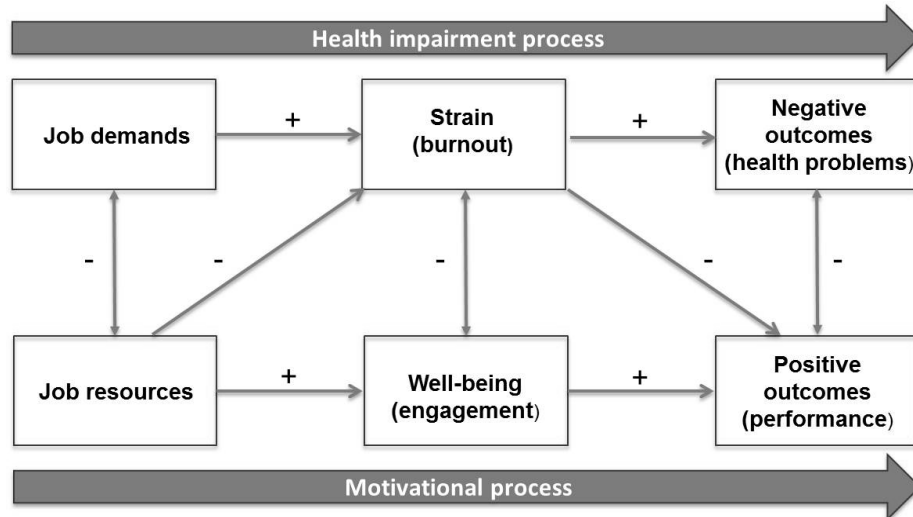
Figure 1. The JD-R model.

Thus, job demands seem to be a predictor of health in a wider sense, while job resources seem to affect performance, motivation, and commitment. However, more recent studies have revealed some interactions between these processes, where job resources, for instance, have been shown to buffer high job demands and thus offer protection from health problems (Bakker, Demerouti, & Euwema, 2005; Llorens et al., 2006). Bakker et al. (2010) have further shown that employees tend to prosper when high demands are combined with a large amount of job resources, which is also in line with the classical JDCS model.

The research using job demands and job resources as predictors of different outcomes is growing, and the JD-R model has to date been used to investigate the impact of work environment on such aspects as burnout (Bakker & Demerouti, 2007; Demerouti et al., 2001; Hakanen, Schaufeli, & Ahola, 2008), commitment (Bakker, et al., 2010; Hakanen, Bakker, & Schaufeli, 2006), engagement (Hakanen et al., 2008; Van den Broeck et al., 2008), task enjoyment (Bakker et al., 2010), absenteeism (Bakker et al., 2003), and turnover (Schaufeli & Bakker, 2004). The organizational context and the work environment as predictors of health and stress reactions have been studied in many settings (Barling, Kelloway, & Frone, 2005; Karasek & Theorell, 1990; Siegrist, 1996). However, there is still a need for more studies that focus on specific contexts and professions, especially since specific job demands and job resources interact depending on the context (Bakker & Demerouti, 2007; Xanthopoulou et al., 2007), and since different psychosocial working conditions can impact health outcomes and other elements in diverse types of occupations (Marmot et al., 1999; Sparks & Cooper, 1999). Managers in the public sector can be considered one such important object of study. In addition, the Swedish context has been studied to a limited extent only. Thus, the principles of the JD-R model remain to be tested in the specific study population that this thesis examines, namely public sector managers in Sweden.

Using the JD-R model with public sector managers

Some of the job demands previously considered within the JD-R framework regarding employees in the public sector, including managers, are workload, emotional demands, psychological demands, cognitive demands, work-family conflict, role conflict, and role ambiguity (Dollard & Bakker, 2010; Lizano & Mor Barak, 2012; Van den Broeck, De Cuyper, Luyckx, & De Witte, 2012). Job resources, on the other hand, have included autonomy, decision authority, skill utilization, professional development, organizational and supervisory support, support from colleagues, social support, and performance feedback (Bakker & Xanthopoulou, 2013: Dollard & Bakker, 2010; Lizano & Mor Barak, 2012; Van den Broeck et al., 2012).

When focusing on managers, specifically public sector managers, it is necessary to investigate as many aspects of job demands and job resources as the JD-R model implies (Van den Broeck et al., 2008). Generally, organizations in the public sector have been found to have many similarities with the private sector, but

they also face special requirements and have some unique prerequisites, as do the managers and employees who work there (Boyne, 2002; Rainey & Bozeman, 2000). The flexibility of the JD-R model makes it possible to tailor the model to the unique working conditions of public sector managers (Bakker, Demerouti, & Sanz-Vergel, 2014; Schaufeli & Taris, 2014).

Job demands

Public sector managers fulfill their assignments under working conditions characterized by political influence and decisions, organizational changes, and economic constraints, with some job demands being emphasized as especially important in public sector management.

One of the major challenges for managers in the public sector consists of managing the tension between the numerous stakeholders' needs and demands (e.g., Boyne, 2002; Hjalmarson, Norman, & Trydegård, 2004; Pandey & Wright, 2006; Thylefors, 2007). Organizations in the public sector experience external actors with extensive influence over resources and decision making to a higher degree; for instance, political actors can have important consequences for these public organizations and their workforce (Pandey & Wright, 2006), which indeed imposes demands on managers (Westerberg, 2000). In addition, most public sector organizations are human service organizations, characterized by their special relationships with their recipients or clients (Hasenfeld, 1983; Söderfeldt et al., 1996). Thus, public sector managers hold key positions in their organizations, where they must consider the interests of politicians, senior management, audit authorities, colleagues, employees, and clients and their relatives (e.g., Antonsson, 2013; Trydegård, 2000; Westerberg, 2000; Wolmesjö, 2005, 2008). Being a manager in the public sector thus usually means dealing with competing demands and interests, and ethical dilemmas (Maslach, Schaufeli & Leiter, 2001; Pousette, 2001).

Because of the stakeholders' different demands and expectations, managers often find themselves in a conflict of loyalty (e.g., Ekholm, 2012; Thylefors, 2007; Wolmesjö, 2005). Most commonly, such conflicts have been shown to arise between recipients' desires and the law's requirements, followed by conflicts between recipients' desires and senior management's expectations (Hagström, 2003). These situations imply further possible conflicts among different aspects of the managerial job (e.g., administrative, personnel, and strategic tasks), often described as role conflict (Rizzo, House, & Lirtzman 1970; Skagert et al., 2004). Managers within the public sector have been found to struggle to prioritize among their numerous work tasks (Ekholm, 2012), and some managers have expressed difficulty in keeping up with the large number of administrative tasks (Wikström & Dellve, 2009), which have in general become a larger part of public management (Karlsson 2006; Levin & Fullan, 2008; Skagert, Dellve, Eklöf, Pousette, & Ahlborg, 2008; Wikström & Dellve, 2009; Wolmesjö, 2008). At the same time, the employees expect accessible managers with a focus on operational leadership and

31

human relationships (Antonsson, 2013;Wolmesjö, 2005, 2008). The managers' workdays have often been characterized as fragmented (Brüde Sundin, 2007; Landstad & Vinberg, 2013; Törnsén, 2010; Wolmesjö, 2008) and their workload excessive (Lindholm et al., 2004; Skagert et al., 2004).

Being a manager in the public sector usually includes dealing with contradictory objectives (Cregård & Solli, 2012). Reaching a balanced budget often overshadows and clashes with other objectives, laws, regulations, and interests (Hagerman, Engström, Häggström, Wadensten & Skytt, 2015). Conflicting organizational goals create great uncertainty regarding performance expectations and have been stressed as a significant source of role ambiguity in public sector organizations (Pandey & Wright, 2006). For example, Törnsén (2010) pointed to deficient communication between first-line managers and senior management, resulting in divergent understandings of organizational preconditions and a lack of role clarity. Accordingly, managerial work in the public sector is characterized by uncertainty and contradictory interpretations about what needs to, can, and should be done, as well as when and where it should be done (Abma & Noordegraaf, 2003) – in other words, role ambiguity (Rizzo et al., 1970).

Another demand that has been emphasized for a long time in the literature is conflict, specifically between superiors and subordinates as well as between subordinates. Such conflicts may of course be problematic for managers to handle, and they comprise a possible threat to managers' health and stress levels (Schat & Kelloway, 2005). In a study conducted by Wikström and Dellve (2009) among managers in the Swedish public sector, the managers stated that challenges regarding handling employees had increased. However, employee problems may also come from other sources than conflicts. For example, being unable to trust subordinates and having to deal with subordinates who are unwilling to do their job are problems that have been suggested as giving rise to stress among managers in public organizations (Skagert et al., 2008). Furthermore, trust between managers and employees has been shown to be more difficult to create when there is a greater distance and less interaction between the two levels (Wikström & Dellve, 2009), which, for example, may be a consequence of a large number of subordinates (Brazier, 2005; Gittell, 2001; Hultberg, 2007; Lucas, Laschinger, & Wong, 2008; Wikström & Dellve, 2009). An additional potential stressor that has been identified is the conflicting demands that increase with demanding clients and recipients, which has been argued to be associated with impaired health (Demerouti et al., 2001; Rasmussen, 2004; Semmer, Jacobshagen, Meier, & Elfering, 2007; Skagert et al., 2008).

Taken together, being a manager in the public sector thus usually means handling a large amount of complexity as a part of the work (Boyne, 2002; Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000; Thylefors, 2007), while at the same time focusing on the budget and on cost reduction (Härenstam & MOA Research Group, 2005; Pousette, 2001). A general lack of financial resources is one of the problems that managers themselves identify in the public sector, where needs often are unlimited (e.g., Wolmesjö, 2008; Antonsson, 2013). Although the public

32

sector has faced reduced budgets (Westerberg & Armelius, 2000), the same level of performance – in other words, the same quality and quantity – has been expected to be maintained (Härenstam et al., 1999; Skagert et al., 2008), and maintaining the same level of service quality with reduced resources has been shown to be one feature that characterizes bad jobs (Waldenström & Härenstam, 2008b).

Job resources

Following the logics of the JD-R model, the job demands for managers are to be balanced with job resources. Research on job resources that could be of particular importance in the public sector is not as specific as research on job demands (e.g., Dollard, Dormann, Boyd, Winefield, & Winefield, 2003). Previous work stress models suggest that job control (Karasek & Theorell, 1990), social support (Johnson & Hall, 1988), and occupational rewards (Siegrist, 1996) represent the main resources available in most occupations.

Job control or decision latitude is a multidimensional concept that includes employees' authority to make decisions on the job (*decision authority*) and the employees' utilization of skills on the job (*skill discretion*; Karasek & Theorell, 1990). Hence, job control combines the opportunity to manage or make decisions regarding an individual's own job, as well as opportunities for learning and development in the job, and it is influenced by the organization's goals, strategies, and values (Bernin, 2002). The managerial role usually implies a certain degree of control in terms of decision authority (e.g., Karasek & Theorell, 1990). However, public sector managers at lower levels have been shown to have a limited amount of influence or decision authority over their work because of such factors as formal frameworks and the expectations of different stakeholders (e.g., Antonsson, 2013; Ekholm, 2012; Lundqvist, 2013; Wolmesjö, 2008).

Social support has consequently been brought forward as an important resource in work stress research (e.g., Demerouti et al., 2001; Johnson & Hall, 1988; Karasek & Theorell, 1990; Wayne, Shore, & Liden, 1997). Social support can be defined as the assistance, support, and confirmation an employee receives from his or her network. Social support thus serves as confirmation and valuation of the individual (*emotional support*), but can also entail more concrete and practical help (*instrumental support*), as well as information and guidance useful in coping with a situation (*informational support*; Cohen, Gottlieb, & Underwood, 2000; House, 1981; Nordin, 2010). Social support at work is often also distinguished by the source of the support, where the most commonly examined sources include the organization, colleagues, and supervisors (for an overview see, for example, Chiaburu & Harrison, 2008; Mor Barak, Travis, Pyun, & Xie, 2009; Riggle, Edmondson, & Hansen, 2009), Thus, one important source of resources that must be considered is the support that managers receive from different stakeholders.

Support from superiors, managerial colleagues, employees, and experts in different fields have been shown to be of importance for public sector managers

33

(e.g., Antonsson, 2013; Dellve, Andreasson, & Jutengren, 2013; Deluga & Perry, 1991; Hagerman et al, 2015). However, managers within the public sector have been shown to often obtain less support from superiors and other support functions than before (Arman et al., 2009; Hildingsson & Krafft, 2001; Höckertin, 2007). Help from support functions such as administrators and finance experts have been shown to be insufficient, thereby negatively influencing work task completion (Antonsson, 2013). It has also been stressed that the access to support systems such as IT and administrative support is often deficient, and better conditions are needed to make time for strategic work (Dellve & Wikström, 2006; Wikström & Dellve, 2009; Hagerman et al, 2015). Support from superior managers can e.g. manifested through organizational support structures that offer the possibility of the managers receiving support and trust from upper-level management. However, the level of support from the managers' own superiors seems to diverge. While some empirical research has reported that the support is perceived as sufficient (e.g., Westerberg & Armelius, 2000), other studies have identified a lack of support from superiors as well as managerial colleagues (Landstad & Vinberg, 2013). Support from subordinates have previously been stressed as especially important in managers work (Hagerman et al, 2015) and can e.g. be manifested as trust between managers and subordinates, or as the participation of the subordinates in organizational development (Skagert et al., 2008). Social relationships and support both upward and downward have been shown to be of great significance for public sector managers' health and well-being (Dellve & Wikström, 2006), as well as for their willingness to remain in their assignment (Skytt, Ljunggren, & Carlsson, 2007). For instance, supervisory support can enhance possibilities for recovery and also reduce managerial stress (Tengelin, Arman, Wikström, & Dellve, 2011) and the risk of depression (Waldenström et al., 2008).

Given the special situation of public sector managers and the increase in client demands (Bejerot & Astvik, 2009), it is necessary to add the client as a possible resource for receiving recognition, appreciation, and gratitude. It has been shown that interactions with and rewards from clients are a very important dimension in, for example, service work, where they have been shown to influence health regardless of the level of job demands (Marshall et al., 1997). Receiving positive feedback and appreciation for one's job has also been suggested to be a resource that is positively associated with health (Bakker & Demerouti, 2007; Pousette, Jacobson, Thylefors, & Hwang, 2003). In human service organizations, feedback and also opportunities for professional development have been argued to be even more crucial resources than classical resources such as control and instrumental support (e.g., Büssing & Höge, 2004). Job resources, like their opposing job demands, may thus come from different sources inside and outside the organization.

Taken together, the JD-R model provides the present thesis with a framework for investigating managerial working conditions in the public sector. The flexibility of the model is utilized by considering context-specific job demands and job resources that are based on previous interview studies with managers in the

34

Swedish public sector (e.g., Dellve & Wikström, 2009; Skagert et al., 2004; Skagert et al., 2008; Tengelin et al., 2011; Wikström & Dellve, 2009). In this thesis, the main components of the JD-R model are used to define psychosocial working conditions. The concepts of psychosocial working conditions and psychosocial work environment, as well as their components in terms of job demands and job resources, are used interchangeably.

The Consequences of Managerial Work

Studying the impact of job characteristics on various outcomes is the main purpose of research on the psychosocial work environment and occupational health (Söderfeldt et al., 1996). Although sparsely used to denote the human dimension of sustainability (Pfeffer, 2010), the complex but important concept of sustainability generally characterizes a balance between destructive and constructive processes.

Sustainability

Inspired by the classical definition of sustainability (World Commission on Environment and Development, 1987), a sustainable, as opposed to consuming, work situation should therefore support the individual's development, engagement, and health over the long term by, for example, minimizing stressors and providing opportunities to recover (Kira, 2002; Kira, van Eijnatten, & Balkin, 2010). In line with this reasoning, a sustainable manager has previously been defined as a manager who is able to and also wants to work as a manager over the long term (Holmberg, Larsson, & Bäckkström, 2009; Wikström, Dellve, Tengelin & Arman, 2011). Even though the studies are relatively few, the concept of sustainability has been used in the context of public sector managers to denote the status of their health (Hargreaves & Fink, 2004, 2006; Holmberg et al., 2009; Tengelin et al., 2011; Wikström et al., 2011), performance (Hargreaves & Fink, 2006; Wikström et al., 2011), and turnover (Hargreaves & Fink, 2006; Holmberg et al., 2009; Wikström et al., 2011). These indicators of managerial sustainability are in line with previously studied outcomes in other contexts within the JD-R model (e.g., Bakker & Demerouti, 2007; Bakker et al., 2004; Schaufeli & Bakker, 2004). Although sustainability is regarded by most researchers as an overly broad and overused concept, it fits well in this thesis as a collective term to denote the consequences of public sector managerial work. Different aspects of managers' health, performance, and turnover have been chosen for this thesis as the main indicators of managerial sustainability and are described in greater detail below.

Health

It has been argued that the health status of employees is a particularly relevant indicator of individual or human sustainability (Pfeffer, 2010), and the

35

consequences for different health aspects are usually the main focus when studying the impact of job characteristics within research on the psychosocial work environment and occupational health (Söderfeldt et al., 1996). Within this field of research, two main perspectives are apparent. One of these dominating views, called the biomedical perspective, defines health as the opposite of ill health – in other words, the absence of disease, where disease is a dysfunction of organs or systems in the body. With its focus on ill health, or pathogenesis, the biomedical perspective differs profoundly from the other dominating view, called the humanistic perspective, where health, or salutogenesis, is in focus. Within this perspective, health is considered as something more than just the absence of ill health (Medin & Alexandersson, 2000) and the importance of investigating not only risk factors but also health-promoting factors is highlighted (Antonovsky, 1996). Although the pathogenic perspective is still dominant in most occupational health research, the salutogenic perspective has received more interest in recent years. Focus has thus been turned to positive health aspects such as work engagement (for an overview, see Bakker, 2011), flow (e.g., Nielsen & Cleal, 2010), and psychological well-being (e.g., Dollard & Bakker, 2010).

In sum, health is a broad and complex concept, and there are several views on how health is supposed to be defined (Medin & Alexandersson, 2000). One of the most general and widespread definitions of health has been postulated by the World Health Organization (WHO): "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization [WHO], 1948, p. 100). In line with the humanistic perspective, and like several other predominant theorists on health, WHO adopts a holistic view on health, focusing on the whole individual in relation to his or her context (Medin & Alexandersson, 2000). However, WHO's definition has been criticized from several directions (see, for example, Bircher, 2005; Brülde, 2000). For instance, it has been suggested that this and other traditional definitions – for instance, the definition formulated by Nordenfelt (1995) that a person's health is characterized as his or her ability to achieve vital goals – can cause incomplete analysis of the concept of health (Brülde, 2000). Brülde (2000) has argued that a broader and looser approach is needed in order to reintroduce health dimensions that for different reasons have been dropped from classical definitions of health. He suggested that a definition should contain physiological and functional dimensions, as well as indicators of subjective well-being. Bircher (2005) agreed that the definition of health needs to be updated and suggested a new definition that could be adapted to different contexts: "Health is a dynamic state of wellbeing characterized by a physical, mental and social potential, which satisfies the demands of a life commensurate with age, culture and social responsibility. If the potential is insufficient to satisfy these demands the state is disease" (p. 336).

Thus, in the research on the psychosocial work environment and occupational health, health has been defined and measured in several ways. The focus has been on a wide variety of health aspects, such as occupational cardiovascular health, as well as more general outcomes such as psychological

36

functioning and mental health and also burnout. Regardless of how one chooses to define health, individuals' working life has been shown to greatly influence their mental and physical health, in good ways as well as in bad (Levi, 2002), and just like any other employee, managers are affected by their work environment. As stated earlier, according to the JD-R model, the characteristics of the work environment can be divided into two main categories: job demands and job resources. The latter has been shown to enhance employees' well-being, mainly in the form of motivation and attachment to work, while job demands, even though not negative in themselves, can easily turn into stressors if they exceed the employee's capacity and lead to health impairments (Schaufeli & Bakker, 2004). Stressors can be defined as "job related factors thought to cause negative psychological reactions like tension, anxiety and fatigue" (Bakker et al., 2003, pp. 342–343). The stressors that can be attributed to work life can cause stress and a wide spectrum of disorders and diseases, as well as loss of well-being (European Commission, 2002; Levi, 2002). Furthermore, stressors can produce different kinds of emotional reactions, as well as influence behavior. These reactions can cause ill health directly but also more indirectly by triggering symptoms (European Commission, 2002). Besides affecting the individual, continual exposure to stressors at work can have an effect on the organization, resulting in such outcomes as increased staff absences and rising health care costs (Harris & Kacmar, 2005).

In this thesis, health is viewed from a humanistic perspective, where it is possible to be healthy – that is, able to realize vitals goals in life (Nordenfelt, 2007) and to enjoy well-being (WHO, 1948). Thus, the focus of the thesis is on both risk factors and health-promoting factors, using different indicators of health and ill health (Antonovsky, 1996; Brülde & Tengland, 2003) including physiological and functional dimensions, as well as indicators of subjective well-being (Brülde, 2000). Health is mainly used in order to validate the importance of the psychosocial work situations for managers.

Health among public sector managers

Although studies have shown that managers are generally a more privileged group than other employees in terms of working conditions and health (e.g., Bernin, Theorell, & Sandberg, 2001; Skakon, Kristensen, Christensen, Lund, & Labriola, 2011), problems related to managers' psychosocial working conditions and health have become an area of concern for sustainability in the public sector (e.g., Björklund et al., 2013; Danielsson et al., 2012; Härenstam & MOA Research Group, 2005; Skagert et al., 2008; Vinberg & Landstad, 2013). Previous research has also reported hazardous working conditions and high levels of stress and sick leave for employees as well as for managers in the public sector (e.g., Björklund et al., 2013; Lindholm et al., 2004; Løkke & Madsen, 2014). Downsizing and structural changes within organizations have been shown to have adverse effects on employees' and managers' health and to increase their stress levels (Hansson, Vingård, Arnetz, & Anderzén, 2008; Härenstam & MOA Research Group, 2005).

37

Hence, both managers and their subordinates are influenced by the organizational structure and their working conditions.

In addition, managers in their turn constitute part of the subordinates' work environment (Semmer, 2006). Managers may, in interaction with the work environment, have an impact on their subordinates' health (Kuoppala, Lamminpää, Liira, & Vainio, 2008; Nyberg et al., 2009; Offermann & Hellmann, 1996). Specifically, managers have been shown to impact their subordinates' psychological and physical well-being, stress levels, sick leave, work attendance, commitment, performance (Dellve, Skagert, & Vilhelmsson, 2007; Nyberg et al., 2009; Westerlund et al, 2010), and their turnover (Eisenberger, Stinglhamber, Vanderberghe, Sucharski, & Rhoades, 2002). Health and stress levels in an organization have generally been associated with the organization's overall performance, results, and quality level of the services, as well as its ability to handle change (Arnetz, 2007). Furthermore, managers experiencing poor health and stress have been shown to make less well-informed decisions, as well as fail to provide sufficient guidance to their subordinates, which in turn negatively influences the organization's productivity (e.g., Little, Simmons, & Nelson, 2007; Quick, Macik-Frey, & Cooper, 2007; Trollestad, 2003). It has been argued that healthy management – and thus healthy managers – is an important, if not the most important, factor when it comes to creating healthy and productive organizations (Arnetz, 2007; Quick et al., 2007; Tvedt, Saksvik, & Nytrø, 2009; Whitehead, 2006). Thus, managers' health can be seen as an important resource for the organization and its employees.

In contrast to the large body of research concerning employees' health, few studies to date have focused solely on sustainability in terms of managers' health and stress levels, especially within the public sector (Dellve et al., 2013). The studies that have been conducted indicate that the public sector managers themselves, especially at lower managerial levels, have a high incidence of stress and stress-related disorders and experience problems with stress and fatigue (Ahlborg et al., 2006; Björklund et al., 2013; Hargreaves & Fink, 2004; Løkke & Madsen, 2014). Female public sector managers have previously reported lower self-rated health than their male counterparts (Björklund et al., 2013). Managers have been found to experience higher demands (Bernin, 2002) and more work overload than other employees (Frankenhaeuser et al., 1989), and in some studies, managers' working conditions in the public sector have been shown to be worse than in corresponding management positions in the private sector (Härenstam et al., 2004; Höckertin, 2007). Hence, managers' health must be attributed significance so as not to jeopardize the future of public sector organizations, since sustainability can only be promoted when it promotes health among the managers themselves (Hargreaves & Fink, 2004).

Performance

In addition to health, performance has been argued to be an indicator of human as well as organizational sustainability (Pfeffer, 2010), and the concept has previously been used to denote managerial sustainability in the public sector (Hargreaves & Fink, 2006; Wikström et al., 2011).

Several researchers have criticized the management research tradition's heavy focus on costs and returns and the use of performance as a dependent variable (e.g., March & Sutton, 1997; Pfeffer, 2010). As opposed to indicators of performance through questionnaire data concerning stakeholders' perceptions (see, for example, Szücs & Strömberg, 2009), or "objective data" collected from government agency registers (see, for example, Putnam, 1993), managers' self-rated performance of the services is focused on in this thesis. This focus follows recent insights into municipalities' performance from studies that used managers as informants (e.g., Björk, Szücs, & Härenstam, 2014; Moynihan & Pandey, 2005; Walker & Brewer, 2009). The intangibility of many services within the public sector makes it hard to identify appropriate indicators (Jääskeläinen & Lönnqvist, 2011), and more objective key indicators used in the Swedish public sector generally do not permit comparisons between different types of services. Therefore, self-rated performance can serve as an important complement to these measures. In addition, it can be argued that managers have the most knowledge about their own operation, and so the evaluation systems and performance measures used in the workplace need to be relevant for those who in actuality will drive the development of the services (Björk et al., 2014). With performance management systems that are insensitive to the local context and fail to incorporate stakeholders' views, there is a risk of creating counterproductive work behavior among employees as well as among managers (Fryer, Antony & Ogden, 2009).

Within the JD-R field, performance has mainly been measured by self-reports. Lately, a distinction between two types of performance has been made. In-role performance is defined as those officially required outcomes and behaviors that directly serve the goals of the organization, including meeting objectives and functioning effectively. Extra-role performance, on the other hand, is defined as discretionary behaviors on the part of an employee that are believed to directly promote the effective functioning of an organization, without necessarily directly influencing a person's target productivity, including the willingness to help colleagues who have heavy workloads or the avoidance of problems with colleagues (Bakker et al., 2004). This thesis focuses on in-role performance and includes service quality, goal achievement, and fulfillment of the managerial assignment as assessed by the managers themselves.

Predicting performance

High job demands such as workload and emotional demands cost effort that negatively affects not only employees' health but also their ability to perform at

39

work (Bakker et al., 2004; European Commission, 2002; Levi, 2002). However, various job resources appear to facilitate the achievement of objectives and thus performance to a greater extent (e.g., Bakker et al., 2010; Van den Broeck, Van Ruysseveldt, Vanbelle, & De Witte, 2013). Resourceful working conditions foster the employees' willingness to dedicate their efforts and abilities to the work task, thereby influencing goal attainment (Meijman & Mulder, 1998; Schaufeli & Taris, 2014). In line with the motivational process of the JD-R model, motivational states foster positive organizational outcomes such as performance (Schaufeli & Taris, 2014). For instance, inadequate social support should be considered as a hindrance to satisfactory job performance, as well as an indicator of an inappropriate work organization (Waldenström, 2007). Taken together, job demands and job resources have previously been shown to predict cooperative behavior, including in-role performance (Bakker, Van Emmerik, & Van Riet, 2008).

Performance among public sector managers

The public sector in Sweden is facing reduced budgets, and public managers are experiencing increasing pressure to hold down public expenditure. Simultaneously, maintaining the same level of performance – that is, the same service quality and quantity – has been expected (Bolin & Härenstam, 2008; Forsberg Kankkunen, Ylander, & Höckertin, 2010; Skagert et al., 2008; Westerberg & Armelius, 2000). With the introduction of new public management in Swedish municipalities, there has been a greater emphasis on performance. Even so, in the majority of studies conducted on NPM and its consequences, no change in performance was found. Rather, some studies showed a worsening of performance after NPM reforms (Pollitt & Sorin, 2011). Keeping the same service quality level with reduced resources has in fact been shown to be one feature that characterizes bad jobs (Waldenström & Härenstam, 2008b). The JD–R model may be instructive in explaining and understanding an organization's productivity. However, the connection between psychosocial working conditions and performance remains to be tested in the context of public sector managers.

Turnover

The so-called exit, voice, and loyalty theory (Hirschman, 1970) is often used to understand individuals' ways of acting in a work situation they are not satisfied with. The exit option means to leave the situation. The voice option is to remain, but actively seek to change the situation. The last option is to stay out of loyalty as a result of identification with and attachment to the organization. These options can have different underlying explanations, social or economic factors, and organizational and individual factors (Selden & Moynihan, 2000). The term turnover has often been used in research instead of exit regarding the termination of an individual's employment and can be defined as employees' change of workplace or retirement – in other words, external mobility – although turnover also can be

40

characterized by a change of position within the organization – that is, internal mobility (Liljegren & Ekberg, 2008; van Vianen, Feij, Krausz, & Taris, 2003).

Furthermore, turnover can be voluntary or involuntary. According to Bludedorn (1978), voluntary turnover is characterized by employee-initiated termination of the employment and thus includes voluntary retirement and resignation. Involuntary turnover, on the other hand, includes involuntary dismissal – for example, employees who are fired, or are laid off because of redundancy – and also includes mandatory retirement (Bludedorn, 1978; McElroy, Morrow, & Fenton, 1995). This type of turnover could also be due to an employee being unable to cope with the job because of poor health (McElroy et al., 1995). Unlike voluntary turnover, involuntary turnover is not initiated by the individual (Bludedorn, 1978).

At the individual level, job mobility can improve the work situation (De Lange, De Witte, & Notelaers, 2008), as well as the health status for that individual (Liljegren & Ekberg, 2008). The career and salary level of the individual can also be affected in a positive direction (Topel & Ward, 1992). Although turnover may have positive effects for the individual as well as be healthy for the organization, the predominant view underpinning the turnover research is that voluntary turnover is considered undesirable by the organization (Abbasi & Hollman 2000; McConnell, 1999). Thus, turnover can be regarded as an indicator of human as well as organizational sustainability (Pfeffer, 2010). Turnover can be considered a critical issue in the organization for several reasons. High staff turnover has implications for both the quality and the stability of the services provided by the public sector (Mor Barak, Nissly, & Levin, 2001), and turnover is costly (see, for example, Sagie, Birati, & Tziner, 2002), especially when qualified employees such as managers quit (Johansson & Johrén, 2004; Mor Barak et al., 2001). In this case, their departure creates both direct financial costs for recruitment and indirect costs resulting from the loss of competence and productivity (Hayes et al., 2006; Mor Barak et al., 2001; Shaw, 2011). Vacancies due to turnover can also pose several risks to the organization (Leland, Carman, & Swartz, 2012). Turnover in managerial positions has been proven to negatively influence performance as well as efficiency, at least in the private sector (Kacmar, Andrews, Van Rooy, Steilberg, & Cerrone, 2006). Thus, the negative consequences of high managerial turnover may be particularly significant (Hambrick, Finkelstein, & Mooney, 2005). The challenge often consists of finding a balance between stability and mobility in favor of the organization, which seems to pose a challenge for the Swedish public sector. Even so, surprisingly few studies have analyzed the causes of managerial mobility or turnover in the public sector.

The majority of studies on turnover have investigated turnover intentions rather than actual turnover, especially in cross-sectional studies, although the researchers investigate potential predictive factors for actual turnover (Flinkman, Leino-Kilpi, & Salanterä, 2010; Hayes et al., 2006; Mor Barak et al., 2001). Turnover intention, which is the intention or desire to change jobs, is associated with actual turnover, and several studies have demonstrated the link between

41

individuals' intentions and actual turnover (see, for example, Allen, Shore, & Griffeth, 2003; Hom & Kinicki, 2001; Liljegren & Ekberg, 2008; Mitchel, 1981; Mor Barak et al., 2001; Tett & Meyer, 1993). Besides job satisfaction and organizational commitment, turnover intentions have been one of the most widely proposed predictors of employee turnover (Tett & Meyer, 1993). However, it has been argued that even though turnover intentions have a relationship with turnover, turnover is not determined by them, and whether the use of turnover intentions can generalize to situations involving actual turnover has been questioned because of the limited strength of the relationship (for an overview, see Mor Barak et al., 2001; Tett & Meyer, 1993). In line with this criticism, several studies have pointed to the fact that turnover intentions turn to action to a greater extent in some situations than in others. In general, several studies have shown that macroeconomic conditions, such as recession or other downturns in the economy, have significance for employee turnover (Mor Barak et al., 2001; Selden & Moynihan, 2000). More specifically, it has been shown that turnover intentions elevate turnover risk when combined with ease of movement – in other words, the notion that other job alternatives were especially close by (Hom & Kinicki, 2001; Josephson, Lindberg, Voss, Alfredsson, & Vingård, 2008; Steel & Lounsbury, 2009).

Although it has been argued that turnover intentions are still a useful proxy for turnover (for an overview, see Griffeth, Hom, & Gaertner, 2000), empirical studies investigating the relationship between self-reported turnover intentions and actual turnover in the public sector are lacking (Jung, 2010). In addition, turnover intentions may be interesting in their own right. Turnover intentions may be as important an indicator of an organization's well-being as actual turnover (Taylor, Audia, & Gupta, 1996). Generally, employees who state that they want to leave their jobs but do not carry out their intentions have been reported to register more health problems and symptoms such as headache, slight depression, and fatigue than other employees do (Aronsson & Göransson, 1999). Furthermore, it has been argued that turnover intentions often mean individuals leaving the organization in a psychological sense (Rusbult, Farrell, Rogers, & Mainous, 1988). More specifically, managerial turnover intentions that do not lead to actual turnover may in future be shown to have highly negative consequences in terms of managers' performance and commitment (Taylor et al., 1996; Zhao, Wayne, Glibkowski, & Bravo, 2007). Knowledge about turnover intentions can help organizations to examine differences between those employees who wish to stay and those who intend to leave and to relate those differences to the organizational context (Moynihan & Landuyt, 2008). Hence, by measuring turnover intentions and their possible causes, important factors can be identified and used in human resource management work to attract and retain managers. Mor Barak and colleagues (2001) pointed to the importance of studying both the causes of turnover intentions and the actual turnover, which is also done in this thesis in order to generate tools for strategic development of the public sector.

Predicting turnover

The focus of the turnover research during the past two decades has mainly been to examine voluntary turnover and find its predictors, and previous research has looked for the causes of employee turnover, both within the individual and in the individual's environment. The suggested predictors have been many, involving organizational factors, task factors, and individual and demographic factors.

Several personal characteristics or demographic determinants, such as being younger, being male, having children, and being better educated and qualified for the job, as well as having tenure, have been highlighted as predictors of turnover (Flinkman et al., 2010; Griffeth et al., 2000; Hayes et al., 2006; Mor Barak et al., 2001). In addition, one important and specific reason to leave a managerial job is that many managers are intent on a career and want more challenges, more power, and better pay to achieve career success. A job offer that cannot be resisted can thus be an important cause of turnover (Lee, Mitchell, Holtom, McDaniel, & Hill, 1999).

However, in an extensive meta-analysis conducted by Griffeth, Hom, and Gaertner (2000), they found that demographic and personality factors such as gender, education, and tenure are of minor importance for turnover compared with other factors. Traditionally, research has not given much attention to the work environment as an antecedent to turnover (Peterson, 2007), but several more recent studies have shown working conditions related to organizational factors as well as to work tasks to be more important for the intention to leave as well as for the actual turnover (Lambert, Hogan, & Barton, 2001; Naus, van Iterson, & Roe, 2007; Tham, 2007; van Vianen et al., 2003). Besides promotional chances and financial rewards (Griffeth et al., 2000; Lambert et al., 2001), psychosocial working conditions – that is, different types of job demands and job resources – have been suggested as a particularly relevant focus when searching for answers to turnover (Lambert et al., 2001). Quantitative demands, role conflicts, influence and the availability of social networks, support, relationships with co-workers, and work group cohesion are some of the psychosocial working conditions suggested as antecedents to turnover intentions and turnover (Berglund, 2007; de Lange et al., 2008; Griffeth et al., 2000; Lambert et al., 2001; Monynian & Pandey, 2007; Skytt, Ljunggren & Carlsson, 2007; Tham, 2007). Within the JD-R field, some researchers have argued that work engagement and motivation mediate the relationship between psychosocial working conditions and turnover (Schaufeli & Bakker, 2004). More specifically, the various job demands imposed on managers every day – for example, being active, present, and supportive while at the same time handling multiple bureaucratic tasks – may lead to managers leaving their positions (Kira & Forslin, 2008). However, whether these types of predictors can be generalized to public sector managers' situation as well is yet to be confirmed.

Turnover among public sector managers

Problems in attracting and retaining skilled managers, especially to the parts of the public sector of Sweden concerning human services, have been noted (e.g., Arman et al., 2009; Danielsson et al., 2012; Höckertin, 2007; Skagert et al., 2012). In recent years, indications have been that managers in the public sector leave their jobs more often than previously. This change is partly due to the demographics of Sweden, with a large proportion of managers expected to retire from the public sector within the next 10 years. Several public sector representatives from unions, employer organizations and similar organizations see the supply of managers as a real difficulty in the future. This is a challenge facing all countries in the European Union (European Commission, 2012), as well as in, for example, the US (Bright, 2013). In addition, high voluntary turnover among managers at different levels has recently been observed in the Swedish public sector. Skagert and colleagues (2012) found that in a sample of Swedish health care managers, 26% and 40% had left their managerial position during a 2-year and 4-year period respectively, and yearly turnover rates ranging from 5% to over 50% have also been found in other countries (Castle & Lin, 2010; Glisson & James, 2002; Peterson, 2009). In addition, according to some union organizing managers, a high proportion of managers still working in the Swedish public sector have signaled that they want to leave their positions. It also seems to be difficult to attract candidates to managerial positions in the public sector, especially among the younger generations. The trend characterized by high retirement rates coupled with high turnover rates in Sweden follows a similar global trend. In the US public sector, for example, at a time when public agencies are facing the approaching retirement of a large part of the managerial workforce, there is a risk that even more managers will be lost because those still of working age want to leave their jobs voluntarily (Leland et al., 2012).

Hence, knowledge about managerial turnover intentions and actual turnover along with their causes is important information for strategic human resource management in public organizations (Jung, 2010). However, the empirical literature on turnover intentions and in particular on actual turnover in the public sector is very limited compared with turnover in the private sector, as previously highlighted by several researchers (Lee & Whitford, 2008; Moynihan & Landuyt, 2008; Selden & Moynihan, 2000). Research on managerial turnover is particularly scarce (Selden & Moynihan, 2000), especially within the public sector (Cregård, Corin, & Skagert, 2016), where only a few researchers have investigated the reasons for managerial turnover intentions and actual turnover (e.g., Glisson & James, 2002; Knudsen et al., 2009; Lee & Ashforth, 1993a, 1993b; Peterson, 2009; Skagert et al., 2012). Although there is surely much to learn and be inspired by in studies conducted on managers in the private sector and on public sector employees in general, limits on making generalizations across populations regarding turnover have been revealed (Griffeth et al., 2000). Consequently, there is a need for more research on the causes of public sector managerial turnover.

In sum, the public sector is facing a number of societal, demographic, and organizational challenges in the near future while at the same time attempting to maintain a stable and healthy workforce (Godue, 2006; World Health Organization Regional Office for Europe, 2009). Hence, the sustainability of public sector managers might be threatened and so should be considered an area of concern. Therefore, the psychosocial working conditions and sustainability among public sector managers need further exploration, partly because of their possibly exposed position, and partly because of the suggestion that management is a highly important factor when it comes to creating healthy and effective organizations (e.g., Arnetz, 2007; Nyberg, Bernin, & Theorell, 2005; Yukl, 2010) and by extension healthy and effective social welfare (Zerbinati & Souitaris, 2005). To shed new light on managerial working conditions in the public sector, a contextual approach has been applied in this thesis and is described below.

A Contextual Approach

The present thesis has applied a contextual approach in order to shed new light on managerial working conditions in the public sector. The understanding of managerial work as a context-bound practice is underestimated in management research and theory (e.g., Dierdorff et al., 2009; Johns, 2006; Mintzberg, 2006) and can thus be considered a helpful counterpoint to individual-centered theories (Johns, 2001). Research concerning organizations and working conditions are carried out in many research disciplines with diverse discourses. Consequently, the concept of context has been assigned different meanings by different disciplines. In a colloquial sense, however, context can be defined as circumstances, setting, environment, and overall situation. In line with this definition, the contextual approach applied within this thesis means that the focus is turned from managers and their individual differences to the conditions that public sector managers work under. Furthermore, context is considered a layered concept (see Yoder & Kahn, 2003), where managers are influenced both by the context immediately proximal to them in terms of their own psychosocial working conditions, and by the organizational context, including organizational setting and structure. Thus public sector managers are seen as influenced by different layers of context at work.

There are three motives for applying a contextual approach in this thesis: theory, methodology, and applicability. Each of these motives is discussed below.

Theoretical motives for a contextual approach

Through its contextual approach, the focus in this thesis is turned to the conditions that public sector managers work under. The underlying assumption of this thesis is that it is both the managerial work situation per se and the interpretation of it, that determines the individual manager's response, is relevant. Thus the perception of the environment or situation should be considered a function of the objective situation and the person experiencing it (James & Sells, 1981).

45

However, it could be considered important to attempt to disentangle these concepts in order for the results to support a demand for organizational interventions and work redesign, rather than for changes in the individual manager's behavior and mindset (Frese & Zapf, 1988; Rau, 2004). In this thesis, the managers' responses to these conditions are used as an indicator for assessing whether their managerial work can be considered sustainable. The independent variables used in the present thesis are both register data and on the more objective side of self-reports, or in other words, low in dependency on cognitive and emotional processing (Frese & Zapf, 1988, p. 379), which can be considered more important, since completely objective job demands do not automatically trigger stress reactions (Frese & Zapf, 1988; Lazarus & Folkman, 1984; Lindström, 1994).

With this focus on managerial working conditions, a guiding theoretical perspective and model that allows for taking manager-specific and multifaceted work characteristics into account is needed (Bakker et al., 2014; Schaufeli & Taris, 2014). In this regard, the JD-R model provides a useful theoretical framework for investigating managerial working conditions, since its flexibility makes it possible to study a broad array of job demands and job resources relevant for public sector managers, thus giving a comprehensive picture of their psychosocial working conditions.

Methodological motives for a contextual approach

The contextual approach in this thesis is also methodological in the sense that managerial working conditions in the public sector were investigated through sampling and methodological approaches that allow for the layers of context to be taken into account.

To begin with, managerial working conditions in the public sector were investigated through strategic two-stage samples of organizations and individual managers, in accordance with recommendations posed by Kallenberg (1989); the two-stage sampling allows for comparing and examining systematic differences and similarities between different organizational factors, as well as learning more about the importance of structuring factors such as gender, age, and managerial experience.

In addition, the contextual approach requires contextual and comprehensive methodological approaches accompanied by instruments and measures specifically tailored (Bakker & Demerouti, 2007; Nielsen, Abildgaard, & Daniels, 2014) for managerial working conditions in the public sector. The instruments and measures include both subjective appraisals and more objective assessments and data on several levels. In this way, the visibility of the work situation surrounding and influencing the managers rather than their individual characteristics is increased. For this thesis, cluster and multilevel analyses were used, which are alternatives to more traditional variable approaches and take the context into account (Bejerot & Härenstam, 2010; Härenstam, 2009). Cluster analysis is used in order to take a more holistic approach on the work situation for managers and to show the

46

variation of different situations within the larger context. Thus instead of regarding situations as fragmented and investigating one variable at a time, researchers build models on the combination of many variables simultaneously, creating images of different contexts (e.g., Magnusson & Törestad, 1993). A multilevel perspective means taking into account how factors at different analytical levels affect the outcomes such as health. Furthermore, multilevel analysis has the ability to capture much of the nested complexity in organizational life (Klein & Kozlowski, 2000) and bring organizational factors into consideration, and thus can more accurately assess what is due to the individual and to the context respectively (Bejerot & Härenstam, 2010; Härenstam, 2009). Studies that take on a contextual approach by exploring the impact of "upstream" organizational conditions on psychosocial working conditions through multilevel analysis are rare, even though this methodology has been recommended for such a purpose (Bejerot & Härenstam, 2010; Härenstam, 2008; Kallenberg, 1989; Klein & Kozlowski, 2000), and even though knowledge about the organizational factors involved in shaping the psychosocial working conditions such as job demands is of great value in preventing unhealthy jobs (Bejerot & Härenstam, 2010; Härenstam, 2008). In this thesis, multilevel analysis is used in order to find organizational origins of the demands in managerial work.

In this thesis, the context has also been taken into account by qualitative analysis focusing on the manager's job content, job demands, and job resources using the ARIA[2] method. The ARIA method has an external perspective, which means that instead of building on the individual's own perceptions and experience, the working conditions are more objectively assessed by experts (Waldenström, 2007). The ARIA method has been developed from action theory and the particular concept of action regulation in work psychology research (e.g., Frese & Zapf, 1994; Hacker, 2003), but also rests upon the managerial behavior approach. ARIA has previously been used for classifying healthy and unhealthy jobs (Waldenström & Härenstam, 2008b) and for assessing exposures in epidemiological studies of musculoskeletal and psychiatric disorders (Waldenström, 2007; Waldenström et al., 2002). It has been validated against traditional models of explaining stress as a consequence of demand–resource imbalance (Waldenström et al., 2002). Past experience has shown that through its external perspective, the method is very useful, since in a neutral way it provides a basis for redesigning work so that it becomes an efficient use of resources (Waldenström, 2007). Furthermore, the mixed-methods approach – that is, combining quantitative studies with in-depth qualitative studies (Bryman, 2002) – can be considered crucial in understanding the underlying processes taking place and thus finding appropriate preventive routes (Griffiths, 1999; Härenstam, 2008; Nielsen & Abildgaard, 2013), leading to the next motive for a contextual approach.

---

[2] ARIA is a Swedish acronym for work content analysis.

Applicability motives for a contextual approach

       The theoretical and methodological contextual approach to managerial working conditions used in this thesis can be considered as a valuable complement for and contrast to the large amount of individual-centered leadership research, where representative samples and variable approaches have mainly been used (Härenstam, 2008). In addition, the approach used in this thesis offers a pedagogic way to disseminate to practitioners relevant information tailored to the specific work setting by, for instance, helping them to obtain a quick grasp of the situation and to identify what concepts to target for improvement – for example, employee health, well-being, and performance (Schaufeli & Taris, 2014). With this backdrop, the knowledge gained through this research and the way in which the knowledge is presented in this thesis are first and foremost directed toward public sector decision-makers and human resource departments, with the aim of helping them to focus on the conditions that managers work under. The findings presented in this thesis could thus provide ideas for interventions at the organizational level as well as for job redesign at the individual level in the organizations in question, and could thereby be considered tools for use in promoting sustainable managerial work.

MATERIALS AND METHODS

The main aim of this thesis is to increase the knowledge of managerial working conditions in the public sector to serve as guidance in promoting sustainable managerial work. This aim entails obtaining accurate and applicable research results, which places several requirements on the materials and methods used. First, a guiding theoretical perspective and model that allow for taking managerial specific conditions into account are needed. Second, a suitable research design and a strategic sample of public sector organizations and public sector managers are desired. Third, contextual and comprehensive methodological approaches, accompanied by data sources and data dimensions specific to managerial work in the public sector, including both subjective appraisals and more objective assessments and data on several levels, can improve the conditions for trustworthy results. The materials and methods used in this thesis to fulfill these requirements are presented in the following sections.

Materials

Research setting

The materials making up this thesis have been collected within three interconnected research projects, the CHEFiOS project[3] and two of its follow-up projects, the CHEFiOS RÖR project[4] and the CHEFiOS NY project,[5] which were conducted over a 6-year period between the years 2009–2015 in the western Sweden county of Västra Götaland. The aim of the main project, the CHEFiOS project, was to study the organizational prerequisites for managerial work in a strategic sample of differently gendered services from seven municipalities. Using the same sample as the CHEFiOS project, the main aim of the CHEFiOS RÖR project was to deepen the understanding of municipal managerial sustainability and mobility. The CHEFiOS NY project was started with the aim of developing and utilizing the methods and knowledge gained in the CHEFiOS project in order to work with managers' prerequisites in larger scale in practice. Table 1 gives an overview of the materials and methods of the four studies included in this thesis.

---

[3] Swedish acronym for Management, Health, Efficiency, and Prerequisites in the Public Sector.

[4] Swedish abbreviation for the CHEFiOS manager mobility project.

[5] Swedish abbreviation for the CHEFiOS development and utilization project.

Table 1. Overview of the materials and methods of the four studies addressed in this thesis·

Study	Focus	Research setting	Research design and sample	Data	Data analysis
Study I	Typical psychosocial work situations for managers in the Swedish public sector	The CHEFiOS project (*2009*)	Including 7 municipalities, 37 operations, and 548 managers at all levels up to department head	Based on cross-sectional data from the CHEFiOS manager questionnaire and register data	Cluster analysis and Analysis of Variance
Study II	Typical psychosocial work situations as predictors of turnover among public sector managers	The CHEFiOS project and CHEFiOS RÖR project (*2009–2011*)	Including 7 municipalities, 37 operations, and 297–488 managers at all levels up to department head	Based on longitudinal data from the CHEFiOS manager questionnaire and register data	Longitudinal logistic regression analysis
Study III	The significance of span of control for public sector managers' experience of job demands	The CHEFiOS project (*2009*)	Including 7 municipalities, 37 operations, and 434 operational managers	Based on cross-sectional data from the CHEFiOS manager questionnaire and register data	Multilevel analysis
Study IV	Job demands and job resources in human service managerial work	The CHEFiOS NY project (*2013*)	Including 1 municipality, 4 operations, and 12 operational managers	Based on data from ARIA interviews and documents	Qualitative work content analysis

Research design and sample

In accordance with recommendations made by Kallenberg (1989), the sampling was done in the form of a two-stage strategic sample, where organizations were selected in the first step and individual managers in these organizations in the second step. The sample of municipalities represented suburban municipalities (Ale and Mark), small towns (Alingsås and Kungälv), medium-sized cities (Borås and Uddevalla), and a large city (Göteborg). Field access was granted through the agreement of four municipalities (Ale, Alingsås, Borås, and Göteborg) to engage in an organizational intervention. Three of the four municipalities in the intervention group were matched with three control municipalities (Mark, Kungälv, and Uddevalla)in the same region following the most similar systems design (MSSD) approach (Przeworski & Teune, 1970) in terms of size and political and demographical composition, in line with recommendations by Szücs and Strömberg (2006). Data on the municipalities' size and political and demographical composition were gathered from the Kfakta07 database. Due to the much larger size of the fourth municipality (Göteborg), the intervention study included only one of its technical services. In order to cover the services of education, health, and social care also in this municipality, two of its districts were selected according to the most different systems design (MDSD) approach (Przeworski & Teune, 1970). These districts are different demographically and socioeconomically.

Hence, this thesis has been written within the framework of a larger research and intervention project requiring that the municipalities included in the intervention be matched against similar cases. However, it was beyond the scope and ambitions of this thesis to compare intervention municipalities with control municipalities. Rather, the sampling was used as a way of securing a strategic sample of municipalities with varying characteristics in order to answer the research questions and, for example, identify risk situations. However, since one of the studies included in this thesis used a longitudinal sample (Study II), with data collected before as well as after the intervention, the effect of the intervention was controlled for. The results did not display any difference between the intervention and the control municipalities and were in consultation with the publishing research journal, were removed from the final analyses. The effects of the intervention have been investigated and described elsewhere (Härenstam & Östebo, 2014b).

Furthermore, based on previous findings on dissimilarities in conditions for managerial work in differently gendered municipal services (Kankkunen, 2009; Westerberg & Armelius, 2000), diverse types of services (human service organizations responsible for care of the disabled and elderly, preschool/compulsory school, upper secondary school, and technical services) within the seven municipalities were strategically selected. This type of selection was done with the purpose of making comparisons possible and thus assumed contrasts visible (Mills, van de Bunt, & de Bruijn, 2006; Rousseau & Fried, 2001), since not opening up for direct comparison is one of the most effective ways to maintain inequalities between groups (Hirdman, 1990). Within these services, all

managers with personnel, financial, and operational responsibility were targeted. Altogether, 28 departments, 37 services in these departments and all 766 managers in these services were included in the sample. The sample included five main categories of managers: heads of department, middle managers, first-line managers, team leaders, and heads of section/functional managers (e.g., HR, IT and finance). The sampling of the organizations and managers was done to enable a cross-level and comparative research design. The descriptives of the CHEFiOS sample are presented in Table 2.

Table 2. Descriptives of the CHEFiOS sample (2009, N = 555).

Type of operation	Number of operations	Number of managers	Managerial position*						Gender**	
			1	*2*	*3*	*4*	*5*	*6*	*Women*	*Men*
Disabled care	8	117	1	14	96	6	0	0	98	18
Preschool/ compulsory school	8	133	5	9	110	3	6	0	95	36
Upper secondary school	6	57	3	13	34	7	0	0	28	29
Technical services	8	113	8	28	54	10	10	3	37	76
Elderly care	7	97	2	8	76	10	1	0	86	11
Other		38	7	8	5	0	16	2	22	16
Total	**37**	**555**	**26**	**80**	**375**	**36**	**33**	**5**	**366**	**186**

*1 = Head of department, 2 = Middle manager, 3 = First-line manager, 4 = Team/group manager,

5 = Head of section (e.g., IT, HR, Finance), 6 = other form of managerial position.

** 3 missing cases

Methods

Data sources, data collection, and data dimensions

The empirical materials for the four studies in this thesis included three data sources: the questionnaires, the interviews, and the organizational documents/registers that were used in the CHEFiOS project and interconnected follow-up projects. An overview of the specific research objects, data sources, measurement levels, and informants is presented in Table 3, and these elements are described in detail in the following sections.

52

Table 3. Overview of the specific research objects, data sources, measurement levels, and informants.

Specific research objects	Data sources	Measurement level	Informants
Job demands, job resources, health, motivation, performance, and turnover intentions	Questionnaires	Individual	Managers
Turnover	Registers	Individual	HR departments
Demographic factors: managerial experience, gender, and age	Questionnaires (validated against registers)	Individual	Managers and HR departments
Work content, work goals, job demands, job resources	Interviews Calendars Documents	Individual	Managers and HR departments
Organizational factors: managerial position, span of control, number of units, geographic distribution of units	Questionnaires Documents Registers	Individual	Managers and HR departments
Municipality, department, workplace and type of service, gender distribution, and mean span of control	Registers	Workplace	Managers and HR departments

The CHEFiOS manager questionnaire

The CHEFIOS manager questionnaire was divided into sections encompassing questions on the managers' background (e.g., gender, experience, education, and position), as well as questions on their working conditions, their coping strategies, and indicators of their health, work ability, performance, and the like. The majority of the questions in the CHEFiOS manager questionnaire were retrieved from the Gothenburg Manager Stress Inventory (GMSI; Eklöf, Pousette, Dellve, Skagert, & Ahlborg, 2010). GMSI was specifically designed to measure public managers' work situation and developed from several qualitative Swedish research studies aimed at finding the essence in public sector managers' job demands, job resources, and coping strategies (e.g., Dellve & Wikström, 2009; Skagert et al., 2004; Skagert et al., 2008; Tengelin et al., 2011; Wikström & Dellve, 2009). Furthermore, the GMSI scales were developed in order to be sensitive to changes and variations within managerial work. The scales were psychometrically

53

tested. Exploratory and confirmatory factor analysis indicated discriminant as well as content validity of the GMSI dimensions. The dimensions have also been tested in previous quantitative pilot studies (Eklöf et al., 2010). In addition to these newly developed GMSI scales, several well-established scales mainly regarding sustainability indicators were added to the CHEFiOS manager questionnaire. The CHEFiOS manager questionnaire was thus tailored to fit managerial work in the public sector context, something that has been recommended when aiming for organizational interventions (Bakker & Demerouti, 2007; Nielsen et al., 2014). The data dimensions included in the CHEFiOS manager questionnaire that are relevant for this thesis are presented in Table 4.

Table 4. Relevant data dimensions from the CHEFiOS manager questionnaire.

Data dimension/ scale	Description	No. of items	Alpha	Study	Reference
Job demands	*Response alternatives ranged from 1 (never/almost never) to 5 (always/almost always)*				
Lack of resources	Not having enough resources to execute given tasks (e.g., "That your operation does not have the resources to cope with peak loads")	Six-item index	.81	*Study I, II*	(Eklöf et al., 2010)
Conflict of logics	Conflict between different types of tasks in the managerial assignment (e.g. "That there are conflicts between administrative work, service development and employee contact")	Five-item index	.86	*Study I, II, III*	(Eklöf et al., 2010)
Employee conflicts/ group problems	Problems associated with the subordinate work group's performance and function (e.g. "That cooperation is problematic or there are conflicts between employees")	Seven-item index	.82	*Study I, II, III*	(Eklöf et al., 2010)

54

Client conflicts	Problems related to clients (e.g., "How often do you encounter clients who display threatening or violent behavior in your work?")	13-item index	.89	*Study I, II*	(see Stengård et al., 2013)
Work overload	Having too much to do and difficulties keeping up with the workload (e.g., "That you actually do not have time to do everything that you should do at work")	Four-item index	.85	*Study III*	(Eklöf et al., 2010)
Excessive role demands	Demands that are naturally occurring in the managerial role, but overall excessive (e.g., "That the responsibility for subordinates is excessive")	Six-item index	.85	*Study III*	(Eklöf et al., 2010)
Buffer problems	Difficulties that can arise when managers have to balance demands and expectations upward and downward in the organization (e.g., "That you must be a buffer between higher levels in the organization and your employees")	Four-item index	.75	*Study III*	(Eklöf et al., 2010)
Container function	Managers as receivers or containers of subordinates' frustration in pressured situations (e.g., "That pressured employees burden you with their problems")	Two-item index	.82	*Study III*	(Eklöf et al., 2010)

55

Individual employee problems	Problems with individual subordinates' performance and motivation (e.g., "That you have to help employees plan and organize their work")	Six-item index	.73	*Study III*	(Eklöf et al., 2010)
Job resources	*Response alternatives ranged from 1 (never/almost never) to 5 (always/almost always)*				
Management support	If managers could receive support from upper management. (e.g. "Superiors show genuine interest in my work and the problems that I encounter as a manager")	Six-item index	.90	*Study I, II*	(Eklöf et al. 2010)
Employee support	If managers could receive support from and had employees who solved their own problems. (e.g. "I feel that my subordinates want to take responsibility for their work")	Six-item index	.83	*Study I, II*	(Eklöf et al. 2010)
Client recognition	If managers met satisfied and positive clients in their work (e.g., "How often do you encounter clients who encourage you and give your work greater meaning?")	Three-item index	.85	*Study I, II*	(Aronsson et al., 2012).

56

Health					
Stress	A person's subjective rating of stress. Higher values indicate more stress (e.g., "Have you felt stressed in the last week?"). *Response alternatives ranged from 0 (not at all) to 5 (a lot)*	Six-item index	.92	*Study I*	(Kjellberg & Wadman, 2007)
General health	A person's subjective rating of health status. The item was "How do you assess your present state of health?" *Response alternatives ranged from 1 (very bad) to 5 (very good)*	Single item	–	*Study I*	(Idler & Benyamini, 1997)
Work ability	Derived from the Work Ability Index. The item was "How many points would you give your current work ability?" *Response alternatives ranging from 0 (completely unable to work) to 10 (my work ability has never been better)*	Single item	–	*Study I*	(Tuomi, Ilmarinen, Jahkola, Katajarinne & Tulkki, 1994)
Motivation					
Motivation	On mood for work. The item was "How do you feel about starting work in a normal working day?" *Response alternatives ranged from 1 (strong disinclination) to 5 (happy at the thought of a stimulating day)*	Single item	–	*Study I*	(Petterson, 1995)

57

Performance					
Client satisfaction	How well the managers assessed that their clients' needs were met. The item was "To what extent would you say that the users' needs are met?" *Responses ranged from 1 (to a very low degree) to 4 (to a very high degree)*	Single item	–	*Study I*	(Dellve, Skagert, & Eklöf, 2004)
Goal achievement	Reflecting how satisfied the managers were with the results of their operations. The item was "Are you able to work in a way that makes you feel satisfied with the results?" *Responses ranged from 1 (no, not at all) to 4 (to a very high degree)*	Single item	–	*Study I*	(Härenstam, 1989)
Turnover intentions					
Intentions of leaving the workplace	The item was: "Regarding your current workplace, is it the workplace where you would like to work in the future?" *The response alternatives were yes or no*	Single item	–	*Study II*	(Aronsson & Göransson, 1999)
Intentions of leaving the profession	The item was: "Regarding your current occupation, is it the occupation in which you would like to work in the future?" *The response alternatives were yes or no*	Single item	–	*Study II*	(Aronsson & Göransson, 1999)

The CHEFiOS manager questionnaire, consisting of 223 items in total, was sent out at two points in time (2009 and 2011) to a sample of 766 managers in a set of human service organizations responsible for the care of the disabled and elderly, preschool/compulsory school, upper secondary school, and technical services in seven municipalities and city districts in western Sweden. Managers at all levels up to department heads were included. The HR departments assisted in this process. The first round of self-administered questionnaires was sent out in spring 2009. The second round of questionnaires was sent out almost exactly 2 years later, in the spring of 2011, to those managers who still remained in their positions, as well as to those who had been employed between the first and second wave. The questionnaire was largely the same as in the first round, with some minor changes and additions such as questions asking why they had chosen to stay in their position. The response rates were 72.5% (N = 555) at baseline (T1) and 66.5% (N = 491) in the second wave 2 years later (T2). The longitudinal response rate was 56.7% (N = 313). An overview of the response patterns of the CHEFiOS manager questionnaire is presented in Figure 2.

Response rate
T1	72.5 % (N = 555)
T2	66.5 % (N = 491)
T1 & T2	56.7 % (N = 316)
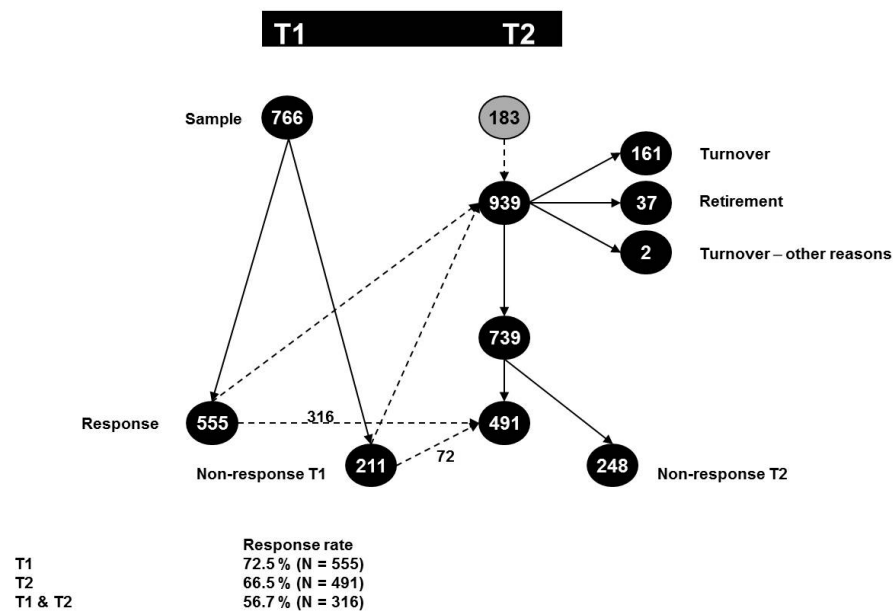
Figure 2. Overview of the response patterns of the CHEFiOS manager questionnaire.

59

External assessments of job demands and job resources – ARIA interviews

   Besides self-administrated questionnaires, external assessments of the managerial work assignment and psychosocial working conditions were conducted based on the ARIA method (for an overview, see Waldenström, 2007). The ARIA method was developed by Swedish researchers in the late 1990s, who drew on the German work psychology tradition (e.g., Greiner & Leitner, 1989; Hacker, 1982; Oesterreich & Volpert, 1986), which was inspired by action theory and the particular concept of action regulation for workers (Frese & Zapf, 1994; Hacker, 2003), and adapted the instrument to other occupational contexts. Importantly and in opposition to its predecessors, ARIA does not take as its point of departure the average worker; instead, it considers individual qualities such as knowledge and previous experience to be important prerequisites for task completion (Waldenström & Härenstam, 2008a).

   The ARIA method was designed as a structured interview protocol established through the MUSIC-Norrtälje study (Waldenström, Josephson, Persson, & Theorell, 1998). The working conditions are addressed from an external perspective – that is, focusing on conditions and actions with the least possible consideration of emotional appraisals from the worker (Waldenström & Härenstam, 2008a). In order to secure an external assessment of the individual's working conditions, a specific interview technique is attached to ARIA. In line with suggestions made by Semmer, Grebner, and Elfering (2003), the interviewer asks the respondents to be concrete and to provide examples and descriptions of consequences related to actions and work characteristics, which are then assessed against predefined criteria and/or cutoff points. ARIA has previously been used for classifying healthy and unhealthy jobs (Waldenström & Härenstam, 2008b), and for assessing exposures in epidemiological studies of musculoskeletal and psychiatric disorders (Waldenström, 2007; Waldenström et al., 2002). The model has been validated against traditional models of explaining stress as a consequence of demand–resource imbalance (Waldenström et al., 2002). Thus, ARIA is a method suitable for exploring work content, work goals, demands, and resources at the job task level that, while it looks at the individual level, is still based on an external perspective and so gives information on the context surrounding the individual. In contrast to quantitative measurements, the ARIA method provides rich illustrative examples of job demands and job resources and their consequences for the individual, as well as for the organization.

   The ARIA interviews followed the ARIA method's structured interview protocol and covered the original ARIA dimensions described in a number of articles (e.g., Waldenström et al., 1998; Waldenström et al., 2002). However, the method was slightly adapted in order to be more specific for managers and the public sector. For example, more context-specific questions as well as questions about tasks that the managers experienced as illegitimate (Semmer et al., 2007) or missing from the assignment were added to the original protocol. An updated

description of the data dimensions included in the ARIA interviews and their related criteria are presented in Table 5.

Table 5. Description of the data dimensions included in the ARIA interviews and their related criteria.

Dimension	Description	Related criteria
Contextual information	Information on the respondent's position in the organizational hierarchy, the function of the closest supervisor, and the formal work assignment was collected. Questions about the number of subordinates and units as well as the physical location of the manager in relation to the employees were added to the original protocol. In order to consider possible negative changes in the work assignment, the respondents were also asked about deteriorated work characteristics and job expansion at the end of the interview. The information from these questions was used to contextualize and enrich the main dimensions in the protocol	Job expansion is defined as work tasks becoming more mentally demanding, more tasks being added, and/or new tasks replacing old ones (Waldenström & Härenstam, 2008b)
Work tasks	Work activities with a common goal were merged into one work task, and the relative proportion of actual work time spent on each task was defined together with the respondent. Diaries/calendars were used to assist the mapping process. Possible illegitimate, i.e., unnecessary or unreasonable tasks included in the work assignment, were also explored	
Time pressure and time binding	The quantitative demands in the respondent's work were assessed as *time pressure*, i.e., whether enough time was provided to conduct the work tasks. *Time binding* was used as an indicator of time constraints at work and assessed as the extent to which the respondent's work tasks require conformance to schedule, i.e., a need to conduct the work tasks in a certain time or space	Work is considered to entail *high* time pressure if the work tasks cannot be unattended for more (or even less) than agreed pauses, or be compensated for with less hectic periods. If the time pressure varies during the day or week, or only some work tasks entail high time pressure, the time pressure is assessed to be variable or

61

		moderate. If the work tasks can be completed in 80% of the work time, time pressure is defined as *low*. Time binding is *high* in bus driving and industrial work at the production line, *moderate* in teaching, and *low* in jobs with little dependence on schedule, machines, or other actors (Waldenström, 2007;Waldenström et al., 2008; Waldenström, Lundberg, Waldenström, Härenstam, & MOA Research Group, 2003)
Work hours	The actual work hours per day, week, and month (as opposed to agreed work hours) and the opportunities for compensating for overtime were assessed	
Work goals	The ARIA method includes a close look at the work goals in this context deriving from several administrative and political levels, as well as from the individual manager. Formal and possible informal goals were disentangled, and information on how goal achievement was evaluated and concrete examples of consequences when goals are not fulfilled were also gathered	
Social interaction	The amount of social interaction (as part of the working time per day or week) between the manager and (1) supervisors, (2) colleagues, and (3) other actors such as staff and recipients was assessed. The questions about the respondent's social interaction at work were originally included to capture the detrimental effects of working alone. Since social interaction is at the heart of the managerial work assignment in human services, this dimension rather became a way to investigate the	

	demands for interactions as well as the opportunities for managers to work concentratedly for uninterrupted periods	
Influence	Influence over the work situation was assessed through questions about the respondent's influence over which work tasks are included in the work assignment (*what*) and *how* to conduct these tasks, as well as *where* and *when* these tasks are performed	The possibilities for exercising influence are categorized into four predefined levels or cutoff points: *none, low, some,* or *high*. The first level indicates that the work tasks and their execution, as well as the time and place for work, are fixed, and the second level indicates that some work tasks can be exchanged or done in a different order. The third level, on the other hand, includes possibilities to choose between work tasks and decide how, when, and where the tasks should be done for at least part of the day. The highest level of influence also includes long-term, but not always short-term, influence over what tasks should be included in the work assignment (Waldenström & Härenstam, 2008b; Waldenström et al., 2003)
Cognitive requirements and possibilities	Three levels requiring different mental resources were assessed: creativity/problem solving; active use of occupational knowledge, skills, and experiences; and routine work with no need for use of focused and conscious mental processes. The balance between the three levels was assessed by asking the respondent for concrete examples of work tasks that involve regulation at each level and the proportion of time spent on these tasks	Although active use of occupational knowledge, skills, and experiences needs to constitute the largest proportion of the work assignment, all three levels should be present at work in order to reach a balance in cognitive requirements (Frese & Zaph, 1994; Hacker, 1982; Volpert, Oesterreich, Galbenz-Kolakovic, Krogol & Resch, 1983).

Resources at work	The interviews followed a checklist in the protocol covering the availability of various job resources: • Goal and task clarity • Premises and technical equipment • Personnel resources • Support functions (e.g., IT and HR) • Social support from colleagues • Social support from supervisors • Social support from subordinates	If there is a lack of various resources and if there are inconsistencies in the rules relating to the individual's work, these aspects can be assessed as possible hindrances at work (Waldenström, 2007). In order to be assessed as a hindrance, the lack of job resources must result in at least one of two predefined criteria – (1) an obvious loss of quality in the work result (more than accepted by the supervisor) and/or (2) considerable delay ensuing overtime work, work without breaks, and/or work executed with an apparent risk of accident or illness (Waldenström & Härenstam, 2008a). Disturbances or sources of irritation were also registered, although not fulfilling the criteria for actual hindrances at work

The face-to-face interviews, following the structured ARIA protocol, lasted for approximately 2 hours and were conducted in spring 2013 at the managers' offices. In total, interviews with six municipal school managers (three from compulsory school and three from preschool) and six elderly care managers (three from elderly care homes and three home care managers) within a municipality of western Sweden were carried out. The managers were all women of varying age and managerial experience. The interviews were conducted by three interviewers who were thoroughly trained in the ARIA interview technique before the data collection. The interviews were in some cases further complemented by telephone calls or e-mail. Additional information in terms of organizational data as well as policy documents was available as input to the ARIA interviews and was provided by the HR departments (see below).

Organizational and demographic data

The questionnaires and interviews were further supplemented with data from various registers and documents at the municipal organizations. In

conjunction with the two waves of questionnaires (2009 and 2011), the organizations' HR departments collected and supplied relevant information from registers and organizational documents. Additional information was also collected via the HR department connected to the interview study in 2013. The data were linked to each subject in the study group. The following data on organizational factors at the workplace level were achieved through this process: municipality, department, workplace or unit, type of service, gender distribution among the staff, and mean span of control. The data on organizational factors at the individual level achieved through this process were span of control, number of units, geographical distribution of units, and managerial position. The data on demographic factors including the managers' gender, age, and managerial experience were originally collected via the CHEFiOS manager questionnaire described above, but also complemented by and/or validated against registers. The data also included organizational documents such as organizational charts, rules, routines, and various policy documents, as well as actual turnover between baseline and the second wave 2 years later. Hence, data on these dimensions can be considered as facts. The data dimensions obtained from and/or double-checked through registers used in this thesis are presented in Table 6.

Table 6. Organizational and demographic data included in the analyses.

Data	Description	Study
Type of service	Were measured with six categories: disabled care, elderly care, preschool/compulsory school, upper secondary school, technical services, and other	*Study I, II, III, IV*
Span of control	The number of subordinates whom the manager is directly responsible for	*Study I, III, IV*
Number of units	The number of organizational units that the manager is directly responsible for	*Study IV*
Geographical distribution of units	The geographical distribution of the units that the manager is directly responsible for	*Study IV*
Managerial position	Were measured with six categories: heads of department, middle managers, first-line managers, team leaders, heads of section/functional managers (e.g. IT, HR, Finance), and other	*Study I, II, III, IV*
Gender	Dichotomous variable (female/male)	*Study I, II, III, IV*
Age	Was measured with four categories: younger than 35, 35–44, 45–54, and 55 and older	*Study I, II*
Managerial experience	The total number of years as a manager at any level	*Study II, III*
Turnover	If the manager had left the managerial position since the first wave of questionnaires	*Study II*

Data analysis

The theoretical and empirical background accompanied by the contextual approach in this thesis has resulted in the use of a framework and guiding analysis model for the thesis known as the MOA model[6] (e.g., Härenstam, 2009; Härenstam et al., 1999; Härenstam et al., 2004). The MOA model builds on a contextual

---

[6] MOA is a Swedish acronym for Modern Work and Living Conditions for Women and Men [Moderna arbets- och livsvillkor för kvinnor och män].

66

approach in which the context is taken into account by answering questions about, for example, what, who, and where (see Burke, 2002; Härenstam, 2008, 2009). Consequently, the model is suitable when possibilities for change and prevention are sought by identifying *WHAT* characterizes the psychosocial working conditions, *WHERE* these working conditions are predominantly found – for example, with respect to the types of work organization – and *WHO* are clustered in these working conditions by the use of demographics, for example. Finally, the model focuses on the *CONSEQUENCES* of the working conditions, mainly in terms of different health aspects.

In accordance with the MOA model that guided this thesis, the psychosocial working conditions constituted the main focus, and supplementing variables were used in order to further locate and understand these conditions, their antecedents, and the outcomes. Thus, the psychosocial working conditions were included in all four studies. However, different layers of context were in focus, which means that the psychosocial working conditions can take the shape of both predictors and endpoints dependent on the study and its specific research question. The MOA model adapted to the overall purpose of this thesis is presented in Figure 3.

WHERE *Organizational factors*	WHAT *Psychosocial working conditions*	WHO *Demographic factors*
Type of service Span of control Number of units Geographical distribution of units Managerial position	**Job demands** *Lack of resources* *Work goals* *Work tasks* *Lack of goal and task clarity* *Unnecessary tasks* *Unreasonable tasks* *Work hours* *Work overload* *Excessive role demands* *Time pressure* *Time binding* *Conflict of logics* *Employee conflicts/group problems* *Individual employee problems* *Buffer problems* *Container function* *Client conflicts* *Social interactions* **Job resources** *Management/supervisory support* *Employee support* *Colleague support* *Client recognition* *Influence* *Cognitive requirements and possibilities* *Premises and technical equipment* *Personnel resources* *Support functions*	Gender Age Managerial experience

CONSEQUENCES
Health, Motivation, Performance, Turnover intentions, Turnover

Figure 3. Adaptation of the MOA model as the framework and guiding analysis model for this thesis.

In this thesis, the main focus was the *WHAT* variables, which represent the public sector managers' psychosocial working conditions measured as job demands and job resources from different sources, in line with the JD-R theory. The psychosocial working conditions were chosen to reflect the managers' most proximal (i.e., first) layer of context. In accordance with the MOA model, supplementing variables were used in order to further locate and understand these psychosocial working conditions, their antecedents, and the outcomes. Thus, in order to increase the understanding of the psychosocial working conditions, a second layer of context including organizational factors was added. In which organizational contexts, or *WHERE,* these psychosocial working conditions are more prevalent was investigated by adding new analyses including, for instance, specific types of services, span of control, and managerial position. These organizational factors can also be regarded as upstream antecedents of the psychosocial working conditions and outcomes. *WHO* are most likely to be found in the psychosocial work situations, thus experiencing the consequences to varying degrees, were investigated by analyses, adding information about demographics – in this thesis, the managers' gender, age, and managerial experience. Although these demographics can be considered individual-level variables, they were essentially used in order to investigate whether groups of individuals can be sorted into different situations or over-represented in these situations. Hence, the demographic variables were used as indicators of structuring factors. In this way, structuring mechanisms with regard to gender, age, and managerial experience can be discovered (e.g., Bejerot & Härenstam, 2010; Härenstam, 2009). Furthermore, in accordance with the MOA model, the *CONSEQUENCES* attached to these situations can also be identified in order to validate the importance of the situations for managerial sustainability.

Although the constructs of antecedents, consequences, and outcomes were used, they should not be regarded as statistical causal terms. The model is conceptual and the relationships are the hypothesized relationships in a chain in a multilevel hierarchy. The adapted MOA model presented in Figure 3 is the general analysis model of this thesis, and the four studies focused on different aspects of the model. The MOA model that was adapted for each of the studies is presented in the Main Findings section.

Quantitative data analysis

In accordance with a contextual approach and the guiding analysis model, contextual and comprehensive analyzing strategies were used in the studies forming this thesis. These types of analytical methods can be especially valuable when searching for high- and low-risk situations at work, in particular because they can give direction on preventive actions. The data analysis methods used served different purposes. Cluster analysis served an explorative purpose and the analysis of variance served a discriminatory purpose, while multilevel analysis and logistic

regression served the purpose of testing associations. In the rest of the quantitative data analysis section, all quantitative data analysis methods used in this thesis are described, with special attention paid to the contextual methods (i.e., the main methods) used.

Data preparation

Prior to analysis, the variables were examined for accuracy of the data entry and for missing values. Before conducting the quantitative analyses, cases with too few or no responses in the variables of interest were removed from the respective analysis. Cases with only a limited amount of missing data were imputed using the EM algorithm in PASW Statistics 18 following the recommendations by Schafer and Graham (2002) and Little and Rubin (1987). The EM algorithm uses a two-step iterative procedure that produces a unique set of estimates through the maximum likelihood estimates of the means, variances, and covariances (Enders, 2001). Imputation was made for the dependent and independent variables separately. Missing data concerning gender, managerial position, managerial experience, and span of control were not imputed but were obtained from registers when possible. Furthermore, univariate outlier analysis and multivariate outlier analysis were performed for dependent and independent variables respectively.

Cluster analysis

With complex contextual conditions in working life, the traditional variable approach is not sufficient for a deeper understanding of the prerequisites for managers. Although the variable approach is important in the investigations of work environment, it does not consider the combination of many variables at the same time (Bergman & El-Khouri, 2001). The holistic approach, or pattern analysis, takes into consideration that situations are formed by different aspects of person–situation interactions. Pattern analysis is explorative in its nature and is aimed at analyzing complex and multifaceted phenomena and identifying natural situations and groups that are similar to each other in certain respects. Instead of regarding situations as fragmentized and investigating one variable at a time, researchers build models with the interaction of many variables, simultaneously creating images of different contexts (see, for example, Magnusson & Törestad, 1993). Thus, pattern analysis is an alternative way of classifying complex data and handling a great number of variables simultaneously, as well as a way of detecting factors that may have different impacts in varying situations (Härenstam, 2009). The approach of pattern analysis has proven especially valuable in worklife research. For example, the approach has been used in prevention research (Leijon, Härenstam, Waldenström, Alderling, & Vingård, 2006), when exploring risk groups for neck, shoulder, and low back disorders. It has also been used when searching for patterns of working and living conditions (Härenstam, Karlqvist, Bodin, Nise, & Scheele, 2003), community employees' job demands-resources

profiles (Van den Broeck et al., 2012), and patterns of psychological empowerment in Swedish healthcare (Hansen, Baraldi, Berntson, & Andersson, 2013). Cluster analysis is one of the most widespread pattern analysis techniques said to use a holistic approach.

A comprehensive and holistic approach can be considered valuable in exploring the working conditions for public sector managers, since it enables considering a multifaceted work environment with job demands and job resources from a wide range of sources. Cluster analysis was initially used to investigate patterns or combinations of different working conditions, thus grouping managers who work under similar conditions.

The specific method used in Study I was agglomerative hierarchical cluster analysis (Bergman, Magnusson, & El-Khouri, 2003). The analyses were performed with the Sleipner 2.1 software (Bergman et al., 2003), using Ward's method with standardized variables. The cluster analysis is an iterative procedure, where each individual starts out as one cluster and ends with all individuals in one cluster. The software seeks a cluster solution combining as large a between-group variance as possible, with the smallest possible within-group variance in the selected cluster variables (Bergman et al., 2003). After choosing the cluster solution, the Relocate module in the Sleipner software was used, performing a k-means relocation cluster analysis in order to maximize the explained error sum of squares (ESS) and homogeneity of the clusters.

Cluster analysis is especially useful when the research questions include What, Where, and Who (Härenstam, 2009), which were important questions within this thesis. Therefore, the cluster analysis was supplemented with variance analysis in Study I in order to find out where the different clusters could be found and which type of individuals each cluster was composed of. Since cluster analysis is an explorative method, additional more traditional analyses were also used in Study I and II in order to test the association between these work situations and, for example, health and turnover. Such a combined methodology has been recommended as a promising approach for testing hypotheses (Bejerot & Härenstam, 2010).

Analysis of variance

After performing the cluster analysis in Study I, T-tests, ANOVA, and MANOVA analyses were performed with a discriminatory purpose, in order to investigate how the clusters discriminate against each other regarding the Where, Who, and Consequences variables, in line with the MOA model (Härenstam et al., 1999). In order to control for common method variance, an additional MANCOVA, with a method factor as covariate, was employed, following the suggestion of Podsakoff, MacKenzie, Lee, & Podsakoff (2003). The method factor was constructed with the factor scores from a factor analysis, where all items in the study analysis (reversed in the same direction) were forced to load on a single factor.

71

Logistic regression

In Study II sequential logistic regression analyses were performed with PASW Statistics 21 in order to explore whether different clusters of psychosocial working conditions were longitudinally associated with and thus constituted different risks for managerial turnover intentions and actual turnover. Logistic regression makes it possible to predict an outcome on a dichotomous, dependent variable from categorical and/or continuous independent variables. Each cluster was compared with the mean for the eight clusters – that is, the overall effect of the clusters. After the constant-only model (Model 0), the main variables of interest, the clusters, were entered in the first model (Model 1) in accordance with recommendations made by Spector and Brannick (2011), in order to obtain crude odds ratios. In the second step, a model adjusting for possible confounders was used (Model 2). A third model further controlled for baseline values of turnover intentions (Model 3). Each cluster was compared with the mean for the eight clusters by calculating two models for each outcome and each step, one with the first cluster used as a reference group and one with the final cluster used as a reference group; in that way, estimates for all eight clusters were obtained (Menard, 2002). The effects were interpreted in terms of odds ratios with 95% confidence intervals (CIs).

Multilevel analysis

One contextual method that has been recommended when searching for predictors for differences in working conditions and health between employees is multilevel analysis (Bejerot & Härenstam, 2010). Multilevel analysis is a method for testing associations suggested when participants are nested in the same context, such as workgroups, since the key assumption of independence in the observations of many standard statistical procedures, such as ordinary least squares (OLS) regression, is then violated (Glick, 1985; Goldstein, Browne, & Rasbash, 2002; Hox, 2002; Snijders & Bosker, 1999; Tabachnick & Fidell, 2007). When observations are dependent – that is, hierarchically ordered or nested – multilevel modeling (MLM) should thus be used. Managers are nested within operations and are therefore influenced by the organizational context (Hox, 2002; Snijders & Bosker, 1999). Ignoring the fact that managers are grouped within operations can lead to incorrect inferences, since it can cause an underestimation of the standard errors of regression coefficients and thus imply that relationships between variables exist when they in fact do not (Rasbash, Steele, Browne, & Goldstein, 2009). Therefore, a multilevel approach was adopted in Study III in order to take the nested structure into consideration and in order to estimate the variance that can be attributed to the individual level and the organizational level respectively. Multilevel analysis takes the nested or hierarchical structure of the data (i.e., the micro level is nested within the macro level) into account by allowing the intercept as well as the other covariates to vary (Snijders & Bosker, 1999). The 37 operations

were set as the organizational or macro level, while the 442 managers in these operations formed the individual or micro level. In accordance with recommendations from Tabachnick and Fidell (2007), the number of macro-level units included in the analyses constitutes sufficient power. The more similar that managers are in one operation, the more likely it is that the variation depends on the context they are in. The similarity between the micro units belonging to the same macro unit was calculated by using the intraclass correlation coefficient (ICC), which is the amount of variance attributable to the group or macro level, which in this case is made up by operations (Snijders & Bosker, 1999). Put differently, ICC can be expressed as the amount of dependence between the observations (Hox, 2002). Multilevel analysis is only worthwhile if the macro level, in this case the organizational unit, contributes significantly to the outcome. It is therefore important to test this assumption by calculating the ICC of the null model and then splitting the variance between the individual level and the organizational level. Multilevel analysis was used in the studies whenever possible, in order to take the nested structure of the sample into account, since it results in more precise estimates of the impact of exposures than traditional regression analysis, where contextual factors such as organizational conditions are disaggregated to the individual (Bejerot & Härenstam, 2010).

The multilevel analysis was performed in sequential steps, with the main variables of interest added in the first steps, in line with Spector and Brannick's (2011) recommendations. First, a random intercept model was estimated. In the following models, predictor variables at both the individual level and the operations level were added and grand-mean centered in accordance with guidance from Wu and Wooldridge (2005). The multilevel analysis was implemented with the MLwiN version 2.1 software, using the restricted iterative generalized least squares (RIGLS) estimation method for empty models, in order to obtain the best variance estimates for relatively small samples (e.g., Goldstein et al., 2002; Hox, 2002), and the default iterative generalized least squares (IGLS) estimation method in the subsequent steps.

Qualitative work content analysis

In Study IV, the face-to-face interviews followed the ARIA method's structured interview protocol and were conducted by three interviewers who were thoroughly trained in the method. The method is based on previous recommendations to use scales or items with defined levels that are rated by professional and experienced job analysts, to minimize personal effects on that data (Voskuijl & van Sliedregt, 2002) and thereby reach an external assessment, as advocated by the ARIA method (Waldenström, 2007). In order to reach an external assessment and consequently assist the data analysis, the ARIA method therefore consists of a structured interview protocol, a specific interview technique, and predefined criteria and/or cutoff points (e.g., Waldenström et al., 1998; Waldenström et al., 2002). The interviews were transcribed and analyzed in

accordance with the method. To secure an external assessment, only statements that included examples and/or descriptions of consequences related to the work characteristics were analyzed further. These qualitative descriptions were then assessed using the predefined criteria and/or cutoff points, to determine the presence and level of a job demand or a job resource (Table 5). Additional information in terms of organizational data, policy documents and calendars were also available as input to the interviews, as well assisting with the analysis. Since the array of dimensions covered by ARIA resembles in many respects the recent developments in the field of stress theory and the JD-R model (Demerouti et al., 2001), the ARIA's dimensions were analyzed and categorized as job demands or job resources in the context of human service managerial work. The ARIA dimensions were also compared and arranged in line with job demands and job resources previously examined in several empirical quantitative and qualitative JD-R studies conducted within a public sector setting.

Ethical approval

The first and second CHEFiOS manager questionnaire studies (Study I, II and III) were approved by the Regional Research Ethics Committee in Gothenburg as being in accordance with ethical standards (Dnr 048-09). The interview study (Study IV) was also approved by the Regional Research Ethics Committee in Gothenburg as being in accordance with ethical standards (Dnr T839-13).

Reflections on the empirical process

This thesis draws on the joint efforts of the CHEFiOS research team, including scholars from various universities and disciplines such as psychology, sociology, public administration, economy, occupational health, and political science. Having the privilege to be part of such a large research project from the beginning, I have been involved in most of the activities constituting the CHEFiOS project. As the project has resulted in several follow-up projects, I have had the opportunity to conduct fieldwork close to managers' everyday reality throughout the PhD process. Thus, it has been 6 years of being thrown between practice and academia, including undertaking such tasks as developing instruments, applying for ethical approval, collecting data, and doing project management, as well as preparing oral and written reports for both the practitioner in the field and the scientific world. I really appreciate the linking of these two worlds that the CHEFiOS project and my thesis have made possible. Sharing the everyday practice with managers at different levels in different types of municipal services has given me invaluable input to all the steps in the research process, from framing research questions, to analyzing the results.

MAIN FINDINGS

This section presents the main findings of the four studies making up this thesis.

Study I: Typical situations for managers in the Swedish public sector: Cluster analysis of working conditions using the job demands-resources model

Authors: Erik Berntson, Linda Corin (formerly Wallin), and Annika Härenstam. The idea of the paper was initiated by EB and AH. EB, LC, and AH conceived the paper topic and the study design. EB performed the data analyses with assistance from LC. EB and LC drafted the manuscript for which EB was responsible for two thirds and LC for one third. EB had the main responsibility for revising the manuscript, but all authors contributed in this process. All authors have read and approved the final version of the manuscript.

Managers in many public domains have to meet major challenges today, which is why it is essential to focus on their psychosocial working conditions in order to develop a sustainable situation.

Aim

The aim of this study was to explore different types of naturally occurring psychosocial work situations, based on a combination of job demands and job resources from several sources, among managers in the public sector. Certain focus was also given to investigating how these situations discriminated against each other regarding sustainability indicators in terms of managerial health, motivation, and performance.

Materials and method

In total, 548 managers at all levels up to the department heads in a set of human service organizations responsible for care of the disabled and elderly, preschool/compulsory school, upper secondary school, and technical services in seven municipalities and city districts in Western Sweden participated in this study. Using the job demands-resources (JD-R) model as a framework, indexes of four job demands and three job resources were included in a cluster analysis, in order to identify naturally occurring psychosocial work situations. The clusters were named in line with their best defining characteristic. As a second step, the cluster analysis was supplemented with variance analysis (MANOVA) in accordance with the MOA model (Härenstam et al., 1999). This analysis was done in order to locate where or in which organizational contexts the different clusters were most prevalent (gender composition in the workplace, managerial position, number of subordinates, and type of operation), which type of individuals composed the

75

clusters (age, gender), and whether the clusters discriminated against each other in terms of managerial sustainability. The analysis entailed the use of three indicators of health, one indicator of motivation, and two indicators of self-reported performance. The analysis model is presented in Figure 4.

WHERE *Organizational factors*	WHAT *Psychosocial working conditions*	WHO *Demographic factors*
Type of service Span of control Managerial position	Clusters of: **Job demands** *Lack of resources* *Conflict of logics* *Employee conflicts* *Client conflicts* **Job resources** *Management support* *Employee support* *Client recognition*	Gender Age

CONSEQUENCES

Health (*General health, Stress, Work ability*), Motivation, Performance (*Client satisfaction, Goal achievement*)

Figure 4. The analysis model of Study I.

Note. The data dimensions in the bold frame were analyzed by means of cluster analysis and made up the focal variables of Study I.

Main findings

The findings in Study I demonstrate that a wide array of different situations is characterized by different psychosocial working conditions for managers in the public sector. Eight distinct clusters of managerial working conditions with different combinations of job demands and job resources were identified. A short description of the main characteristics of the eight clusters is presented in Table 7.

Table 7. Short description of the main characteristics of the eight clusters

Cluster	Job demands (4 indexes)	Job resources (3 indexes)	**Who** are mainly included in the cluster?	**Where** are the clusters mainly found?
1. The favored *N=104*	Low levels in all four job demand variables. Lowest of all groups in conflict of logics and employee conflicts.	High levels of job resources and highest of all groups in management and employee support.	Male managers 55+ Middle-managers	Technical services
2. The appreciated *N=64*	Relatively low job demands, below the mean in all variables.	High levels of job resources and the highest level of client recognition of all groups.	Female managers Over 45 years First-line managers	All types of services
3. The supported *N=58*	Small lack of resources but problems with employees.	Good managerial support but low levels of employee support.	Male managers Managers under 35	Technical services Disability care
4. The focused /detached *N=76*	Levels of job demands just below the mean and very low levels of client conflicts.	Levels of job resources just above the mean in combination with very low levels of client recognition.	Male managers Expert managers	Technical services
5.The neglected *N=76*	High levels of the job demands lack of resources and conflict of logics. However low levels of employee problems.	The lowest levels of managerial support of all clusters. High degrees of employee support.	55+ First-line and middle managers	Pre-/compulsory school
6. The exposed *N=43*	High levels of client conflict and the highest level of lack of resources as well as high levels of conflict of logics.	High levels of managerial support.	<44 years old Heads of department	Pre-/compulsory school
7. The pressed *N=60*	High levels of job demands especially in employee conflict.	Low support from management and the lowest level of support from employees.	Female managers First-line managers	Elderly care
8. The opposed *N=67*	High levels of all job demands. The highest levels of conflict of logics.	Low levels of all job resources. The lowest level of support from management and client recognition.	Female managers 45-55 years Heads of department	All types of services

Note. N= Number of managers in each cluster at T1. Total N=548.

Furthermore, the clusters were discriminated from each other in a distinct way by the sustainability indicators – that is, health, motivation, and performance – on an almost perfect gradient. Under the most advantageous working conditions, which would be low in demands and high in resources, the managers' health, motivation, and performance were considerably better than in the unfavorable clusters. Furthermore, the results from Study I could indicate a higher-order structure of the cluster solution, where three main groups could be proposed: healthy, unhealthy, and risk clusters. *The favored*, *the appreciated*, and *the supported* clusters could be argued as forming the healthy clusters, and *the pressed* and *the opposed* clusters could be suggested to form the unhealthy clusters. *The detached[7], the neglected*, and the *exposed clusters* could then be suggested to be the "risk clusters" – that is, situations including negative as well as positive aspects of psychosocial working conditions. Thus, job demands and job resources from various sources can be combined in many ways with a wide range of effects on health, motivation, and performance. Although the job demands in working situations are important and should be recognized, the results of Study I specifically imply that support structures for managers are central prerequisites for sustainable management in the public sector.

Moreover, the results of Study I show that the different psychosocial work situations are not randomly distributed, which strengthens the validity of the clusters. Differentiations between the clusters were found in all organizational and structuring factors tested: type of service, number of subordinates, managerial position, age and gender. For example, the results show that the conditions for managers seem to be gender based, where managers in human service organizations, usually female-dominated organizations, were generally worse off, with psychosocial working conditions associated with health problems, low motivation, and poor performance. The same held true for first-line managers, particularly in the care of the elderly and disabled.

Contribution

The results from Study I expand the use of the JD-R model to a specific and significant group of employees, public sector managers. The study suggests that the JD-R model, which allows for selection of the indicators of job demands and job resources relevant to the study group, can be recommended for use in studies of such homogeneous samples, where other work environment models have fallen short.

When combined with a pattern analysis, such as cluster analysis, more specific and variable descriptions of beneficial and detrimental situations at work can be presented, and generalization to all public sector managers is thus avoided.

---

[7] *The detached* cluster was previously named *the focused* cluster but has been renamed in order to better reflect the psychosocial work situation.

78

In addition, the results from the cluster analyses in Study I show that a holistic approach is useful and valuable when investigating psychosocial working conditions with the JD-R model. The results also suggest that the associations between psychosocial working conditions and sustainability indicators are not necessarily linear. Indeed, different combinations of variables contribute to the understanding of situations of positive and negative psychosocial working conditions.

As well, the results of a cluster analysis, in combination with a discriminant analysis, can help to not only identify what types of problems exist, but also indicate where they are most prevalent. Such information is extremely helpful as guidance for actions to be taken in preventing unsustainable psychosocial working conditions. Since both advantageous and disadvantageous situations are identified, groups of individuals with different sustainability risks are defined directly from the study population, thus making it possible to find target groups for intervention. It also offers a way to be inspired by the more balanced situations.

Furthermore, the specific methods used in this study offer a pedagogic way to disseminate knowledge to practitioners, since cluster analysis contributes images of contexts rather than abstract phenomena, thus increasing the chance that the results will lead not only to reflection, but also to preventive action.

Study II: Managers' turnover in the public sector: The role of psychosocial working conditions

Authors: Linda Corin, Erik Berntson, and Annika Härenstam. The idea of the paper was initiated by LC. LC conceived the paper topic and the study design with assistance from EB and AH. LC performed the data analyses and drafted the manuscript with assistance from EB. LC had the main responsibility for revising the manuscript, but all authors contributed in this process. All authors have read and approved the final version of the manuscript.

Attracting and retaining skilled managers has become an increasingly important and urgent issue for the public sector in Sweden. Thus, knowledge about managerial turnover intentions and actual turnover, along with their causes, is key information for strategic human resource management in public organizations.

Aim

The main aim of Study II was to investigate whether public sector managers' psychosocial working conditions, assessed by job demands and job resources, can predict their turnover, actual as well as intended. By doing so, the aim was to investigate the applicability of the JD-R model, together with a holistic approach for identification of groups that are at high and low risk for actual as well as intended turnover.

Materials and method

Study II explored how naturally occurring psychosocial work situations longitudinally predict public sector managers' turnover intentions and actual turnover. Participants in the study were managers at all levels up to department head in a set of human service organizations responsible for the care of the disabled and elderly, preschool/compulsory school, upper secondary school, and technical services in seven municipalities and city districts in western Sweden. Eight previously identified psychosocial work situations, assessed by the combination of the managers' specific job demands and job resources in accordance with the JD-R model, were used to predict their intentions of leaving their workplace and/or profession, as well as to measure their actual turnover 2 years later. Sequential logistic regression analysis was used for the identification of work situations that are at high and low risk for turnover, actual as well as intended. Several organizational and structuring factors were also added to the model and tested as additional predictors: type of service, managerial position, gender, age and managerial experience. The analysis model is presented in Figure 5.

WHERE *Organizational factors*	WHAT *Psychosocial working conditions*	WHO *Demographic factors*
Type of service Managerial position	Clusters of: **Job demands** *Lack of resources* *Conflict of logics* *Employee conflicts* *Client conflicts* **Job resources** *Management support* *Employee support* *Client recognition*	Gender Age Managerial experience

CONSEQUENCES

Turnover intentions (*Intentions of leaving the workplace, Intentions of leaving the profession*), Actual turnover

Figure 5. The analysis model of Study II.

Note. The WHAT variables in the bold frame, that were analyzed by means of cluster analysis in Study I, were used as focal predictors for longitudinally predicting the consequences in terms of managerial turnover.

Main findings

Despite the fact that almost a fifth of the managers left their jobs during the 2-year study period, over a third of the managers who remained found themselves in some form of negative employment situation, in a non-preferred occupation and/or workplace. The overall results of Study II show that psychosocial working conditions have a great impact on public sector managers' intentions of leaving not only the workplace, but also the profession. The results demonstrate that managers' willingness to stay in the workplace as well as in the profession is strengthened under more favorable psychosocial working conditions. For example, *the favored* cluster, which experiences the lowest job demands in combination with the most job resources of all clusters, had a significantly lower intention of leaving the workplace and the profession. *The appreciated* cluster, characterized by reasonable job demands and high levels of job resources, displayed a similar pattern, with significantly lower intentions of leaving the workplace as well as the profession.

The clusters at the other end of the spectrum, or those exposed to the highest levels of job demands in combination with scarce job resources, displayed

different results for leaving the workplace and the profession. For example, regarding the intention of leaving the workplace, *the pressed* cluster, characterized mainly by high levels of employee conflict and lack of support from employees and management, displayed the highest risk. Individuals in *the detached* cluster also reported a higher intention of leaving the workplace. Managers in the least favorable cluster, *the opposed* cluster, showed the highest risk of wanting to leave the profession. Here, conflicts of logics between different managerial work tasks and low levels of support and recognition from management and clients are prominent. In addition, the members of *the exposed* cluster reported a higher risk of intention to leave their profession. Taken together, *the opposed* cluster and *the exposed* cluster are especially characterized by conflicts regarding clients, including threats and violence.

The patterns for actual turnover are slightly different. First, it seems as if the association between psychosocial working conditions and actual turnover is weaker, when compared with managers' intentions of leaving their job. Only one cluster, *the detached* cluster, displayed a risk above the mean for actual turnover, where the psychosocial working conditions are characterized mainly by limited contact with the service recipients. This situation also includes an over-representation of expert managers and managers in the technical services. Hence, the results suggest that turnover intentions and actual turnover are possibly not determined by the same factors. Poor working conditions may therefore result in psychologically detached managers in public organizations, which may have considerable and costly effects both on the organizations and on the managers, in terms of decreased commitment and performance and impaired health.

Besides the importance of psychosocial working conditions for managers' retention, the managers gender and age was shown to be consistently relevant in predicting the turnover outcomes. Younger managers displayed a highly elevated risk of wanting to leave the workplace and the profession, as well as actually leaving. The risk of female managers wanting to leave the profession and actually leaving was considerably lower than for their male colleagues.

Contribution

The method goes beyond the variable-centered approaches that have tended to dominate the JD-R research field, with only a few studies offering ideas on how patterns of psychosocial working conditions influence workers. Moreover, such studies have not been conducted in the context of managerial work in the public sector. Therefore, Study II adds novel insights to the research using the JD-R model by providing evidence to increase the limited knowledge about the naturally occurring constellations of job demands and job resources and their interaction, and thus their joint effect on public sector managers' retention over time. Furthermore, by applying the JD-R framework and using cluster analysis and sequential logistic regression in combination, the authors of Study II have met one challenge that has been identified as central in future JD-R research, which is to help organizations

82

identify potentially hazardous psychosocial working conditions. Hence, the design of this study can add important complementary information to more traditional studies, since it can identify high-risk and low-risk psychosocial work situations. Such situations are crucial for targeting groups of employees with specific needs and then facilitating interventions and relevant prevention strategies.

The results of Study II imply that one way of securing managers who are motivated to stay at the workplace, as well as in the profession, is by providing them with good psychosocial working conditions, with a balance between job demands and job resources. The results indicate that it might be even more essential that young managers are provided with advantageous psychosocial working conditions, in order to retain those who have already signed up and to attract new young talent, which has proven difficult so far. Focusing on the new generation of managers is highly important in securing the future availability of managers in the public sector.

Study III: Span of control and the significance for public sector managers' job demands: A multilevel study

Authors: Linda Corin (former Wallin), Anders Pousette, and Lotta Dellve. The idea of the paper was initiated by LC together with LD. LC conceived the paper topic and the study design with assistance from AP and LD. LC performed the data analyses with assistance from AP. LC drafted the manuscript. LC had the main responsibility for revising the manuscript, but all authors contributed in this process. All authors have read and approved the final version of the manuscript.

In order to facilitate healthy work for managers, an understanding of relevant organizational conditions that shape psychosocial working conditions is essential. The number of employees that the manager is responsible for – in other words, the manager's span of control – is one such important condition reflecting the organizational structure.

Aim

The main aim of Study III was to establish how the span of control, as one of several possible organizational origins of psychosocial working conditions, affects operational public sector managers' job demands. Additionally, this study further examines whether the span of control has diverse effects on managers' job demands in different types of municipal services. Thus, the following research questions were empirically investigated: (1) How does the span of control influence the levels of job demands that operational public sector managers experience at work? and (2) Are there diverse effects of the span of control in different types of municipal services?

Materials and method

In Study III, self-administrated surveys were collected from 434 managers working in 37 municipal operations, specifically management teams in a set of public organizations, in Sweden. The municipal operations are governed by a middle manager, and the units within these operations are governed by first-line managers. The managers in the respective municipal operations constituted the management teams studied. The management teams have regular team meetings characterized mainly by dialogue and common concerns primarily regarding operational and financial issues. In this study, multilevel analysis was performed, combining self-reported job demands and register data on the managers' span of control. A total of 32 items, combined into seven indexes and reflecting job demands common to managers in the public sector, were included: work overload, conflict of logics, excessive role demands, buffer problems, container function, group problems, and individual employee problems. Several organizational and structuring factors were also added to the model and tested as additional predictors: type of service, managerial position, gender and managerial experience. The 37

84

municipal operations, or management teams, were set as the organizational level, and the 434 managers constituting these management teams formed the individual level. The multilevel analysis was performed in sequential steps, with the main variables of interest added in the first steps. As a last step, interaction terms were added to the model, to test whether the span of control had differing impacts on job demands in different types of services. The analysis model is presented in Figure 6.

WHERE *Organizational factors*	**WHAT** *Psychosocial working conditions*	**WHO** *Demographic factors*
Span of control Type of service Managerial position	**Job demands** *Work overload* *Conflict of logics* *Excessive role demands* *Buffer problems* *Container function* *Group problems* *Individual employee problems*	Gender Managerial experience

CONSEQUENCES
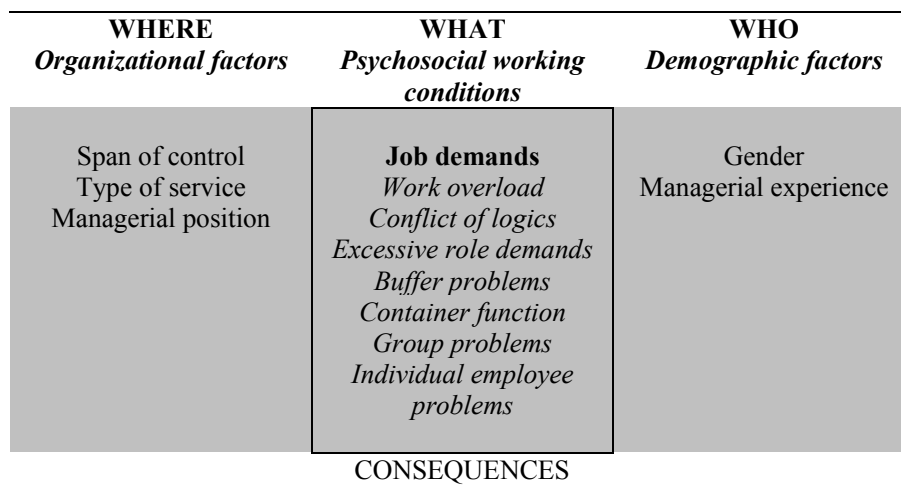
Figure 6. The analysis model of Study III.

Note. In Study III, the WHAT factors in the bold frame were in focus but in this case as outcomes or endpoints. The focal predictors for explaining these job demands were the WHERE factors, with a special focus on the span of control. The WHO factors were used as additional predictors.

Main findings

The main results of Study III demonstrate that the span of control, which is the number of subordinates per manager, is of utmost importance for operational public sector managers' experience of a wide array of job demands. In Study III, the span of control was shown to significantly influence five of the seven job demands studied: work overload, conflict of logics, excessive role demands, group problems, and container function. In these cases, a wider span of control means a higher volume of demands in a manager's job, irrespective of the manager's gender, position, and managerial experience.

Experiencing excessive role demands and acting as a container for subordinates' frustration in pressured situations were most heavily associated with the span of control. The multilevel approach further revealed that besides being associated with the managers' individual span of control, these job demands were

85

influenced by the average span of control in the management team. Thus, managers who were members of management teams with a higher than average span of control experienced even more excessive role demands and received subordinates' frustration to an even higher extent than managers in management teams with a lower than average span of control. Next to these two job demands, conflict of logics, or conflict between different types of tasks included in managerial work, was most strongly associated with the span of control. Quantitative work overload and group problems – in other words, problems associated with subordinate work groups' performance and function – were also associated with the span of control. Hence, in the majority of job demands investigated regarding managers' workload, their managerial role, and their relationships with subordinates, it is unfavorable to have a large number of subordinates. Furthermore, an additional significant effect of the average span of control in the management team was found for two types of job demands: excessive role demands and container function. This finding implies that just being a member of a management team where the average span of control is higher increases the level of job demands for the individual managers.

In addition, Study III also emphasized that the span of control is of equal importance for managers' levels of job demands in human services as well as technical services, suggesting that the span of control is of general significance in the municipal public sector in Sweden. Even so, there was a difference between human services and technical services in terms of the average span of control per manager, where human service managers on average had almost twice as many subordinates as their colleagues in technical services.

The results of Study III imply that organizational interventions with the goal of increasing sustainability in terms of psychosocial working conditions and their consequences should include efforts to reduce the number of employees that each manager is responsible for. A reasonable span of control may not only prevent unnecessary costs for the managers as well as the subordinates, but most importantly also improve the working conditions for the management team and for the organization as a whole.

Contribution

Study III demonstrates that the span of control is a organizational prerequisite that is a key upstream component of operational public sector managers' job demands and thus underlines the value of assigning a reasonable number of subordinates per manager. Thus, this study expands the JD-R model by establishing the span of control as one important upstream organizational condition causally prior to job demands. This finding is a significant contribution because it provides some insight into the reason for the experience of high levels of job demands. Since job demands, in line with the JD‑R model, play a central role in the health impairment process that might lead not only to various health problems, but also to potentially negative organizational outcomes such as increased turnover intention, reducing those job demands seems to be warranted. Thus, the results

point to an important organizational condition to target. Reducing the number of subordinates that the manager is responsible for can be considered as a valuable complement to adding more job resources in order to buffer the effect of high job demands.

The Study III results demonstrate that not only the individual manager's span of control is important, and that being a member of a management team where the average span of control is higher increases the level of some job demands for the manager. This significant new insight should be taken into account when building public sector organizations and conducting future organizational research.

Furthermore, Study III confirms that a wide span of control is common in municipal operations and moreover validates that managers in human services on average have a significantly wider span of control than managers in technical services. However, Study III clearly shows that the span of control is of equal importance for the job demands that public sector managers experience at work independently of the type of service performed, and it is therefore vital to question whether these differences in the span of control can be justified.

Study IV: Job demands and job resources in human service managerial work: An external assessment through work content analysis

Authors: Linda Corin and Lisa Björk. The idea of the paper was initiated by LC. LC conceived the paper topic and the study design with assistance from LB. LC and LB performed the data analyses. LC drafted the manuscript with assistance from LB. The authors have read and approved the final version of the manuscript.

Problems related to ensuring good working conditions and health for managers, as well as to attracting and retaining skilled managers, have become areas of concern for managerial sustainability in the public sector, where first-line managers of human service organizations have been found to be in a particularly disadvantageous situation. In order to address these issues and gain updated insights into the working conditions of public sector managers, it is important to perform detailed empirical studies of managerial work practices.

Aim

The main aim of Study IV was to assess the job demands and job resources, as well as the balance between them in first-level human service managerial work, in order to provide explanations of the current work strain experienced by this group of managers. Furthermore, the study wants to test applying a work content analysis method in the theoretical framework of the JD-R model.

Materials and method

With qualitative interviews, following the work content analysis method – that is, the ARIA method – an external assessment of the managerial work assignment and job demands and job resources was carried out. Study IV was based on ARIA interviews with 12 first-line human service managers within a municipality in western Sweden: six municipal school managers (three from compulsory school and three from preschool) and six elderly care managers (three from elderly care homes and three home care managers). The managers were all women of varying ages and managerial experience.

The face-to-face interviews, following the structured ARIA protocol, lasted for approximately 2 hours and were conducted in spring 2013 at the managers' offices. The interviews were transcribed by the researchers and analyzed in accordance with the ARIA method. In order to secure an external assessment, particular attention was paid to the examples and descriptions of consequences related to each work characteristic, and the predefined criteria and cutoff points guided the analysis. As part of the analysis, the ARIA dimensions were also categorized as job demands or job resources in the context of human service managerial work. The analysis model is presented in Figure 7.

WHERE *Organizational factors*	WHAT *Psychosocial working conditions*	WHO *Demographic factors*
Type of service Span of control Number of units Geographical distribution of units Managerial position	**Job demands** *Work tasks* *Time pressure* *Time binding* *Work hours* *Work goals* *Lack of goal and task clarity* *Unnecessary tasks* *Unreasonable tasks* *Social interactions* **Job resources** *Influence* *Cognitive requirements and possibilities* *Supervisory support* *Employee support* *Colleague support* *Premises and technical equipment* *Personnel resources* *Support functions*	Gender Managerial experience

CONSEQUENCES

Loss of performance quality, Work intensification, Overtime, Risk of illness

Figure 7. The analysis model of Study IV.

Note. Assessing the WHAT factors in the bold frame was the main focus of Study IV. The dimensions were categorized as job demands and job resources based on empirical investigation as part of the analysis. The WHERE and WHO factors were also documented. The CONSEQUENCES were mainly used in order to validate whether job resources constituted a hindrance to fulfilling the managerial work assignment.

Main findings

The results of Study IV reveal an imbalance for human service managers between high levels of job demands and the lack of job resources available to meet these demands. The managerial assignment included a broad scope of demanding

responsibilities and work tasks, and work overload and fragmented work days were found to be common. In addition, job expansion had taken place in the managers' work were increased demands from various stakeholders for reports, follow-ups, and monitoring on a broad scope of issues, in addition to a greater use of standardized tools for management control, accounted for a large part of the expansion. The time binding was also assessed as moderate to high, since deadlines, scheduled meetings, and fixed work procedures regulated the managerial assignment to a large extent. In addition, most workdays were complex and event-driven, with numerous "firefighting" activities. The time pressure in the managers' work was assessed as high, with a constant demand for speed and intensity. Besides working fast, the managers, especially those in the education services, frequently attempted to handle the situation by doing extensive overtime, which they had difficulties being compensating for.

Furthermore, the vast number of objectives and tasks, and the fact that they often collide in practice, was a problem identified in the managers' work. The managers struggled and often failed to take all the different objectives and stakeholder demands and expectations into account, as well as to prioritize among work tasks. Several work activities was also identified as peripheral to the core assignment. It was furthermore unclear when the managers had achieved adequate results, especially regarding the qualitative aspects of human service work. Thus goal conflicts as well as conflicts and ambiguity concerning the managerial role were highly present in the human service managers' work, leading to a work assignment without visible borders.

The managerial assignment was also assessed as emotionally demanding, with high demands and negative feedback from service users and their relatives, as well as negative media attention. Problems related to employees, groups, or individuals, characterized by, for instance, conflicts, distrust, disciplinary actions, and complicated rehabilitation cases, further added to the emotional demands, a situation particularly common among managers in the care setting.

The job resources supposed to balance these job demands were often lacking and sometimes even posed additional demands on the human service managers. The managers exert low to some decision authority in their work because of legislation, organizational procedures, numerous stakeholders, standardized tools for management control, and "firefighting" activities. The managers' work assignments were furthermore assessed as unbalanced regarding mental demands, with extensive use of previous knowledge and experience in combination with limited development opportunities and almost no routine work enabling recovery.

The social support was to a large extent assessed as inadequate. Assistance in delimiting the work assignments, prioritizing among work goals and tasks, setting criteria for goal achievement, and solving emerging problems were mostly absent. This lack of supervisory support took its toll at the individual level in terms of a boundary-less assignment, often including substantial overtime work and risk of illness. A disconnection between the operational needs and the management

systems set up to control the operational work was also identified. Although the human service managers received support from their colleagues by, for instance, sharing their knowledge and experience, time was often so scarce that it precluded potential support from colleagues in the same situation. In the school setting, the support from employees was generally high, where the teachers facilitated the manager's work. In the care setting, on the other hand, the employees hindered the manager's work, since they needed to be directed and controlled to a large extent.

The organizational support in terms of professional support functions and assistants, personnel resources, premises, and technical equipment were largely suboptimal. Most of the managers had access to a part-time administrator or assistant, while others had part-time or full-time coordinators or team leaders who handled daily issues such as staffing, scheduling, and morning meetings. However, the quality of these services varied heavily, which had considerable consequences for the offloading effect in the manager's work. Specialists in HR, IT, and finance assisted the managers in their daily work, but had become more demanding and less supportive and operative. Personnel resources constituted a hindrance to goal achievement in the managerial assignment, although in different ways. In elderly care services, short-term and long-term sick leave and staff shortages impeded service continuity, one of the main objectives in the social care. In school services, the struggle was to recruit staff and fill vacancies. Premises and equipment were also assessed as a hindrance to goal achievement in the care setting and as a disturbance or source of irritation in the school setting as a result of such factors as worn-out premises, lack of appropriate meeting rooms, flawed technical equipment, and poor technical support.

The managers were often left to deal with this imbalance in job demands and provided job resources on their own, and there is an obvious risk that the current situation will have undesired organizational and individual consequences.

Contribution

Study IV makes important contributions to the research field of psychosocial working conditions, as well as to the practice of managerial work in the public sector. ARIA's wide-ranging approach covering a multitude of job demands and job resources relevant for human service managers, combined with the specific ARIA interview technique, has the advantage of generating rich, concrete, and valid information on the elements making up the JD-R model. In addition to a comprehensive array of more widely studied job demands and job resources, the ARIA method includes an analysis of work content. Thus, a more objective and concrete aspect of psychosocial working conditions has been added to the JD-R model, which has seldom been included in studies to date.

Furthermore, the qualitative external assessments of managers' job demands and job resources provide a methodological contribution to the JD-R field by offering a useful way to operationalize JD-R theory in qualitative research. In addition, by using contextualized and more objective measures, the ARIA method

complements and overcomes some of the limitations with self-reporting, thus developing the JD-R research field further. It has previously been argued that even though the JD-R model is a widely applied framework, there is a need for methodological contributions, not least when it comes to more objective measurements of working conditions (Demerouti, 2014).

The information from the ARIA interviews is easily communicated to higher-level management and decision-makers, since the focus is turned from the individual to organizational solutions and job redesign strategies, solving problems of relevance for a larger group of employees. Thus the results support a demand for redesigning work, rather than the individual's behavior and mindset. The detailed knowledge gained by this approach is of great importance for human service decision-makers who wish to improve working conditions for first-line managers by tackling the imbalance between job demands and job resources, and thereby reduce significant individual and organizational costs in the specific context.

DISCUSSION

The empirical studies presented in this thesis have contributed to increased knowledge of managerial working conditions in the public sector, or more specifically in Swedish municipalities. In these studies, a contextual approach to managerial work was applied, and the motives for this approach were threefold: for theoretical, methodological, and applicability reasons. First, the theoretical part of the contextual approach means that the focus was deliberately turned to work tasks and conditions, rather than to the individual's behavior and mindsets (Frese & Zaph, 1988; Rau, 2004). This focus is one of the main reasons for applying the JD-R theory and model on managerial working conditions. Second, the methodological part of the contextual approach includes the use of a strategic sample and quantitative and qualitative methods that take into account the context in which managers work as well as variations in that context. Finally, the applicability motive of the contextual approach means that the results are directed toward public sector decision-makers and HR departments. The knowledge provided and the ways in which it is presented are aimed at helping these individuals to further understand the conditions that managers work under, as well as the consequences of these conditions. Such knowledge is a valuable basis for plans to improve unsatisfactory situations and promote the creation of sustainable managerial work.

The following discussion revolves around these three motives for a contextual approach. Since managerial psychosocial working conditions are the main focus in this thesis, they are presented first, followed by the significance of organizational and structuring conditions, and by the consequences of these conditions for managerial sustainability. This section also reflects on observations that result from combining quantitative and qualitative investigations, as well as conducting years of fieldwork. All these results have not been discussed in the included studies. Thereafter, the extension of the JD-R model is discussed, followed by an examination of the applicability contribution and implications of this thesis. The Discussion section ends with a consideration of some limitations and some methodological issues.

Managerial Work in the Public Sector

The psychosocial working conditions of managers

The combination of the flexible JD-R framework and the quantitative and qualitative contextual methods used in this thesis has made it possible to study the close context of managerial work, including the psychosocial working conditions, comprising job demands and job resources, that are of relevance for public sector managers.

An array of diverse psychosocial working conditions

The results illustrate that the managers are found to work in diverse situations that are characterized by varying psychosocial working conditions (Study I, II, and IV). In Study I, eight distinct clusters of psychosocial working conditions with different combinations of job demands and job resources were identified. In the qualitative study (Study IV) that focused on human service managers, high levels of several job demands were identified that were not matched by sufficient job resources.

Identifying high-risk and low-risk psychosocial work situations

An unbalanced psychosocial work situation, characterized by a lack of balance between the job demands posed and the job resources provided, was found to be a reality for a many of the managers, especially within human services (Study I, II, and IV). Such problematic psychosocial working conditions, characterized mainly by high job demands in combination with limited job resources such as control and support, have previously been found to be common among managers in public sector organizations and especially prevalent among female managers (Björklund et al., 2013; Landstad & Vinberg, 2013; Pousette, 2001; Skagert et al., 2008). Another important observation from the qualitative study (Study IV) was that job expansion had taken place in the assignment of human service managers in later years, generally including greater responsibility and a broader scope of work tasks than in earlier years. The most evident change in the managerial assignment is the increased demands from various stakeholders for reports, follow-ups, and monitoring on a broad scope of issues and a greater use of standardized tools for management control. As a result, the managers spend less time on leadership and strategic issues such as service development, and more time on administrative tasks and documentation than before. A similar trend has been seen in several public sector domains in Sweden, as well as in other countries (e.g., Hagerman et al, 2015; Kira & Forslin, 2008; Levin & Fullan, 2008; Rapp, 2010; Wolmesjö, 2008). These changes can provide important insights into and explanations for the high-strain situation that human service managers are often found in (Study I).

However, a broad variety of identified psychosocial work situations, including specific and variable descriptions of both advantageous and disadvantageous work situations, helps to avoid generalization to all public sector managers. The Study I results confirm and also extend previous findings on problematic psychosocial working conditions for many public sector managers, since the results also reveal that a balanced work situation is in fact possible and does exist for some managers. The present thesis can thus add important information to more traditional studies, as the results of Study I and Study II are applicable in identifying high-risk and low-risk psychosocial work situations. These results provide guidance for actions to be taken to prevent unsustainable psychosocial working conditions (Demerouti & Bakker, 2011). By using the MOA

model (e.g., Härenstam et al., 1999; Härenstam et al., 2004), summarized in Figure 3, as a guiding framework, the studies further aimed at finding where and among whom these problems are more prevalent (Study I and II). In addition, the identification of both high-risk and low-risk psychosocial work situations is a way not only to find target groups for intervention, but also to be inspired by more balanced situations promoting sustainable psychosocial working conditions for managers. By focusing on both negative and positive situations and outcomes, this thesis aligns with positive psychology and examines both the good and the bad sides of employment (Seligman & Csikszentmihalyi, 2000).

The organizational and structuring factors of managerial work

Through a strategic sample of organizations and managers and by systematic comparison, the importance of organizational as well as structuring factors was visualized. Organizational variances such as working in diverse types of municipal services, with different spans of control, and in diverse managerial positions were addressed. Gender, age, and managerial experience were also taken into account, in order to discover eventual structuring factors that affect the possibility of women and men, young and old, experienced and inexperienced, ending up in different types of work situations. This knowledge contains valuable insights that can be utilized to promote sustainable managerial work.

In general, the different psychosocial work situations identified were not randomly distributed, and differentiations between work situations were found for several organizational and structuring factors. The contextual approach applied has contributed to identify organizational and structuring conditions that help to explain why psychosocial working conditions in terms of job demands and job resources vary, as well as have different consequences (Study I, II, III, and IV). The type of service the manager works in and the manager's span of control, managerial position, gender, age, and managerial experience all seem to provide some explanation for variations in psychosocial working conditions and their consequences. In the following section, the most relevant findings considering these factors are highlighted.

Organizational factors

Type of service

Diverse types of services, specifically human service organizations responsible for care of the disabled and elderly, pre-school/compulsory school, upper secondary school, and technical services, were strategically selected and included in the studies by drawing on previous findings on differences in contextual conditions for managerial work in municipalities (Kankkunen, 2009; Westerberg & Armelius, 2000). Comparison between these types of service reveals that the working conditions for managers are not randomly distributed and seem to be

95

gender-based, where managers in human service organizations, which are mainly female-dominated organizations, were generally found to work under worse psychosocial working conditions (Study I). These results are in line with a recent large inspection of female-dominated and male-dominated municipal services carried out by the Swedish Work Environment Authority (2014). Since the more disadvantageous psychosocial working conditions were associated with health problems, low motivation, poor performance, and turnover intention (Study I and II), managers working in human services can be considered to be a particularly exposed group. Targeting their working conditions should be made a particular priority, since the imbalance of job demands and job resources in the human service sector is only one of many expressions of gender inequality in the labor market.

The qualitative study (Study IV) further revealed differences within human services in more detail. For example, organizational support for human service managers in terms of personnel resources was a problem in general, although in different ways. Care services were often short staffed owing to sick leaves, while school services struggled with recruiting staff and filling vacancies. Furthermore, managers' social relationships with their employees diverged. These results are in line with the results from Study I, where elderly care managers were over-represented in one of the most disadvantageous work situations, characterized especially by lack of employee support combined with a high number of employee-related problems. School managers were also over-represented in a relatively disadvantageous situation, but had good support and few problems related to their employees (Study I). These results add weight to the notion that not all social interactions are supportive and some can have negative implications (e.g., Karasek & Theorell, 1990), as well as different meanings in different contexts (Berntson & Härenstam, 2010). Managers working in care settings further displayed an increased risk of actual turnover (Study II). These types of comparisons lead to deeper knowledge that avoids generalization to all public sector managers and thus identifies and targets groups of employees with specific needs.

A difference between human services and technical services in terms of the average span of control per manager was found in Study III, where human service managers on average had almost twice as many subordinates as their managerial colleagues in technical services. These results validate previous findings that on average, managers in human services have a wider span of control than managers in technical services have (Forsberg Kankkunen et al., 2010; Swedish Work Environment Authority, 2014). However, the results also revealed that the span of control is of equal significance for managers' levels of job demands in human services as well as technical services (Study III). Thus, the results suggest that the span of control is of general importance for managers in the municipal public sector in Sweden. Consequently, the large differences between types of services in the number of subordinates per manager can be questioned and are an essential issue to address in the public sector, an issue that has also been stressed recently by the Swedish Work Environment Authority (2014).

Span of control

The span of control was identified as a key upstream component of a wide array of job demands that public sector managers have to meet (Study III). It significantly influences managers' work overload, conflicting logics, excessive role demands, group problems, and container function. Hence, in the majority of job demands investigated regarding workload, the managerial role, and relationships with subordinates, it is unfavorable to have a large number of subordinates. A wider span of control means a higher degree of job demands in the manager's work, irrespective of the managerial position, the manager's gender and managerial experience. Furthermore, an additional effect of the average span of control in the management team was found for two types of job demands: excessive role demands and container function. This finding implies that being a member of a management team where the average span of control is higher increases the levels of job demands for a manager. The span of control can therefore be regarded as an important organizational demand influencing managers' more proximal job demands. These results increase the currently limited knowledge of the reasons for the experience of disadvantageous psychosocial working conditions (Dollard & Bakker, 2010; Van De Voorde, Van Veldhoven, & Paauwe, 2014), and this knowledge is of great value in preventing unhealthy jobs (Bejerot & Härenstam, 2010; Härenstam, 2008).

In line with the results from Study III, the findings from Study I reveal a general tendency for managers in the more disadvantageous psychosocial work situations to have a wider span of control. However, the managers' span of control was also found to be relatively wide in one of the most advantageous work situations, including those with high levels of job resources. Sufficient job resources from several directions, including high levels of support from employees, upper management, and clients, may thus be an important resource in tackling the demands that a wide span of control implies. In fact, good social relationships have previously been identified as a highly important resource in order for managers to handle job demands and avoid stress, particularly for those managers with many subordinates (Dellve et al., 2013). The qualitative study further indicated that good administrative support and responsibility over fewer units and employees who are less geographically scattered assist in handling the often-wide span of control (Study IV).

Managerial position

It has been highlighted that managers are not a uniform group of employees and that differences between managerial levels exist regarding work tasks and working conditions, which also result in differences in health (Lundqvist, 2013; Pousette & Johansson Hanse, 2002; Reineholm, 2013). In line with these previous findings, the Study I results indicate that the different psychosocial work situations

97

identified in that study are not randomly distributed with regard to managerial position.

First-line managers, particularly within human services, were generally worse off, with psychosocial working conditions associated with health problems, low motivation, and poor performance. They were often found in situations characterized by high job demands and limited job resources, especially with a lack of support from their upper management (Study I). Previous findings suggest that such operational managers at lower levels in the organization may act as "shock absorbers" or buffers in strategies to reduce the load on their own staff from demands from above (Skagert et al., 2008). Buffer problems between upper management and subordinates were found to be heavily associated with the first-line managerial position (Study III), which could be a result of the somewhat diverse functions that managers at different levels in the organizational hierarchy hold (e.g., Arman et al., 2009; Mintzberg, 1993). However, first-line managers were also slightly over-represented in one of the most advantageous work situations that was mainly characterized by appreciation from their service recipients (Study I).

For middle managers, the picture was more dualistic: they were over-represented in the most advantageous psychosocial work situation as well as in a psychosocial work situation regarded as a risk situation (Study I). This picture indicates that a position between the highest and the lowest levels of managers might give greater degrees of freedom, which could be favorable, but also that managers in such a situation are at risk of being unrecognized (Andersson-Felé, 2008; Skagert et al., 2008). Although making up a small part of the sample, managers in the highest managerial position investigated, heads of department, were found to be over-represented in two of the most disadvantageous work situations (Study I).

Structuring factors

Gender

A comparison between male and female managers revealed that the working conditions for managers are not randomly distributed and seem to be gender-based. Male managers were generally found to work under more reasonably balanced psychosocial working conditions, while their female counterparts were generally found to work under more unbalanced psychosocial working conditions characterized by high job demands and limited job resources (Study I and IV). These unbalanced psychosocial working conditions were associated with health problems, low motivation, poor performance, and turnover intention (Study I, II, and IV).

Furthermore, the managers' gender played an important role in turnover, where the risk of female managers wanting to leave the profession and actually leaving was approximately 60% lower than for their male colleagues (Study II).

The results are supported by previous research showing that women employed in the public sector are less likely than their male counterparts to intend to quit, as well as to actually leave the workplace (Curry, McCarragher, & Dellmann-Jenkins, 2005; Lee & Whitford, 2008; Moyhinian & Landuyt, 2008) which has been shown to often be the case, despite unfavorable working conditions (Muhonen, 2010). Various explanations of why female managers stay in their position despite their unfavorable working conditions have been proposed. Some researchers argue that it might simply be an expression of loyalty (Hirschman, 1970; Rasmussen, 2004). Furthermore, while some researchers look more to the individual for an explanation by suggesting that female managers are more likely than male managers to express high levels of public service motivation, mainly in terms of compassion for others, or emotional attachment (DeHart-Davis, Marlowe, & Pandey, 2006), other researchers propose more structural explanations such as limited job opportunities elsewhere (Strolin, 2008).

Female managers were also found to experience two additional job demands – buffer problems and container function – to a greater degree than male managers (Study III). These job demands include difficulties that can arise when the manager has to balance demands and expectations upward and downward in the organization, including receiving or acting as a container for subordinates' frustration in pressured situations. This difference may simply involve expectations of how male and female managers should act (Heilman, 2001).

Although men and women have been compared, in many regards the results connected to gender follow the pattern of the different gender composition of the staff of specific types of services. Thus, it is worth noting that the differences in psychosocial working conditions seem more to be bound by the type of service performed – differences that would have come across as simple gender dissimilarities if comparisons between differently gendered contexts, or services, had not been included (Björk, 2013; Härenstam, 2009; Kankkunen, 2009, 2014). Although it is beyond the scope of this thesis to sort out the complex relationship between an individual's gender and the gendered context of a specific type of service, it is hoped that the results regarding gender differences from the four studies addressed in this thesis can be used to challenge the conception of gender as an explanation in itself and to consider the impact of the context to a larger extent (Yoder & Kahn, 2003).

Age and managerial experience

Differentiations regarding the managers' age and managerial experience in the different psychosocial work situations were found. Older managers were generally found to have more advantageous psychosocial work situations than their younger counterparts (Study I). This finding is in line with results from the qualitative study (Study IV) showing that managerial experience, which is highly related to age, was an important resource in handling a demanding work situation and its negative consequences. The more inexperienced and often younger

99

managers were more likely to end up in a more disadvantageous work situation (Study I and IV), in line with previous findings by Dellve and colleagues (2013). The more experienced managers could thus be a vital resource for public organizations regarding how to better utilize the scope of action in a managerial assignment. It could be argued that at least some of what the more experienced managers have learned could be taught to their more inexperienced colleagues, in order to promote sustainable work.

Besides the importance of psychosocial working conditions for managers' retention, age was shown to be consistently relevant in predicting the turnover outcomes. Younger managers displayed a highly elevated risk of wanting to leave the workplace and the profession, as well as actually leaving (Study II). The results are in line with age effects regarding general turnover intention that have previously been found among other groups of employees in the Swedish public sector (Josephson et al., 2008; Liljegren & Ekberg, 2008). The results indicate that it might be even more important that young managers are provided with balanced working conditions, in order to retain those who have already signed up and to attract new young talent, a task that has proven difficult thus far. Focusing on this new generation of managers is highly important in securing the future availability of managers in the public sector.

The consequences of managerial working conditions

In accordance with the MOA model, the consequences attached to the different situations regarding working conditions were mainly identified in order to validate the importance of these situations for managerial sustainability, and are therefore described only briefly here. The results demonstrate that the differences in psychosocial working conditions were related to the consequences for several aspects of health, performance, motivation, and turnover intention among the managers (Study I, II, and IV).

An imbalance between job demands and job resources is thus associated with undesired organizational and individual consequences, including ill health, unsatisfying service quality and goal achievement, poor motivation, and intention to leave the workplace, as well as intention to leave the profession. On the other hand, the results demonstrate that a better balance between job demands and job resources is associated with desired organizational and individual consequences, including health, satisfying service quality and goal achievement, motivation, and intention to stay at the workplace as well as in the profession. Thus, job demands and job resources from various sources can be combined in many ways, with a wide range of effects on managerial sustainability.

Although this thesis has focused on the joint effects of naturally occurring constellations of job demands and job resources on managerial sustainability, rather than looking at the different processes initiated by job demands and job resources respectively, the findings are clearly in line with the JD-R model and support both the health impairment process and the motivational process, as predicted by the

100

model (Schaufeli & Taris, 2014). Thus, consistent with the general JD-R model, the influence of job demands and job resources on these sustainability indicators, including health, performance, motivation, and turnover, is also more specifically in line with previous findings in other groups of employees (see, for example, Alarcon, 2011; Schaufeli & Bakker, 2004; Stansfeld & Candy, 2006). Confirming the predictions of the JD-R model, it can be concluded that one important way of securing sustainable managers who can and will take on their managerial assignment is by providing them with good psychosocial working conditions, with a reasonable balance between job demands and job resources.

A Contextual Approach Extending the JD-R Model

Besides new knowledge on managerial working conditions in the public sector, the results reported on in this thesis contribute to the literature on psychosocial working conditions in general and the JD-R model in particular. By applying three contextual methods within the JD-R framework on public sector managers, the model is extended in several senses and its usefulness is increased, which is elaborated on below.

Extending the JD-R model by applying contextual methods

The thesis has extended the JD-R model by applying contextual methods, including cluster analysis, multilevel analysis, and qualitative external assessments, that to date have been seldom used within the JD-R research tradition. The results reveal that such contextual methods are both useful and valuable in several ways for investigating psychosocial working conditions with the JD-R model (Study I, II, III, and IV).

First, the different processes initiated by job demands and job resources have often been in focus within the JD-R field, but they also have joint effects (Bakker et al., 2014). By using the more holistic approach of cluster analysis as an alternative to or complement to the traditional variable approach to managers' work situations, different situations within the larger context can be identified. Instead of regarding situations as fragmented and investigating one variable at a time, the combination of many variables can be considered simultaneously, creating images of different situations (Bejerot & Härenstam, 2010; Härenstam, 2009; Magnusson & Törestad, 1993). Thus, cluster analysis goes beyond the variable-centered approaches that have tended to dominate the JD-R research field, with only a few studies offering ideas on how natural patterns of psychosocial working conditions influence workers.

The results have contributed to the understanding that the associations between psychosocial working conditions and sustainability indicators are not necessarily additive or linear. For instance, certain well-known risk factors may not have the same association with outcomes for all women and all men, regardless of the context (Härenstam, 2009). These results provide novel research insights by

101

providing evidence that increases the limited knowledge of the naturally occurring constellations of job demands and job resources and their interactions, and thus their joint effects (Hu, Schaufeli, & Taris, 2011; Schaufeli & Taris, 2014; Van den Broeck et al., 2012). Furthermore, by focusing on these constellations of job demands and job resources, different high-risk and low-risk psychosocial work situations can be identified. This identification addresses another important challenge that has been identified as central in future JD-R research, which is helping organizations to identify potentially hazardous psychosocial working conditions (Demerouti & Bakker, 2011).

Second, multilevel analysis was used in order to find organizational antecedents of the job demands in managerial work. By doing so, the JD-R model has been extended by identifying one important organizational condition that makes up a key upstream component of the psychosocial working conditions that public sector managers work in (Study III). In the JD-R model, job demands and job resources are typically regarded as the starting point, and identifying their antecedents thus adds to the limited knowledge of the reasons for the experience of disadvantageous psychosocial working conditions (Dollard & Bakker, 2010; Van De Voorde et al., 2014). Studies that take a contextual approach by exploring the impact of such upstream organizational conditions on psychosocial working conditions through multilevel analysis are rare, even though this methodology has been recommended for such purposes (Bejerot & Härenstam, 2010; Härenstam, 2008; Kallenberg, 1989; Klein & Kozlowski, 2000). Multilevel constructs have been argued to result in a better understanding of psychological phenomena unfolding within an organization, thus making a contribution from a theoretical point of view (Demerouti & Bakker, 2011). Extending the individual-level approach of the JD-R model, as was done in this thesis, has also been considered as an important future challenge for JD-R research (Demerouti & Bakker, 2011; Schaufeli & Taris, 2014).

Third, even though the JD-R model is a widely applied framework, there is a need for methodological contributions, not least when it comes to more objective measurements of working conditions (Demerouti, 2014). Through qualitative external assessments of managers' job demands and job resources, the results of Study IV make a methodological contribution to the JD-R field by offering a useful way to operationalize JD-R theory in qualitative research by using contextualized and more objective measures (Study IV). The ARIA method has an external perspective, which means that instead of building on the individual's own perception and experience, the working conditions are more externally assessed by experts. This qualitative approach not only provides the opportunity to overcome some of the limitations with traditional self-reports, but also complements the quantitative methods by simultaneously elaborating on a multitude of job demands and job resources relevant for public sector managers. The ARIA method provides concrete, rich, and valid descriptions of the elements making up the JD-R model. In addition to a comprehensive array of more widely studied job demands and job resources examined through the ARIA method, it also includes an analysis of work

content. The managers' work content was identified as an important job demand and thus a potential stressor (Study IV), which has been highlighted by others (Sauter et al., 1990; Swedish Work Environment Authority, 2014). Thus, by using the ARIA method, a more objective and concrete aspect of job demands has been added to the JD-R model that has seldom been included in studies on psychosocial working conditions.

Taken together, the contextual methods applied in this thesis answers several of the future challenges that have been identified by JD-R scholars. Answering these challenges includes adding knowledge to the currently limited information on the joint effects of job demands and job resources, and identifying potentially hazardous psychosocial work situations and the antecedents of these psychosocial working conditions. It also includes finding ways to more elaborately and externally assess job demands and job resources (e.g., Demerouti, 2014; Dollard & Bakker, 2010; Hu et al., 2011; Schaufeli & Taris, 2014; Van den Broeck et al., 2012; Van De Voorde et al., 2014). Furthermore, the mixed-methods approach, or the combination of quantitative studies with in-depth qualitative studies (Bryman, 2002), used in this thesis can be considered crucial in exploring and understanding underlying processes that can explain the quantitative results and thus assist in finding appropriate preventive routes (Griffiths, 1999; Härenstam, 2008; Nielsen & Abildgaard, 2013), which has been one of the aims of this thesis.

Extending the use of the JD-R model to public sector managers

Since its appearance at the beginning of the 21st century, the JD-R model has gained high popularity among researchers as well as practitioners, and is currently recognized as one of the leading job stress models, along with Karasek's (1979) job demand-control (JDC) model and Siegrist's (1996) effort-reward imbalance (ERI) model. These models all rest on the same assumption, which is that employee health and well-being result from a balance between negative and positive job characteristics in terms of job demands and job resources (Schaufeli & Taris, 2014). While the JDC and ERI models have difficulty explaining variations in the work environment of public sector employees including managers (e.g., Kristensen, 1995; Marshall et al., 1997; Söderfeldt et al., 1996), the results of the present thesis suggest that the JD-R model is suitable for finding such variability in the working conditions of this specific group of employees. Thus, using the JD-R model's more inclusive design allows for the choice of indicators of job demands and job resources relevant for public sector managers. Based on the results of this thesis, researchers can conclude that it is a promising and possible alternative to the kind of one-size-fits-all approaches of more traditional stress models (Karasek, 1979; Karasek & Theorell, 1990; Siegrist, 1996). By integrating and complementing previous approaches and ideas concerning the relationships between work characteristics, and by offering the possibility of tailoring the model to the specific context by choosing relevant indicators of job demands and job

resources (Bakker et al., 2014; Nielsen et al., 2014; Schaufeli & Taris, 2014), the JD-R model can be argued to be advantageous in this context.

In addition, the study group chosen for the purpose of this thesis further adds to the extension of the JD-R model, since there is still a need for more studies that focus on specific contexts and professions within the JD-R field (e.g. Xanthopoulou et al., 2007). Public sector managerial work can be considered one such important context and object of study rarely focused on in JD-R research to date. By using data sources and dimensions adapted to public sector managerial work within the JD-R framework, this thesis has further increased the flexibility of the model, as well as underscored the validity of the assumptions underpinning it (Demerouti & Bakker, 2011). The results provided also reveal that the JD-R framework, in combination with the contextual methods applied, is very useful when investigating public sector managers' psychosocial working conditions. Although the contextual approach has been applied in a concrete occupational setting, the results suggest that this approach will be advantageous to use with other groups of employees as well.

Applicability Contributions and Implications

The overall aim of this thesis included the aspiration to provide knowledge that can be utilized and applied by public sector decision-makers and HR departments to promote sustainable managerial working conditions. This is one of the main reasons for applying a contextual approach to managerial working conditions. This aim can be considered especially important now that the Swedish government has raised the level of ambition regarding improvements to the work environment in Swedish workplaces, with a special emphasis put on the psychosocial working conditions and a sustainable work life (Ministry of Environment of the Kingdom of Sweden, 2016). This ambition is further reflected in the new provisions in the *Organizational and Social Work Environment* report from the Swedish Work Environment Authority (2015) that come into effect in March 2016. The provisions state that resources should be adapted to the demands at work. Therefore, the next section of this thesis is devoted to the implications of the thesis for the public sector practice, as well as some suggestions for some possible routes to creating sustainable managerial work within the public sector.

Finding target groups for intervention

The contextual approach applied has added important complementary information to more traditional studies because the results are applicable in identifying high-risk and low-risk psychosocial work situations. The results from this thesis can provide guidance for actions to be taken in preventing unsustainable psychosocial working conditions, plus they meet one key challenge that has been identified as central in future research on psychosocial working conditions (Demerouti & Bakker, 2011). The contextual approach can also assist both
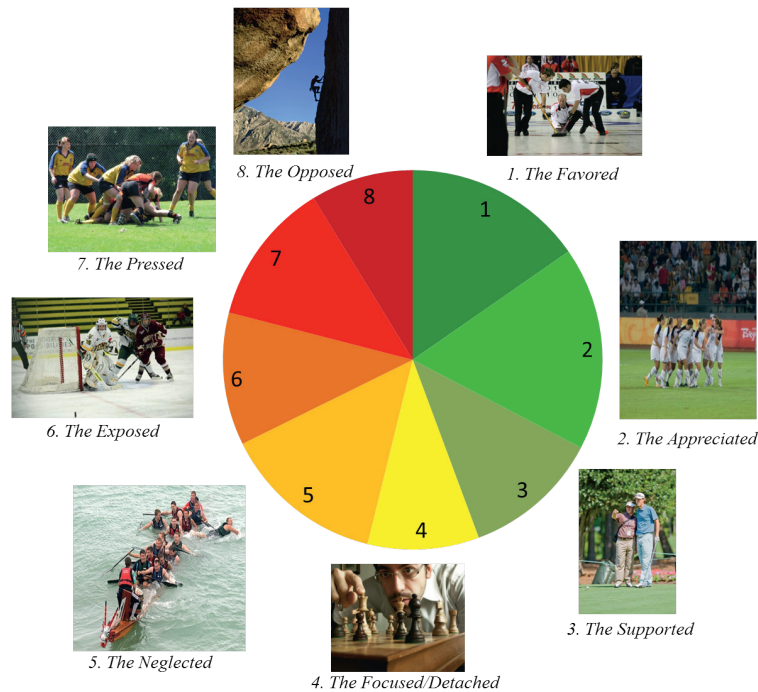
104

researchers and practitioners in identifying where and among whom these problems are most prevalent. As a result, the importance of organizational as well as structuring factors can be visualized, which is crucial for targeting groups of employees with specific needs and thus facilitating further interventions and relevant prevention strategies.

Moreover, by identifying both high-risk and low risk situations, the results from this thesis offer not only a way to find target groups for intervention, but also a way to be inspired by more balanced situations promoting sustainable psychosocial working conditions for public sector managers. Such an approach has been argued to be desirable when applying the JD-R model in an organization, since it appeals to different occupational groups involved in the management of the organization's human resources, thus increasing the recognition and acceptability of the results among different stakeholders (Schaufeli & Taris, 2014). In addition, by identifying naturally occurring psychosocial work situations, the results of Study I also highlight that sustainable as well as unsustainable work situations can be constituted in different ways, including varying constellations of job demands and job resources. Thus, it is recognized that sustainable as well as unsustainable situations can come in different packages, which would not have been visualized without cluster analysis. This insight adds valuable knowledge for practitioners who aspire to promote sustainable managerial work and allows for more tailored prevention strategies.

Accessible and easily communicated knowledge

Furthermore, the contextual approach and the specific methods used offer a pedagogic way to disseminate the knowledge to practitioners by, for instance, helping them to obtain a quick grasp of the situation and to identify which concepts should be targeted for improvement (Schaufeli & Taris, 2014) while also contributing images of contexts rather than abstract phenomena (Härenstam, 2009). During the writing of this thesis, there have been opportunities to communicate the results of the studies included in the thesis to different practitioners, such as the study group, upper management, HR professionals, and others. In meeting with these different stakeholders, it has been fruitful to highlight work situations rather than focus on individual aspects of working conditions. It has also seemed easier for the practitioners to absorb and comprehend descriptions of such complex situations characterized by the combination of various job demands and job resources. Understanding these situations has been further facilitated by assigning names to the different psychosocial work situations that reflect their best defining characteristic and providing the stakeholders with sports metaphors, as illustrated in Figure 8. The cluster images create an understanding of the situation that managers can find themselves in and serve as a starting point for discussing how they would like to have it in the future.

8. The Opposed

7. The Pressed

6. The Exposed

5. The Neglected

4. The Focused/Detached

1. The Favored

2. The Appreciated

3. The Supported

Figure 8. Illustration of the psychosocial work situations as presented to practitioners.

Note. The situations have been named in line with their best defining characteristics, illustrated by sports metaphors and sorted in accordance to their association with health, motivation and performance outcomes.

The multitude of job demands and job resources relevant for public sector managers that can be focused on using the ARIA method gives rich, concrete, and valid information that can open up for reflection and verbalizing. When communicating the ARIA results to practitioners, it became especially evident that a contextual approach to managerial working conditions can help relieve the individual managers of responsibility for problems that have to do with the organization of the work, rather than with their individual traits, skills, and behavior. The external assessments that ARIA provides can also open new perspectives for the managers regarding their work assignment, compared with self-assessments of their working conditions (Waldenström, 2007). Most managers stated that using the more objective and descriptive information that ARIA provides was a new and valuable way to reflect on their work. The presentation of the results led to constructive discussions on such topics as what the managers' workload and job content entail and how to prioritize among work tasks included in their work assignment.

106

The comprehensiveness and flexibility of the JD-R model further contribute to communicating relevant information tailored to the specific work setting (Schaufeli & Taris, 2014). Thus, the results can be considered context specific, making the information more easily communicated to the study group, as well as to higher-level management and other decision-makers. Thereby, the chances are increased that the results from studies using the JD-R framework will not only lead to reflection, but also be used for interventions at the organizational level, as well as job redesign in the organizations in question. In fact, the applicability of the results from the studies reported on in this thesis can already be seen in public organizations in western Sweden, where a wide variety of actions have been taken to improve managerial working conditions (see Härenstam & Östebo, 2014b).

Suggestions for improvements to managers' working conditions

Within the JD-R theory, two types of interventions have been highlighted: individual-level interventions and organization-level interventions (Bakker et al., 2014). Although individual-level interventions can be valuable in many senses and complement organization-level interventions (Kompier & Kristensen, 2000), more organizationally directed interventions have been argued to have more long-term effects (Hasson, 2005). Organizations and jobs are created entities and therefore are possible to change, and the workplace is an arena in which preventive actions can be implemented. Therefore, this thesis has mainly focused on providing ideas for organization-level interventions and on solving problems of relevance for a larger group of employees by, for example, job redesign. Hence, in line with the JD-R theory and the purpose of this thesis, two possible and combinable routes, focusing on work characteristics rather than individual factors, can be suggested (Bakker et al., 2014; Maslach et al., 2001), namely, increasing the job resources and optimizing the job demands (Bakker et al., 2014). A broad scope for intervention ideas is offered, not least by turning for inspiration to advantageous work situations that may reduce significant individual as well as organizational costs. Some suggestions for possible action are presented in the following section.

Increasing the job resources

An unbalanced work situation, characterized by a lack of correspondence between the job demands posed and the job resources provided, is a reality for a large part of the studied managers, especially within human services (Study I, II, and IV). In line with the results from this thesis, the often-high job demands should be supplemented with relevant and reasonable job resources as an important first step when needed. This suggestion is made not only because job resources are known to reduce job demands and thus the health impairment process, but also because the absence of these job resources can lower job satisfaction, motivation, commitment, and engagement (e.g., Demerouti et al., 2001). It is crucial to start the

107

intervention with the assessment of the most important job resources that need attention (Bakker et al., 2014; Bakker & Demerouti, 2014).

Several suggestions of important job resources that could be provided in order to create a more balanced and sustainable situation have been highlighted throughout this thesis. The results of this thesis specifically imply that job resources in terms of support structures are important prerequisites for managerial sustainability in the public sector (Study I, II, and IV). For instance, support from superiors, including assistance in delimiting the assignment, prioritizing among work tasks, and solving problems, as well as receiving feedback when adequate results have been achieved, can be considered vital. Two other examples are ensuring support by employees with subordinates who take responsibility for their own work and help to solve operational problems, and providing the time and space for managerial colleagues to support each other. Besides the social support, organizational support in terms of professional support functions, personnel resources, premises and technical resources should be overseen and improved, since such organizational support was assessed to be a hindrance to the fulfillment of the managerial assignment (Study IV). Study IV, for example, shows that HR and IT specialists have become more demanding and less supportive and operative, while managers' need for professional assistance has increased. If the tasks of HR professionals and others are becoming more strategic and specialized, the question must be raised regarding who will assist operational managers with the wide range of operative and administrative personnel-related duties (Thilander, 2013). Investigating and developing models for cooperation between support units and operations managers, in order to find relevant and effective division of tasks, without compromising any of the occupational groups' professionalization efforts can be considered essential. In conclusion, the results of this thesis demonstrate the importance of support for the managers from several directions in the organization in order to tackle the job demands. Therefore, it is central to consider several, if not all, of these alternatives simultaneously.

Optimizing the job demands

However, it is not enough to simply strengthen the job resources, since they have previously been shown to compensate for high job demands to a certain point only. From a preventive point of view, the founders of the JD-R model have argued that decreasing the job demands is even preferred above increasing the job resources (Schaufeli & Bakker, 2004). Whereas a certain level of job demands can be beneficial, too high a level of challenge may turn into a stressor (Crawford, LePine, & Rich, 2010; Schaufeli & Taris, 2014). Decreasing the job demands of managers may not be a simple route in a sector characterized by unlimited needs (Rasmussen, 2004; Thylefors, 2007). Even so, since high job demands cost considerable effort, it is essential to examine possible ways to reduce them (Bakker & Demerouti, 2014).

A couple of ideas regarding important job demands to tackle in order to create a sustainable situation are suggested. The ARIA interviews have been especially useful in contributing to these ideas. One possible conclusion from Study IV is that public sector managers generally have too much on their plate, including various demanding responsibilities, numerous stakeholders, endless encounters, and diverse and often conflicting objectives and expectations from different directions, giving a broad scope of work tasks that is difficult to balance (Study I, II, III, and IV). Mintzberg (1996) has argued that a long-lived myth is that public sector managers can solve everything as long as they are properly trained. With such a view of leadership, people may fail to recognize the importance of the conditions that the managerial assignment is performed under, which the study results reported on in this thesis have brought to light. In addition, the qualitative study (Study IV) revealed that the managerial assignment tends to have expanded in recent years, at least within human services. As a result, the managers spend less time on leadership and service development and more time on administrative tasks and documentation than previously. The desire to develop the core service is a common reason for becoming an operational manager in the first place. However, that the managers' efforts must instead be directed to the description, evaluation, and measurement of the services has been termed as "managing a pseudo world" (Cregård & Corin, 2016). Discussions therefore need to be initiated about the role of managers and their work content, and what they need to devote their limited time to. Job crafting, including discussions on how the work assignment and its tasks as well as social relationships should be understood and delimited (Kira & Forslin, 2008), could be further considered in the context of public sector management, at least as a collective act. Otherwise, there is a risk that the managerial assignment becomes borderless, resulting not only in overtime, but also in problems with managerial health and performance, as well as in an increased risk of managers leaving their assignment. Work content analysis may provide one important route to deepening constructive discussions on this matter (Study IV).

Furthermore, the study results reported on in this thesis also imply that finding more structural interventions can be a possible and additional route when aiming at decreasing the job demands and their consequences. For instance, reducing the number of subordinates that each manager is responsible for may provide one possible way of limiting job demands concerning the managerial role (Study III and IV). More research that adds to the limited knowledge on the antecedents of psychosocial working conditions could thus be highly beneficial.

Tackling the imbalance between job demands and job resources

Preferably and realistically, however, both aspects of psychosocial working conditions should be approached, in order to tackle the imbalance between job demands and job resources that many public sector managers experience. The qualitative study (Study IV) revealed that the managers were often left to deal with the imbalance between job demands and job resources themselves – for instance,

109

by taking the main responsibility for delimiting the assignment, setting priorities, and solving intricate goal and role conflicts. The imbalance between job demands and job resources that is so often present in public sector managerial work needs to be made a common concern.

A sustainable organization actively seeks to balance various job resources and job demands (Kira et al., 2010). The importance of balance between demands and resources at work has been stressed to a greater degree with the new provisions in the *Organizational and Social Work Environment* report (Swedish Work Environment Authority, 2015), which come into effect at the end of March 2016. The provisions state that the resources need to be adapted to the demands at work. Without this balance in managerial work, there is an obvious risk that the current situation will have undesired organizational and individual consequences, including unsatisfying performance, as well as ill health, low motivation, and turnover among managers. Balancing the job demands and job resources and thus strengthening managerial sustainability could be considered a top priority in financially difficult times where there is also a shortage of managerial candidates. As the public sector is unable to offer the same pay levels and benefits as the private sector offers (Selden & Moynihan, 2000), it has been argued that good working conditions are especially important for public sector managers. This factor is crucial in attracting and retaining skilled managers and securing the future of the public sector and the welfare society.

Limitations and Methodological Considerations

I want to take the opportunity to highlight two limitations related to the scope of this thesis. First, the contextual approach implies a deliberate exclusion of the influence of individual-level parameters such as managers' personal resources or personality on their working conditions and sustainability. The contextual approach also implies that priority should be given to aspects that are possible to address in the organization (Härenstam, 2009). As a result, individual employees are not ascribed responsibility for factors outside their control (Bejerot & Härenstam, 2010). Hence, this thesis has built on the early and revised versions of the JD-R model that only consider characteristics of the work environment (Schaufeli & Taris, 2014) complemented by the new direction within the JD-R field to contextualize the JD-R model to a larger extent (Demerouti & Bakker, 2014; Dollard & Bakker, 2010; Van De Voorde et al., 2014), rather than by the new direction to include personal resources in the model (for an overview see, for example, Schaufeli & Taris, 2014).

Besides personality factors, it would of course have been possible to cover a broader array of job demands and job resources. However, the dimensions included in each study were carefully chosen according to theoretical as well as methodological considerations. Weighted together, these considerations have meant that certain theoretically interesting dimensions were left out of e.g. the cluster analysis because of the limited amount of variance they offer. This situation was,

110

for example, the case with the control dimension in the cluster analysis (Study I and II). Additionally, several other potentially interesting organizational factors that may influence managers' working conditions were left outside the scope of this thesis. However, in line with the applicability aim of this thesis, it was important to focus on those factors that an employer could and might be willing to adjust, such as the number of employees that a manager is responsible for.

In addition, some methodological considerations may have had an impact on the results, and therefore, deserve comments and special attention.

First, while it is possible to find support for certain associations in a cross-sectional sample, the direction of these associations is difficult to establish, and so it is not possible to rule out all spurious relationships, which is necessary in order to draw causal inferences. Therefore, the results from the cross-sectional studies addressed in this thesis need to be interpreted with some caution (Study I and III). However, the longitudinal study (Study II) shows the same pattern as the cross-sectional study using the same predictors, thus supporting the results in Study I.

Second, the job demands, job resources, and sustainability indicators were mainly self-reports in the studies included in the thesis, which may inflate their relationships as a result of common method variance (Campbell & Fiske, 1959). However, the size of this problem should not be overestimated (Spector, 2006), and it could be argued that common method variance resulting from self-reported data is probably a minor problem in this thesis. The underlying premise is that both the work situation per se and an individual's interpretation of the work situation determine the individual's response. These are relevant aspects, but it is important to attempt to disentangle these concepts in order for the results to support a demand for redesigning the work, rather than the individual's behavior and mindset (Frese & Zaph, 1988; Rau, 2004). With this backdrop, the perspective in this thesis is first and foremost contextual, with a focus on organizational and psychosocial working conditions, in order to provide ideas on how managerial work should be organized and where preventive actions can be implemented in the promotion of sustainable managerial work. The individual managers' responses to these conditions can be used as an indicator to assess whether the managerial work can be considered sustainable. In the quantitative studies (Study I, II, and III), the independent variables were register data on organizational and demographic factors or more on the objective side of self-reporting – in other words, low in dependency on cognitive and emotional processing (Frese & Zaph, 1988). Using solely objective data would have been insufficient, since completely objective job demands do not automatically trigger stress reactions (e.g., Frese & Zaph, 1988; Lindström, 1994). Moreover, in the qualitative study (Study IV), external assessments of the psychosocial working conditions were conducted in order to avoid the over-reporting of unfavorable work characteristics (Waldenström et al., 2008). The external assessments also lead to less measurement bias related to other psychological and behavioral conditions (Frese & Zaph, 1988; Kasl, 1998) and thus help validate the findings of the quantitative studies.

Third, it should be noted that the use of single items regarding the validation and outcome measures of health, motivation, performance, and turnover intention can make interpretation more difficult. However, it should also be mentioned that previous studies have found that single items possess satisfactory psychometric properties, especially regarding health and well-being. For example, the generic and widely used single-item indicator of self-reported health has been found to be a multidimensional summary and a reliable indicator of overall health and its functional consequences (Lundberg & Manderbacka, 1996; Manderbacka, 1998). Furthermore, the global single item of work ability, included in the full Work Ability Index (WAI), can replace the full WAI in surveys (Ahlstrom, Grimby-Ekman, Hagberg, & Dellve, 2010).

Fourth, although reliability is increased by such factors as coding methodology and sample size, empirically based, in-depth understanding of real-world phenomena increases the validity of the study and thus constitutes another equally valuable form of research (Noordegraaf & Stewart, 2000). Although the relatively small sample size in Study IV must be taken into account and the findings interpreted with caution, the external assessments give valuable and reliable information on human service managers' working conditions. The detailed examples further provide important insights into what lies behind these conditions and thus yield ideas for action that the more common methods often fail to provide.

Fifth, another potential limitation concerns missing data (Study I, II, and III). Although a reality in social science research with a quantitative focus, any type of missing data is undesirable. Even so, the theoretically driven strategic sampling, in combination with relatively high response rates, in the quantitative studies may also provide opportunities for generalizing the results to managers working in Swedish municipalities.

Finally, it is worth discussing some methodological issues connected to the JD-R model. The model has previously been shown to be of assistance in understanding, explaining, and making predictions, mainly about employee burnout, work engagement, and related organizational outcomes (Bakker et al., 2014). However, there is no single JD-R model in which well-defined and specific sets of concepts are related to each other. Instead, the JD-R model is heuristic and non-limitative in nature and represents a way of thinking about how a wide array of job demands and job resources may influence the broad categories of employee health, well-being, and motivation, which adds greatly to the JD-R model's relevance across an extensive variety of settings. The nature of the model implies that even if two studies show no overlap in terms of the study concepts, they could still be based on and tests the same assumptions of the JD-R model (Schaufeli & Taris, 2014). However, when making use of the entire spectrum of the JD-R model, it becomes clear that the items for the two dimensions should be treated cautiously (Van den Broeck et al., 2013). Whether a job phenomenon is conceptualized as a job demand or a job resource is a matter of empirical investigation (Schaufeli & Taris, 2014), which was especially evident in the qualitative study (Study IV). Hence, this thesis supports previous discussions on the JD-R model as being highly

embedded in context and on the notion that the conceptual difference between a job demand and a job resource is dependent on the amount of energy spent, as well as whether the work characteristic is negatively or positively valued in that specific context (Schaufeli & Taris, 2014; Van den Broeck et al., 2013).

Schaufeli and Taris (2014) have argued that the JD-R model can be tailored to the specific needs of an organization, given any particular situation. More specific measures of job demands and job resources, for instance, have the advantage of enhancing the likelihood of finding interactions between job demands and job resources (van Vegchel, 2005). The variety of specific job demands, job resources, and outcomes considered in this thesis rests on the assumption that the model can be tailored to the specific needs of an organization. Specifically, the model was selected on the basis of the specific needs in the specific context and thus the challenges of contemporary managerial work in the public sector of Sweden at a time when the sector's managerial sustainability is threatened. The fact that job demands and job resources can be represented by quite different concepts adds to the flexibility of the JD-R model, but it may at the same time limit the generalizability of the results (Schaufeli & Taris, 2014; Van den Broeck et al., 2013). Consequently, with a model tailored to the specific context, generalizing beyond managers within this specific context might not be possible or even desirable. Although the use of a more general work stress model might have facilitated comparisons with other groups besides managers in municipalities, the applicability of the results for interventions in the specific context would have been heavily compromised. Hence, the variables included in the JD-R model in this thesis were chosen because of their relevance and in order to promote the applicability of the results. Therefore, it is important to stress that the JD-R model complements, encompasses, and integrates with, rather than replaces, older work stress models, with the aim being to compare the same constructs of job demands and job resources across populations.

CONCLUSIONS

The aims of this thesis were threefold: to explore and increase knowledge of managerial working conditions in Swedish municipalities, to extend the JD-R model, and to provide information that public sector decision-makers and HR departments can use and apply in promoting sustainable managerial working conditions. Thus the overall aim was to make empirical/theoretical, methodological, and practical contributions.

The empirical results illustrate that public sector managers are found in a diverse array of work situations (Study I, II, and IV). An unbalanced work situation, which is characterized by a lack of correspondence between the job demands posed and the job resources provided, is a reality for a large number of the managers, especially within human services (Study I, II, and IV). The psychosocial working conditions were found to be related to consequences for managerial sustainability in terms of health, performance, motivation, and turnover (Study I, II, and IV). In addition, the contextual approach applied has contributed to identifying organizational and structuring conditions that help to explain why psychosocial working conditions in terms of job demands and job resources vary, as well as have different consequences. The type of service the manager works within and the manager's span of control, managerial position, gender, age and managerial experience provide reasons for variation in psychosocial working conditions and their consequences (Study I, II, III, and IV). Taken together, the results can be used as a guide in organizing more sustainable working conditions for managers.

Besides new knowledge on managerial working conditions in the public sector, the present thesis has also improved on a theoretical model for studying psychosocial working conditions. The thesis has extended the JD-R model by applying contextual methods including cluster analysis, multilevel analysis, and qualitative external assessments that to date have been seldom used within the JD-R research tradition. These extensions answer several of the future challenges identified by JD-R scholars. These challenges includes adding to the limited knowledge on the joint effects of job demands and job resources, identifying potentially hazardous psychosocial work situations and the antecedents of these disadvantageous psychosocial working conditions, and finding ways to more objectively assess job demands and job resources. In addition, the study group chosen has added to the extension of the JD-R model, since managers, and especially public sector managers, have to date been rarely focused on in the JD-R research. The results show that the JD-R framework, in combination with the contextual methods applied, is useful and valuable when investigating public sector managers' psychosocial working conditions. The contextual approach seems to be promising for use with other groups of employees as well.

Not only can the contextual approach assist practitioners in finding target groups for intervention, but also it can be inspiring in creating more balanced work situations. The results can thus provide guidance for actions to be taken in order to promote sustainable psychosocial working conditions for public sector managers.

Identifying both high-risk and low-risk work situations has previously been argued to increase the recognition and acceptability of the results among different stakeholders. The contextual approach used is advantageous in that the knowledge can be presented in rich and concrete ways that make it more accessible and easier to communicate to the study group, as well as to higher-level managers and other decision-makers. As a result, there is a greater likelihood that the results will lead not only to reflection, but also to interventions in the organizations in question. A broad scope for suggestions for improvements to managers' working conditions has been offered in this thesis; these ideas focus on work characteristics rather than on individual factors. The results can therefore be used for interventions at the organizational level, such as job redesign, thus helping to solve problems of relevance for a larger group of employees, which may reduce both significant individual and organizational costs.

SVENSK SAMMANFATTNING

Titel: Jobbkrav, jobbresurser, och konsekvenser för chefshållbarhet i offentlig

sektor: En kontextuell ansats.

Författare: Linda Corin (tidigare Wallin)

Chefer i den offentliga sektorn är nyckelspelare när det gäller att skapa hälsosamma och produktiva offentliga organisationer. Chefsarbete i den offentliga sektorn är både berikande och utmanande, med höga krav och stora förväntningar från många intressenter som ständigt måste balanseras. Chefsarbete i den offentliga sektorn kan också vara speciellt belönande, där framförallt möjligheten att göra skillnad för samhället och dess invånare är en unik motivationsfaktor.

Att värna om chefernas hälsa, samt att attrahera och behålla kompetenta chefer, är en viktig utmaning inom den offentliga sektorn. Chefsarbetet inom den offentliga sektorn har förändrats under de senaste decennierna där utvecklingen pekar mot en arbetssituation kantad av organisatoriska förändringar, ekonomiska åtstramningar liksom förändrade psykosociala arbetsvillkor.

Trots dessa stora förändringar, har få vetenskapliga studier fokuserat på just chefers arbetsvillkor och hållbarhet inom den offentliga sektorn. De har dock signalerat problem gällande chefernas arbetsbelastning, stress, trötthet, sjukfrånvaro samt omsättning. Chefer som vill och har möjlighet att arbeta som chefer på lång sikt är avgörande för Sveriges utveckling. Offentliga organisationer är under en stark press med bland annat ökade krav på grund av en åldrande befolkning, en stor invandring, en ökande urbanisering, finansiella underskott på många håll, och inte minst, på grund av att en stor andel av chefer närmar sig pensionsåldern. Kunskapen om chefsarbetet inom den offentliga sektorn måste öka för att främja hälsosamma och attraktiva jobb och inte äventyra framtiden för offentliga organisationer och därmed välfärdssamhället.

Syfte och frågeställningar

Det övergripande syftet med föreliggande avhandling är tredelat: att utifrån ett kontextuellt perspektiv utforska och öka kunskapen om chefers arbetsvillkor i svenska kommuner, att utvidga och utveckla Jobb-krav-resurs (JD-R) modellen genom att använda kontextuella metoder med särskild tonvikt på chefer inom den offentliga sektorn, och att tillhandahålla kunskap som kan utnyttjas och tillämpas av beslutsfattare och HR-funktioner för att främja hållbara arbetsvillkor för chefer.

De specifika syftena för studierna i denna avhandling är följande:
- Att identifiera och beskriva olika typer av arbetssituationer för chefer genom att kombinera data om jobbkrav och jobbresurser, för att upptäcka hög- och låg risk arbetssituationer i termer av chefers hållbarhet (Studie I och II).
- Att undersöka om organisatoriska förhållanden kan förklara skillnader i psykosociala arbetsvillkor mellan olika operativa chefer (Studie III).
- Att använda en metod för en extern bedömning av jobbkrav och jobbresurser samt balansen mellan dem i chefsarbete (Studie IV).

Avhandlingen tar ett kontextuellt perspektiv på chefsarbete för att kasta nytt ljus över chefers arbetsvillkor i den offentliga sektorn. I avhandlingen innebär det att fokus vänds från chefer och deras individuella skillnader, till de villkor som chefer inom den offentliga sektorn arbetar under. Dessutom betraktas kontext som ett koncept innefattande flera lager där chefer påverkas både av kontexten i deras direkta närhet, det vill säga deras psykosociala arbetsvillkor, samt av den organisatoriska kontexten i form av organisationstyp och organisationsstruktur.

Det finns tre huvudsakliga motiv för att tillämpa ett kontextuellt perspektiv och därmed en kontextuell ansats i denna avhandling kopplat till teori, metod och nyttiggörande:

Med ett fokus på chefers arbetsvillkor behövs ett teoretiskt perspektiv och en modell som gör det möjligt att studera chefsspecifika och mångfacetterade arbetsvillkor. I detta avseende tillhandahåller Jobb-krav-resurs (JD-R) modellen en användbar teoretisk referensram. Dess flexibilitet gör det möjligt att studera ett brett spektrum av jobbkrav och jobbresurser som är relevanta för chefer inom den offentliga sektorn, vilket ger en heltäckande bild av deras psykosociala arbetsvillkor.

Den kontextuella ansatsen i denna avhandling är också metodologisk genom att chefers arbetsvillkor undersöktes genom ett strategiskt urval och metodologiska tillvägagångssätt, som gör det möjligt att ta kontexten i beaktande. Det teoretiska och metodologiska kontextuella arbetssättet utgör ett värdefullt komplement och en kontrast till den stora mängden individcentrerad ledarskapsforskning.

Ansatsen möjliggör ett pedagogiskt sätt att nyttiggöra forskningsresultaten och sprida relevant kunskap, anpassad till det specifika arbetet och den specifika kontexten. Kunskapsspridningen riktas främst mot den offentliga sektorns beslutsfattare och HR-avdelningar, i syfte att hjälpa dem att fokusera på de villkor som chefer arbetar under. Resultaten kan därmed betraktas som verktyg för att främja ett hållbart chefsarbete.

Avhandlingen består av en sammanhållen text och fyra delstudier, samtliga skrivna på engelska. I den sammanhållande texten presenteras först avhandlingens bakgrund och syfte. Därefter följer en redogörelse av tidigare forskning och teoretiska utgångspunkter för avhandlingen följt av en metodbeskrivning. I denna

svenska sammanfattning ges en översiktlig redogörelse av avhandlingens fyra delstudier och övergripande slutsatser.

Empiriska studier

Studie I:

Berntson, E., Wallin, L., & Härenstam, A. (2012). Typical situations for managers in the Swedish public sector: Cluster analysis of working conditions using the job demands-resources model. *International Public Management Journal*, *15*(1), 100-130.

Syftet med avhandlingens första studie var att identifiera olika typer av naturligt förekommande psykosociala arbetssituationer. Dessa bestod av olika kombinationer av krav och resurser i chefernas arbete. De olika situationerna jämfördes också med avseende på olika hållbarhetsindikatorer som hälsa, motivation och prestation.

Urvalet bestod av närmare 550 kommunala chefer på olika nivåer inom äldreomsorg, funktionshinderverksamhet, förskola, grundskola, gymnasium samt teknisk verksamhet från sju kommuner i Västra Götaland.

Med JD-R modellen som teoretisk referensram inkluderades fyra skalor av jobbkrav (mål/medel- konflikt, logikkonflikt, medarbetarproblem och brukarproblem) samt tre skalor av jobbresurser (stöd från ledning, stöd från medarbetare och positiva brukare) i en klusteranalys. Den gjorde det möjligt att identifiera olika typer av naturligt förekommande psykosociala arbetssituationer. Klusteranalysen kompletterades med variansanalys för att ta reda på var de olika klustren var överrepresenterade och vilken typ av individer som ingick i klustren. Dessutom testades om klustren skiljde sig åt i ett antal hållbarhetindikatorer för chefers hälsa (stress, allmänt hälsotillstånd och arbetsförmåga), och motivation och prestation (tillfredställda brukare och måluppfyllelse).

Den genomförda klusteranalysen resulterade i att åtta olika typsituationer för chefer med olika kombinationer av jobbkrav och jobbresurser identifierades. Resultaten visade alltså att chefers psykosociala arbetsvillkor inom den offentliga sektorn kan skilja sig tydligt åt. Resultaten pekade också på ett mycket tydlig samband mellan klustertillhörighet och de valda hållbarhetsindikatorerna. Det innebär att jobbkrav och jobbresurser från flera olika håll i organisationen kan kombineras på många olika sätt med ett brett spektra av konsekvenser för chefers hälsa, motivation och prestation.

De åtta klustren namngavs utifrån sina mest framträdande karaktäristika och rangordnades kvalitativt med utgångspunkt i fördelningar i de olika hållbarhetsindikatorerna: *de gynnade, de uppskattade, de uppbackade, de fokuserade, de försummade, de utsatta, de klämda och de motarbetade*. Chefer som befann sig i de mest fördelaktiga arbetssituationerna som karaktäriserades av relativt låga jobbkrav och hög grad av jobbresurser (*de gynnade, de uppskattade*

118

och de uppbackade), rapporterade betydligt bättre hälsa, motivation och prestationer i arbetet än de som befann sig i de mest ogynnsamma klustren (de klämda och de motarbetade). Klustren mellan dessa två ytterligheter (*de fokuserade/isolerade, de försummade och de utsatta*) identifierades som "risk-kluster" då dessa chefers arbetssituationer innefattade såväl negativa som positiva psykosociala arbetsvillkor.

Skillnader mellan kluster återfanns i samtliga testade organisatoriska och strukturerande faktorer: verksamhetstyp, antal underställda, chefsposition samt ålder och kön. De psykosociala arbetsvillkoren för chefer är könssegregerade. Chefer i människovårdande verksamheter, vilka vanligen också är kvinnodominerade organisationer, hade i allmänhet sämre villkor. Detsamma gällde för första linjens chefer, särskilt inom äldreomsorgen och funktionshinderverksamhet. De psykosociala arbetsvillkoren hade samband med hälsoproblem, låg motivation samt dåliga prestationer.

Studie II:

Corin, L., Berntson, E., & Härenstam, A (2016). Managers' Turnover in the Public Sector − The Role of Psychosocial Working Conditions. Publicerad online 14 Januari. *International Journal of Public Administration.*

Det huvudsakliga syftet med avhandlingens andra studie var att se om de olika naturligt förekommande psykosociala arbetssituationer identifierade i den första studien kunde predicera chefers rörlighet två år senare. Därigenom inkluderade syftet också att undersöka tillämpligheten av JD-R modellen tillsammans med klusteranalys för att identifiera grupper som löper hög respektive låg risk för rörlighet, avsedd såväl som faktisk.

Urvalet bestod av kommunala chefer på olika nivåer inom äldreomsorg, funktionshinderverksamhet, förskola, grundskola, gymnasium samt teknisk verksamhet från sju kommuner i Västra Götaland. De åtta naturligt förekommande psykosociala arbetssituationerna som identifierades i studie I användes för att förutsäga chefernas avsikter att lämna sin arbetsplats och/eller sitt yrke, samt att mäta deras faktiska rörlighet 2 år senare. För att identifiera arbetssituationer som skapar hög respektive låg risk för chefsrörlighet, avsedd såväl som faktisk, användes logistisk regression med ett medelkluster som jämförelse.

Resultaten visade att nästan en femtedel av cheferna i studiegruppen lämnade sina jobb under tvåårsperioden. Över en tredjedel av cheferna som fortfarande arbetade kvar ansågs sig vara i någon form av negativ anställningssituation, det vill säga på en icke önskvärd arbetsplats och/eller i ett icke önskvärt yrke.

Studien visade att de psykosociala arbetsvillkoren hade en stor inverkan på de offentliga chefernas avsikter att lämna inte bara sin arbetsplats, utan också yrket. Chefernas vilja att stanna på arbetsplatsen och i yrket stärktes betydligt under mer

gynnsamma psykosociala arbetsvillkor. Klustret *de gynnade*, som upplevde de lägsta jobbkraven i kombination med bäst jobbresurser bland klustren, ville till exempel i betydligt lägre grad lämna sin arbetsplats såväl som sitt yrke. *De uppskattade*, ett kluster som kännetecknades av rimliga jobbkrav och gott om jobbresurser, uppvisade ett liknande mönster, med betydligt lägre vilja att lämna sin arbetsplats såväl som sitt yrke jämfört med medelklustret. Klustren i den andra änden av spektrumet, de som utsattes för de högsta nivåerna av jobbkrav i kombination med knappa jobbresurser, visade olika resultat för viljan att lämna arbetsplatsen respektive yrket. *De klämda*, som kännetecknas främst av höga nivåer av medarbetarproblem och bristande stöd från medarbetare och ledning, visade den högsta risken för att vilja lämna arbetsplatsen. *De fokuserade/isolerade* uppvisade också en högre risk att vilja lämna arbetsplatsen där de psykosociala arbetsvillkoren främst kännetecknas av en begränsad kontakt med brukare. Chefer i det minst gynnsamma klustret, *de motarbetade*, visade den högsta risken för att vilja lämna yrket. Där var logikkonflikter eller slitningar mellan olika arbetsuppgifter och låga nivåer av stöd och erkännande från ledning och brukare mest framträdande. *De utsatta* uppvisade också en högre risk för att vilja lämna sitt yrke. Sammantaget kännetecknas både *de motarbetade* och *de utsatta* av konflikter relaterade till brukare såsom hot och våld.

Resultaten visade ett något annorlunda mönster för de chefer som faktiskt lämnat sitt arbete. För det första verkar det som om sambandet mellan psykosociala arbetsvillkor och faktisk rörlighet är svagare, jämfört med de chefer som har för avsikt att lämna sin arbetsplats och/eller sitt yrke men inte gjort det. Endast ett kluster, *de fokuserade/isolerade*, visade en risk över medelvärdet för faktisk rörlighet. I detta kluster fanns en överrepresentation av expertchefer och chefer inom tekniska verksamheter.

Resultaten pekade således på att viljan att lämna arbetsplatsen och/eller yrket och att faktiskt göra det inte nödvändigtvis bestäms av samma faktorer. Bristande arbetsvillkor kan därför leda till psykiskt frånvarande chefer i offentliga organisationer. Det kan ha betydande och kostsamma effekter för både organisationerna och individerna, i form av minskad engagemang och prestation samt nedsatt hälsa.

Studie III:

Wallin, L., Pousette, A., & Dellve, L. (2014). Span of Control and the Significance for Public Sector Managers' Job Demands: A Multilevel Study. Economic and Industrial Democracy, 35(3), 455‑481.

Huvudsyftet med Studie III var att fastställa hur chefers kontrollspann, det vill säga antalet underställda per chef, påverkar operativa chefers jobbkrav. Syftet var också att ta reda på om kontrollspannet hade olika effekter på chefernas jobbkrav i olika typer av kommunala verksamheter.

120

Urvalet bestod av 434 operativa chefer (enhetschefer och verksamhetschefer) från 37 olika verksamheter/ledningsgrupper inom äldreomsorg, funktionshinderverksamhet, förskola, grundskola, gymnasium samt teknisk verksamhet i sju kommuner inom Västra Götaland. Flernivåanalyser utfördes med sju index av självskattade jobbkrav (överbelastning, logikkonflikt, betungande rollkrav, buffertproblem, containerfunktion, medarbetarproblem, och individuella medarbetarproblem) samt registerdata gällande chefernas kontrollspann. Flera potentiellt strukturerande faktorer adderades också till modellen och testades som ytterligare prediktorer: chefens kön, position, erfarenhet och verksamhetstyp. De 37 kommunala verksamheterna/ledningsgrupperna utgjorde organisationsnivån i analyserna och de 434 cheferna individnivån.

De viktigaste resultaten av studien III visade att chefers kontrollspan är av stor betydelse för operativa chefers upplevelse av ett brett spektrum av jobbkrav kopplade till chefernas arbetsbelastning, chefsrollen och deras relationer till sina medarbetare. Kontrollspannet påverkade signifikant fem av de sju jobbkrav som studerades: överbelastning, logikkonflikt, betungande rollkrav, medarbetarproblem, och containerfunktion. I dessa fall betydde ett större kontrollspann högre nivåer av jobbkrav, oberoende av chefens kön, position och erfarenhet.

Upplevelsen av betungande rollkrav och att fungera som en container för medarbetares frustration i pressade situationer visade störst samband med kontrollspannet. Flernivåansatsen möjliggjorde också att visa att dessa jobbkrav också påverkades av det genomsnittliga kontrollspannet i ledningsgruppen. Chefer som var medlemmar i ledningsgrupper med ett genomsnittligt högre kontrollspann upplevde betungande rollkrav och containerproblematik i ännu högre grad än chefer i ledningsgrupper med ett kontrollspann lägre än genomsnittet. Bredvid dessa två krav i arbetet uppvisade logikkonflikter, eller konflikter mellan olika typer av uppgifter som ingår i chefsarbete, starkast samband med kontrollspann. Kvantitativ arbetsbelastning och medarbetarproblem, med andra ord problem som är förknippade med den underordnade arbetsgruppens prestation och funktion påverkades också av chefernas kontrollspann.

Kontrollspannet visade sig vara av lika stor betydelse för nivåerna av upplevda jobbkrav i människovårdande respektive tekniska verksamheter. Det tyder på att kontrollspannet är av generell betydelse i den kommunala offentliga sektorn i Sverige. Studien visade dessutom att det finns en skillnad i det genomsnittliga kontrollspannet per chef mellan människovårdande respektive tekniska verksamheter. Cheferna i de människovårdande, och ofta kvinnodominerade, verksamheterna hade i genomsnitt nära dubbelt så många underställda medarbetare som sina kollegor i tekniska verksamheter.

Sammantaget tyder resultaten från Studie III på att organisatoriska åtgärder med målet att öka hållbarheten i fråga om psykosociala arbetsvillkor och deras konsekvenser bör omfatta insatser för att minska antalet underställda medarbetare som varje chef ansvarar för. Ett rimligt kontrollspann kan inte bara förhindra onödig belastning för chefer och deras medarbetare, utan även förbättra

arbetsvillkoren för ledningsgrupperna och i förlängningen också för organisationen som helhet.

Studie IV:

Corin, L., & Björk, L. *Job Demands and Job Resources in Human Service Managerial Work – An External Assessment through Work Content Analysis.* Manuscript submitted for publication.

Huvudsyftet med avhandlingens fjärde och sista studie var att utvärdera jobbkraven och jobbresurserna samt balansen mellan dem bland första linjens chefer inom människovårdande kommunala organisationer, för att tillhandahålla förklaringar till den överbelastning som ofta upplevs inom denna chefskategori. Dessutom innefattade syftet med studien att testa att applicera en arbetsinnehållanalysmetod inom JD-R modellens teoretiska ram.

Urvalet bestod av 12 första linjens chefer från en kommun inom Västra Götaland varav 6 kommunala skolledare (tre från grundskolan och tre från förskolan) och sex äldreomsorgschefer (tre från äldreboenden och tre från hemtjänsten). Kvalitativa intervjuer gjordes med hjälp av en arbetetsinnehållsanalysmetod, kallad ARIA. Den består av en extern utvärdering av chefernas arbetsuppgifter, jobbkrav och jobbresurser samt balansen dem emellan. Särskilt stor vikt lades vid konkreta exempel och beskrivningar av konsekvenserna i samband med varje arbetsvillkor. ARIA metodens fördefinierade kriterier och gränsvärden guidade analysen. Som en del av analysen, kategoriseras ARIA dimensioner också som jobbkrav eller jobbresurser.

Resultaten från Studie IV visade sammantaget på en obalans mellan höga nivåer av jobbkrav och brist på jobbresurser för att möta dessa krav. De jobbkrav som identifierades i chefsarbetet var: *arbetsuppgifter, tidspress, tidsbundenhet, arbetstid, mål i arbetet, brist på tydlighet i mål och arbetsuppgifter, onödiga arbetsuppgifter, oskäliga arbetsuppgifter* samt krav på *social interaktion*.

I chefsuppdraget ingick ett brett spektra av krävande ansvar och arbetsuppgifter, och överbelastning och fragmenterade arbetsdagar var vanligt förekommande. Dessutom hade chefernas arbete expanderat över tid där ökade krav från en mängd intressenter gällande rapportering, uppföljningar samt övervakning och inrapportering av en mängd frågor, tillsammans med en ökad användning av standardiserade IT-verktyg för verksamhetsstyrning, svarade för en stor del av expansionen.

Tidsbundenheten i chefsarbetet bedömdes som måttlig till hög, eftersom tidsfrister, schemalagda möten och fasta arbetsordningar reglerar chefsuppdraget i stor utsträckning. Dessutom var de flesta arbetsdagar komplexa och händelsestyrda, samt karaktäriserade av många "brandkårsutryckningar". Tidspressen i chefernas arbete bedömdes vidare som hög, med en konstant efterfrågan på hög hastighet och

intensitet i arbetet. Dessutom försökte cheferna, särskild inom skolverksamheterna, ofta att hantera sitt omfattande chefsuppdrag med att arbeta omfattande övertid.

Målkonflikter samt konflikter och tvetydighet gällande chefsrollen och dess arbetsuppgifter var starkt närvarande i chefsarbetet, vilket skapade ett arbete utan synliga gränser. Chefsuppdraget innefattade ansvar för ett stort antal mål och arbetsuppgifter som ofta kolliderade i praktiken. Cheferna kämpade och misslyckades ofta med att ta alla mål och intressenters krav och förväntningar i beaktande, liksom att prioritera bland arbetsuppgifter. Flera arbetsuppgifter identifierades också som perifera till chefsuppdragets kärna. Det var dessutom oklart när cheferna hade uppnått tillräckliga resultat, särskilt när det gäller de kvalitativa aspekter av välfärdsarbetet.

Chefsarbetet bedömdes också som känslomässigt krävande, till exempel som följd av högt ställda krav och negativ feedback från brukare och deras anhöriga, samt negativ uppmärksamhet i media. Problem relaterade till anställda, grupper eller individer, som kännetecknades av till exempel konflikter, misstro, disciplinära åtgärder och komplicerade rehabiliteringsfall, adderade ytterligare till de känslomässiga kraven, särskilt bland chefer inom äldreomsorgen.

De möjliga jobbresurser som identifierades i chefsarbetet för att möta dessa krav var: *inflytande, kognitiva krav och möjligheter, stöd från ledningen, stöd från medarbetare, stöd från kollegor, lokaler och teknisk utrustning, personalresurser* och *stödfunktioner*. Dessa potentiellt balanserande resurser saknades ofta och utgjorde ibland till och med ytterligare krav i chefsarbetet.

Chefer bedömdes ha lågt till visst inflytande i sitt arbete främst på grund av lagstiftning, organisatoriska rutiner, flertalet intressenter, standardiserade IT-verktyg för styrning, och ett arbete till stor del styrt av "brandkårsutryckningar". Chefsuppdraget bedömdes också som obalanserat i mentala krav och utmaningar, med omfattande användning av tidigare kunskap och erfarenhet i kombination med begränsade utvecklingsmöjligheter och nästan inget rutinarbete som möjliggjorde återhämtning.

Det sociala stödet bedömdes vidare som otillräckligt i stor utsträckning. Det saknades till stor del hjälp med avgränsning av chefsuppdraget, att prioritera bland arbetets mål och uppgifter, fastställa kriterier för måluppfyllelse, och att lösa uppkommande problem. Denna brist på stöd från ledningen tog ut sin rätt på individnivå i form av ett gränslöst arbete, ofta med betydande övertidsarbete och risk för ohälsa som följd. En glapp mellan behoven i den operativa verksamheten och gehöret i de mer strategiska ledningsnivåerna identifierades också. Även chefernas stöd från sina kollegor i form av att till exempel, dela med sig av sina kunskaper och erfarenheter, begränsades starkt av att tiden ofta var en så knapp resurs. I skolverksamheterna, var stödet från chefernas medarbetare generellt högt, medan medarbetarna inom äldreomsorgen, å andra sidan, på flera sätt försvårade chefernas arbete, då de till exempel behövde guidas och kontrolleras i stor utsträckning.

Det organisatoriska stödet i form av professionella stödfunktioner, personalresurser, lokaler och teknisk utrustning bedömdes i många avseenden

123

bristfälligt. De flesta cheferna hade bara tillgång till en administratör eller assistent på deltid, medan andra chefer hade samordnare eller teamledare, på deltid eller heltid, som hanterade dagliga frågor som bemanning, schemaläggning, och morgonmöten. Men kvaliteten på dessa tjänster varierade kraftigt, vilket fick betydande konsekvenser för den avlastande effekten i chefernas arbete. Specialister inom HR, IT och ekonomi hjälpte chefer i det dagliga arbetet, men hade blivit mer krävande och mindre stödjande och operativa på senare år. Personalresurser utgjorde ett hinder för måluppfyllelse i chefsuppdraget, om än på olika sätt. Inom äldreomsorgen, hämmade sjukfrånvaro och personalbrist vårdkontinuiteten, som utgör ett av de viktigaste målen i inom äldreomsorg. I skolverksamheterna var det svårt att rekrytera personal och fylla vakanser. Slitna lokaler, brist på lämpliga mötesrum, bristfällig teknisk utrustning, och dålig teknisk support bedömdes vidare som ett hinder för måluppfyllelse i äldreomsorgen och som ett störningsmoment i skolverksamheterna.

ARIA-metoden inkluderar en mängd olika jobbkrav och jobbresurser. I kombination med dess specifika intervjuteknik, har den fördelen att generera rik, konkret, och valid information om de faktorer som utgör JD-R modellen. Den detaljerade kunskap som fås genom detta tillvägagångssätt är av stor betydelse för den konkreta förståelsen för beslutsfattare som vill förbättra arbetsvillkoren för första linjens chefer. De kan på så sätt angripa obalansen mellan jobbkrav och jobbresurser, och därmed minska betydande kostnader på individ- och organisationsnivå i den specifika kontexten.

Övergripande slutsatser

De empiriska resultaten från avhandlingen visar att chefer inom den offentliga sektorn befinner sig i en mångfald av arbetssituationer (studie I, II och IV). En obalanserad arbetssituation, som kännetecknas av en brist på överensstämmelse mellan de jobbkrav som ställs och de jobbresurser som tillhandahålls för att hantera dessa krav, är en realitet för många chefer, särskilt inom människovårdande verksamheter (studie I, II och IV). De psykosociala arbetsvillkoren visade sig vara relaterade till konsekvenser för chefernas hållbarhet när det kommer till deras hälsa, prestation, motivation, och rörlighet (studie I, II och IV). Dessutom har den kontextuella ansatsen som tillämpas lett till att identifiera organisatoriska och strukturerande faktorer som bidrar till att förklara varför psykosociala arbetsvillkor när det gäller jobbkrav och jobbresurser varierar, samt har olika konsekvenser. Den typ av verksamhet chefen arbetar inom och chefens kontrollspann, chefsposition, kön, ålder samt chefserfarenhet förklarar variation i psykosociala arbetsvillkor och deras konsekvenser (studie I, II, III och IV). Sammantaget kan resultaten användas som en guide för att skapa mer hållbara arbetsvillkor för chefer inom offentlig sektor.

Förutom ny kunskap om chefers arbetsvillkor inom den offentliga sektorn, har denna avhandling också vidareutvecklat den teoretiska JD-R modellen för att

124

studera psykosociala arbetsvillkor. Avhandlingen har visat att det är möjligt att utöka JD-R modellen genom att tillämpa kontextuella metoder som klusteranalys, flernivåanalys och externa bedömningar som hittills sällan använts inom JD-R forskningstraditionen. Dessa tillägg svarar mot flera av de framtida utmaningar som identifierats av JD-R forskare. De adderar till den begränsade kunskapen om de kombinerade effekterna av jobbkrav och jobbresurser, de bidrar till att identifiera potentiellt skadliga psykosociala arbetssituationer och prediktorer till dessa psykosociala arbetsvillkor. Därtill eftersöks metoder som på ett mer objektivt sätt kan mäta och utvärdera jobbkrav och jobbresurser. Chefer och i synnerhet chefer inom den offentliga sektorn har, hittills sällan fokuserats på inom JD-R forskning. Resultaten visar att JD-R ramverket, i kombination med den kontextuella ansatsen som är använd i denna avhandling, är användbar och värdefull vid studier av offentliga chefers psykosociala arbetsvillkor. Den kontextuella ansatsen kan också anses lovande för användning i andra grupper av anställda.

Det kontextuella angreppssättet kan inte bara assistera praktiker i att hitta målgrupper för intervention, utan också inspirera till att skapa mer balanserade arbetssituationer. En rad potentiella möjligheter för att förbättra chefers arbetsvillkor visas på i denna avhandling. De fokuserar på arbetets egenskaper snarare än på chefernas individuella egenskaper. Resultaten ger underlag för åtgärder som kan vidtas för att främja hållbara psykosociala arbetsvillkor för det stora flertalet chefer Stora vinster kan göras genom såväl minskning av kostnader på individ som på organisatorisk nivå inom den offentliga sektorn.

125

REFERENCES

Abbasi, S. M., & Hollman, K. W. (2000). Turnover: The real bottom line. *Public Personnel Management*, *29*(3), 333–342.

Abma, T. A., & Noordegraaf, M. (2003). Public managers amidst ambiguity: Towards a typology of evaluative practices in public management. *Evaluation*, *9*(3), 285–306.

Ahlborg Jr, G., Ljung, T., Swan, G., Glise, K., Jonsdottir, I., Hadzibajramovic, E., & Währborg, P. (2006). *Stressrelaterad ohälsa bland anställda vid Västra Götalandsregionen och försäkringskassan i Västra Götaland* [Stress-related illness among employees in Region Västra Götaland and the Swedish Social Insurance Agency]. Delrapport 1 – enkätundersökning i maj-juni 2004. Gothenburg, Sweden: Institute for Stress Medicine.

Ahlström, L., Grimby-Ekman, A., Hagberg, M., & Dellve, L. (2010). Measures of work ability and association with sick leave, symptoms and health: A prospective study of female workers on long-term sick leave. *Scandinavian Journal of Work, Environment & Health*, *36*(5), 404–412.

Alarcon, G. (2011). A meta-analysis of burnout with job demands, resources, and attitudes. *Journal of Vocational Behavior*, *79*(2), 549–562.

Allen, D. G., Shore, L. M., & Griffeth, R. W. (2003). The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of Management*, *29*(1), 99–118.

Allvin, M., Aronsson, G., Hagström, T., Johansson, G., & Lundberg, U. (2006). *Gränslöst arbete – Socialpsykologiska perspektiv på det nya arbetslivet* [Boundless work – A social psychological perspective on the new working life]. Malmö, Sweden: Liber.

Andersson-Felé, L. (2008). *Leda lagom många – Om struktur kontrollspann och organisationsideal* [Leading just the right number – On structure, span of control and organizational ideals] (Doctoral dissertation, University of Gothenburg, Sweden; ISBN-978-91-628-7352-3; ISSN 1653-8358).

Antonovsky, A. (1996). The salutogenic model as a theory to guide health promotion. *Health Promotion International*, *11*(1), 11–18.

Antonsson, H. (2013). *Chefers arbete i äldreomsorgen – Att hantera den svårhanterliga omvärlden: Relationen mellan arbete och organisering* [Managerial work in elder care –Managing the unwieldy world: The relationship between work and organization] (Doctoral dissertation, Linköping University, Sweden). Retrieved from http://www.diva-portal.org/smash/get/diva2:647832/FULLTEXT01.pdf

Appels, A., Siegrist, J., & De Vos, Y. (1997). Chronic workload, need for control and vital exhaustion in patients with myocardial infarction and controls: A comparative test of cardiovascular risk profiles. *Stress Medicine, 13*(2), 117–121.

Arman, R., Dellve, L., Wiktröm, E., & Törnström, L. (2009). What health care managers do: Applying Mintzberg's structured observation method. *Journal of Nursing Management, 17*(6), 718–729.

Arnetz, B. (2005). *Hälsa, stress och produktivitet: Ett ledningsperspektiv* [Health, stress and productivity: A management perspective]. In R. Ekman & B. Arnetz (Eds.), Stress: Individen, samhället, organisationen, molekylerna [Stress: The individual, the society, the organization, the molecules] (pp. 292-304). Stockholm, Sweden: Liber.

Aronsson, G., & Göransson, S. (1999). Permanent employment but not in a preferred occupation: Psychological and medical aspects, research implications. *Journal of Occupational Health Psychology, 4(2)*, 152–163.

Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology, 60*, 421–429.

Bach, S., & Della Rocca, G. (2000). The management strategies of public service employers in Europe. *Industrial Relations Journal, 31*(2), 82–96.

Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science, 20*(4), 265–269.

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309–328. doi:10.1108/02683940710733115

Bakker, A. B., & Demerouti, E. (2014). Job demands-resources theory. In P. Y. Chen & C. L. Cooper (Eds.), *Wellbeing: A complete reference guide. Vol. III: Work and wellbeing* (pp. 37–64). Oxford, UK: John Wiley & Sons.

Bakker, A. B., Demerouti, E., de Boer, E., & Scahufeli, W. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior, 62*, 341–356. doi:10.1016/S0001-8791(02)00030-1

Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology, 10*(2), 170–180. doi:10.1037/1076-8998.10.2.170

127

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(1), 389–411.

Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, *43*(1), 83−104. doi:10.1002/hrm.20004

Bakker, A. B., Van Emmerik, H., & Van Riet, P. (2008). How job demands, resources, and burnout predict objective performance: A constructive replication. *Anxiety, Stress, & Coping*, *21*(3), 309–324.

Bakker, A. B., van Veldhoven, M., & Xanthopoulou, D. (2010). Beyond the demand-control model. *Journal of Personnel Psychology*, *9*(1), 3–16. doi:10.1027/1866-5888

Bakker, A. B., & Xanthopoulou, D. (2013). Creativity and charisma among female leaders: The role of resources and work engagement. *International Journal of Human Resource Management*, *24*(14), 2760–2779.

Ball, S. J. (2003). The teacher's soul and the terrors of performativity. *Journal of Education Policy*, *18*(2), 215–228.

Barley, S. R., & Kunda, G. (2001). Bringing work back in. *Organization Science*, *12*(1), 76–95.

Barling, J., Kelloway, E. K., & Frone, M. R. (2005). *Handbook of work stress*. Thousands Oaks, CA: Sage.

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: The Free Press.

Bass, B. M., & Stogdill, R. M. (1990). *Bass and Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York, NY: The Free Press.

Bejerot, E., & Astvik, W. (2009). *När patienten blir kund: Nya stressorer och strategier i läkarens arbete* [When the patient becomes a customer: New stressors and strategies in the doctor's work]. Växjö, Sweden: Arbetsliv i omvandling.

Bejerot, E., & Härenstam, A. (2010). Reintegrating studies of organizations, work and health – Some methodological experiences. In S. Marklund & A. Härenstam (Eds.), *The dynamics of organization and healthy work* (pp. 140–156). Växjö, Sweden: Linnaeus University, Arbetsliv i omvandling.

Bejerot, E., Söderfeldt, B., Härenstam, A., Aronsson, G., & Söderfeldt, M. (1998). Towards healthy work or ruthless efficiency? The effect of managerial changes on professional work with life or things. In E. Bejerot (Ed.), *Dentistry in Sweden: Healthy work or ruthless efficiency?* (pp. ??–??). Solna, Sweden: Arbetslivsinstitutet [National Institute for Working Life].

Bennis, W. (2007). The challenges of leadership in the modern world: Introduction to the special issue. *American Psychologist*, *62*(1), 2–5.

Berglund, T. (2007). Flexible work situations and employees' thoughts of leaving the organization. In B. Furåker, K. Håkansson, & J. Karlsson (Eds.), *Flexibility and stability in working life* (pp. 148–172). Basingstoke, England: Palgrave Macmillan.

Bergman, L. R., & El-Khouri, B. M. (2001). Developmental processes and the modern typological perspective. *European Psychologist*, *6*(3), 177–186.

Bergman, L. R., Magnusson, D., & El-Khouri, B. (2003). *Studying individual development in an interindividual context: A person-oriented approach*. Mahwah, NJ: Lawrence Erlbaum Associates.

Bernin, P. (2002). *Managers' working conditions – Stress and health* (Doctoral dissertation, Karolinska Institute, Department of Public Health Science, Solna, Sweden).

Bernin, P., Theorell, T., & Sandberg, C. G. (2001). Biological correlates of social support and pressure at work in managers. *Integrative Physiological & Behavioral Science*, *36*(2), 121–136.

Berntson, E., & Härenstam, A. (2010). Mönster av sociala relationer på arbetsplatser i Sverige [Patterns of social relations in the workplace in Sweden]. In A. Härenstam & B. Bejerot (Eds.), *Sociala relationer i arbetslivet. Studier från föränderliga arbetsplatser* [Social relations in the workplace. Studies from changing workplaces] (pp. 27-44). Malmö, Sweden: Gleerups förlag.

Bircher, J. (2005). Towards a dynamic definition of health and disease. *Medicine, Health Care and Philosophy*, *8*(3), 335–341.

Björk, L. (2013). *Contextualizing managerial work in local government organizations* (Doctoral dissertation, University of Gothenburg, Sweden). Retrieved from https://gupea.ub.gu.se/handle/2077/34265

Björk, L., Forsberg Kankkunen, T., & Bejerot, E. (2011). Det kontrollerade chefsarbetet – Variationer i könsmärkta verksamheter [The controlled

managerial assignment – Variations in gendered services]. *Arbetsmarknad och Arbetsliv*, *17*(4), 79–94.

Björk, L., Szücs, S., & Härenstam, A. (2014). Measuring capacity to perform across local government services – Managers' perceptions. *International Journal of Public Sector Management*, *27*(1), 26–38.

Björklund, C., Lohela-Karlsson, M., Jensen, I., & Bergström, G. (2013). Hierarchies of health: Health and work-related stress of managers in municipalities and county councils in Sweden. *Journal of Occupational and Environmental Medicine*, *55*(7), 752–760.

Blake, R. R., & Mouton, J. S. (1964). *The managerial grid*. Houston, TX: Gulf.

Blauner, R. (1964). *Alienation and freedom: The factory worker and his industry.* Chicago, IL: University of Chicago Press.

Bludedorn, A. C. (1978). A taxonomy of turnover. *Academy of Management Review*, *3*(3), 647–651.

Bolin, M., & Härenstam, A. (2008). An empirical study of bureaucratic and post-bureaucratic characteristics in 90 workplaces. *Economic and Industrial Democracy*, *29*(4), 541–564.

Borins, S. (1998). Lessons from the new public management in Commonwealth nations. *International Public Management Journal*, *1*(1), 37–58.

Boyne, G. (2002). Public and private management: What's the difference? *Journal of Management Studies*, *39*(1), 97–122.

Brazier, D. K. (2005). Influence of contextual factors on health care leadership. *Leadership and Organizational Development Journal*, *26*(2), 128–140.

Braverman, H. (1974). *Labor and monopoly capital.* New York, NY: Monthly Review Press.

Bright, L. (2013). Where does public service motivation count the most in government work environments? A preliminary empirical investigation and hypotheses. *Public Personnel Management*, *42*(1), 5–26.

Brüde Sundin, J. (2007). *En riktig rektor: Om ledarskap, genus och skolkulturer* [A real headmaster: About leadership, gender and school cultures] (Doctoral dissertation, Linköping University, Sweden). Retrieved from http://www.diva-portal.org/smash/get/diva2:18015/FULLTEXT01.pdf

Brülde, B. (2000). On how to define the concept of health: A loose comparative approach. *Medicine, Health Care and Philosophy*, *3*(3)*,* 305–308.

Brülde, B., & Tengland, P. A. (2003). *Hälsa och sjukdomen begreppslig utredning* [Health and sickness: A conceptual investigation]. Lund, Sweden: Studentlitteratur.

Bryman, A. (2002). *Samhällsvetenskapliga metoder* [Methods in social sciences]. Malmö, Sweden: Liber.

Burke, W. W. (2002). *Organization change: Theory and practice*. Thousand Oaks, CA: Sage.

Büssing, A., & Höge, T. (2004). Aggression and violence against home care workers. *Journal of Occupational Health Psychology*, *9*(3), 206–219.

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, *56*(2), 81–105.

Cappelli, P. (2006). Tracing the path of research in organizations and work. *Work and Occupations*, *33*(1), 8–11.

Carlson, S. (1991). *Executive behavior: A study of the work load and the working methods of managing directors* (Reprinted with contributions by H. Mintzberg & R. Stewart). Uppsala, Sweden: Acta Universitatis Upsaliensis. (Original work published 1951)

Castle, N. G., & Lin, M. (2010). Top management turnover and quality in nursing homes. *Health Care Management Review*, *35*(2), 161–174.

Chandler, J., Barry, J., & Clark, H. (2002). Stressing academe: The wear and tear of the new public management. *Human Relations*, *55*(9), 1051–1066.

Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance. *Journal of Applied Psychology*, *93*(5), 1082–1103.

Cohen, S., Gottlieb, B. H., & Underwood, L. G. (2000). Social relationships and health. In S. Cohen, L. G. Underwood, & B. H. Gottlieb (Eds.), *Social support measurement and intervention: A guide for health and social scientists* [Online version]. New York, NY: Oxford University Press.

Cooper, C. L., Dewe, P. J., & O'Driscoll, M. P. (2001). *Organizational stress: A review and critique of theory, research, and applications*. Thousand Oaks, CA: Sage.

Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, *95*(5), 834–848.

Cregård, A., & Corin, L. (2016). *Why public managers quit*. Unpublished manuscript, University of Gothenburg, Sweden.

Cregård, A., Corin, L., & Skagert, K. (2015). *Voluntary turnover among public sector managers: A review*. Unpublished manuscript, University of Gothenburg, Sweden.

Cregård, A., & Solli, R. (2012). Managers at the municipal top. In S. Tengblad (Ed.), *The work of managers: Towards a practice theory of management* (pp. 167–189). New York, NY: Oxford University Press.

Curry, D., McCarragher, T., & Dellmann-Jenkins, M. (2005). Training, transfer, and turnover: Exploring the relationship among transfer of learning factors and staff retention in child welfare. *Children and Youth Services Review, 27*, 931–948.

Danielsson, M., Heimerson, I., Lundberg, U., Perski, A., Stefansson, C. G., & Åkerstedt, T. (2012). Psychosocial stress and health problems. Health in Sweden: The national public health report 2012. Chapter 6. *Scandinavian Journal of Public Health*, *40*(9), 121–134.

Dargie, C. (1998). The role of public sector chief executives. *Public Administration*, *76*(1), 161–177.

DeHart-Davis, L., Marlowe, J., & Pandey, S. K. (2006). Gender dimensions of public service motivation. *Public Administration Review*, *66*(6), 873–887. doi:10.1111/j.1540-6210.2006.00655.x

de Jonge, J., & Dormann, C. (2003). The DISC model: Demand-induced strain compensation mechanisms in job stress. In M. F. Dollard, A. H. Winefield, & H. R. Winefield (Eds.), *Occupational stress in the service professions* (pp. 43–74). London, England: Taylor & Francis.

de Jonge, J., & Kompier, M. A. (1997). A critical examination of the demand-control-support model from a work psychological perspective. *International Journal of Stress Management*, *4*(4), 235–258.

de Jonge, J., Mulder, M. J. G. P., & Nijhuis, F. J. N. (1999). The incorporation of different demand concepts in the job demand-control model: Effects on health care professionals. *Social Science & Medicine*, *48*(9), 1149–1160.

de Lange, A. H., Taris, T. W., Kompier, M. A., Houtman, I. L., & Bongers, P. M. (2003). "The very best of the millennium": Longitudinal research and the demand-control-(support) model. *Journal of Occupational Health Psychology*, *8*(4), 282–305.

de Lange, A. H., De Witte, H., & Notelaers, G. (2008). Should I stay or should I go? Examining longitudinal relations among job resources and work engagement for stayers versus movers. *Work & Stress*, *22*(3), 201–223.

Dellve, L., Skagert, K., & Eklöf, M. (2004). *Delaktighet och struktur i systematiskt arbetsmiljöarbete. Betydelsen för rapporterade arbetsskador och arbetshälsa bland personal i kommunal vård och omsorg* [Participation and structure of systematic environment work. The significance of reported occupational injuries and health among staff in Health care]. Gothenburg, Sweden: University of Gothenburg. Rapport från Arbets- och miljömedicin 2004:107.

Dellve, L., Andreasson, J., & Jutengren, G. (2013). Hur kan stödresurser understödja hållbart ledarskap bland chefer i vården? [How can support resources create sustainable leadership among managers in healthcare?]. *Socialmedicinsk tidskrift*, *90*(6), 866–877.

Dellve, K., Skagert, K., & Vilhelmsson, R. (2007). Leadership in workplace health promotion projects: 1- and 2-year effects on long-term work attendance. *European Journal of Public Health*, *17*(5), 471–476.

Dellve, L., & Wikström, E. (2006). *Hållbart ledarskap i sjukvården – Utveckling av ledarskap och stödstrukturer ur individ- och organisationsperspektiv* [Sustainable leadership in health care – Developing leadership and support structures from an individual and organizational perspective]. Gothenburg, Sweden: University of Gothenburg/Region Västra Götaland.

Dellve, L., & Wikström, E. (2009). Managing complex workplace stress in health care organizations: Leaders' perceived legitimacy conflicts. *Journal of Nursing Management*, *17*(8), 931–941.

Deluga, R. J., & Perry, J. T. (1991). The relationship of subordinate upward influencing behaviour, satisfaction and perceived superior effectiveness with leader-member exchanges. *Journal of Occupational Psychology*, *64*(3), 239–252.

Demerouti, E. (2014, April). *Job demands and job resources: Given and crafted*. Keynote speech delivered at the 11th conference of the European Academy of Occupational Health Psychology, London, England.

Demerouti, E., & Bakker, A. B. (2011). The job demands-resources model: Challenges for future research. *SA Journal of Industrial Psychology, 37*(2), 1–9.

Demerouti, E., & Bakker, A. B. (2014, April). *The job demands-resources model: A simple representation of the complex reality?* Paper presented at the 11th

conference of the European Academy of Occupational Health Psychology, London, England.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499–512.

Dierdorff, E. C., Rubin, R. S., & Morgeson, F. P. (2009). The milieu of managerial work: An integrative framework linking work context to role requirements. *Journal of Applied Psychology*, *94*(4), 972–988.

Dollard, M. F., & Bakker, A. B. (2010). Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement. *Journal of Occupational and Organizational Psychology*, *83*(3), 579–599.

Dollard, M. F., Dormann, C., Boyd, C. M., Winefield, H. R., & Winefield, A. H. (2003). Unique aspects of stress in human service work. *Australian Psychologist*, *38*(2), 84–91.

Eisenberger, R., Stinglhamber, F., Vanderberghe, C., Sucharski, I., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, *87*(3), 565–573.

Ekenvall, L., Härenstam, A., Karlqvist, L., Nise, G., & Vingård, E. (1993). Kvinnan i den vetenskapliga studien – Finns hon? [The female in scientific studies – Does she exist?]. *Läkartidningen*, *90*(3), 3773–3774.

Ekholm, B. (2012). Middle managers in elderly care under demands and expectations. *Leadership in Health Services*, *25*(3), 203–215.

Eklöf, M., Pousette, A., Dellve, L., Skagert, K., & Ahlborg, G. J. (2010). *Gothenburg Manager Stress Inventory (GMSI): Utveckling av ett variations- och förändringskänsligt frågeinstrument för mätning av stressorexponering, copingbeteende och copingresurser bland 1:a och 2:a linjens chefer inom offentlig vård och omsorg* [Gothenburg Manager Stress Inventory (GMSI): Development of a variation- and change-sensitive instrument for measuring stress or exposure, coping behaviour and coping resources among first- and second-line managers within public health care]. Gothenburg, Sweden: Institute of Stress Medicine.

Ekman, R., & Arnetz, B. (Eds.). (2005). *Stress: Individen, samhället, organisationen, molekylerna* [Stress: The individual, the society, the organization, the molecules]. Stockholm, Sweden: Liber.

Enders, C. K. (2001). A primer on maximum likelihood algorithms available for use with missing data. *Structural Equation Modeling*, *8*(1), 128–141.

Erikson, E. H. (1959). *Identity and the life cycle: Selected papers: Psychological issues* (Vol. 1, No. 1). New York, NY: International Universities Press.

European Commission. (2002). *Guidance on work-related stress: Spice of life or kiss of death?* (Executive summary). Luxembourg: Office for Official Publications of the European Communities.

European Commission. (2012). *An agenda for adequate, safe and sustainable pensions* [White paper]. Brussels: European Commission.

Fälldin, T., & Ahlmark, P. (1977). Regeringens proposition 1976/77:149 om arbetsmiljölag mm [The Swedish governments proposition No. 1976/77:149 for the Work Environment Act, 1977]. Stockholm, Sweden.

Farrell, C., & Morris, J. (2003). The "neo-bureaucratic" state: Professionals, managers and professional managers in schools, general practices and social work. *Organization*, *10*(1), 129–156.

Fiedler, F. E. (1967). *A theory of leadership effectiveness*. New York, NY: McGraw-Hill.

Fiedler, F. E. (1996). Research on leadership selection and training: One view of the future. *Administrative Science Quarterly*, *41*(2), 241–250.

Flinkman, M., Leino-Kilpi, H., & Salanterä, S. (2010). Nurses' intention to leave the profession: Integrative review. *Journal of Advanced Nursing*, *66*(7), 1422–1434.

Forsberg Kankkunen, T., Ylander, J., & Höckertin, C. (2010). Managing the psychosocial environment – Logics of leadership in different organizational contexts. In S. Marklund & A. Härenstam (Eds.), *The dynamics of organizations and healthy work* (pp. 64–76). Växjö, Sweden: Linnaeus University, Arbetsliv i omvandling.

Frankenhaeuser, M., Lundberg, U., Fredrikson, M., Melin, B., Tuomisto, M., Myrsten, A.-L., . . . Wallin, L. (1989). Stress on and off the job as related to sex and occupational status in white-collar workers. *Journal of Organizational Behavior*, *10*(3), 321–346.

Frese, M., & Zapf, D. (1988). Methodological issues in the study of work stress: Objective vs subjective measurements of work stress and the question of longitudinal studies. In C. L. Cooper & R. Payne (Eds.), *Causes, coping and consequences of stress at work* (pp. 115–140). Oxford, England: John Wiley & Sons.

Frese, M., & Zapf, D. (1994). Action as the core of work psychology: A German approach. *Handbook of Industrial and Organizational Psychology*, *4*, 271–340.

Fryer, K., Antony, J., & Ogden, S. (2009). Performance management in the public sector. *International Journal of Public Sector Management*, *22*(6), 478–498.

Fullan, M. (2006). The future of educational change: System thinkers in action. *Journal of Educational Change*, *7*(3), 113–122.

Gittell, J. (2001). Supervisory span, relational coordination and flight departure performance: A reassessment of post bureaucracy theory. *Organization Science*, *12*(4), 468–483.

Glick, W. H. (1985). Conceptualizing and measuring organizational and psychological climate: Pitfalls in multilevel research. *Academy of Management Review*, *10*(3), 601–616.

Glisson, C., & James, L. R. (2002). The cross-level effects of culture and climate in human service teams. *Journal of Organizational Behavior*, *23*(6), 767–794. doi:10.1002/job.162

Godue, C. (2006, May). *Human resources for health: A global public health issue?* Paper presented at the Canadian Public Health Association 97th Annual Conference, Vancouver, Canada.

Goldstein, H., Browne, W., & Rasbash, J. (2002). Multilevel modelling of medical data (Tutorial in biostatistics). *Statistics in Medicine*, *21*(21), 3291–3315.

Gore, A. 1993. *From red tape to results: Creating a government that works better and costs less. Report of the National Performance Review*. New York, NY: Times Books/Random House.

Greiner, B., & Leitner, K. (1989, March). Assessment of job stress: The RHIA instrument. In K. Landau & W. Rohmert (Eds.), *Recent developments in job analysis.* Proceedings of the International Symposium on Job Analysis, University of Hohenheim, Germany (pp. 53–66). London, England: Taylor & Francis.

Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, *26*(3), 463–488.

Griffiths, A. (1999). Organizational interventions: Facing the limits of the natural science paradigm. *Scandinavian Journal of Work, Environment & Health*, *25*(6), 589–596. Hacker, W. (1982). Objective and subjective organization of

136

work activities. In M. Cranach & R. Harre (Eds.), *The analysis of action* (pp. 73–91). Cambridge, England: Cambridge University Press.

Hacker, W. (2003). Action regulation theory: A practical tool for the design of modern work processes? *European Journal of Work and Organizational Psychology*, *12*(2), 105–130.

Hackman, J. R., & Oldham, G. R. (1980). *Work redesign* (Vol. 72). Reading, MA: Addison-Wesley.

Hagerman, H., Engström, M., Häggström, E., Wadensten, B., & Skytt, B. (2015). Male first-line managers' experiences of the work situation in elderly care: An empowerment perspective. *Journal of Nursing Management*, *23*(6), 695–704.

Hagström, B. (1990). *Chef i offentlig verksamhet – Forskning kring offentligt ledarskap* [Managers in the public sector: Research on public leadership]. Lund, Sweden: Studentlitteratur.

Hagström, B. (2003). Ett ledarskap för hela organisationen – Mellanchefernas återkomst [A leadership for the whole organization: The return of the middle managers]. In C. von Otter (Ed.), *Ute och inne i svenskt arbetsliv* (pp. 309–321). Stockholm, Sweden: Arbetslivsinstitutet [National Institute for Working Life].

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, *43*(6), 495–513.

Hakanen, J., Schaufeli, W., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, commitment and work engagement. *Work & Stress*, *22*(3), 224–241.

Hales, C. P. (1986). What do managers do? A critical review of the evidence. *Journal of Management Studies*, *23*(1), 88–115.

Hambrick, D. C., Finkelstein, S., & Mooney, A. C. (2005). Executive job demands: New insights for explaining strategic decisions and leader behaviors. *Academy of Management Review*, *30*(3), 472–491.

Hansen, N., Baraldi, S., Berntson, E., & Andersson, H. (2013). Privatizing health care in times of new public management: Investigating the role of psychological empowerment using cluster analysis. *PsyCh Journal*, *2*(3), 190–208.

Hansson, A. S., Vingård, E., Arnetz, B. B., & Anderzén, I. (2008). Organizational change, health, and sick leave among health care employees: A longitudinal

study measuring stress markers, individual, and work site factors. *Work & Stress*, *22*(1), 69–80.

Harder, H., Svärd, E., Wigforss, A., & Hedén, K. (2000). *Stress och belastning i vård och omsorg. Verksgemensamt tillsynsprojekt 1998 och 1999* [Stress and workload in healthcare: supervision of projects in 1998 and 1999], Stockholm, Sweden: Arbetarskyddstyrelsen.

Härenstam, A. (1989). *Prison personnel: Working conditions, stress and health: A study of 2000 prison employees in Sweden* (Doctoral dissertation, Karolinska Institute, Solna, Sweden).

Härenstam, A. (2008). Organizational approach to studies of job demands, control and health. *Scandinavian Journal of Work, Environment & Health*, *6*, 144–149.

Härenstam, A. (2009). Exploring gender, working and living conditions and health – Suggestions for contextual and comprehensive approaches. *Scandinavian Journal of Work, Environment & Health*, *35*(2), 127–133.

Härenstam, A., Ahlberg-Hulthén, G., Bodin, L., Jansson, C., Johansson, G., Johansson, K., & Wiklund, P. (1999). *Vad kännetecknar och innebär moderna arbets- och livsvillkor? Resultat av analyser med personansats samt utveckling av analysmodeller för befolkningsstudier* [What characterizes modern working and living conditions? Results of analyzes with a person-centered approach and the development of analytical methods for population studies]. Slutrapport I, MOA-projektet No. 8 [MOA project final report No. 8]. Stockholm, Sweden: Occupational Medicine Unit, Karolinska Institute.

Härenstam, A., Karlqvist, L., Bodin, L., Nise, G., & Schéele, P. (2003). Patterns of working and living conditions: A holistic, multivariate approach to occupational health studies. *Work and Stress*, *17*(1), 73–92.

Härenstam, A., & MOA Research Group. (2005). Different development trends in working life and increasing occupational stress require new work environment strategies. *Work*, *24*(3), 261–277.

Härenstam, A., Rydbeck, A., Karlqvist, M., Waldenström, K., Wiklund, P., & MOA Research Group. (2004). *The significance of organization for healthy work: Methods, study design, analyzing strategies and empirical results from the MOA study*. Stockholm, Sweden: Arbetslivsinstitutet [National Institute for Working Life].

Härenstam, A., & Östebo, A. (Eds.). (2014a). *Chefskapets förutsättningar och konsekvenser – Metoder och resultat från CHEFiOS projektet – Slutrapport*

del 1 [Managerial prerequisites and consequences. Methods and results from the CHEFiOS project: Final report part 1]. Gothenburg, Sweden: Institute of Stress Medicine.

Härenstam, A., & Östebo, A. (Eds.). (2014b). *Förändringsprocesser och utvärderingar av interventioner i kommunala förvaltningar. Metoder och resultat från CHEFiOS projektet – Slutrapport del 2* [Change processes and evaluation of interventions in municipal organizations. Methods and results from the CHEFiOS project: Final report part 2]. Gothenburg, Sweden: Institute of Stress Medicine.

Hargreaves, A., & Fink, D. (2004). The seven principles of sustainable leadership. *Educational Leadership*, *61*(7), 8–13.

Hargreaves, A., & Fink, D. (2006). *Sustainable leadership*. San Francisco, CA: Jossey-Bass.

Harris, K., & Kacmar, K. (2005). Easing the strain: The buffer role of supervisors in the perceptions of politics–strain relationship. *Journal of Occupational and Organizational Psychology*, *78*(3), 337–354.

Hasenfeld, Y. (1983). *Human service organizations*. Englewood Cliffs, NJ: Prentice-Hall.

Hasenfeld, Y. (2009). *Human services as complex organizations*. Thousand Oaks, CA: Sage.

Hasson, D. (2005). *Stress management interventions and predictors of long-term health* (Doctoral dissertation, Uppsala University, Sweden).

Häusser, J. A., Mojzisch, A., Niesel, M., & Schulz-Hardt, S. (2010). Ten years on: A review of recent research on the Job Demand-Control (Support) model and psychological well-being. *Work & Stress*, *24*, 1–35.

Hayes, L. J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., . . . Stone, P. W. (2006). Nurse turnover: A literature review. *International Journal of Nursing Studies*, *43*(2), 237–263.

Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, *57*(4), 657–674.

Henning, R. (2000). *Ledarskap och ledning i offentlig sektor* [Leadership and governance in the public sector] (Research paper series 2000/2). Stockholm, Sweden: Center for Advanced Studies in Leadership, Stockholm School of Economics.

Hersey, P., & Blanchard, K. H. (1969). Life cycle theory of leadership. *Training & Development Journal*, *23*(5), 26–34.

Hildingsson, K., & Krafft, C. (2001). *Höga krav och lite stöd – En beskrivning av chefers arbetsvillkor* [High demands and low support: A description of managers' working conditions]. Stockholm, Sweden: SACO.

Hildingsson, K., & Krafft, C. (2003). *HögTid för ledarskap. Om stöd till chefer* [Time for leadership: On managerial support]. Stockholm, Sweden: SACO.

Hirdman, Y. (1990). Genussystemet [The gender system]. In SOU 1990:44, *Demokrati och makt i Sverige* [Democracy and power in Sweden] (pp. 73–116). Stockholm, Sweden: Fritzes offentliga publikationer.

Hirschman, A. O. (1970). *Exit, voice and loyalty: Responses to decline in firms, organizations and states.* Cambridge, MA: Harvard University Press.

Hjalmarson, I., Norman, E., & Trydegård, G.-B. (2004). *Om man ska vara stöttepelare åt andra måste man stå stadigt själv* [If you are supposed to support others, you must stand on solid ground yourself]. Stockholm, Sweden: Stiftelsen Stockholms läns äldrecentrum.

Höckertin, C. (2007). *Organisational characteristics and psychosocial working conditions in different forms of ownership* (Doctoral dissertation, University of Umeå, Sweden). Retrieved from https://www.diva-portal.org/smash/get/diva2:140278/FULLTEXT01.pdf

Holmberg, R., Larsson, M., & Bäckkström, M. (2009). *Utvärdering av projektet Hållbara chefer 2006–2009* [Evaluation of the sustainable project managers 2006–2009]. Lund, Sweden: Lund University.

Hom, P., & Kinicki, A. (2001). Toward a greater understanding of how dissatisfaction drives employee turnover. *Academy of Management Journal*, *44*(5), 975–987.

Hood, C. (1991). A public management for all seasons? *Public Administration*, *69*(1), 3–19.

Hood, C. (2011). The Ashgate research companion to new public management – by Tom Christensen and Per Laegreid (Book review). *Governance*, *24*(4), 737–739. doi:10.1111/j.1468-0491.2011.01547_1.x

House, J. S. (1981). *Work stress and social support.* Reading, England: Addison-Wesley Educational.

Hox, J. J. (2002). *Multilevel analysis: Techniques and applications.* Mahwah, NJ: Lawrence Erlbaum Associates.

Hu, Q., Schaufeli, W., & Taris, T. (2011). The Job Demands-Resources model: An analysis of additive and joint effects of demands and resources. *Journal of Vocational Behavior*, *79*, 181–190. doi:10.1016/j.jvb.2010.12.009

Hultberg, A. (2007). Ett hälsosammare arbetsliv – Vägledning för goda psykosociala arbetsförhållanden [A healthier working life: Guidance for good psychosocial working conditions]. *Socialmedicinsk Tidskrift*, *84*(2), 114–122.

Idler, E. L., & Benyamini, Y. (1997). Self-rated health and mortality: A review of twenty-seven community studies. *Journal of Health and Social Behavior*, *38*(1), 21–37.

Ivarsson Westerberg, A. (2013). Förvaltningchefer [Heads of department]. In Å. C. Vifell & A. Ivarsson Westerberg (Eds.), *I det offentligas tjänst: Nya förutsättningar för tjänstemannarollen* [In the public service: New prerequisites for the role of the administrator] (pp. 147–165). Malmö, Sweden: Gleerups förlag.

Jääskeläinen, A., & Lönnqvist, A. (2011). Public service productivity: How to capture outputs? *International Journal of Public Sector Management*, *24*(4), 289–302.

James, L. R., & Sells, S. B. (1981). Psychological climate: Theoretical perspectives and empirical research. In D. Magnussen (Ed.), *Toward a psychology of situations: An interactional perspective* (pp. 275–295). Hillsdale, NJ: Lawrence Erlbaum Associates.

Johansson, U., & Johrén, A. (2004). *Personalekonomi idag* [Personal finance today]. Uppsala, Sweden: Uppsala Publishing House.

Johns, G. (2001). In praise of context. *Journal of Organizational Behavior*, *22*(1), 31–42.

Johns, G. (2006). The essential impact of context on organizational behaviour. *Academy of Management Review*, *31*(2), 386–408.

Johnson, J. V., & Hall, E. M. (1988). Job strain, work place social support, and cardiovascular disease: A cross-sectional study of a random sample of the Swedish working population. *American Journal of Public Health*, *78*(10), 1336–1342.

Josephson, M., Lindberg, P., Voss, M., Alfredsson, L., & Vingård, E. (2008). Employment and sickness absence. The same factors influence job turnover and long spells of sick leave – a 3-year follow-up of Swedish nurses. *European Journal of Public Health*, *18*(4), 380–385.

Jung, C. S. (2010). Predicting organizational actual turnover rates in the US federal government. *International Public Management Journal, 13* (3), 297–317.

Kacmar, K. M., Andrews, M. C., Van Rooy, D. L., Steilberg, R. C., & Cerrone, S. (2006). Sure everyone can be replaced . . . but at what cost? Turnover as a predictor of unit-level performance. *Academy of Management Journal, 49* (1), 133–144.

Kahn, R. L. (1981). *Work and health*. New York, NY: Wiley.

Kallenberg, A. (1989). Linking macro and micro levels: Bringing the workers back into the sociology of work. *Social Forces*, *67*(3), 582–592.

Kankkunen, T. (2009). *Två kommunala rum. Ledningsarbete i genusmärkta tekniska respective omsorgs- och utbildningsverksamheter* [Two municipal spaces: Managerial work in genderized municipal technical and human services] (Doctoral dissertation, Stockholm University, Sweden).

Kankkunen, T. (2014). Access to networks in genderized contexts: The construction of hierarchical networks and inequalities in feminized, caring and masculinized, technical occupations. *Gender, Work and Organization*, *21*(4), 340–352.

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, *24*(2), 285–308.

Karasek, R. A., & Theorell, T. (1990). *Healthy work: Stress, productivity and the reconstruction of working life*. New York, NY: Basic Books Harper.

Karlsson, I. (2006). *Att leda i kommunal äldreomsorg: Om arbetsledares handlingsutrymme, handlingsfrihet och skilda lojaliteter: Exemplet Halland* [Leading in municipal elderly care: On managers' scope of action and separate loyalties: The Halland example] (Doctoral dissertation, Linnaeus University, Växjö, Sweden).

Kasl, S. (1996). The influence of the work environment on cardiovascular health: A historical, conceptual, and methodological perspective. *Journal of Occupational Health Psychology*, *1*(1), 42–56.

Kasl, S. (1998). Measuring job stressors and studying the health impact of the work environment: An epidemiologic commentary. *Journal of Occupational Health Psychology*, *3*, 390–401.

Katz, R. L. (1974). *Skills of an effective administrator*. Boston, MA: Harvard Business Press.

Kellerman, B., & Webster, S. W. (2001). The recent literature on public leadership: Reviewed and considered. *The Leadership Quarterly*, *12*(4), 485–514.

Kira, M. (2002). Moving from consuming to regenerative work. In P. Docherty, J. Forslin, & A. B. Shami (Eds.), *Creating sustainable work systems: Emerging perspectives and practices* (pp. 29–39). London, England: Routledge.

Kira, M., & Forslin, J. (2008). Seeking regenerative work in the post-bureaucratic transition. *Journal of Organizational Change Management*, *21*(1), 489–501.

Kira, M., van Eijnatten, F. M., & Balkin, D. B. (2010). Crafting sustainable work: Development of personal resources. *Journal of Organizational Change Management*, *23*(5), 616–632.

Kjaer Jensen, M. (1995). *Kvalitativa metoder för samhälls- och beteendevetare* [Qualitative methods for social and behavioral scientists]. Lund, Sweden: Studentlitteratur.

Kjellberg, A., & Wadman, C. (2007). The role of the affective stress response as a mediator of the effect of psychosocial risk factors on musculoskeletal complaints – Part I: Assembly workers. *International Journal of Industrial Ergonomics*, *37*(4), 367–374. doi:10.1016/j.ergon.2006.12.002

Klein, K., & Kozlowski, S. (2000). From micro to meso: Critical steps in conceptualizing and conducting multilevel research. *Organizational Research Methods*, *3*(3), 211–236.

Knudsen, H., Ducharme, L., & Roman, P. (2009). Turnover intention and emotional exhaustion "at the top": Adapting the job demands-resources model to leaders of addiction treatment organizations. *Journal of Occupational Health Psychology*, *14*(1), 84–95. doi:10.1037/a0013822

Kompier, M. A., & Kristensen, T. S. (2000). Organizational work stress interventions in a theoretical, methodological and practical context. In J. Dunham (Ed.), *Stress in the workplace: Past, present and future* (pp. 164–190). London, England: Whurr.

Kotter, J. (1982). *The general managers*. New York, NY: The Free Press.

Kotter, J. (1999). *John P. Kotter on what leaders really do*. Boston, MA: Harvard Business School Press.

Kristensen, T. (1995). The demand-control-support model: Methodological challenges for future research. *Stress & Health*, *11*(1), 17–26.

143

Kuoppala, J., Lamminpää, A., Liira, J., & Vainio, H. (2008). Leadership, job well-being, and health effects – A systematic review and a meta-analysis. *Journal of Occupational Environmental Medicine*, *50*(8), 904–915.

Lambert, E., Hogan, N., & Barton, S. (2001). The impact on job satisfaction on turnover intent: A test of a structural measurement model using a national sample of workers. *The Social Science Journal*, *38*(2), 233–250.

Landstad, B., & Vinberg, S. (2013, March). Female leaders' experiences of psychosocial working conditions and its [*sic*] health consequences in Swedish public human service organizations. *Society, Health & Vulnerability*, *4*. http://dx.doi.org/10.3402/vgi.v4i0.19075

Lawler, J. (2007). Leadership in social work: A case of caveat emptor? *British Journal of Social Work*, *37*(1), 123–141.

Lazarus, R. S., & Folkman, S. (1984). Stress, *appraisal, and coping*. New York, NY: Springer.

Lee, R. T., & Ashforth, B. E. (1993a). A further examination of managerial burnout: Toward an integrated model. *Journal of Organizational Behavior*, *14*(1), 3–20. doi:10.1002/job.4030140103

Lee, R. T., & Ashforth, B. E. (1993b). A longitudinal study of burnout among supervisors and managers: Comparisons between the Leiter and Maslach (1988) and Golembiewski et al. (1986) models. *Organizational Behavior and Human Decision Processes*, *54*(3), 369–398. doi:10.1006/obhd.1993.1016

Lee, T., Mitchell, T., Holtom, B., McDaniel, L., & Hill, J. (1999). The unfolding model of voluntary turnover: A replication and extension. *Academy of Management Journal*, *42*(4), 450–462.

Lee, S. Y., & Whitford, A. B. (2008). Exit, voice, loyalty, and pay: Evidence from the public workforce. *Journal of Public Administration Research and Theory*, *18*(4), 647–671. doi:10.1093/jopart/mum029

Leijon, O., Härenstam, A., Waldenström, K., Alderling, M., & Vingård, E. (2006). Target groups for prevention of neck/shoulder and low back disorders: An exploratory cluster analysis of working and living conditions. *Work*, *27*(2), 189–204.

Leland, S. M., Carman, J. G., & Swartz, N. J. (2012). Understanding managerial succession planning at the local level: A study of the opportunities and challenges facing cities and counties. *National Civic Review*, *101*(2), 44–50.

Levi, L. (2002, September 19/20). The European Commission's guidance on work-related stress: From words to action. *TUTB Newsletter*, 12–17.

144

Levin, B., & Fullan, M. (2008). Learning about system renewal. *Educational Management Administration Leadership*, *36*(2), 289–303.

Lidwall, U. (2010). *Long-term sickness absence: Aspects of society, work, and family* (Doctoral dissertation, Karolinska Institute, Solna, Sweden). Retrieved from http://publications.ki.se/xmlui/handle/10616/38927

Liljegren, M., & Ekberg, K. (2008). The longitudinal relationship between job mobility, perceived organizational justice, and health. *BMC Public Health*, *8*(1), 1–10.

Lindholm, M., Dejin-Karlsson, E., Westin, J., Hagström, B., & Uden, G. (2004). Physicians as clinical directors: Working conditions, psychosocial resources and self-rated health. *Occupational Medicine*, *54*(3), 182–189.

Lindström, K. (1994). Psychosocial criteria for good work organizations. *Scandinavian Journal of Work, Environment & Health*, *20*, 123–133.

Little, L. M., Simmons, B. L., & Nelson, D. L. (2007). Health among leaders: Positive and negative affect, engagement and burnout, forgiveness and revenge. *Journal of Management Studies*, *44*(2), 243–260.

Little, R. J., & Rubin, D. B. (1987). *Statistical analysis with missing data*. New York, NY: John Wiley & Sons.

Lizano, E. L., & Mor Barak, M. E. (2012). Workplace demands and resources as antecedents of job burnout among public child welfare workers: A longitudinal study. *Children and Youth Services Review*, *34*(9), 1769–1776.

Llorens, S., Bakker, A., Schaufeli, W., & Salanova, M. (2006). Testing the robustness of the job demands-resources model. *International Journal of Stress Management*, *13*(3), 378–391.

Løkke, A. K., & Madsen, H. (2014). Public sector managers and work stress. *International Journal of Workplace Health Management*, *7*(2), 105–120.

Lucas, V., Laschinger, H., & Wong, C. (2008). The impact of emotional intelligent leadership on staff nurse empowerment: The moderating effect of span of control. *Journal of Nursing Management*, *16*(8), 964–973.

Lundberg, O., & Manderbacka, K. (1996). Assessing reliability of a measure of self-rated health. *Scandinavian Journal of Social Medicine*, *24*(3), 218–224.

Lundqvist, D. (2013). *Psychosocial work conditions, health, and leadership of managers* (Doctoral dissertation, Linköping University, Sweden). Retrieved from http://liu.diva-portal.org/smash/get/diva2:643342/FULLTEXT01.pdf

145

Magnusson, D., & Törestad, B. (1993). A holistic view of personality: A model revisited. *Annual Review of Psychology*, *44*(1)*,* 427–452.

Manderbacka, K. (1998). *Questions on survey questions on health* (Doctoral dissertation, Stockholm University, Sweden).

March, J. G., & Sutton, R. I. (1997). Crossroads – Organizational performance as a dependent variable. *Organization Science*, *8*(6), 698–706.

Marmot, M., Siegrist, J., Theorell, T., & Feeney, A. (1999). Health and the psychological environment at work. In M. Marmot & R. G. Wilkinson (Eds.), *Social determinants of health* (pp. 105–131). Oxford, England: Oxford University Press.

Marshall, N. L., Barnett, R. C., & Sayer, A. (1997). The changing workforce, job stress, and psychological distress. *Journal of Occupational Health Psychology, 2*(2)*,* 99-107.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, *52*(1), 397–422.

McConnell, C. R. (1999). Staff turnover: Occasional friend, frequent foe, and continuing frustration. *The Health Care Manager*, *18*(1), 1–13.

McElroy, J. C., Morrow, P. C., & Fenton, J. B. (1995). Absenteeism and performance as predictors of voluntary turnover. *Journal of Managerial Issues*, *7*(1), 91–98.

Medin, J., & Alexandersson, K. (2000). *Begreppen hälsa och hälsofrämjande: en litteraturstudie* [The concepts of health and health promotion: A literature review]. Lund, Sweden: Studentlitteratur.

Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. D. Drenth, H. Thierry, & C. J. De Wolff (Eds.), *Handbook of work and organizational psychology. Vol. 2: Work psychology* (2nd ed., pp. 5–33). Hove, England: Psychology Press.

Menard, S. (2002). *Applied logistic regression analysis* (2nd ed.). Thousand Oaks, CA: Sage.

Miles, B., & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.

Mills, M., van de Bunt, G., & de Bruijn, J. (2006). Comparative research: Persistent problems and promising solutions. *International Journal of Sociology*, *21*(5), 619–631.

Ministry of Environment of the Kingdom of Sweden. (2016, February 1). *En arbetsmiljöstrategi för det moderna arbetslivet 2016–2020* [A work environment strategy for the modern working life 2016–2020] (Media release; document 2015/16:80). Stockholm, Sweden: Government of Sweden. Retrieved from http://www.regeringen.se/rattsdokument/skrivelse/2016/02/skr.-20151680/

Mintzberg, H. (1973). *The nature of managerial work*. New York, NY: Harper & Row.

Mintzberg, H. (1993). *Structure in fives: Designing effective organizations*. London, England: Prentice Hall.

Mintzberg, H. (1996). Managing government, governing management. *Harvard Business Review*, *74*(3), 75.

Mintzberg, H. (2006, October 23). Community-ship is the answer [The leadership debate with Henry Mintzberg]. *Financial Times*.

Mitchel, J. O. (1981). The effect of intentions, tenure, personal, and organizational variables on managerial turnover. *Academy of Management Journal*, *24*(4), 742–751.

Montin, S. (2004). *Moderna kommuner [Modern municipalities]*. Malmö, Sweden: Liber.

Montin, S. (2005). *Politisk styrning och demokrati i kommunerna: Åtta dilemman i ett historiskt ljus* [Political governance and democracy in municipalities: Eight dilemmas in a historical light]. Stockholm, Sweden: Sveriges kommuner och landsting.

Mor Barak, M. E., Nissly, J. A., & Levin, A. (2001). Antecedents to retention and turnover among child welfare, social work, and other human service employees: What can we learn from past research? A review and meta-analysis. *Social Service Review*, *75*(4), 625–661.

Mor Barak, M. E., Travis, D., Pyun, H., & Xie, B. (2009). The impact of supervision on worker outcomes: A meta-analysis. *Social Service Review*, *83*(1), 3–32.

Mowday, R., & Sutton, R. (1993). Organizational behavior: Linking individuals and groups to organizational contexts. *Annual Review of Psychology, 44*, 195–229.

Moynihan, D. P., & Landuyt, N. (2008). Explaining turnover intention in state government: Examining the roles of gender, life cycle, and loyalty. *Review of*

147

Public Personnel Administration, *28*(2), 120–143.
doi:10.1177/0734371X08315771

Moynihan, P., & Pandey, S. (2005). Testing how management matters in an era of
government by performance management. *Journal of Public Administration
Research and Theory*, *15*(3), 421–439.

Moynihan, P., & Pandey, S. (2007). The ties that bind: Social networks, person–
organization value fit, and turnover intention. *Public Administration
Research and Theory*, *18*(2), 205–227.

Muhonen, T. (2010). Feeling double locked-in at work: Implications for health and
job satisfaction among municipal employees. *Work, 37*(2), 199–204.
doi:10.3233/WOR20101070

Mumford, M., Zaccaro, S., Harding, F., Jacobs, F., & Fleishman, E. (2000).
Leadership skills for a changing world: Solving complex problems.
Leadership Quarterly, *11*(1), 11–35.

Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A
meta-analytic investigation of the link between job demands, job resources,
burnout, engagement, and safety outcomes. *Journal of Applied Psychology,
96*, 71–94.

Naus, F., van Iterson, A., & Roe, R. (2007). Organizational cynicism: Extending
the exit, voice, loyalty, and neglect model of employees' responses to
adverse conditions in the workplace. *Human Relations*, *60*(5), 683–718.

Nielsen, K., & Abildgaard, J. S. (2013). Evaluating organizational interventions: A
research-based framework of process and effect evaluation. *Work & Stress*,
27(3), 278–297.

Nielsen, K., Abildgaard, J. S., & Daniels, K. (2014). Putting context into
organizational intervention design: Using tailored questionnaires to measure
initiatives for worker well-being. *Human Relations*, *67*(12), 1537–1560.

Nielsen, K., & Cleal, B. (2010). Predicting flow at work: Investigating the activities
and job characteristics that predict flow states at work. *Journal of
Occupational Health Psychology*, *15*(2), 180–190.

Noordegraaf, M., & Abma, T. (2003). Management by measurement? Public
management practices amidst ambiguity. *Public Administration*, *81*(4), 853–
871.

Noordegraaf, M., & Stewart, R. (2000). Managerial behaviour research in private
and public sectors: Distinctiveness, disputes and directions. *Journal of
Management Studies*, *37*(3), 427–443.

Nordenfelt, L. (1995). *On the nature of health* (2nd rev. ed.). Dordrecht, The Netherlands: Kluwer.

Nordenfelt, L. (2007). The concepts of health and illness revisited. *Medicine, Health Care and Philosophy*, *10*(1), 5–10.

Nordin, M. (2010). Det sociala stödets betydelse för utslagning och inlåsning på arbetsmarknaden [The importance of social support for exclusion and locking-in effect on the labor market]. In A. Härenstam, & E. Bejerot (Eds.), *Sociala relationer i arbetslivet* [Social relationships in working life] (pp. 45–56). Malmö, Sweden: Gleerups förlag.

Northouse, P. G. (2007). *Leadership: Theory and practice* (4th ed.). Thousand Oaks, CA: Sage.

Nyberg, A. (2009). *The impact of managerial leadership on stress and health among employees* (Doctoral dissertation, Karolinska Institute, Solna, Sweden). Retrieved from https://openarchive.ki.se/xmlui/handle/10616/38102

Nyberg, A., Alfredsson, L., Theorell, T., Westerlund, H., Vahtera, J., & Kivimäki, M. (2009). Managerial leadership and ischaemic heart disease among employees: The Swedish WOLF study. *Occupational and Environmental Medicine*, *66*(1), 51–55.

Nyberg, A., Bernin, P., & Theorell, T. (2005). *The impact of leadership on the health of subordinates*. Stockholm, Sweden: Arbetslivsinstitutet [National Institute for Working Life].

Oesterreich, R., & Volpert, W. (1986). Task analysis for work design on the basis of action regulation theory. *Economic and Industrial Democracy*, *7*(4), 503–527.

Offermann, L., & Hellmann, P. (1996). Leadership behavior and subordinates stress: A 360º view. *Journal of Occupational Health Psychology*, *1*(4), 382–390.

Ohlsson, Ö., & Rombach, B. (1998). *Res pyramiderna: Om frihetsskapande hierarkier och tillplattningens slaveri* [Raise the pyramids: Freedom-creating hierarchies and the slavery from flattening them]. Stockholm, Sweden: Svenska förlaget.

Oxenstierna, G., Widmark, M., Finnholm, K., & Elofsson, S. (2008). *Psykosociala faktorer i dagens arbetsliv och hur man mäter och beskriver dem* [Psychosocial factors in modern working life and how to measure and describe them]. Stockholm, Sweden: Stress Research Institute.

149

Pandey, S., & Wright, B. (2006). Connecting the dots in public management: Political environment, organizational goal ambiguity, and the public manager's role ambiguity. *Journal of Public Administration Research and Theory*, *16*(4), 511–532.

Peeters, M., & Le Blanc, P. (2001). Towards a match between job demands and sources of social support: A study among oncology care providers. *European Journal of Work and Organizational Psychology*, *10*(1), 53–72.

Peter, R., Siegrist, J., Hallqvist, J., Reuterwall, C., Theorell, T., & SHEEP Study Group. (2002). Psychosocial work environment and myocardial infarction: Improving risk estimation by combining two complementary job stress models in the SHEEP study. *Journal of Epidemiology & Community Health*, *56*(4), 294–300.

Peterson, S. L. (2007). Managerial turnover in US retail organizations. *Journal of Management Development*, *26* (8), 770–789.

Peterson, S. (2009). Career decision-making self‑efficacy, integration, and the likelihood of managerial retention in governmental agencies. *Human Resource Development Quarterly*, *20*(4), 451–475.

Petterson, I.-L. (1995). *Psykosocial arbetsmiljö och hälsa – En sammanställning av instrument från databasen metod* [Psychosocial work environment: A compilation of instruments from the database method]. Stockholm, Sweden: National Institute for Psychosocial Environmental Medicine (IPM).

Pfeffer, J. (2010). Building sustainable organizations: The human factor. *Academy of Management Perspectives*, *24*(1), 34–45.

Podsakoff, P., MacKenzie, S., Lee, J.-Y., & Podsakoff, N. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903.

Pollitt, C. (1993). *Managerialism and the public services*. Cambridge, England: Blackwell.

Pollitt, C., & Bouckaert, G. (2000). *Public management reform: A comparative analysis*. Oxford, England: Oxford University Press.

Pollitt, C., & Sorin, D. (2011). *The impacts of the new public management in Europe: A meta-analysi*s (COCOPS Work Package 1 – Deliverable 1.1; ISSN 2211-2006). Retrieved from http://www.uio.no/om/aktuelt/rektors-blogg/bilder/wp1_deliverable1_meta-analysis_final.pdf

Pousette, A. (2001). *Feedback and stress in human service organizations* (Doctoral dissertation, University of Gothenburg, Sweden).

Pousette, A., Jacobson, C., Thylefors, I., & Hwang, C. P. (2003). The role of feedback in Swedish human service organizations. *Community, Work & Family*, *6*(3), 245–268.

Pousette, A., & Johansson Hanse, J. (2002). Job characteristics as predictors of ill-health and sickness absenteeism in different occupational types – A multigroup structural equation modeling approach. *Work & Stress*, *16*(3), 229–250.

Przeworski, A., & Teune, H. (1970). *The logic of comparative social inquiry.* New York, NY: Wiley Interscience.

Putnam, R. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.

Quick, J. C., Macik-Frey, M., & Cooper, C. L. (2007). Managerial dimensions of organizational health: The healthy leader at work, *Journal of Management Studies*, *44*(2), 189–205.

Rainey, H. (1991). *Understanding and managing public organizations*. San Francisco, CA: Jossey-Bass.

Rainey, H., & Bozeman, B. (2000). Comparing public and private organizations: Empirical research and the power of the a priori. *Journal of Public Administration Research and Theory*, *10*(2), 447–469.

Ranson, S., & Stewart, J. (1989). Citizenship and government: The challenge for management in the public domain. *Political Studies*, *37*(1), 5–24.

Rapp, S. (2010). Headteacher as a pedagogical leader: A comparative study of headteachers in Sweden and England. *British Journal of Educational Studies*, *58*(3), 331–349.

Rasbash, J., Steele, F., Browne, W., & Goldstein, H. (2009). *A user's guide to MLwiN. Version 2.10.* Bristol, England: Centre for Multilevel Modelling, University of Bristol.

Rasmussen, B. (2004). Between endless needs and limited resources: The gendered construction of a greedy organization. *Gender, Work & Organization*, *11*(5), 506–525.

Rau, R. (2004). Job strain or healthy work: A question of task design. *Journal of Occupational Health Psychology*, *9*(4), 322–338.

Reineholm, C. (2013). *Psychosocial work conditions and aspects of health* (Doctoral dissertation, Linköping University, Sweden). Retrieved from http://liu.diva-portal.org/smash/get/diva2:636209/FULLTEXT01.pdf

Riggle, R. J., Edmondson, D. R., & Hansen, J. D. (2009). A meta-analysis of the relationship between perceived organizational support and job outcomes: 20 years of research. *Journal of Business Research*, *62*(10), 1027–1030.

Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, *15*(2), 150–163.

Rolland, A. (2005). The free-market innovation machine and new public management. *The Innovation Journal: The Public Sector Innovation Journal*, *10*(2), 1–14.

Rousseau, D. M., & Fried, Y. (2001). Location, location, location: Contextualizing organizational research. *Journal of Organizational Behavior*, *22*(1), 1–13.

Rusbult, C. E., Farrell, D., Rogers, G., & Mainous, A. G., III. (1988). Impact of exchange variables on exit, voice, loyalty, and neglect: An integrative model of responses to declining job satisfaction. *Academy of Management Journal*, *31*(3), 599–627. doi:10.2307/256461

Sagie, A., Birati, A., & Tziner, A. (2002). Assessing the costs of behavioral and psychological withdrawal: A new model and an empirical illustration. *Applied Psychology*, *51*(1), 67–89.

Sauter, S. L., Murphy, L. R., & Hurrell, J. J. (1990). Prevention of work-related psychological disorders: A national strategy proposed by the National Institute for Occupational Safety and Health (NIOSH). *American Psychologist*, *45*(10), 1146–1158.

Sayles, L. (1964). *Managerial behavior: Administration in complex organizations*. New York, NY: McGraw-Hill.

Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, *7*(2), 147–177.

Schat, A., & Kelloway, E. K. (2005). Workplace aggression. In J. Barling, E. K. Kelloway, & M. R. Frone (Eds.), *Handbook of work stress* (pp. 189-218). Thousand Oaks, CA: Sage.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demand, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, *25*(3), 293–315.

Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the job demands-resources model: Implications for improving work and health. In G. Bauer & O. Hämmig (Eds.), *Bridging occupational, organizational and public health* (pp. 43–68). Dordrecht, The Netherlands: Springer.

Schnall, P., Landsbergis, P., & Baker, D. (1994). Job strain and cardiovascular disease. *Annual Review of Public Health*, *15*, 381–411.

Schwartz, J., Pickering, T., & Landsbergis, P. (1996). Work-related stress and blood pressure: Current theoretical models and considerations from a behavioral medicine perspective. *Journal of Occupational Health Psychology*, *1*(3), 287–310.

Selden, S. C. & Moynihan, D. (2000). A model of voluntary turnover in state government. *Review of Public Personnel Administration*, *20*(2), 63–74.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*(1), 5–14.

Selye, H. (1974). *The stress of life*. New York, NY: McGraw-Hill.

Semmer, N. (2006). Job stress interventions and the organization of work. *Scandinavian Journal of Work, Environment & Health*, *32*(6), 515–527.

Semmer, N. K., Grebner, S., & Elfering, A. (2003). Beyond self-report: Using observational, physiological, and situation-based measures in research on occupational stress. *Research in Occupational Stress and Well-being*, *3*, 205–263.

Semmer, N. K., Jacobshagen, N., Meier, L. L., & Elfering, A. (2007). Occupational stress research: The "stress-as-offense-to-self" perspective. In J. Houdmont & S. McIntyre (Eds.), *Occupational health psychology: European perspectives on research, education and practice* (Vol. 2, pp. 43-60). Maia, Portugal: Instituto Universitário da Maia.

Shaw, J. D. (2011). Turnover rates and organizational performance: Review, critique, and research agenda. *Organizational Psychology Review*, *1*(3), 187–213.

Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, *1*(1), 27–41.

Siegrist, J., & Marmot, M. (2004). Health inequalities and the psychosocial environment – Two scientific challenges. *Social Science & Medicine*, *58*(8), 1463–1473.

Siegrist, J., Siegrist, K., & Weber, I. (1986). Sociological concepts in the etiology of chronic disease: The case of ischemic heart disease. *Social Science & Medicine*, *22*(2), 247–253.

Skagert, K., Dellve, L., & Ahlborg, G., Jr. (2012). A prospective study of managers' turnover and health in a healthcare organization. *Journal of*

Nursing Management, *20*(7), 889–899. doi:10.1111/j.1365-2834.2011.01347.x

Skagert, K., Dellve, L., Eklöf, M., Ljung, T., Pousette, A., & Ahlborg, G. (2004). *Om ledarskap och stress i politiskt styrd verksamhet* [Leadership and stress in politically governed operations]. Gothenburg, Sweden: Institute for Stress Medicine.

Skagert, K., Dellve, L., Eklöf, M., Pousette, A., & Ahlborg G. (2008). Leaders' strategies for dealing with own [*sic*] and their subordinates' stress in public human service organizations. *Applied Ergonomics*, *39*(6), 803–811.

Skakon, J., Kristensen, T. S., Christensen, K. B., Lund, T., & Labriola, M. (2011). Do managers experience more stress than employees? Results from the Intervention Project on Absence and Well-being (IPAW) study among Danish managers and their employees. *Work*, *38*(2), 103–109.

Skytt, B., Ljunggren, B., & Carlsson, M. (2007). Reasons to leave: The motives of firstline nurse managers for leaving their posts. *Journal of Nursing Management Studies*, *15*, 294–302. doi:10.1111/j.1365-2834.2007.00651.x

Snijders, T., & Bosker, R. (1999). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. London, England: Sage.

Söderfeldt, B., Söderfeldt, M., Muntaner, C., O'Campo, P., Warg, L.-E., & Ohlson, C.-G. (1996). Psychosocial work environment in human service organizations: A conceptual analysis and development of the demand-control model. *Social Science & Medicine*, *42*(9), 1217–1226.

Sparks, K., & Cooper, C. L. (1999). Occupational differences in the work-strain relationship: Towards the use of situation-specific models. *Journal of Occupational and Organizational Psychology*, *72*(2), 219–229.

Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, *9*(2), 221–232.

Spector, P. E., & Brannick, M. T. (2011). Methodological urban legends: The misuse of statistical control variables. *Organizational Research Methods*, *14*(2), 287–305. doi:10.1177/1094428110369842

Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health – A meta-analytic review. *Scandinavian Journal of Work, Environment & Health*, *32*(6), 443–462.

Statistics Sweden. (2012). *Standard för Svensk yrkesklassificering (SSYK 2012)* [Swedish standard classification of occupations 2012]. Stockholm, Sweden: Author.

Statistics Sweden. (2013). *Kortperiodisk sysselsättningsstatistik (KS)* [Short-term employment statistics]. Stockholm, Sweden: Author.

Staw, B. M. (1980). The consequences of turnover. *Journal of Occupational Behaviour*, *1*, 253-273.

Steane, P. (1997). Oils ain't oils! Strategy across sectors. *International Journal of Public Sector Management*, *10*(6), 461–469.

Steel, R. P., & Lounsbury, J. W. (2009). Turnover process models: Review and synthesis of a conceptual literature. *Human Resource Management Review*, *19*(4), 271–282.

Stengård, J., Härenstam, A., Ahlborg jr, G., Allard, K., Bejerot, E., et al. (2013). *Chefskap, hälsa, effektivitet, förutsättningar i offentlig sektor. Teknisk rapport från CHEFiOS-projektet* [Management, health, efficiency, conditions in the public sector. Technical report from the CHEFiOS project]. Gothenburg, Sweden: Institute of Stress Medicine.

Stewart, R. (1967). *Managers and their jobs: A study of the similarities and differences in the ways managers spend their time*. London, England: Macmillan.

Stewart, R. (1976). *Contrasts in management: A study of different types of managers' jobs, their demands and choices*. London, England: McGraw-Hill.

Stewart, R. (1982). *Choices for the manager*. Englewood Cliffs, NJ: Prentice Hall.

Stewart, R. (1989). Studies of managerial jobs and behaviour: The ways forward. *Journal of Management Studies*, *26*(1), 1–10.

Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology*, *25*, 35–71.

Strolin, J. (2008). Should I stay or should I go? A comparison study of intention to leave among public child welfare systems with high and low turnover rates. *Child Welfare*, *87*, 125–143.

Sweden. Work Environment Act (1977:1160). Retrieved from http://www.government.se/contentassets/86e9091526644e90b78d2ff937318530/sfs-19771160-work-enironment-act

Swedish Work Environment Authority. (2011). *Stress och psykiska påfrestningar* [Stress and psychological strain]. Stockholm, Sweden: Author. Retrieved from http://www.av.se/teman/halsosjukvard/risker/stress/

155

Swedish Work Environment Authority. (2014). *Inspections of female and male dominated municipal activities, home care services and technical administration.* Stockholm, Sweden: Author. (Report 2014:3)

Swedish Work Environment Authority. (2015). *Organizational and social work environment.* Stockholm, Sweden: Author. (AFS 2015:4)

Szücs, S., Hemström, Ö., & Marklund, S. (2003). Organisatoriska faktorers betydelse för längre sjukskrivningar i kommuner [The importance of organizational factors for long-term sick leave in municipalities]. *Arbete och Hälsa*, *6*.

Szücs, S., & Strömberg, L. (Eds.). (2006). *Local elites, political capital and democratic development: Governing leaders in seven European countries.* Wiesbaden, Germany: Verlag für Sozialwissenschaft.

Szücs, S., & Strömberg, L. (2009). The more things change, the more they stay the same: The Swedish local government elite between 1985 and 2005. *Local Government Studies*, *35*(2), 251–270.

Tabachnick, B., & Fidell, L. (2007). *Using multivariate statistics.* Boston, MA: Pearson Education.

Taylor, F. (1911). *The principles of scientific management.* Norwood, MA: Harper & Brothers.

Taylor, M. S., Audia, G., & Gupta, A. K. (1996). The effect of lengthening job tenure on managers' organizational commitment and turnover. *Organization Science*, *7*(6), 632–648. doi:10.1287/orsc.7.6.632

Tengblad, S. (Ed.). (2012). *The work of managers: Towards a practice theory of management.* Oxford, England: Oxford University Press.

Tengelin, E. (2012). *Creating proactive boundary awareness – Observations and feedback on lower level healthcare managers' time commitments and stress* (Licentiate thesis, University of Gothenburg, Sweden).

Tengelin, E., Arman, R., Wikström, E., & Dellve, L. (2011). Regulating time commitments in healthcare organizations: Managers' boundary approaches at work and in life. *Journal of Health Organization and Management*, *25*(5), 578–599.

Tett, R., & Meyer, J. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, *46*(2), 259–293.

156

Tham, P. (2007). Why are they leaving? Factors affecting intention to leave among social workers in child welfare. *British Journal of Social Work*, *37*(7), 1225–1246.

Theorell, T. (2007). Psychosocial factors in research on work conditions and health in Sweden. *Scandinavian Journal of Work, Environment & Health*, *33*(1), 1–53.

Thilander, P. (2013). *Personalarbete och HR-transformation – Om samspel och relationer mellan linjechefer och HR-medarbetare* [Personal work and HR transformation: Interaction and relationships between line managers and HR staff] (Doctoral dissertation, University of Gothenburg, Sweden).

Thulin Skantze, E. (2006). *Organisationsstrukturens betydelse för de anställdas hälsa. En explorativ studie baserad på fokusgruppsintervjuer bland chefer* [Organisational structure's significance for the health of employees. An exploratory study based on focus group interviews among managers]. Stockholm, Sweden: National Institute for Psychosocial Environmental Medicine (IPM). (Stress Research Report No. 318-2006)

Thylefors, I. (2007). *Ledarskap i Human service- organisationer* [Leadership in human service organizations]. Stockholm, Sweden: Natur och kultur.

Topel, R. H., & Ward, M. (1992). Job mobility and the careers of young men. *Quarterly Journal of Economics*, *107*(2), 441–479.

Törnsén, M. (2010). Keys to successful leadership: High support for capable and versatile principals. *The Educational Forum*, *74*(2), 90–103.

Trollestad, C. (2003). Den hälsosamma organisationen [The healthy organization]. In K. Abrahamsson (Ed.), *Friskfaktorer i arbetslivet* [Health factors in working life] (pp. 152–181). Stockholm, Sweden: Arbetarskyddsnämnden.

Trydegård, G.-B. (2000). *Tradition, change and variation: Past and present trends in public old-age care* (Doctoral dissertation, University of Stockholm, Sweden). Retrieved from http://www.diva-portal.org/smash/get/diva2:197356/FULLTEXT01.pdf

Tuomi, K., Ilmarinen, J., Jahkola, A., Katajarinne, L., & Tulkki, A. (1994). *Work ability index*. Helsinki, Finland: Institute of Occupational Health.

Tvedt, S. D., Saksvik, P. Ø., & Nytrø, K. (2009). Does change process healthiness reduce the negative effects of organizational change on the psychosocial work environment? *Work & Stress*, *23* (1), 80–98.

Van den Broeck, A., De Cuyper, N., Luyckx, K., & De Witte, H. (2012). Employees' job demands-resources profiles, burnout and work engagement.

Economic and Industrial Democracy, *33*(4), 691–706.
doi:10.1177/0143831X11428228

Van den Broeck, A., Van Ruysseveldt, J., Vanbelle, E., & De Witte, H. (2013). The
job demands-resources model: Overview and suggestions for future research.
Advances in Positive Organizational Psychology, *1*, 83–105.
doi:10.1108/S2046-410X(2013)0000001007

Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008).
Explaining the relationship between job characteristics, burnout, and
engagement: The role of basic psychological need satisfaction. *Work &
Stress*, *22*(3), 277–294.

Van De Voorde, K., Van Veldhoven, M., & Paauwe, J. (2014). Relationships
between work unit climate and labour productivity in the financial sector: A
longitudinal test of the mediating role of work satisfaction. *European
Journal of Work and Organizational Psychology*, *23*(2), 295–309.

van Vegchel, N. (2005). *Two models at work: A study of interactions and
specificity in relation to the demand-control model and the effort-reward
imbalance model* (Doctoral dissertation, Utrecht University, Utrecht, The
Netherlands). Retrieved from http://dspace.library.uu.nl/handle/1874/7300

van Vegchel, N., de Jonge, J., Bosma, H., & Schaufeli, W. (2005). Reviewing the
effort-reward imbalance model: Drawing up the balance of 45 empirical
studies. *Social Science & Medicine*, *60*(5), 1117–1131.

van Vegchel, N., de Jonge, J., & Landsbergis, P. (2005). Occupational stress in
(inter)action: The interplay between job demands and job resources. *Journal
of Organizational Behavior*, 26(5), 535–560.

van Vegchel, N., de Jonge, J., Söderfeldt, M., Dormann, C., & Schaufeli, W.
(2004). Quantitative versus emotional demands among Swedish human
service employees: Moderating effects of job control and social support.
International Journal of Stress Management, *11*(1), 21–40.

Van Vianen, A., Feij, J., Krausz, M., & Taris, R. (2003). Personality factors and
adult attachment affecting job mobility. *International Journal of Selection
and Assessment*, *11*(4)*, 253–264.

Van Wart, M. (2003). Public-sector leadership theory: An assessment. *Public
Administration Review*, *63*(2), 214–228.

Vinberg, S., & Landstad, B. (2013). Kvinnliga ledares arbetsvillkor i en
glesbygdskommun – Oglamorösa och hindrande för hälsofrämjande insatser?
[Female leaders' psychosocial working conditions in a rural municipality:

Unglamorous and impeding health promotion?]. *Socialmedicinsk tidskrift*, *6*, 838–847.

Volpert W. (1974). *Handlungsstrukturanalyse* [Actions structure analysis]. Cologne, Germany: Pahl-Rugenstein Verlag.

Volpert, W., Oesterreich, R., Galbenz-Kolakovic, S., Krogol, T., & Resch, M. (1983). *Verfaren zur ermittlung von regulationserfodernissen in der arbeitstatigkeit (VERA)* [Method for determination of regulation requirements in work activity]. Cologne, Germany: Verlag TÜV Rheinland.

Voskuijl, O. F., & van Sliedregt, V. (2002). Determinants of interrater reliability of job analysis: A meta-analysis. *European Journal of Psychological Assessment*, *18*, 52–62.

Vroom, V. (2000). Leadership and the decision-making process. *Organizational Dynamics*, *28*(4), 82–94.

Vroom, V., & Jago, A. (2007). The role of the situation in leadership. *American Psychologist*, *62*(1), 17–24.

Waldenström, K. (2007). *Externally assessed psychosocial work characteristics: A methodological approach to explore how work characteristics are created, related to self-reports and to mental illness* (Doctoral dissertation, Karolinska Institute, Solna, Sweden). Retrieved from https://openarchive.ki.se/xmlui/bitstream/handle/10616/39223/thesis.pdf?seq uence=1

Waldenström, K., Ahlberg, G., Bergman, P., Forsell, Y., Stoetzer, U., Waldenström, M., & Lundberg, I. (2008). Externally assessed psychosocial work characteristics and diagnoses of anxiety and depression. *Occupational and Environmental Medicine*, *65*, 90–97.

Waldenström, K., & Härenstam, A. (2008a). Does the job demand-control model correspond to externally assessed demands and control for both women and men? *Scandinavian Journal of Public Health*, *36*, 242–249.

Waldenström, K., & Härenstam, A. (2008b). How are good and bad jobs created? Case studies of employee, managerial and organizational factors and processes. *Work Life in Transition*, *4*, 1–52.

Waldenström, M., Josephson, M., Persson, C., & Theorell, T. (1998). Interview reliability for assessing mental work demands. *Journal of Occupational Health Psychology*, *3*, 209–216.

Waldenström, K., Lundberg, I., Waldenström, M., Härenstam, A., & MOA Research Group. (2003). Does psychological distress influence reporting of

demands and control at work*? Occupational and Environmental Medicine*, *60*, 887–891.

Waldenström, M., Theorell, T., Ahlberg, G., Josephson, M., Nise, P., Waldenström, K., & Vingård, E. (2002). Assessment of psychological and social current working conditions in epidemiological studies: Experiences from the MUSIC-Norrtälje study. *Scandinavian Journal of Public Health*, *30*, 94–102.

Walker, R. M., & Brewer, G. A. (2009). Can management strategy minimize the impact of red tape on organizational performance? *Administration & Society*, *41*(4), 423–448.

Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader–member exchange: A social exchange perspective. *Academy of Management Journal*, *40*(1)*,* 82–111.

Westerberg, K. (2000). *The important activity: Work, tools and tensions of municipal middle managers in elder care* (Doctoral dissertation, Umeå University, Sweden).

Westerberg, K., & Armelius, K. (2000). Municipal middle managers: Psychosocial work environment in a gender-based division of labor. *Scandinavian Journal of Management*, *16*(2)*,* 189–208.

Westerlund, H., Ferrie, J., Jeding, K., Oxenstierna, G., & Theorell, T. (2004). Workplace expansion, long-term sickness absence, and hospital admission. *The Lancet*, *363*(9416), 1193–1197.

Westerlund, H., Nyberg, A., Bernin, P., Hyde, M., Oxenstierna, G., Jäppinen, P., . . . Theorell, T. (2010). Managerial leadership is associated with employee stress, health and sickness absence independently of the demand-control-support model. *Work*, *37*(1), 71–79. doi:10.3233/WOR-2010-1058

Whitehead, D. (2006). Workplace health promotion: The role and responsibility of health care managers. *Journal of Nursing Management*, *14*(1), 59–68.

Wikström, E., & Dellve, L. (2009). Contemporary leadership in healthcare organizations: Fragmented or concurrent leadership. *Journal of Health, Organization and Management*, *23*(4), 411–428.

Wikström, E., Dellve, L., Tengelin, E., & Arman, R. (2011, August 25). *Chefers tidsanvändning och stress i sjukvården* [Managers use of time and stress in health care] (Report). Vänersborg, Sweden: Västra Götaland Regional Council.

Wolmesjö, M. (2005). *Ledningsfunktion i omvandling – Om förändringar av yrkesrollen för första linjens chefer inom den kommunala äldre-och*

handikappomsorgen [Management functions in transformation: On changes in the professional role of first-line managers in local elderly and disabled care] (Doctoral dissertation, Lund University, Sweden). Retrieved from lup.lub.lu.se/record/25089/file/26532.pdf

Wolmesjö, M. (2008). Ledarskapets autonomi – Om chefers dilemman och handlingsutrymme [Leadership autonomy: On managers' dilemmas and room for action]. In K. Jonnergård (Ed.), *När den professionella autonomin blir ett problem* [When the professional autonomy becomes a problem] (pp. 141–161). Växjö, Sweden: Växjö University Press. Retrieved from http://lnu.diva-portal.org/smash/get/diva2:206458/FULLTEXT01.pdf

World Commission on Environment and Development. (1987). *Our common future: The report of the World Commission on Environment and Development*. Oxford, England: Oxford University Press.

World Health Organization. (1948). *Official records of the World Health Organization*, *No. 2*. Geneva, Switzerland: Author.

World Health Organization Regional Office for Europe. (2009). *The European health report 2009: Health and health systems*. Copenhagen, Denmark: Author.

Wu, Y. W., & Wooldridge, P. (2005). The impact of centering first-level predictors on individual and contextual effects in multilevel data analysis. *Nursing Research*, *54*(3), 212–216.

Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B. Taris, T. W., & Schreurs, P. (2007). When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology*, *22*(8), 766–786. doi:10.1108/02683940710837714

Yammarino, F. J., & Bass, B. M. (1991). Person and situation views of leadership: A multiple levels of analysis approach. *Leadership Quarterly*, *2*(2), 121–139.

Yoder, J. D., & Kahn, A. S. (2003). Making gender comparisons more meaningful: A call for more attention to social context. *Psychology of Women Quarterly*, *27*(4), 281–290.

Yukl, G. (2010). *Leadership in organizations* (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Zerbinati, S., & Souitaris, V. (2005). Entrepreneurship in the public sector: A framework of analysis in European local governments. *Entrepreneurship & Regional Development*, *17*(1), 43–64.

Zhao, H., Wayne, S., Glibkowski, B., & Bravo, J. (2007). The impact of psychological contract breach on work related outcomes: A meta-analysis. *Personnel Psychology*, *60*(3), 647–680.