

EMPLOYABLE EVER AFTER

Examining the antecedents and outcomes of sustainable employability in a hospital context

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Employable Ever After

Examining the antecedents and outcomes of sustainable employability in a hospital context

Voor Altijd Inzetbaar

Een onderzoek naar de antecedenten en uitkomsten van de duurzame inzetbaarheid van ziekenhuismedewerkers

(met een samenvatting in het Nederlands)

Proefschrift

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Preface

Perhaps you instantly recognized the Great Spotted Woodpecker on the cover of this book. I can however imagine that you are puzzled why this bird appears on the cover of a social sciences dissertation, and in particular what it has to do with my research. Let me unravel this mystery.

As an enthusiastic birdwatcher, I am always keen on bringing the art of birding to the attention of others. In this preface, I want to make a case for the Great Spotted Woodpecker as a great example of sustainable employability – the subject of this dissertation. The Dutch population of the Great Spotted Woodpecker has steadily grown to approximately 55,000 – 65,000 pairs over several decades. Probably one of the main reasons for this sustainable growth is the bird's remarkable adaptability. Originally, Great Spotted Woodpeckers inhabited forests, and were dependent upon dead and old trees for food and nesting sites. Nowadays, the bird is widespread across the country and has adjusted its lifestyle to gardens and city parks. Woodpeckers still mainly feed on insects and seeds that can be found near trees, but they also forage from bird tables that contain fat balls and peanut butter. As such, these birds have adapted to their changing environment in order to survive. This is one of the key elements of being a sustainably employable worker, as I explain in the introductory chapter.

Additionally, the Great Spotted Woodpecker's nesting behavior – one of its main job tasks so to say – can also be characterized as sustainable. With their bills, the birds drill nesting holes that protect young woodpeckers from predators and bad weather. As a consequence, the breed usually hatches and flecthes successfully, and parent birds do not have to anticipate a partly failed brood and lay additional eggs as a form of insurance. Hence, they do not waste their resources. Taken together, this means that Great Spotted Woodpeckers 'work' in a sustainable way.

Based on the above information¹ and on the beautiful and recognizable silhouette of the Great Spotted Woodpecker, I regard the bird as a symbol of sustainable employability. Further, when reading on their population growth in the Netherlands, I learned that these birds have benefitted from extensive forest management that involves conserving a natural forest by no longer removing dead and rotten materials. Here, I saw a parallel between Dutch forest management and the concept of 'employer's investments', which I use in my research to examine whether employers can enhance their workers' sustainable employability by providing them with all kinds of opportunities (further explained in Chapter 1).

I hope that readers who are familiar with the concept of sustainable employability find the example of the woodpecker refreshing and want to read more on my research, and I hope that readers who do not know the concept are curious to find out what it is all about. I realize that not every reader is a scholar with expertise on the central topic and an interest in reading the whole book. Therefore, I now provide some reading guidelines for three types of readers: (1) researchers, (2) practitioners, and (3) more general readers such as relatives and friends.

I would suggest researchers first read Chapter 1. Here, I outline four research gaps and explain how my dissertation contributes to closing these gaps. These research gaps also guide Chapter 9, in which I draw conclusions and discuss my research findings. I hope that the

¹The information on the Great Spotted Woodpecker that I have used in this preface is mainly based on my own knowledge of the bird and that of my father. Additionally, I have made use of information available through the websites www.sovon.nl and www.vogelbescherming.nl.

structure of this dissertation will allow you to leap from Chapter 1 to Chapter 9 without necessarily reading the whole dissertation. Further, if a specific part of the research model (which is also shown in Chapter 1) appears particularly interesting, Section 1.4 will indicate which chapters address the various parts of the model. For example, if you are carrying out research in healthcare organizations, Chapter 4 is relevant as it provides a context analysis of the Dutch hospital sector and explains why sustainable employability is relevant in this setting.

If you are a **practitioner**, such as a manager or HR professional struggling with how to improve your employees' sustainable employability, I would encourage you to first read the summary (available in both English and Dutch versions). Especially take a look at Table 2 which summarizes the practical recommendations resulting from my research, accompanied by actionable suggestions and potential results. Please contact me if you want a copy of the infographic 'The road to sustainably employable workers' that I have developed to visualize the practical recommendations. If you are enthused by the summary, then you could read Chapter 9 that will provide you with a more detailed insight into the results of my research and how these are relevant for both practice and science. Additionally, the context analysis in Chapter 4 is particularly relevant for practitioners working in healthcare.

Finally, **other readers** who do not recognize themselves in the above two categories could start by reading the first page of Chapter 1. This chapter begins with a description of a nurse that struggles with becoming and remaining sustainably employable. Hopefully, this example will give you an initial impression of what my research is about. After this, continue with the Dutch or English summary to learn more about my research in an efficient way.

Acknowledgements

I would like to end this preface by expressing my gratitude to a number of people who have been particularly supportive during my PhD project.

My supervisors Peter Leisink and Eva Knies deserve the first thanks. You have provided fantastic guidance and I very much appreciate your commitment and involvement. I hope that we can continue doing research together. Peter, thank you for providing me with the opportunity to start PhD research. I am not only grateful for your research support, but also for your supportive leadership behavior that helped me to increase my own sustainable employability. You have provided me with numerous opportunities to work on my career and you have always stimulated me to think ahead. You facilitated my hunger for variety, but at the same time kept me focused. Eva, I think that you have done an excellent job of being my daily supervisor. You were always willing to think along when I needed a more experienced perspective, and you never got tired of helping me deal with research practicalities such as Mplus. You were also great in performing other important tasks of a daily supervisor; regularly checking how I was doing, sending me home after 6 p.m., and chitchatting about our hobbies.

I would also like to express my gratitude to Jo Thijssen. Jo, thank you for helping me during the startup phase of the research and later on during the finalization of the manuscript. I am grateful that you have shared your knowledge on the subject of sustainable employability with me, and I think that my research has benefitted from your sharp eye for conceptual inconsistencies. Next, I would like to thank Giles Stacey for editing this dissertation. Giles, you always returned my chapters very quickly which helped me to keep on track and, moreover, you frequently posited questions or suggestions that helped me strengthen my arguments.

Another thanks to my cousin Hermen Visser who designed this book. Hermen, your expertise is unique and very helpful for researchers, it was refreshing and pleasant to work with you. I should also say that this PhD project would not have been possible without the cooperation of several organizations and respondents. I thank the Stichting Arbeidsmarkt Ziekenhuizen for their support, and the hospitals that participated in this research project. I would explicitly like to thank my contact persons within the hospitals, as well as the managers and employees that were willing to talk to me about the topic of sustainable employability and all the respondents who were willing to complete my survey.

The Utrecht School of Governance (USBO) has been a supportive and inspiring work environment that has definitely contributed to finishing this dissertation. I feel privileged to work here, and I am grateful to Paul Boselie for providing me with the opportunity to continue working at USBO. During my PhD research, I have had the chance to work as a lecturer, to be a member of the Faculty Council, to participate in academic consultancy projects, and to co-organize the Dutch HRM Network conference. I feel that performing these tasks have enabled me to become a better researcher. Therefore, I would like to thank all my colleagues, both within USBO and the Faculty of Law, Economics, and Governance, for the pleasant cooperation in carrying out those tasks. Further, there is a group of USBO colleagues that I want to mention in particular – my fellow PhD candidates. United in the ‘Phd Platform’, I benefitted from your feedback on my work and, most importantly, you helped me in keeping up morale and in having fun. Thanks to all current and former PhDs that participated in the platform over the period of 2011-2016.

A special word of thanks goes to my paranimphs Corine and Romy. Hopefully, I can show my gratitude by serving as your paranimph in the near future. Corine, where would all the entertainment have come from if you had never shared an office with me? I would not have missed all those hilarious, embarrassing, and sometimes also quite emotional moments for the world. Besides, history has proven that there are very few people who can adapt to the office norms and values we happen to share. So, I have many reasons to thank you and that is what I do now. Romy, we go back to when we started to discover there is more to life than being a clever girl. Although we know how to amuse ourselves in our leisure time, we support each other in developing a career. You understand like no one else that you can combine such things. Thank you for being my friend for so long and for having a lot of similar interests that have given rise to many joint trips.

Lastly, I want to thank my family. Mom and dad, I regard you as the two people who have most enabled me to become a researcher. You stimulated my academic curiosity right from the start. You encouraged me to explore the world surrounding me, and you inexhaustibly taught me to recognize bird and plant species. Moreover, you always stimulated autonomous thinking and behavior. Later, for both my bachelor and master theses, I have made use of your networks. Your commitment to my current job as a researcher and teacher is valuable and stimulating. Thank you for all of this. My little brother Reinier, I am often amazed by your enthusiasm, positivity, and creativity. Although our professional lives are worlds apart, your music inspires me and your way of living moves me. Please remain as you are, for you not only help yourself, but many others, including your family, to laugh and to live. And then, my dearest Woutje, seven years ago I would never have thought that, after three years of studying in Utrecht, I would meet someone like you there. I do not have to explain academic life to you, as you probably know more about it than I do. This, together with many of your qualities such

as your immense patience and your critical yet constructive way of thinking, is reassuring and helpful to me. You dare to ask questions about my research even when you know that I will not always like them. Instead of not asking them, you face my reaction and patiently wait for me to calm down. Thank you for your help with this dissertation but, most importantly, for sharing your life with me.

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1



INTRODUCTION

“The high pace of healthcare changes makes it hard at the moment. The high tempo of the digitalization process is not easy for older employees, sometimes also not for younger ones. Hospital stays are also shorter; all in all, everything becomes shorter, more complex, and faster and, in the middle of that, you have all these innovations and changes coming at you [as an employee].” (Interviewee 13, Head pediatric and obstetric unit, aged 64)

“[In the near future] I hope to do the same job. But I am not sure whether I can hold on. (...) It depends on my physical health, and also my mental health. And whether the work pressure is acceptable, whether you can deal with it. There are of course fewer employees available nowadays, and the pressure increases.” (Interviewee 17, nurse, aged 47)

Imagine a nurse in her mid-forties who has worked for about fifteen years in the same Dutch hospital. She has witnessed many organizational changes and medical innovations that have changed her job. This has required the nurse to update herself constantly and to be open to adapting and to learning new skills so that she is able to continue to deliver high quality care. In addition, the continuing application of market mechanisms and increasing pressures on hospital budgets have led the hospital to reduce the length of patient stays, and have led to an increased work pace in the nurse’s unit. Recently, the Dutch government has increased the state retirement age because of the rising costs that are associated with an ageing population. This means that the nurse will need to continue working to a higher age. The nurse hopes that she can carry on with her job at her current employer for the rest of her career. However, she is worried about all the changes and increased work pace, and her abilities to keep up and stay ahead.

Are this nurse’s career expectations realistic? She may be able to continue performing her current job provided she manages to update her abilities and is willing to learn new skills throughout her career. However, given the changing environment, will her job still exist in the near future, and what if her employer requires her to perform a different job in another department? It seems plausible that, from her individual standpoint, the nurse needs support to update and develop herself. Her employer could provide the nurse with such help. After all, the hospital may also benefit from a competent nurse that is able to deal with the fast, complex and ever-changing work environment and so is able to perform well (i.e. provides high quality care).

In this dissertation, I will elaborate on changes in the Dutch hospital sector and the consequences of these changes for hospital management and its employees. In a nutshell, the above quotes and example show how important it is for hospital workers, such as nurses, to remain ‘employable ever after’, or, to put it more formal, to remain sustainably employable. I define the latter concept as *being able and willing to productively work throughout the career.*² This could refer to adequately performing one’s current job or, in the event of a change to it, other tasks or jobs. Especially in dynamic contexts, such as the hospital sector, achieving high sustainable employability, such that employees can cope with changes, is beneficial for both the employee and the employer (Forrier et al., 2015; Pool et al., 2015). Achieving sustainable employability and/or enabling employees to deal with ongoing changes have been viewed as major challenges in recent reports on labor in the Dutch healthcare sector (AZW, 2016; RVZ, 2015 and 2011).

²The most commonly used research definition of a career is “the evolving sequence of a person’s work experiences over time” (Arthur et al., 1989).

For these reasons, research that provides insights into employees' sustainable employability, its consequences, and how it can be enhanced, is highly relevant. However, the literature on sustainable employability can be characterized as fuzzy with multiple definitions and conceptualizations of the concept that, moreover, are not always measured in a consistent way. Further, a comprehensive view on how sustainable employability can be enhanced and how this pays off has yet to be established. Therefore, in this dissertation, I examine how various antecedents and contingency variables on the individual, job, and organizational levels are related to hospital workers' sustainable employability, and how the latter impacts on outcomes that are relevant for both the employee and the employer. By including a broad range of antecedents, contingency factors, and outcomes of sustainable employability, I am able to provide a rich understanding of how sustainable employability can be enhanced and whether and how this pays off. This leads to the following research question that is central to this dissertation:

How is employees' sustainable employability related to individual, job, and organizational characteristics and to organizational and employee outcomes?

To answer this question, it is first necessary to investigate how the central concept of sustainable employability can be understood and examined. The aforementioned definition reflects that an employee's *ability* and *willingness* to continuously productively work is the emphasis in this dissertation. To examine these elements, various components are studied in the present research (explained in Subsection 1.1.1). Further, the label of 'employer's investments' is used to encompass a broad range of job (e.g. job autonomy) and organizational characteristics (managerial support) that are expected to impact on sustainable employability and on organizational and employee outcomes. The initial assumption is that the sustainable employability components partially mediate the relationships between the investments and the outcomes. The specific interpretation of the above question's concepts and variables will be clarified later in this chapter.

I start this introductory chapter by describing the scientific relevance of this dissertation. Four research gaps that are present in the current sustainable employability literature are identified, and it is briefly explained how I will address these gaps in this dissertation (Section 1.1). Subsequently, in Section 1.2, I elaborate upon the societal and practical relevance of sustainable employability. I explain why it has become a relevant concept in the Dutch labor market in general, and in the hospital sector in particular. I show how this dissertation will provide relevant practical insights. Next, in Section 1.3, I present this dissertation's research model in which the research gaps and their resolution are integrated. Here, the methods that I have used to examine the model are also briefly explained. Finally, the structure of the dissertation is outlined in Section 1.4.

1.1 Scientific relevance: four research gaps

In this section, I identify four research gaps and describe how these are addressed in this dissertation. Accordingly, this section contains four subsections in which this dissertation's contributions to the literature become clear. The research gaps and scientific contributions are summarized at the end of the section in Table 1.1.

1.1.1 Gap I: a consistent conceptualization and measurement of sustainable employability is lacking

The concept of sustainable employability has a tradition dating back to the 1950s when the concept of ‘employability’ was first introduced (Forrier and Sels, 2003). Despite this, empirical research has only been reported since the late 1990s, when awareness grew that careers were becoming increasingly volatile and less predictable, and that employees increasingly have to comply with organizational and labor market changes (Van der Heijde and Van der Heijden, 2006). In this section, I show that there is a great variety in the ways in which, first, employability and, second, sustainable employability are conceptualized and measured. This variation has provoked criticisms that the concepts are both fuzzy and poorly defined, and has led to a scatter of stand-alone studies (Forrier et al., 2015; McQuaid and Lindsay, 2005).

First, most research views *employability* as an individual’s possibility or chance of a job (Forrier et al., 2015; Thijssen et al., 2008). However, the definitions of this ‘possibility or chance’ are highly divergent within the literature. One group of authors understands and measures employability as individuals’ beliefs regarding their job chances or employment opportunities (e.g. Van den Broeck et al., 2014; Wittekind et al., 2010), while others regard employability as the individual’s range of abilities and attitudes, and use variables such as up-to-date expertise or competences (e.g. Camps and Rodríguez, 2011; Van Emmerik et al., 2012). Sometimes, openness or willingness to change is also included in the latter understanding and measurement of employability (e.g. Grip et al., 2004; Van der Heijde and Van der Heijden, 2006). At times, such adaptive attitudes are even put forward as the core of employability. Fugate and Kinicki (2004, 2008) call this ‘the dispositional approach of employability’ that focuses on the individual’s openness to changes, career resilience, and proactivity. However, other studies treat such attitude variables as antecedents of employability, and separate these variables from the employability construct itself (e.g. Boom and Metselaar, 2001 in: Forrier and Sels, 2003; Veld et al., 2015). Taken together, there is an array of definitions and conceptualizations.

Thijssen et al. (2008) attempted to classify these various definitions by creating ‘three concentric circles’ of employability. First, these authors observe that several definitions of employability merely concern the individual’s adequacy to perform a job, which they label the employability radius. This is seen as the most limited definition of employability, and thus relates to the smallest circle. Second, some definitions broaden the scope to include employability competencies or skills, which involve learning competencies or attitudes such as having an open attitude towards change or a willingness to learn new skills. Such definitions relate to the authors’ middle circle. Third, the broadest circle of employability also includes contextual factors at the organizational and even the societal level that influence the labor situation of workers. Thijssen et al. (2008) argue that most employability definitions can be placed in one of the two inner circles.

This variety in the conceptualization of employability leads to criticisms of the concept as being fuzzy and poorly defined, and resulting in a scatter of stand-alone studies (Forrier et al., 2015; McQuaid and Lindsay, 2005). Similarly, although scholars argue that job chances depend on an individual’s expertise and flexibility, little empirical work actually examines the relationships among the various elements. As a consequence, there is little evidence for any assumed relationships (exceptions being Wittekind et al., 2010 and Forrier et al., 2015).

Second, I turn to the relatively new concept of *sustainable* or *lifetime employability*. This concept refers to being continuously employable during one’s working life, from concluding

education through to retirement (Thijssen et al., 2008). This long-term perspective is the key element of sustainable employability and distinguishes it from employability that only focuses on the present. Somewhat problematically, antecedents or outcome variables are sometimes included in the concept's definition (such as in Van der Klink et al., 2011), or there are inconsistencies between the definition of sustainable employability and its conceptualization and measurement (such as in Van Vuuren et al., 2011). These problems are further discussed in Chapter 2. An extra complication is that, sometimes, notions of employability include the sustainability aspect, and this creates even more confusion and therefore adds to the criticisms above. Green (2011) for example defines employability as the ability of an individual to find and *sustain* employment.

In this dissertation, I respond to the above criticisms by elaborating a consistent definition, conceptualization, and measurement of sustainable employability. I explain this at length in Chapter 2 and empirically examine these aspects in Chapter 5. In essence, I define sustainable employability as the extent to which an employee is able and willing to productively work throughout their career. This is conceptualized as comprising three components: perceived up-to-date expertise, willingness to change, and future employment opportunities. Up-to-date expertise and willingness to change are viewed as an employee's *current* level of employability. In this dissertation, it is examined how this relates to an employee's beliefs regarding their *future* employment opportunities, which corresponds with the long-term perspective that is key to the concept of sustainable employability. In addition, the inclusion of the three components enables one to investigate the relationships between these variables, which are often assumed but rarely studied empirically. The conceptualization and measurement of sustainable employability focus on an individual's own perceptions, following the argument that workers are likely to act upon their perceptions rather than upon any objective reality (Vanhercke et al., 2015; Van Emmerik et al., 2012).

1.1.2 Gap II: how employer's investments jointly affect sustainable employability is under-researched

As I argued in the example on the first page of this introduction, both employees and employers have a need for sustainable employability given the changing labor market and work environment. Researchers therefore argue that employers should support their employees in enhancing and maintaining their lifetime employability (Baruch, 2001; Forrier and Sels, 2003; Thijssen et al., 2008). However, in this section, I first show that individual antecedents have been examined to a greater extent than contextual factors, such as organizational characteristics, that also influence sustainable employability. Second, I argue that even when studies do examine the latter, a comprehensive understanding of how organizations can promote sustainable employability has largely remained missing.

In the research that has studied various antecedents of employability, it is argued that both individual and contextual characteristics are important determinants of employability (Berntson et al., 2006; Forrier and Sels, 2003). A significant proportion of this research regards employability as a combination of individual dispositions (Fugate et al., 2004; 2008) or competences (Van der Heijde and Van der Heijden, 2006) that together provide a psychological individual perspective on employability. Likewise, individual characteristics such as self-efficacy (Nauta et al., 2009), or personality characteristics such as openness to take the initiative (Van Dam, 2004), are found to impact on employability.

There are studies showing how contextual determinants affect employability but it is acknowledged that this perspective is under-researched (Berntson and Marklund, 2007). Regarding the effect of the economic context, Berntson et al. (2006) have demonstrated how economic factors (e.g. prosperity) influence workers' employability, and Marks and Scholarios (2008) have shown that changes in customer and market demands affect the value of workers' employability. Recently, research has started to reveal how the organizational context influences employability. For instance, Nauta et al. (2009) show how having an organizational culture focused on development affects workers' employability. Others have examined the effect of supervisors' providing competence development or career support (de Vos et al., 2011; Wittekind et al., 2010). Van Emmerik et al. (2012) focus on the job level and show that characteristics such as job autonomy and task variety affect workers' employability.

The latter studies offer insights into how employers could boost their workers' employability. Nevertheless, Van den Broeck et al. (2014) argue that the understanding of how organizations can enhance and nurture employability remains an issue that has attracted little scholarly attention. In addition, I observe that studies that have investigated organizational determinants of employability fail to provide a comprehensive perspective, with studies focusing either on job characteristics (e.g. job autonomy) or on managerial support variables (e.g. providing career support) as antecedents of employability. Due to these limited foci, the contextual antecedents' individual and combined contributions to employability (and also to sustainable employability) remain unclear. Hence, in order to gain a deeper understanding of the antecedents that explain the development of sustainable employability, there is a need to combine the various antecedents in a single study.

In addressing this need, this dissertation takes a comprehensive perspective on how employers can enable their employees to use and expand their sustainable employability (conceptualized as up-to-date expertise, willingness to change, and employment opportunities) by providing them with resourceful and challenging jobs *and* with adequate managerial support. I label the provision of these opportunities as 'employer's investments'. This connects to similar notions on the responsibility of employers to invest in their employees' continuous employability (Pearce and Randel, 2004; Van der Heijde and Van der Heijden, 2006). I explain my understanding and conceptualization of employer's investments in Chapter 2, and empirically examine the relationships between such investments and sustainable employability in Chapter 5.

1.1.3 Gap III: it is unclear whether sustainable employability mediates the relationship between employer's investments and outcomes

Besides its antecedents, research has also investigated outcome variables related to employability. What is still largely lacking in the literature, however, is research that examines antecedents and outcomes simultaneously. As such, it remains unclear whether employability (and sustainable employability) is the actual link between employer's investments and desirable outcomes, i.e. whether it pays an employer to invest. Before elaborating on this gap below, I first identify those outcome variables that are relevant to examine.

Several studies have shown that workers' employability leads to career success (Van der Heijden et al., 2009), decreased feelings of job insecurity (De Cuyper et al., 2012; McArdle et al., 2007), and enhanced well-being (Berntson and Marklund, 2007; Kirves et al., 2011). These outcomes are considered as beneficial for the employees themselves. There is also research

showing how employability leads to increased organizational commitment and decreased turnover intentions (De Cuyper and de Witte, 2011) and to increased job performance (Kinnunen et al., 2011). These can be seen as outcomes that are beneficial for the organization as these variables lead to heightened organizational performance (Appelbaum et al., 2000; Jiang et al., 2012). For employers, this increases the relevance of investing in their workers' sustainable employability.

Nevertheless, in line with theories stating that organizations should not only strive for, and therefore not merely invest in its workers for, economic purposes, I study both economic outcomes of sustainable employability, such as job performance, and employee outcomes such as well-being at work. This accords with the Harvard model of HRM that views contributing to individual well-being as being as important as creating economic value (Beer et al., 1984, 2015). It is also in line with the balanced HRM approach that includes both the economic and human sides of organizing (Boselie et al., 2009; Paauwe, 2004). Further, my approach connects to the social legitimacy perspective of HRM as expounded by Boxall and Purcell (2015) and Paauwe and Boselie (2007). These authors argue that, through HRM, organizations should enhance not only their economic objectives but also goals related to social legitimacy. As part of this, organizations have to consider societal expectations and legal requirements regarding how people should be treated in the workplace. Hence, in line with these three frameworks that all emphasize the same argument, I examine whether employees and employers both benefit from employers investing in their workers' sustainable employability as this is likely to increase workers' job performance *and* well-being at work.

However, it is this premise of beneficial outcomes that has not been adequately studied. Studies so far only assume that investments pay off; they do not provide convincing evidence for such claims. Usually, employability is investigated in combination with either its antecedents (e.g. van Emmerik et al., 2011; Wittekind et al., 2010) *or* its outcomes (e.g. de Cuyper et al., 2014; Kinnunen et al., 2011). These limited foci mean that it is still unclear whether employability links employer's investments to desirable outcomes.

I observe that well-being is often included in the definition and/or conceptualization of sustainable employability. For example, Van Vuuren et al. (2011) conceptualize sustainable employability as comprising employability, work ability, and vitality. However, these authors fail to consider potential causal relationships between these elements, and so the research gap equally holds for sustainable employability.

In this dissertation, I address this research gap by examining whether the sustainable employability components of 'up-to-date expertise' and 'willingness to change' mediate the relationships between employer's investments and the outcome variables of job performance and well-being. I further explain this in Chapter 2 and empirically examine it in Chapter 6.

1.1.4 Gap IV: the role of contingency variables is rarely studied

Although earlier research has provided insights that are highly valuable for this dissertation's focus on employer's investments in workers' sustainable employability, there are very few employability studies that have examined the role of contingency variables. This is surprising given that, following contingency theories in organizational science, it is highly likely that workers' sustainable employability and the ways in which an employer's investments affect this are contingent upon several factors. In this subsection, I further explain this assumption, and consider which contingency variables are relevant given the objectives of my research.

Contingency theories state that there is no one best way of organizing or performing, but rather that elements such as the optimum organizational structure, leadership style, and job design are dependent on specific contingencies that are both internal and external to an organization (Fiedler, 1964; Hersey and Blanchard, 1993; Kinnie et al., 2005; Yukl, 2012). Applying such a contingency approach to my research leads to the expectation that the effect of employer's investments on workers' sustainable employability is unlikely to be consistent for all types of workers, but instead depends on internal contingencies such as workforce characteristics.³ This application involves that I examine the effects of contingency variables on an individual level (i.e. employees), which is in line with other research using individual characteristics as contingency variables to understand behavior (e.g. Beersma et al., 2003; Hersey and Blanchard, 1993). Despite the plausibility of the above expectation, there are very few employability studies that have shed any light on the role of contingency variables, with a few that have examined employability differences between employed and unemployed individuals (Green, 2011), or between temporary and fixed-term labor (Forrier and Sels, 2003a; Kinnunen et al., 2011; Kirves et al., 2011).

Overall, research has paid scant attention to the possible contingency variables of (sustainable) employability, and has not been illuminating as to which contingency variables might be relevant. I have therefore had to turn to the context of Dutch hospitals, in which this research takes place, to search for workforce characteristics that seem likely to act as important contingency variables. First, it seems relevant to include the age of workers, as the need for Dutch hospital workers to continue working to higher ages has consequences for sustainable employability. Individuals will have to be sustainably employable for an extended period, and maybe older workers' sustainable employability should be enhanced in different ways than for their younger counterparts. Researchers do indeed frequently mention that, because of an aging hospital working population, workers' age is a relevant variable to study in relationship to sustainable employability (Pool et al., 2015). However, despite this recognition, there are very few studies that have actually researched whether age affects employability, or whether the relationships between employability and other variables are dependent on age (notable exceptions that suggest that age does matter include Froehlich et al., 2014; Van der Heijden et al., 2009).

In this dissertation, based on age-related stereotyping and lifespan theories (Posthuma and Campion; 2009; Carstensen, 1995; Kooij et al., 2013), I argue that age may play a moderating (i.e. conditional) role in relationships between employer's investments and workers' sustainable employability. More specifically, a moderating effect of age can be expected because these theories claim that older workers are likely to make less use of, and add employability al., 1984, as the Dutch hospital sector meetings? benefit less in terms of increased sustainable employability from employers' investments. However, this theoretical claim has never been empirically validated with the majority of employability studies only treating age as a control variable (De Vos et al., 2011; Wittekind et al., 2010).

Next to age, a hospital workers' job type seems an important contingency variable. The research population of hospital workers is in fact fairly heterogeneous (Harris et al., 2007), consisting of various job types such as doctors, nurses, non-nursing medical employees, supporting/assisting employees, and managers. This list contains very different jobs that require

³External contingency variables are excluded from this dissertation on the assumption that there will be too little variance in such factors given the focus on Dutch hospitals only.

different educational backgrounds and that vary in the extent to which an employee needs general or specialized expertise. Consequentially, jobs can have different career trajectories and opportunities within the hospital itself. Therefore, it is highly plausible that the level of sustainable employability and the ways in which this can be enhanced, differ for the various hospital job types.⁴

Although there is no published research that focuses purely on a healthcare setting, such as a hospital, and examines differences between job groups in terms of sustainable employability, there are a few employability studies that include a sample of healthcare workers to test their hypotheses (e.g. de Cuyper et al., 2011a). However, these ignore the specific features of individual healthcare workers' employability or its enhancement. Nevertheless, it is argued that it is specifically necessary to boost nurses' sustainable employability since hospitals have to keep abreast of rapid changes in patient care resulting from technological advancements (Pool et al., 2015). This specific reference to nurses is perhaps not surprising since most HRM research in a hospital setting focuses on the nursing occupation. However, other hospital occupations are also likely to be confronted with several of the same challenges (e.g. technological advancements) and therefore also warrant research (Townsend and Wilkinson, 2010).

Moreover, it seems plausible that there are differences between job groups in the extent to which such challenges affect them. For example, nursing work could easily be more affected by the introduction of market mechanisms that result in patients having greater voice in the care delivery process than those employed in medico-technical jobs with less patient contact (e.g. medical laboratory assistant). This could mean that the need for sustainable employability, and the ways this can be enhanced, differs between hospital employees. In this dissertation, I therefore argue that it is relevant to differentiate between hospital occupational groups and to examine the effect of job type when studying sustainable employability.

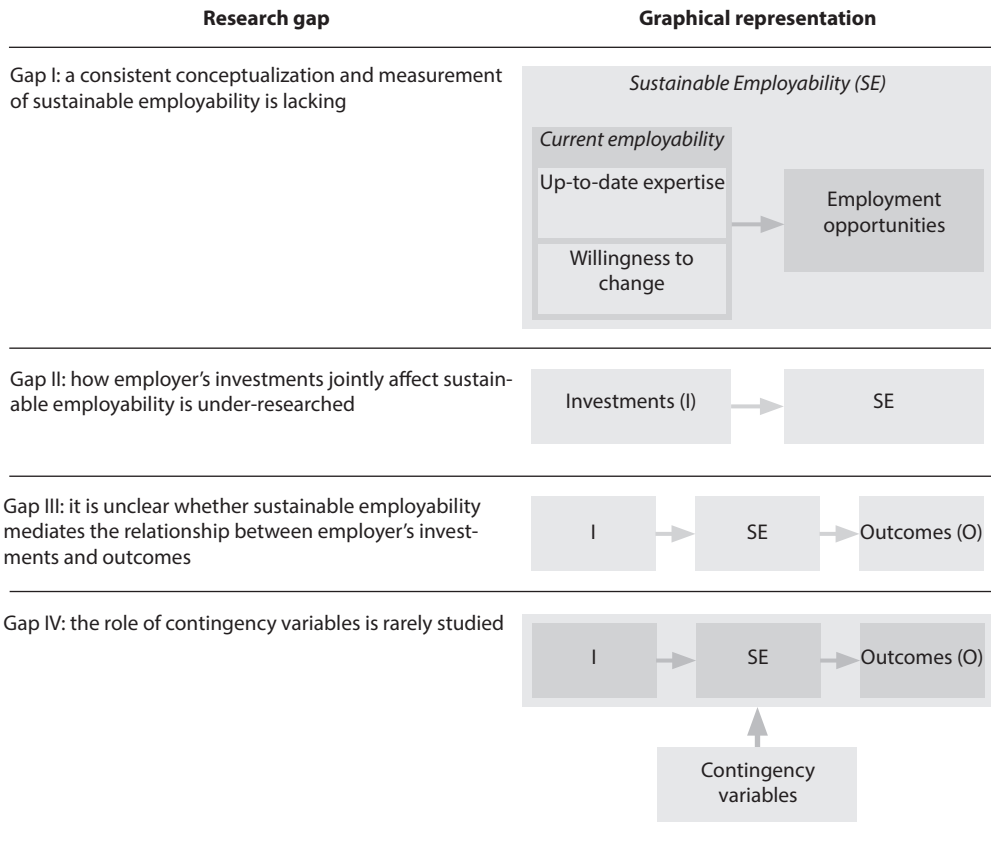
To summarize, the roles of a worker's age and their hospital job type have not been adequately studied in the employability literature, despite it seems highly plausible that workers' sustainable employability and its enhancement are contingent upon these two variables. In this dissertation, I address this fourth research gap in Chapter 7 (where the focus is on age) and Chapter 8 (on job type). While it is quite possible that other contingency variables play a role, I have chosen to focus on age and hospital job type. Age, in both theory and hospital practice, is seen as an important sustainable employability factor that deserves further research. Examining the role of job type will provide valuable information on possible differences between occupational groups. The ageing workforce and the range of occupations present make Dutch hospitals an ideal setting for testing the validity of age and job type as contingency factors.

1.1.5 Overview of research gaps

In the above four subsections, I have introduced the four identified research gaps and explained how this dissertation contributes to closing these gaps. This is summarized in Figure 1.1 in which the gaps are listed and graphically represented. This forms the basis for the research model that is shown in Section 1.3.

⁴This expectation implies that the contingency variable of job type is expected to have both direct and moderating effects. This in line with other research studying whether moderator variables have other, non-moderating effects as well (e.g. de Lange et al., 2010). Also, moderators are regularly found to have a direct effect on the dependent variable, additional to their moderating role (e.g. Kooij et al., 2013).

Figure 1.1 Overview of research gaps



1.2 Societal and practical relevance: dealing with a changing work environment

Western labor markets, such as those of the Netherlands, have been affected by various developments including globalization, technological innovations, and ageing populations. It is argued that these ongoing changes require flexibility and adaptability from both employers and employees (Stichting van de Arbeid, 2013). In a similar vein, the Dutch government has recently taken several measures to stimulate longer working lives – such as increasing the state retirement age and cutting the opportunities for early retirement – so that the effects of an ageing population can be managed (OECD, 2014). Further, to create greater leeway for organizations to react flexibly to market changes and to become more innovative, the Dutch government has reduced the legal protection against being dismissed (OECD, 2014). At the same time, employers are now required by the Dutch government to provide dismissed employees with so-called transition compensation (in Dutch: transitievergoeding), with the aim of stimulating employee mobility (SZW, 2016). Taken together, these developments mean, for

employees, that it is increasingly important to safeguard their chances of survival throughout their extended working lives. This is what is referred to as lifetime or sustainable employability (Forrier et al., 2015; Thijssen et al., 2008).

Such recent Dutch labor market policies and measures are steered by the discourse on the so-called ‘from lifetime employment to lifetime employability’ transition. The intention is that employees will no longer be provided with the security of working for one employer throughout their entire career but, instead, should be offered possibilities to secure their capabilities to obtain and retain jobs throughout their working lives (Thijssen et al., 2008). The decreased legal protection combined with the availability of a transition budget reflects this notion. Likewise, the social partners (i.e. associations of employers and employees) in the Netherlands have agreed that “employers and employees share responsibility for sustainable employability” (Stichting van de Arbeid, 2013, p. 11). More specifically, it is argued that this new perspective involves a role shift for employees who have to become more autonomous and more resilient. It also implies a transition for employers who, rather than control employees’ careers, are expected to support and enable their employees’ in achieving sustainable employability (Baruch, 2006; Thijssen et al., 2008; Stichting van de Arbeid, 2013).

To summarize, enhancing sustainable employability has been put forward as a key solution for labor market problems such as an ageing population. The government, employers, and unions all frequently refer to this concept in their policy documents and, as explained above, have agreed to share responsibility for ensuring sustainable employability. As a further inducement, the Ministry of Social Affairs and Employment subsidizes organizations that have developed initiatives to enhance the sustainable employability of their employees.⁵ As such, sustainable employability has relevance and is a concept worthy of study. In this dissertation (in particular in Chapter 4), I examine how the concept is interpreted and applied in the context of the Dutch hospital sector.

In the Netherlands, as elsewhere, the hospital sector faces a continuously changing environment that requires sustainably employable workers. That is, hospitals are increasingly confronted with market mechanisms and ongoing technological and medical innovations (Cooke and Bartram, 2015; Townsend and Wilkinson, 2010). In addition, ageing populations increase the demand for care while simultaneously the labor force as a percentage of the population is shrinking (AZW, 2016; OECD, 2007). Being sustainably employable enables hospital employees to deal with such a turbulent work environment and survive in the labor market. Although the labor market in the Dutch hospital sector has been relatively stable during recent years, changes within hospital jobs and in the organization of work are increasingly prevalent and the number of changes is expected to increase in the near future (AZW, 2015; RVZ, 2014). Enhancing the sustainable employability of their workforce is also beneficial for hospital employers for several reasons, not least that sustainably employable hospital workers are expected to perform well (Van der Heijde and Van der Heijden, 2006). In a hospital context, high performance means delivering high quality care to patients, thereby satisfying one of a hospital’s ultimate business goals (Porter, 2010). Further, it is an important public value that hospitals have to deliver as, by law, Dutch hospitals have to provide high quality care that is safe, available, and affordable (NZA, 2016). In other words, hospitals can enable public value creation by stimulating workers’ sustainable employability.

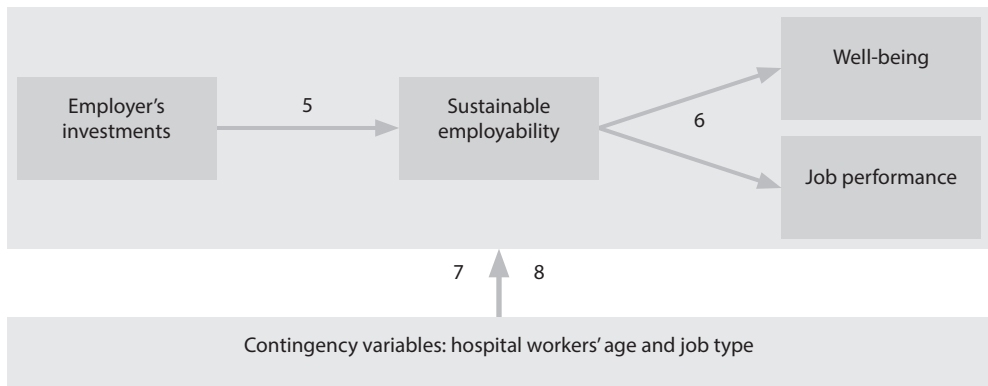
Overall, the hospital sector provides a particularly relevant context in which to conduct this study on sustainable employability. This dissertation will provide several insights that

have practical relevance for employers and employees, not only in a hospital context but also more generally. By examining how a range of employer's investments affect sustainable employability, I provide concrete examples of how employers can meet their responsibility to stimulate sustainable employability. Moreover, this study will show whether, and how, the age and job of employees should be taken into account when attempting to stimulate their sustainable employability. As many organizations increasingly have aging workforces and are confronted with older workers, insights into the sustainable employability of older workers, and how employers can ensure this, are highly valuable. Insights into whether different job types differ in terms of sustainable employability are also very useful for organizations, such as hospitals, where the workforce fills a large range of job types. In addition, this research examines whether an employer's investments in sustainable employability pay off in terms of increased employee well-being and job performance. This will provide practice with insights into two effects that are relevant from an employee and a managerial perspective respectively. To conclude, this dissertation provides useful insights that can help the nurse and her employer that were introduced on the first page of this chapter to determine how best to deal with the changing work environment so that both the nurse and the hospital secure their future.

1.3 Taking stock: research model and design

In the previous sections, I have described the conceptualization of sustainable employability, how an employer's investments are expected to enhance workers' sustainable employability, how such investments lead to increased job performance and well-being, and why the enhancement of workers' sustainable employability may be conditional on their age and job type. I have explained how this study is relevant for both science and practice. The following research model visualizes the focus of this dissertation. The numbers in the model represent the specific parts of the model that are central to the four empirical chapters (further described in Section 1.4 below).

Figure 1.2 Research model



In order to inform the above model, a combination of qualitative and quantitative research methods was used. Qualitative data were used to gain in-depth insight into the specificities of the research context. In total, 21 exploratory interviews were conducted with employees and supervisors that covered various hospital job types in three Dutch hospitals. This part of the research was not designed to test the research model but rather to understand the research context, to develop and validate survey items (which were based on scales available from other research that have shown good reliability and validity), and to further interpret and explain the quantitative research findings. To test the hypothesized relationships in the research model, I have used the quantitative research method of a survey. The quantitative materials were collected from a sample of almost 1,900 hospital workers in three Dutch hospitals. The methodology is described in more detail in Chapter 3.

1.4 This dissertation's outline

This dissertation is a mix of 'classic' chapters, such as the theoretical framework chapter, and of chapters that have a previous existence as stand-alone research papers. The research papers (Chapters 5 to 8) contain the empirical materials of this dissertation and are either published in journals, under review, or presented at conferences and/or included in conference proceedings. These papers are included in their original form and can therefore be read independently of the other chapters. Two research papers (Chapters 5 and 7) are co-authored by my supervisors but, as the first author, I have taken the major responsibility for writing these papers and conducting the research on which these are based. Chapters 6 and 8 are single-authored research papers. The mix of conventional chapters and research papers inevitably means that there is some overlap and repetition in this dissertation. Nevertheless, this dissertation is constructed in such a way that the respective chapters build on the insights in previous chapters. That is, the basic research model has been introduced in the present chapter to provide an overview of this dissertation. The theoretical arguments for this model will be elaborated in Chapter 2, leading to an extended research model. The four paper-based empirical chapters focus on different parts of the (extended) research model. In these chapters, the relationships between variables are further specified and hypotheses are developed to test the relationships. The focus of each chapter is now described in more detail below:

Chapter 2 continues this dissertation by developing a theoretical framework. In this chapter, the theoretical basis of my research is outlined by reviewing the literature on sustainable employability, further defining and conceptualizing the main concepts, and explaining the mechanisms that underlie the expected relationships as presented in the research model above. I then describe the research design and methods in **Chapter 3**. Next, a contextual analysis of the Dutch hospital sector is provided in **Chapter 4**. The aim of this chapter is to explain why sustainable employability has become a relevant issue for the hospital sector as a consequence of contextual developments. The following four chapters answer different parts of the overall research question and, likewise, focus on different parts of the overall research model. **Chapter 5** investigates the relationships between an employer's investments and workers' sustainable employability. In **Chapter 6**, I examine whether the sustainable employability components of up-to-date expertise and willingness to change mediate the relationships between employer's investments and workers' well-being and job performance. The first contin-

gency variable (a worker's age) is considered in **Chapter 7** where I test the moderating role of age in the relationships between employer's investments and sustainable employability. The second contingency variable (a worker's job type) is central to **Chapter 8**, where I investigate its conditional role. The specific research questions that are at the heart of these four chapters (research papers) are presented in Table 1.1. Finally, in **Chapter 9**, I pull together the findings from the previous chapters and provide insights into the overall research aim and question of this dissertation. The empirical findings of my research are discussed in-depth and I assess the strengths and weaknesses of my research, along with its practical and theoretical implications and offer suggestions for further research.

Table 1.1 Overview of research questions addressed in empirical Chapters 5-8

Chapter	Research Question
5.	To what extent do employer's investments relate to hospital employees' employment opportunities, and to what extent is this relationship mediated by the latter's up-to-date expertise and willingness to change?
6.	To what extent do employer's investments relate to hospital employees' well-being and job performance, and to what extent is this relationship mediated by the latter's up-to-date expertise and willingness to change?
7.	To what extent do workers' ages moderate the relationships between employer's investments, hospital workers' up-to-date expertise, their willingness to change, and their employment opportunities?
8.	To what extent do employer's investments, workers' up-to-date expertise, their willingness to change, and their employment opportunities differ among hospital occupational groups, and to what extent does job type moderate the relationships between these variables?

2



THEORETICAL FRAMEWORK

The research model for the present study was introduced in the first chapter. Here, I define and conceptualize the model's variables and elaborate on the relationships between them. The aim of this chapter is to provide a general theoretical framework for the empirical research that is subsequently reported in Chapters 5 to 8. Each of these chapters provides a specific theoretical framework that reflects the focus of that chapter, and from which hypotheses are developed. In the present chapter, the sustainable employability literature is reviewed, and several other research streams are integrated to enrich that literature. For example, to explain how employers can invest in their workers' sustainable employability (research gap II), I draw upon social exchange and human capital theories, which are frequently used in HRM research, as well as drawing insights from Organizational Behavior including on job characteristics and job design models. Further, to elaborate on the role that the age of a worker plays in the model (research gap IV), I draw upon age-related stereotyping and lifespan theories (insights from the Psychology literature).

This chapter starts by defining and conceptualizing the study's central concept of sustainable employability in Section 2.1. Next, I explain what is covered by the term employer's investments, and describe how these investments are expected to enhance workers' sustainable employability in Section 2.2. In Section 2.3, I first elaborate on how sustainable employability impacts on the two outcome variables: employee well-being and job performance. Additionally, I explain how sustainable employability acts as a link between employer's investments and these two outcome variables. Following this, in Section 2.4, I expand on the roles that two contingency variables – worker's age and job type – play in the research model. This chapter concludes with an extended research model in which all these concepts and underlying relationships are integrated. This model is more refined than the research model presented in Chapter 1.

2.1 Sustainable employability: definition and conceptualization

In Chapter 1, I showed the great variety in understandings of employability. This has seen criticisms of the concept for being fuzzy and poorly defined, and of the research field for being scattered (Forrier et al., 2015; McQuaid and Lindsay, 2005). Further, as I illustrate below, the concept of *sustainable* or *lifetime* employability can also be characterized as fuzzy. In this section, I present a consistent definition and conceptualization of sustainable employability that contains the components of 'employability' and 'employment opportunities' (in response to research gap I). I first explain the individual components before integrating them to form the concept of sustainable employability.

2.1.1 Employability: up-to-date expertise and willingness to change

Employability is defined as the extent to which an employee is able and willing to productively work. The term 'productively work' refers to adequately performing one's current job or others tasks or jobs. The latter aspect is included because of the constant changes in and around organizations that lead to ongoing changes in jobs (Van den Broeck et al., 2014; Van Emmerik et al., 2012). The term also links to Rothwell and Arnold's (2007, p. 25) employability definition that also includes the possibility of change: "the ability to keep the job one has, or to get the job one desires".

Both aspects, of being ‘able’ and being ‘willing’, are included in this study’s definition as it is argued that while having up-to-date knowledge, skills, and competences (expertise) are necessary to adequately perform in a changing work environment, this might not be sufficient (Süß and Becker, 2013; Thijssen et al., 2008). That is, employees have to be open to change and willing to adapt to employment, job content, or location alterations (Fugate and Kinicki, 2008; Kluytmans and Ott, 1999; Van der Heijde and Van der Heijden, 2006).

On this basis, the two aspects of being able and being willing are conceptualized as up-to-date expertise and as willingness to change. Following Thijssen and Walter (2006), three dimensions are included for up-to-date expertise: the extent to which employees are physically and psychologically able to keep pace with the job; the extent to which employees’ expertise is up-to-date in terms of technological innovations; and the extent to which employees’ ideas about the job are in line with relevant occupational developments in the organization and in society. Willingness to change concerns employees’ attitudes and openness to developing themselves and adapting to work changes (Van Dam, 2004).

In essence, this study’s definition and conceptualization of employability can be placed in Thijssen et al.’s (2008) second ‘concentric circle’ of employability. This notion of employability views the concept as an individual’s adequacy to perform a job combined with other personal factors such as willingness to change. Thijssen et al. (2008) argue that such an understanding of employability is preferable to a too limited definition (i.e. the first circle, which merely focuses on personal adequacy), as well to a too broad a view (i.e. the third circle, which includes contextual factors that influence employability and which the authors see as antecedents).

In my study, I focus on individuals’ own perceptions of their up-to-date expertise and willingness to change. This approach is not unique, many other researchers also understand and measure employability by assessing employees’ perceptions of their own capabilities (e.g. Camps and Rodríguez, 2011; Van der Heijde and Van der Heijden, 2006). The argument is that workers are likely to act upon their perceptions of employability rather than any objective reality: “perceptions rather than reality trigger cognitions, behavior, and psychological functioning” (Vanhercke et al., 2015, p. 180; see also Van den Broeck et al., 2014; Van Emmerik et al., 2012). As such, individuals have to feel employable in order to perform productive work, and this makes it relevant to focus on self-perceptions in this study.

2.1.2 Employment opportunities

In contrast to the above conceptualization of employability, there are other studies that understand employability as individuals’ beliefs regarding their job chances or employment opportunities (Van den Broeck et al., 2014; Wittekind et al., 2010). The present study also takes this variable into account but as a component of sustainable employability rather than of employability. In the current study, employment opportunities are defined as an employee’s expectations of getting another job within the near future, and also of continuing to perform in the current job throughout the near future.

‘Getting another job’ covers job movements (i.e. horizontal and vertical mobility) in the current and in other organizations. Continuing in the current job is also incorporated, thereby covering a range of career possibilities. In general, research only takes account of employees’ perceptions of how easy it would be for them to get another job (e.g. Berntson et al., 2006; De Cuyper et al., 2011), also referred to as ‘perceived ease-of-movement’ (Trevor, 2001). Sometimes, a further division into vertical or horizontal mobility, or a new job in the current

organization or another employer, is included (De Cuyper and De Witte, 2011). However, a changing work environment can also mean that the requirements for one's current job can change (Thijssen et al., 2008). This means that employees do not only have to adapt to changes in terms of new employment, but also to changes in their current job. As such, the expectation of continuing to perform in one's current job can be a relevant challenge and therefore it is included in the employment opportunities variable. Finally, in this study, the words 'in the near future' are added to the definition to emphasize the future orientation, and to distinguish the variable of employment opportunities from the two employability components of up-to-date expertise and willingness to change (which refer to the present situation).

Researchers argue that individuals' employment opportunities strongly depend on their expertise and willingness to change (Forrier et al., 2015; Fugate and Kinicki, 2008). For example, it is likely that employees who are very willing to adapt to changes will also assess their chances of getting a job that requires new skills as good. Such employees perceive a broader range of employment opportunities than employees who are less open or even closed to changes (Wittekind et al., 2010). Similarly, the sense of being up-to-date could make employees feel that they have good chances of a similar job outside their current organization, or that they are capable of continuing to perform in their current job. In other words, up-to-date expertise and willingness to change are expected to impact positively on employment opportunities. This argument also supposes that the various conceptualizations that are referred to as 'employability' in fact measure different aspects, and therefore cannot be regarded as identical to each other (Forrier et al., 2015).

However, only very few studies have taken all the variables into account and have provided evidence for the assumption that up-to-date expertise and willingness to change boost workers' employment opportunities (Forrier et al., 2015; Wittekind et al., 2010). Given the limited evidence, the present research examines whether employability, conceptualized as up-to-date expertise and willingness to change, impacts on workers' beliefs as to their employment opportunities. Based on the above arguments, and to avoid confusion, the 'employment opportunities' variable is analytically separated from the two employability components ('up-to-date expertise' and 'willingness to change') and not labelled as 'employability'. The relationships addressed here are tested in Chapter 5.

2.1.3 Sustainable employability

In line with this study's notion of employability, I define sustainable employability as the extent to which an employee is able and willing to productively work throughout their career. In essence, 'sustainable' refers to being continuously employable during one's working life, from the start through to retirement (Thijssen et al., 2008). This long-term perspective is the key to sustainable employability and distinguishes it from the concept of employability. In comparison, the latter is merely focused on the present (Berntson et al., 2006; Van Emmerik et al., 2012) or, at most, the near future in terms of the next career change (De Cuyper and De Witte, 2011).

The literature offers a few definitions of sustainable employability. Van Vuuren et al. (2011, p. 358) define the concept as "the extent to which one is able and willing to perform current and future jobs". As in the present study's definition, these authors incorporate the aspects of ability and willingness. Next, Thijssen et al. (2008, p. 174) have a definition for what they call lifetime employability: "the behavioral tendency directed at acquiring, maintaining, and using

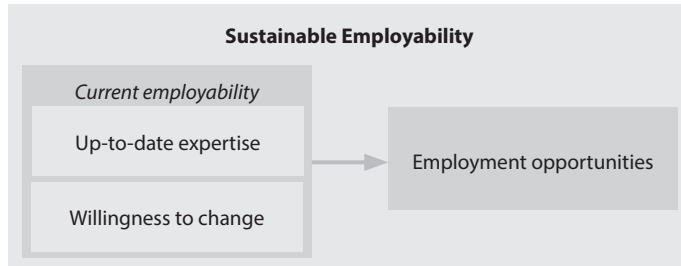
qualifications aimed at coping with a changing labor market during all career stages”. Again, this definition includes the aspects of ability (‘qualifications’) and willingness (‘behavioral tendency’). Lastly, Van der Klink et al. (2011, p. 347) have a very broad understanding of the concept (also used by Schaufeli, 2011): “sustainable employability means that, throughout their working lives, employees have continuous access to opportunities as well as to conditions to perform in current and future jobs, while remaining healthy and happy. This implies both a work context that empowers them, and the attitude and motivation to use the opportunities”.

The last of these notions of sustainable employability is somewhat complex as it includes both antecedents and outcomes of sustainable employability and, in this way, creates fuzziness in the concept. For instance, Van der Klink et al. (2011) include the opportunities an employer could provide to employees so that they could increase or maintain their sustainable employability. In other words, these are antecedents or ways to enhance sustainable employability. Likewise, the clause ‘while remaining healthy and happy’ suggests that the opportunities or conditions have other, parallel effects alongside an increase of sustainable employability.

Van Vuuren et al.’s (2011) conceptualization does not reflect their definition. The authors conceptualize sustainable employability as consisting of three components: employability, vitality, and workability. Employability is regarded as an employee’s experienced job chances and their willingness to change. Vitality is seen as high energy or mental resilience (Schaufeli and Bakker, 2004), and workability as being physically and psychologically able to do one’s job (Ilmarinen et al., 2005). This conceptualization is problematic for various reasons. First, because the concepts of vitality and workability seem to overlap. Moreover, such ‘well-being’ variables have been shown to be a consequence of employability (Kirves et al., 2014; De Cuyper et al., 2012; Berntson and Marklund, 2007), whereas van Vuuren et al. (2011) regard them as correlates. In line with other recent research, I consider well-being to be a consequence and therefore do not include it in the conceptualization of sustainable employability. I return to this point in Section 2.3.

In this dissertation, a consistency between the definition and the conceptualization of sustainable employability is maintained, and the concept is kept apart from variables that represent antecedents (such as job characteristics) or consequences (such as well-being). I conceptualize sustainable employability as involving an employee’s up-to-date expertise and willingness to change – i.e. current employability – and its beliefs regarding employment opportunities. That is, both employees’ perceptions of their *current* employability as well as their current beliefs on career perspectives in the *near future* are included. This corresponds with the long-term perspective that is key to the concept of sustainable employability. As explained earlier in Section 2.1.2, I expect (current) employability to impact on workers’ beliefs as to future employment opportunities.

Although the variables used to assess sustainable employability do not encompass the whole career (from start to end) as some definitions imply they should, they do enable a cross-sectional examination of employees’ career expectations against the background of their current employability. Adopting this definition, I do not need to establish whether an individual has been sustainably employable over a specific period. Rather, I provide an approximation to an individual’s sustainable employability. This is common practice in research as the former would require longitudinal panel research over many years (van der Klink et al., 2011). Figure 2.1 graphically represents this conceptualization.

Figure 2.1 Conceptualization of sustainable employability

Having explained how the central concept of this dissertation is defined and conceptualized, I now examine how sustainable employability can be enhanced.

2.2 Employer's investments in sustainable employability

In this dissertation, I examine whether workers' sustainable employability can be enhanced by their employers providing them with a broad range of opportunities to maintain and increase their employability and employment opportunities (in response to research gap II). Many scholars argue that employers should invest in their workers' sustainable employability. Forrier and Sels (2003) for instance reason that, in return for taking responsibility for their own career, employees might expect their employer to offer them the support and facilities necessary to enhance their (sustainable) employability. Schaufeli (2011) states that sustainable employability is a 'contextual concept', which in this case means that sustainable employability is not merely an individual characteristic, but rather can be attributed to an interaction between the individual and his/her job. According to Schaufeli (2011), this implies that employers have responsibility for enhancing their workers' sustainable employability by creating conditions that enable employees to develop their talents, knowledge, and skills. Van der Klink et al. (2011) go as far as to state that workers can only be sustainably employable if their organization enables them to enhance their capabilities. Similarly, Baruch (2001) regards an organization's commitment to providing its employees with good training and development opportunities as the essence of employability.

Beyond the mere provision of training, employers can enable their employees to enhance their sustainable employability by providing resourceful challenging jobs and adequate managerial support (Pearce and Randel, 2004; Schaufeli, 2011; Van der Heijde and Van der Heijden, 2006). Together, I label the provision of these opportunities as 'employer's investments'. In this, I include those job characteristics that encourage employees to maintain and enhance their expertise and openness towards change: i.e. job autonomy, task variety, and workload. Drawing on the work of Knies and Leisink (2014), I regard managerial support as the implementation of supportive HR practices and supervisor supportive behavior.

Drawing on theories related to job characteristics, social exchange, and human capital, one can expect employer's investments to stimulate workers' sustainable employability. More specifically, I presume that investments will boost workers' up-to-date expertise and willing-

ness to change and, consequently, their employment opportunities. As such, I anticipate a mediated relationship as explained in Sections 2.2.1 and 2.2.2 below. A few studies have investigated whether job characteristics or managerial support variables impact on up-to-date expertise, willingness to change, and employment opportunities (De Vos et al., 2011; Van Emmerik et al., 2012). However, the aforementioned theories have not been combined to provide a theoretical basis. Below I elaborate on the underlying mechanisms in the relationships between employer's investments and components of sustainable employability.

2.2.1 Providing a resourceful and challenging job

When employees' jobs provide them with relevant experiences and enable them to acquire new expertise, they are likely to sustain their employability (De Vos et al., 2011; Farr and Ringseis, 2002; Forrier and Sels, 2003). More specifically, it is argued that high autonomy and task variety give employees the opportunity to use and develop their competences (Hackman and Oldham, 1975; Van der Heijden et al., 2009). Further, De Lange et al. (2010) have shown that a job that gives employees decision-making authority and skill variety intrinsically motivates them to learn and to develop themselves.

In addressing the role of job autonomy, scholars argue that employees feel responsible for their work when they experience freedom in and control over their job. This leads to a willingness to go the 'extra mile' to complete tasks or improve one's effectiveness (Snape and Redman, 2010). Experiencing having control over the job also gives employees the feeling that their performance is dependent on their own choices and decisions, and this in turn makes them feel better and more secure about their own abilities (in this study: expertise) (Hackman and Oldham, 1976). Further, if employees experience sufficient autonomy, they can feel free to experiment in their work leading to new abilities that they can also possibly use in other jobs. This increases their employability, which impacts positively on their perceived employment opportunities.

Another aspect is that if employees have a high task variety in their job, they will need to use a varied array of their abilities (Hackman and Oldham, 1976; Van Emmerik et al., 2012). In other words, the job itself could motivate employees to adapt to changes and to continuously update their expertise in order to perform their work tasks effectively. This will, in turn, increase their employment opportunities.

Finally, it is likely that employees need time to benefit from job autonomy and task variety. Studies have demonstrated that individuals who feel that they are under time pressure increasingly rely on routines, and are less able to develop themselves (Taris and Kompier, 2004), and are less flexible in their attitudes (Van Dam, 2004). This means that a high workload may serve as a constraint on enhancing workers' employability and employment opportunities. Conversely, a high workload might stimulate employees to update or develop expertise since they experience their current abilities as inadequate to perform their jobs effectively (De Lange et al., 2010; Van Ruyseveldt and van Dijke, 2011).

The relationships of the autonomy, task variety, and workload job characteristics with workers' employability and employment opportunities are tested in Chapter 5. These three job characteristics are regarded as essential for developing one's sustainable employability and are often regarded as the most important job characteristics. For instance, job influence (which is similar to job autonomy) is central to the work of Snape and Redman (2010). Parker regards autonomy and task variety as fundamental to job enrichment (e.g. Parker and Wall,

1998), and sees workload as an important job demand in her work on job design (Parker et al., 2001). Also De Lange et al. (2010) use the same three characteristics in their concept of 'challenging jobs'. They focus on job control, which is comprised of autonomy and variety plus job demands (measured as workload). Finally, the characteristics are also applied to a hospital context; Armstrong-Stassen and Stassen (2013) urge hospital employers to design nursing jobs in such a way that they are challenging and meaningful, and enable nurses to fully utilize their skills and expertise.

2.2.2 Providing adequate managerial support

Based on social exchange theory (Blau, 1964), it is argued that employers can show that they value and support their employees through the provision of appropriate HR policies, which in turn is likely to lead to favorable employee attitudes and behaviors (e.g., in this context, being able to perform your current job tasks or having a flexible attitude). Examples include providing development opportunities, managers investing time in rewarding and appraising their employees, or providing work-life balancing opportunities such as flexible work schedules. In this way, organizations demonstrate that they are willing to invest in the development of the workforce and also care about their well-being. Research has shown that this investment leads to increased human capital (Snape and Redman, 2010; Takeuchi et al., 2007). Similarly, other studies have demonstrated the importance of supportive HR and supportive line managers (Knies and Leisink, 2014; Purcell and Hutchinson, 2007). Further, Solberg and Dysvik (2015) have shown that employees who experience their employer as providing them with development HR practices are more open to developing themselves and to adapting to changes.

Based on the social exchange mechanism, I expect supportive HR practices to increase workers' employability and employment opportunities. HR practices will stimulate employees to update their expertise and encourage them to develop themselves further or to adapt to changes so that they can perform according to their job requirements and managerial expectations. This increase in their employability will lead workers to perceive more employment opportunities. It should be noted that HR practices can be either general or tailor-made (Guest, 2007; Knies and Leisink, 2014). HR responsibilities are increasingly being devolved to supervisors, and this makes it easier to make tailor-made arrangements with individual employees. This HR devolution is taking place in many industries (Brewster et al., 2015), and has been noted in a hospital context (Townsend and Wilkinson, 2010).

In this dissertation, managerial support is covered by a supervisor implementing HR practices (both general and tailor-made) and a supervisor providing supportive behavior to employees. Supervisors can support workers by showing concern for their well-being, giving feedback, and stimulating them in their personal development and growth (Knies and Leisink, 2014). By providing appropriate feedback and by communicating clearly and concisely, a supervisor can make employees feel satisfied and confident with their own capabilities (Van der Heijden, 2003). With this positive feedback, employees are likely to positively rate their own up-to-date expertise. In addition, they are likely to be more willing to adapt to changes when they are actively encouraged to develop themselves further and to be open to change. Concrete examples of development support that supervisors can provide include stimulating employees to create a personal development program and working together with them on its realization.

This expectation regarding the effect of supervisors' supportive behavior on employability is supported by empirical evidence (Camps and Rodríguez, 2011; Van Dam, 2004). Research also shows that supervisor support is especially important for hospital nurses given their emotionally demanding jobs (Van der Heijden et al., 2010). This suggests that providing adequate support to employees so that they can enhance their sustainable employability could be especially important in a hospital setting because of the nature of the jobs.

Overall, in this dissertation it is assumed that a supervisor can stimulate workers' employability and employment opportunities by providing various forms of supportive behavior. Following Knies and Leisink (2014), this support is divided into supervisor support for employees' well-being and functioning, and their support of employees' development. The relationships between these two variables and workers' employability and employment opportunities are tested in Chapter 5. Having explained how sustainable employability can be enhanced by employer's investments, I now turn to the outcomes of sustainable employability to highlight the potential benefits of having sustainably employable workers.

2.3 Benefits of sustainable employability: well-being and job performance

A worker who is sustainably employable has a high likelihood of prospering in the labor market throughout their working lives (Thijssen et al., 2008). Moreover, the interpretations of sustainable employability by van Vuuren et al. (2011) and Van der Klink et al. (2011) show that sustainably employable workers are expected to be both happy and good performers. As such, sustainable employability is believed to have outcomes that are beneficial for both the employee and the employer.

In this dissertation, I focus on employee well-being and job performance as outcome variables of sustainable employability. However, I only include the two sustainable employability components that refer to current employability – up-to-date expertise and willingness to change – and exclude the third component (employment opportunities). It is likely that an individual's current well-being and job performance are both impacted by their *current* up-to-date expertise and willingness to adapt, rather than by their current perceptions of their employment opportunities *in the near future*. The latter is regarded as a more distal factor, while up-to-date expertise and willingness to change are viewed as proximal factors directly impacting on well-being and job performance. Besides, employment opportunities may possibly affect job performance and well-being at some point in the future, but this cannot be assessed in this dissertation because of the cross-sectional nature of the data. Therefore, in this section, I relate only up-to-date expertise and willingness to change to job performance and well-being.

In line with theories stating that employers should not only strive for economic ends, and therefore not only invest in its workers for economic purposes, I study whether or not sustainable employability has economic outcomes (job performance) as well as employee outcomes (employee well-being). As explained in Chapter 1, this is in line with the Harvard model of HRM (Beer et al., 1984, 2015) and the balanced HRM approach (Boselie et al., 2009; Paauwe, 2004).

To date, various studies have shown that employability positively impacts on both well-being and job performance (De Cuyper et al., 2014; Kinnunen et al., 2011; Kirves et al., 2014). These studies further argue that employers invest in employability because of these positive effects: “employability is built on earlier investments from both the employer and the employee and with a view on a specific return. The employer makes such investments in view of economic return, in-role performance in particular” (De Cuyper et al., 2014, p. 538). However, this premise, that employability investments pay off, has not been researched in depth. Studies have focused either on employability antecedents or on outcomes, and have not investigated whether employability is the linking mechanism between investments and outcomes.

Below, I first define the ‘well-being’ and ‘job performance’ outcome variables, and explain the underlying mechanisms that link employability to these two outcomes. Second, I explain how up-to-date expertise and willingness to change (current employability) are expected to mediate the relationships between employer’s investments and the outcome variables (in response to research gap III).

2.3.1 Well-being

Well-being is defined as the overall quality of an employee’s experiences and functioning at work (Van de Voorde et al., 2012; Kooij et al., 2013). Studies have used two mechanisms to explain the link between employability and well-being that are both based on the Conservation of Resources (COR) theory (Hobfoll, 2001). Essentially, COR theory argues that the acquisition and maintenance of resources increases an individual’s resilience. Employability can be regarded as a personal resource that stimulates well-being (Vanhercke et al., 2015).

First, highly employable workers are considered able to successfully deal with challenges resulting from changes and uncertainty (Kirves et al., 2014). That is, employable workers, since they have the required resources of up-to-date expertise and an openness and willingness to adapt to changes, feel able to cope with possible threats such as switching to a new software system or working in a new department or team. As such, they experience less stress and feel better than less employable workers (Berntson and Marklund, 2007). Second, De Cuyper et al. (2008) argue that employability decreases employees’ fear of becoming unemployed, and increases their feeling of being in control of their careers, as they have the required resources to survive in today’s labor market. As a result, employees’ well-being increases.

2.3.2 Job performance

Job performance is defined in this dissertation as how well an individual carries out the duties that are part of the job (Christian et al., 2011). Workers’ employability has been shown to positively impact on their perceived job performance (De Cuyper et al., 2014; Kinnunen et al., 2011). As employable workers have up-to-date occupational expertise, they have the capabilities needed for their job and can fully concentrate on their work. Consequently, they are expected to perform well (De Cuyper et al., 2011; Dries et al., 2014). In addition, as they are willing to change, employable workers are likely to be flexible and to proactively adapt, which also positively impacts on their performance (Fugate et al., 2004).

2.3.3 Up-to-date expertise and willingness to change as the linking mechanisms

In Section 2.2, I linked employer’s investments to workers’ up-to-date expertise, willingness to change, and employment opportunities. I argued that when employees experience their job

as resourceful and challenging, and with adequate managerial support, they are able to maintain and expand their up-to-date expertise and willingness to change, leading to increased employment opportunities. In Section 2.3, I related up-to-date expertise and willingness to change (i.e. current employability) to well-being and job performance. I have argued that a feeling of being currently employable enhances well-being and increases job performance. Based on these arguments, one would expect employer's investments to have a positive relationship with workers' well-being and job performance *through* up-to-date expertise and willingness to change. In other words, I expect a mediated effect, and assume that employer's investments in sustainable employability will pay off in terms of increased well-being and job performance. This is expected to be a partial mediation effect as, based on the HRM and performance literature (Boxall and Macky, 2009; Jiang et al., 2012), there are other mechanisms that also partly explain the link between the employer's investments and the outcome variables. This assumption is further elaborated upon in Chapter 6.

As observed earlier, research has previously investigated employability in combination with either its antecedents (Van Emmerik et al., 2011; Wittekind et al., 2010) or its outcomes (De Cuyper et al., 2014; Kinnunen et al., 2011). In other words, there is a lack of studies in which investments, employability, and outcomes are examined simultaneously. Whether up-to-date expertise and willingness to change are truly links between employer's investments and desirable outcomes such as high job performance and well-being therefore remains uncertain. I test this assumption in Chapter 6.

2.4 The roles of two contingency variables: worker's age and job type

So far, I have discussed how sustainable employability is related to possible antecedents and outcomes *in general*. In this section, I argue that the effects of an employer's investments on workers' sustainable employability are likely to be dependent on two contingency variables, namely a worker's age and their type of job (here specifically their hospital job). As outlined in Chapter 1, the role of contingency variables has received little attention in employability research (research gap IV) despite contingency theories suggesting that the effects of employer's investments on workers' sustainable employability are likely to be influenced by internal contingencies such as workforce characteristics.⁶

In Sections 2.4.1 and 2.4.2 below, I explain how the enhancement of sustainable employability is likely to be dependent on workers' age and their job type respectively. Justifications for focusing on these two contingency variables were elaborated in Chapter 1. In essence, given the limited research to date, it is unclear which contingency variables might be important but, within the broad array of potential contingency variables, these two variables are regarded as highly relevant. Age, in both theory and hospital practice, is regarded as an important sustainable employability factor warranting further research (Pool et al., 2015). Examining the role of job type on the other hand, provides valuable information on possible differences between occupational groups. The ageing Dutch hospital workforce and the range of occupations present make this setting ideal for testing the validity of age and job type as contingency factors.

⁶In this dissertation, contingency variables are examined on an individual level (i.e. employees), which is in line with other research using individual characteristics as contingency variables to understand behavior (Beersma et al., 2003; Hersey and Blanchard, 1969).

2.4.1 Worker's age

It is currently argued that, because of the aging working population, age is a highly relevant variable to study in relation to employability (Pool et al., 2015). However, research on this subject remains scarce (notable exceptions suggesting that age matters include Froehlich et al., 2014; Van der Heijden et al., 2009). Studies that include age often do so as a control variable (e.g. De Vos et al., 2011; Wittekind et al., 2010) even though it is not unreasonable to expect age to play an important moderating role in the relationships between employer's investments and components of sustainable employability.

This view is derived from Selection Optimization Compensation theory (Baltes et al., 1999), Socio-Emotional Selectivity theory (Carstensen, 1995), and theories on age-related stereotyping (Posthuma and Campion, 2009). The moderating role of age has been studied in a range of relationships associating job characteristics and managerial support variables with employees' attitudes and behaviors. Such studies base their hypotheses on the above-mentioned theories, and the empirical findings show that these theories are highly useful in understanding the moderating role of age (Drabe et al., 2015; Innocenti et al., 2013; Kooij et al., 2013). In essence, these studies imply that older workers make less use of employers' investments and benefit less from having high levels of up-to-date expertise and willingness to change than their younger colleagues.

It should be noted that the division of a workforce into young and old workers is not straightforward. Frequently, studies use a threshold of 40 or 45 years to classify an older employee, although others use ages closer to the retirement age (Ng and Feldman, 2009). Further, it has become increasingly clear that individual differences increase with age (e.g. Bal and Jansen, 2015; Greller and Stroh, 1995). As such it is probably an over-simplification to split employees into just two groups of young and old employees. In this dissertation, instead of dichotomizing age into two categories, multiple age groups are used as explained in Chapter 3.

The first argument for the assumption that age plays a moderating role comes from lifespan theories (Baltes et al., 1999; Carstensen, 1995). Here, Kooij et al. (2013) argue that older individuals allocate fewer resources to growth (e.g. updating or developing themselves) because of losses such as declining physical abilities. Instead, they are more committed to maintaining the status quo and regulating losses. Given these changing motivational structures (Kanfer and Ackerman, 2004), it is likely that providing employees with resourceful jobs and managerial support to elicit ongoing updating and developing will be less effective with older workers. This is because older workers will *utilize* these opportunities less than younger workers. Further, lifespan theories suggest that high employability is less valuable for older worker in terms of their employment opportunities.

The second argument comes from studies into age-related stereotyping. The logic is that, as they get older, employees will internalize the negative age-related stereotypes that are prevalent in their work environment (Van der Heijden et al., 2009). These stereotypes consist of beliefs that older employees are less flexible, less adaptable, and less able to learn (Posthuma and Campion, 2009). Another stereotypical view is that the time left to regain an employer's investment is too short for older workers, so that there is no sense in investing in them (Armstrong-Stassen and Templer, 2005; Fleischmann et al., 2015). If older workers accept such stereotypes, they are likely to make less use of employer's investments intended to enhance their employability. In addition, such stereotypical thinking can lead older workers

to perceive their up-to-date expertise and willingness to change as of little value as assets for their remaining careers. They come to see their time horizon and period of productivity in a new job as too short.

Overall, one can argue that age plays a moderating role in two ways: in the relationships between employers' investments and workers' up-to-date expertise and willingness to change (employability); as well as in the relationships between workers' employability and their employment opportunities. In all cases, the relationships are expected to be less positive for older workers than their younger counterparts. This assumption is tested in Chapter 7.

2.4.2 Hospital job type

The wide range of occupations and jobs within a hospital (Harris et al., 2007) makes it relevant to examine the role, if any, that job type plays in the relationships between employer's investments and workers' sustainable employability. It is likely that the level of sustainable employability, and the ways in which this can be enhanced, will depend on the specific hospital job type, and that there will be significant differences between the hospital occupational groups.⁷ To date there has been almost no published employability research that pays specific attention to a healthcare setting such as a hospital. A few studies have tested hypotheses using samples of healthcare workers (e.g. de Cuyper et al., 2011a) but these have not specifically considered healthcare workers' employability, or how this might be enhanced.

Given this lack of prior research, I draw insights from various streams of research to theorize on the role of the type of hospital job in the relationships between employer's investments and workers' sustainable employability, and have developed four potential explanatory mechanisms for the different roles of job type. These are thoroughly explained and empirically examined in Chapter 8. In essence, they can be summarized as follows.

First, based on Lepak and Snell's (1999, 2002) HR architecture, one would expect employees in jobs with a high strategic value to the hospital to perceive *more employer's investments* than employees in jobs of low strategic value. In a hospital setting, high strategic value jobs involve diagnosis, treating, and nursing tasks (i.e. jobs that are directly connected to the core business). Employees with these tasks have the potential to improve the effectiveness and efficiency of the hospital, and this makes it relevant to invest in them (Purcell et al., 2004; Wright and Nishii, 2013). It therefore seems reasonable to assume that such employees will perceive more opportunities to boost their sustainable employability than do employees with low strategic value jobs (i.e. support staff and assistants who are only indirectly related to the core business).

Second, it is likely that the more highly educated employees will perceive *a higher level of sustainable employability* than employees in jobs requiring only a more basic education. In essence, highly educated hospital workers (such as the so-called advanced nurses) will have developed more knowledge and skills, meaning that their personal capabilities (up-to-date

⁷In this dissertation, the following job types are included: nurses (basic and advanced), medico-technical and medical non-nursing employees (e.g. surgical technologists and therapists), supporting and assisting employees (nursing aides and medical office assistants), and management. These distinctions are further explained in Chapter 4. Doctors are excluded from this study as they tend to form their own ventures within most Dutch general hospitals (including those participating in this study), and therefore cannot be considered as employees that benefit from employer's investments made by a hospital.

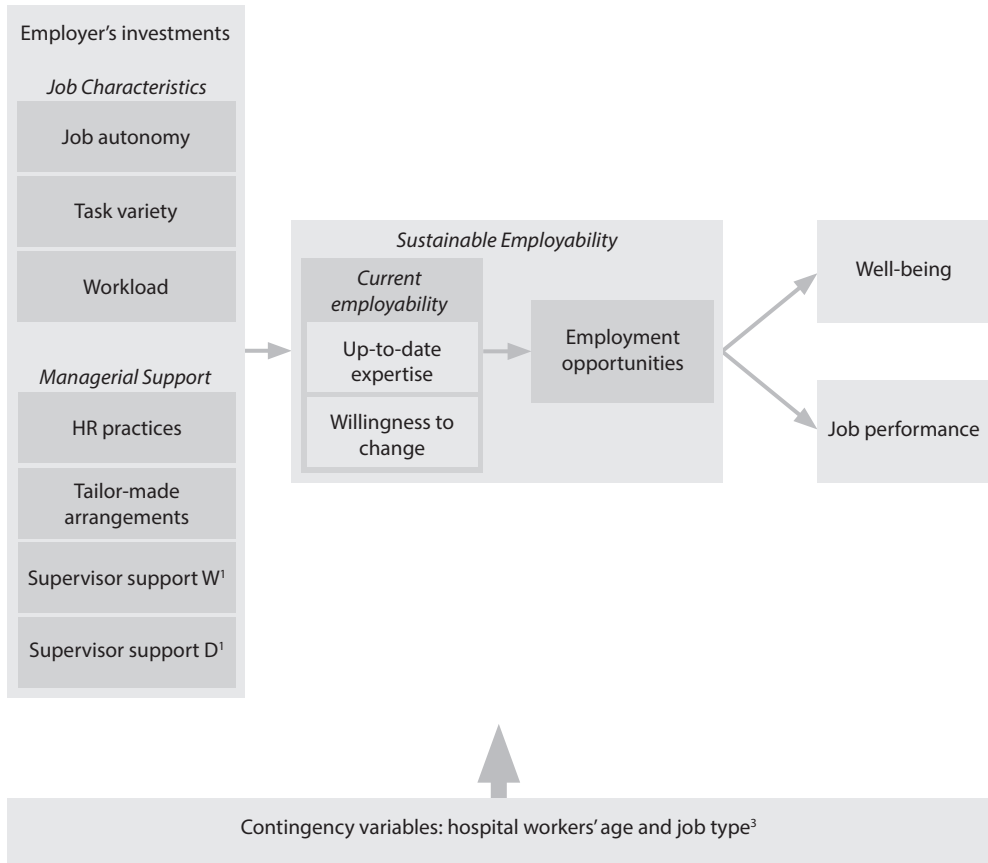
expertise and willingness to change) and employment opportunities will be greater (Berntson et al., 2006; Grip et al., 2004; Van der Heijden et al., 2009).

Third, it seems reasonable to assume that hospital employees who can be characterized as professionals (or who are in a professionalization process) will benefit more from the positive effects of employer's investments in their up-to-date expertise and willingness to change than non-professional workers. Professionals are able to adapt their behavior to a specific situation and to assess autonomously which skills to use in that situation (Noordegraaf, 2007). This in effect means that they are used to constantly developing themselves (Pool et al., 2013). They are accustomed to continuously maintaining their up-to-date expertise and flexible attitude, and therefore will easily be able to utilize employer's investments that are targeted towards this. This suggests that job type will play a *moderating role* in the relationships between employer's investments and both up-to-date expertise and willingness to change.

Fourth, one could argue that the employment opportunities of hospital employees in general jobs will be boosted more if they have a high level of up-to-date expertise and willingness to change than the employment opportunities of those with specialized jobs. This is because general jobs require a capacity for learning/adaptation whereas specialized workers develop in a narrow specialization that benefits only the current job rather than opening up alternatives (Nauta et al., 2005). This pattern has been referred to as experience concentration (Thijssen, 1992; Thijssen and van der Heijden, 2003). In the Dutch hospital sector, many non-nursing medical jobs, such as surgical technologists, require a specialized degree that is distinct from a nursing education, and prepares them only for their chosen job's tasks (LVO, 2012). This limits their employment opportunities and boosting their up-to-date expertise or willingness to change will not increase their employment opportunities in the same way as it does for employees with general jobs. Further, employees in general jobs tend to have more employment opportunities anyway, which they can realize provided they are sufficiently capable (i.e. employable). As such, job type is expected to have another *moderating role* in the relationships of up-to-date expertise and willingness to change with employment opportunities. The various roles of job type are tested in Chapter 8.

2.5 Research model

The aim of this chapter has been to develop a theoretical framework that can be used to test the relationships linking employer's investments, workers' sustainable employability, and their job performance and well-being. This framework is presented graphically in Figure 2.2. Compared to the research model in Chapter 1, Figure 2.2 is an extended version of the research model that addresses all the concepts examined in this dissertation. Hypotheses are formulated in Chapters 5 to 8 and used to test different parts of the model. Next, in Chapter 3, the research design and methodology used to test this model is explained.

Figure 2.2 Research model**Notes:**

¹W = supervisor support of employee's functioning/well-being; D = supervisor support of employee's development.

²The sustainable employability component of employment opportunities is not included in the analysis in Chapter 6 where the well-being and job-performance outcome variables are examined (see Section 2.3.3 for further explanation).

³The roles of the contingency variables are simplified in Figure 2.2 to enhance readability. As explained in detail in Chapters 7 and 8, the age and job type contingency variables are expected to play multiple roles in the model.

3



**RESEARCH
DESIGN AND
METHODOLOGY**

This chapter elaborates on the research design and methods that were used to answer the central research question: *'How is employees' sustainable employability related to individual, job, and organizational characteristics and to organizational and employee outcomes?'* To answer this question, the research combines qualitative and quantitative research methods. Qualitative data were gathered to gain a comprehensive insight into the research context of the Dutch hospital sector and to interpret the quantitative data, which were used to test the relationships hypothesized in the research model. This research design is discussed in Section 3.1. Following this, in Section 3.2, I briefly describe the research context and the participating hospitals (an in-depth description and analysis of the context is provided in Chapter 4). Then, I describe the qualitative component of the research in Section 3.3, followed by an elaboration of the quantitative materials and techniques in Section 3.4.

3.1 Research design

The empirical research consists of two elements: a qualitative and a quantitative research phase. First, in the qualitative phase, a range of sector and organization-specific documents were analyzed to understand how contextual developments have impacted upon the hospital sector and called for sustainably employable workers. Given that the research took place in a specific context that can be characterized as a turbulent sector, and because of this turbulence, it is argued that sustainably employable workers are needed (Thijssen et al., 2008; Van Dam, 2004; Grip et al., 2004). Consequently, I carried out interviews to gain in-depth insights into the perceptions of Dutch hospital workers and their supervisors regarding the workers' current levels of sustainable employability and the conditions needed to enhance their sustainable employability. Together, these qualitative materials provided essential understandings. It is argued that the research context provided a particularly relevant setting to conduct a study on sustainable employability and this premise is examined further in Chapter 4 in which a context analysis is provided based on the qualitative information.

Collecting qualitative data can be seen as a useful research strategy for gaining information on contextual features (Miles and Huberman, 1994). As such, the qualitative part of the research was not designed to test the research model; rather I have used the qualitative data in three distinct ways. First, as noted above, to analyze the research context in Chapter 4. Second, to develop and validate survey items (which were based on available scales that have shown good reliability and validity elsewhere). Third, to interpret and explain the research findings in Chapters 5 to 8. Overall, these uses of the qualitative data increased the internal validity of the quantitative findings.

The second element in this dissertation's research design involved collecting quantitative materials through a survey. I used this method to collect data to test the relationships hypothesized in the research model. As stated in the previous chapter, this dissertation examines how employees perceive their own level of sustainable employability. The underpinning argument is that workers are likely to act upon their perceptions rather than on any objective reality: "perceptions rather than reality trigger cognitions, behavior, and psychological functioning" (Vanhercke et al., 2015, p. 180). Following this argument, it is also likely that employees' *perceptions* of their employer's investments will influence their level of sustainable employability. More specifically, even though employers could believe that they have made ample invest-

ments, their effectiveness, in terms of increasing sustainable employability, job performance and well-being, largely depends on the perceptions of the employees (see also: Nishii et al., 2008; Wright and Nishii, 2013). As the concepts adopted in this research focus on the perceptions of employees, an employee survey can be seen as an appropriate research strategy since it allows me to measure the individual perceptions of many employees, rather than the opinions of a few (Gerhart, 2007). It should be noted however that other data sources might also be relevant for measuring some of this dissertation's variables (e.g. job performance). This aspect is reflected upon in Chapter 9 (Subsection 9.3).

The research materials were collected in a single round, which means that I have cross-sectional data and that conclusive causal relationships cannot be extracted from the research findings.⁸ However, there are solid theoretical grounds for assuming, for example, that employer's investments influence employees' sustainable employability rather than the other way around. In addition, I used insights from various studies that did employ longitudinal research designs in developing the research model. Nevertheless, when interpreting the research results, one should bear in mind that the findings are cross-sectional and that reversed causality cannot be ruled out.

That having been said, this dissertation's research design allowed me to combine the rigor of quantitative research methods with the relevance of qualitative research methods in a single study. The quantitative research component means that the research question and subsequent research model have been tested with a large population that is considered representative of Dutch hospital workers (see Section 3.4.1). Further, to explain the specificity of the hospital context and to better understand the research results, qualitative research methods were employed. This combination of approaches responds to calls in the HRM literature to balance rigor and relevance (Boxall et al., 2007; Godard, 2014; Paauwe, 2004).

Finally, it should be noted that this study was part of an applied research project that was commissioned by a national foundation of hospital employers and unions (Stichting Arbeidsmarkt Ziekenhuizen). The aim of the project was to customize an online self-assessment tool (the 'Loopbaanspiegel') for Dutch hospital employees in which they could evaluate their own level of sustainable employability. Together with two other researchers, I participated in this project as a research consultant. The three researchers developed materials and conducted the research independently, and the commissioning foundation did not interfere in the research. Together with representatives of participating hospitals, the commissioning agent participated in an advisory committee that was periodically asked to give advice and to reflect upon the research. Such an embedded research design has the advantage of keeping researchers in close contact with the participating organizations, both during and after the data collection process. In addition, the researchers have presented their results to the management, the HR department, and line managers of the participating hospitals and, in this way, have translated research results into concrete information that is valuable for the hospitals (for evidence-based management, Rousseau, 2006). This process has also been valuable for the research itself, with the researchers receiving feedback on the reasons why certain results were found, which was then used to further interpret the research findings.

⁸The research design originally involved two rounds of quantitative data collection. Due to various reasons, the hospitals cancelled their participation in the second wave. I further reflect upon this in the limitations section of Chapter 9 (see Section 9.4).

3.2 Research context

The Dutch hospital sector offers a particularly relevant context in which to conduct a study on sustainable employability, as ongoing changes in the sector are likely to increase hospitals' needs for sustainably employable workers. That is, Western populations are ageing, thereby increasing the demand for care, while the labor force as a percentage of the population is shrinking (AZW, 2016; OECD, 2010). Simultaneously, the sector is facing pressures such as the ongoing introduction of market mechanisms and new technological and medical innovations (Cooke and Bartram, 2015; Townsend and Wilkinson, 2010). Achieving and maintaining a workforce that is both up-to-date and flexible to adapt to changes – in other words, that is sustainably employable – seems essential to cope with such a turbulent environment. As such, research into how workers' sustainable employability can be enhanced has great practical relevance for both hospital employers and employees. This presumption is further examined in Chapter 4 where I provide a thorough contextual analysis of the Dutch hospital sector. The hospitals that participated in this research are described below.

The Dutch hospital sector consists of approximately 105 general hospitals and 8 university hospitals (NVZ/Dutch Hospital Data, 2012). General hospitals can be further divided into regional hospitals (often smaller and middle-sized hospitals) and so-called 'top clinical' hospitals, which are teaching hospitals providing specialized care such as In Vitro Fertilization (often, these are the larger hospitals). Four general hospitals voluntarily participated in this study, of which three were teaching hospitals and one a regional hospital.⁹ The hospitals were approached by the researchers and by the foundation that commissioned the consultancy project. The participating hospitals are located in different parts of the Netherlands and provide similar facilities. At the time of the data collection (2012), teaching hospitals 1 and 2 were the largest (with capacities of 850-880 hospital beds), the regional hospital was the smallest (400 hospital beds), and teaching hospital 3 in between (with 480 hospital beds). During the qualitative data collection phase, teaching hospital 3 decided to withdraw from the project as it was being merged with another hospital and involved in downsizing activities. Consequently, the quantitative materials were collected from the regional hospital and teaching hospitals 1 and 2. To control for potential differences between the hospitals, the hospitals form a control variable in the quantitative data analysis in Chapters 5 to 8.¹⁰ Having described the research design and context, I now elaborate on the qualitative and quantitative research phases in Sections 3.3 and 3.4 respectively.

3.3 Qualitative research

In this section, I describe the qualitative research materials and their analysis. First, a brief account of the documents that have been used to analyze the research context is provided. I then turn to the collection of interview materials. Here, the interview sample and procedure, the measures, and the data analysis techniques are sequentially described.

⁹The participating hospitals are not named because of agreements on confidentiality and anonymity.

¹⁰In Chapters 5 to 8, the regional hospital is referred to as 'hospital A' and teaching hospitals 1 and 2 as 'hospital B' and 'hospital C'.

3.3.1 Document analysis

In the period from 2012 to 2016, a range of documents was collected to understand how developments such as an ageing population and market mechanisms have impacted upon the hospital sector, and the participating hospitals in particular. Table 3.1 shows the main sources and documents that were used. Initially, information was primarily gathered at the national or even transnational level (e.g. using documents from the Dutch Ministry of Social Affairs and Employment and OECD), so that later context-specific information on the Dutch hospital sector and the participating hospitals could be placed in the wider context. This part of the research was specifically set up to gather information on the research context, and should not be regarded as a systematic document analysis.

Table 3.1 Overview of used documents

Level	Main sources and documents
Dutch labor market (in a European context)	<ul style="list-style-type: none"> - OECD: research reports, working papers - Ministry of Social Affairs and Employment: policy documents, rules and regulations (Acts) - Stichting van de Arbeid (The Labour Foundation): social charters
Dutch hospital sector	<ul style="list-style-type: none"> - NVZ (Dutch Hospital Association): collective labor agreements, annual reports - RVZ/RVS (The Council for Health and Society): advice reports - AZW (research consortium monitoring the Dutch healthcare labor market): research reports
Participating hospitals	HR policy documents, annual reports

3.3.2 Interviews: sample and procedure

In total, 21 exploratory interviews were conducted with 16 employees and 5 managers from teaching hospitals 2 and 3 and the regional hospital. Additionally, a group interview with 5 work council members from the regional hospital was conducted. As can be seen from Table 3.2, the interviewed employees included nurses, medical office assistants, and non-nursing medical employees working in different departments. The interviewed managers supervised nursing and non-nursing departments. About half of the respondents had worked for more than five years in their current job, the other half having less experience within the current job but not necessarily within the hospital sector. Respondents' ages ranged from 23 to 60 years, and all but three were female.

Employees in the HR departments of the three hospitals were asked to identify interviewees based on the following criteria: (1) variation in job type (nurses, non-nursing medical employees, assisting jobs, and managers), (2) a spread of departments/nursing units, and (3) a range of experience. The interviewees were then invited to participate in a one-hour interview with a researcher. The interviews with employees were described as an interview about

Table 3.2 Interviewees' characteristics

Respondent	Hospital'	Job type	Unit/Department	Gender	Age	Education**
1	T2	Doctors' assistant	Polyclinic ENT***	Female	53	IVE doctors' assistant
2	T2	Doctors' assistant	Polyclinic plastic surgery	Female	42	IVE doctors' assistant
3	T2	Doctors' assistant	Polyclinic plastic surgery	Female	45	IVE doctors' assistant
4	T2	Supervisor teams of doctors' assistants	a.o. Polyclinic ENT	Female	42	IVE doctors' assistant, middle management
5	R	X-ray technician	X-ray unit	Female	25	HVE x-ray technician
6	R	X-ray technician	X-ray unit	Female	47	HVE x-ray technician
7	R	Analytical chemist	Laboratory	Male	23	IVE laboratory technics
8	R	Analytical chemist	Laboratory	Female	31	IVE laboratory technics
9	R	Operating Room (OR) assistant	OR unit	Female	28	HVE OR assistant, IVE nursing
10	R	Recovery nurse	Recovery (part of OR unit)	Female	54	HVE Intensive Care nursing
11	R	Unit manager	OR unit	Male	43	HVE nursing, management
12	R	Pediatric nurse	Pediatric unit	Female	47	HVE IC pediatric nursing, management
13	R	Unit manager	Pediatric and obstetric unit	Female	60	HVE pediatric nursing, management
14	R	Oncology nurse	Internal medicine unit	Female	40	HVE oncology nursing
15	R	Nurse	Internal medicine unit	Female	55	IVE nursing
16	R	Nurse	Orthopedic unit	Female	27	IVE nursing
17	R	Nurse	Orthopedic unit	Female	47	IVE nursing
18	R	Work council members	--	--	--	--
19	T3	Cardiac nurse	Cardiology	Female	28	IVE nursing
20	T3	Coordinating cardiac nurse	Cardiology	Female	45	HVE nursing
21	T3	Nursing supervisor	Cardiology	Female	24	HVE nursing
22	T3	Unit manager	OR unit	Male	--	--

Notes: *T2 = teaching hospital 2; T3 = teaching hospital 3; R = regional hospital. **IVE = Intermediate Vocational Education; HVE = Higher Vocational Education. ***ENT = Ear, nose and throat diseases.

their current job and future job perspectives and, for managers, as about the current jobs and future perspectives of their employees.

3.3.3 Interviews: topics

All the interviews had a semi-structured character, and the topic list and interview protocol can be found in Appendix 1. The interviews with employees were characterized by two main topics. First, interviewees' perceptions regarding their current job and working situation were explored (example questions: "what do you think of your current job?" and "what do you need to perform your job adequately?"). Second, they were asked about their future career expectations and considerations (sample question: "if you look to the near future, say five to ten years ahead, what do you think you will be doing then?"). The interview procedure was pilot-tested by interviewing two nurses.

The interviewed managers/supervisors were asked their opinions on the employment opportunities for employees in their department and in the hospital, the ways in which employees make use of these options, and their perceptions of employees' reasons for staying or leaving their department. In addition, the supervisors were asked about the career support they provided to their staff.

3.3.4 Interviews: analysis

All the interviews took place at the three hospitals between April and June 2012, and each lasted about one hour as expected. The interviews were recorded and fully transcribed. For the analysis, NVivo 9.2 software was used. Employees' perceptions regarding their current job situation were coded and compared with each other, as were their future career expectations and considerations. The data from the supervisor interviews were used to better understand employees' perceptions and expectations.

3.4 Quantitative research

In this section, the quantitative research phase is described. I start by describing the sample and survey procedure, followed by an explanation of the survey's content (measurements), and the data analysis techniques used. Where applicable, I describe the measures taken to increase generalizability, reliability, and validity.

3.4.1 Procedure and sample

The quantitative data were collected in the autumn of 2012 in teaching hospitals 1 and 2 and the regional hospital. The regional hospital invited all its employees involved in healthcare services to participate ($N = 970$), and the teaching hospitals invited between one-third and one-half of their workforce ($N = 1,500$ each). Based on guidelines provided by the researchers, the hospitals selected a range of similar nursing departments and non-nursing medical units. Doctors were not included in this study as they are self-employed professionals within most Dutch general hospitals (including those participating in this study).

The hospitals' HR departments passed on information about the online survey to the 3,970 potential participants. Participants received a letter in which the confidentiality of responses was stressed and anonymity guaranteed. In addition, the letter explained that the data would be collected and stored by the researchers, and that only aggregated results would be reported

to the hospital. These measures were taken to boost the response rate and to limit the risk of a social desirability bias. Several other measures were taken to boost the response rate:

1. As part of the applied research project, the survey was built into an online self-assessment tool ('Loopbaanspiegel') for hospital employees that provided them with insight into their own level of sustainable employability. The scores on several survey items were summarized and explained to the individual respondent immediately after finishing the survey. Respondents were informed about this digital tailor-made feedback tool in the invitation letter. It was stressed that this tool was individual and confidential, and that the individual respondent was the only person with access to the results. Although providing respondents with the opportunity to receive individual feedback was seen as a measure that would increase the response rate, there is the possibility that this has particularly encouraged employees who had career concerns to participate. This could have introduced a bias into the data that, unfortunately, cannot be controlled for.
2. Respondents received a paper version (including a return envelope) as well as a digital version of the survey, so that they had a choice which version to use. It was also explained to respondents that the self-assessment tool was only available in the digital survey version. In total, 88 per cent of the respondents used the digital version of the survey.
3. A reminder was sent after two weeks, and was also placed on the intranet of the hospitals. In addition, supervisors were asked to bring the survey to the attention of their employees and to stress the importance of participating.

The survey was closed after four weeks. The final sample consisted of 1,815 respondents, a response rate of 46 per cent.¹¹ Of these, 45 per cent were employed by teaching hospital 1, 33 per cent by teaching hospital 2, and 22 per cent by the regional hospital. Nursing staff accounted for 39 per cent of the total, 25 per cent were medical office assistants or clerical staff, 24 per cent were non-nursing medical employees (such as X-ray technicians, medical laboratory assistants, surgical technologists), and 12 per cent were middle and higher managers or service staff (e.g. in HR). Of our sample, 85 per cent were female and 10 per cent male. The mean age of the respondents was 43.15 years (SD=10.5), mean job tenure was 10.64 years (SD=9.4), and mean organizational tenure was 12.99 years (SD=10.2). In terms of two important variables (age and gender), the sample is fairly representative of employees of Dutch general hospitals in that it matches figures in annual reports on the Dutch hospital sector (AZW, 2016). This suggests that this study's findings should be generalizable to other Dutch hospital employees although I reflect further on the generalizability of my findings in Chapter 9.

¹¹The empirical Chapters 5 to 8 contain sample rates and characteristics that sometimes differ from those mentioned in Chapter 3. These differences can be attributed to the inclusion of different variables in the empirical chapters (and therefore different missing data patterns) and to the use of varying data analysis techniques.

3.4.2 Measures

The survey contained 93 items, and completing it took about 15 minutes. In this subsection, the measurements for all the variables included in the research model are described in detail. An overview of these items can be found in Appendix 2.¹² In an attempt to ensure that the final survey consisted of reliable and valid measurements, the following procedure was used:

1. Whenever possible, for each variable, I used available scales that had shown good reliability and validity in earlier research.
2. I used the interview materials to check whether the variables and accompanying scales would make sense in a hospital context (which increases the validity of the scales). For instance, if the interview data had shown that a certain research variable was meaningless to the interviewees, or that they would interpret a variable in a different way than how it was operationalized in the scale, that variable, or its measurement, would have been changed or even deleted. However, such fundamental problems did not arise from the interview data. Nevertheless, I did change certain terminology that was used in the variables' scales so that the items would be more meaningful and recognizable for hospital employees. More specifically, general words such as 'work' or 'organization' were reframed into 'healthcare work' or 'hospital'.
3. Building on the above two steps, I constructed a complete draft survey that I distributed to HR managers in the three participating hospitals. This provided an additional check for reliability and validity. The managers were asked to assess the survey on two main criteria: (1) whether the items and questions and accompanying response categories were clear and comprehensive; and (2) whether all the items were applicable to their hospital. Again, the terminology of certain items was slightly changed as a result of this step.
4. Finally, the survey was pilot tested among 11 employees that all worked in teaching hospital 2. They were invited for a lunch session in which they started by filling in the survey. The time this took was noted for each individual, and the mean completion time was 14 minutes. Next, a group discussion was held in which the survey was discussed from beginning to end. The discussion revealed that the employees interpreted the items consistently but, to make items more meaningful, a few minor adjustments were made to the survey. For instance, the word 'hospital' was in places replaced by 'department' because 'hospital' sometimes seemed to be an overly large entity that was difficult for respondents to interpret and to connect to the topic of the question. For example, questions about whether various HR practices in the hospital were considered as supportive were reformulated as 'the department's HR practices'.

The finalized survey was sent to the identified populations following the procedures described in Subsection 3.3.1. The respondents were asked to answer the questions as they related to their own personal situation (i.e. employees with management jobs should refer to their own job and not to those of their employees).

¹²The survey contained items that are excluded from the analyses presented in this dissertation because they were shown to have low reliability or validity, or because they seemed irrelevant to the specific research aim and question.

Below, all the measurements for the variables used are described. All the variables rated respondents' perceptions and were measured using five-point Likert scales, with a score of 1 indicating very weak support for the statement, and a 5 very strong support.

Measurement of sustainable employability components

Up-to-date expertise. This variable was defined as the extent to which an employee is able and willing to productively work, and measured using a nine-item scale based upon Thijssen and Walter (2006). Respondents were asked to indicate to what extent they perceived their expertise to be up-to-date in terms of three dimensions of expertise: technical, economic, and perceptual (see Chapter 2, p. 28 for a further explanation of the three dimensions). As such, a second-order factor structure is expected, and each dimension was measured with three items, a sample item being: "As a result of technological developments, much of my knowledge and skillset has become redundant" (technical dimension).

Willingness to change. This variable was defined as an employee's attitudes and openness toward developing oneself and adapting to work changes. It was measured with a four-item scale based upon Wittekind et al. (2010) and Van Dam (2004) with a sample item being "If the hospital offered me a possibility to obtain new work experiences, I would take it".

Employment opportunities. This variable was defined as an employee's expectations of getting another job within the near future, and also of continuing to perform in the current job throughout the near future. The variable was measured using a six-item scale in which respondents were asked to indicate their employment expectations for the next year in terms of three dimensions: vertical job mobility/gaining promotion; horizontal job mobility/getting a similar job; and continuing in their current job. A second-order factor structure was expected linking the three dimensions and each dimension was measured with two items. In addition, a time horizon of one year was inserted in order to emphasize the distinction from other variables such as willingness to change. Scales used by De Cuyper and De Witte (2011) and Wittekind et al. (2010) were applied to measure the vertical and horizontal job mobility dimensions, an example item being: "In the next year, I expect my chances of an equivalent job in another organization to be high". However, these scales were considered insufficient to cover the entire range of employment opportunities and were therefore extended with two items related to expectations of continuing in the current job.

Measurement of employer's investments

Job autonomy. Job autonomy was defined as the extent to which an employee has freedom in and control over the job. The variable was measured using a three-item scale based on the Job Diagnostic Survey (Hackman and Oldham, 1975). A sample item being "my job provides me the opportunity to decide on my own how I do my work".

Task variety. This variable was defined as the extent to which an employee has to carry out different activities within the job. A three-item scale was used to measure task variety, again based on the Job Diagnostic Survey (Hackman and Oldham, 1975), including "I have a substantial amount of task variety in my job".

Workload. This variable was defined as the extent to which an employee has to provide continuous physical and/or psychological (cognitive/emotional) efforts to carry out the job. Here a four-item scale was used made up of items taken from the Job Content Questionnaire (Karasek and Theorell, 1990) and the Copenhagen Psychosocial Questionnaire (Pejtersen et al., 2010), an example item being "I have to work very fast".

Supportive HR practices. This variable was defined as the extent to which an employee is supported by the organizational HR practices that are part of the organizational HR policy. Following Kooij et al. (2014), these practices were classified in three HR bundles aimed at development (e.g. training), maintenance (e.g. compensation and benefits), and accommodation (e.g. task changing or easing). As such, a second-order factor structure is again expected, and each of the three bundles is measured using two items that are based upon Knies and Leisink's (2014) scale for measuring supportive HR practices. Here, an example item is "I experience the HR 'education and development' policy in my department as supporting me in my job".

Tailor-made arrangements. This variable was defined as the extent to which an employee is supported by arrangements that their supervisor has tailored to the employee's personal situation. A two-item scale of Knies and Leisink (2014) was used to measure this variable, with an example item being "My supervisor tailors employment conditions to my personal situation".

Supervisor support of employees' well-being and functioning. This variable was defined as the extent to which employees are supported by their supervisor's behavior in their daily functioning and overall well-being. The variable was measured using the four-item scale of Knies and Leisink (2014) with "My supervisor shows an interest in how I do my job" being a sample item.

Supervisor support of employees' development. This variable was defined as the extent to which employees are supported by their supervisor's behavior in their personal development. The four-item scale of Knies and Leisink (2014) was used to measure the variable. An example item being "My supervisor informs me about opportunities for training and development".

Measurement of outcome variables

Psychological strain. This variable was defined as the extent to which an employee has a job that is strenuous and/or fatiguing. It was measured with two two-item scales, for stress and burnout respectively, taken from the short version of the Copenhagen Psychosocial Questionnaire (Pejtersen et al., 2010). The inclusion of these two scales addresses various aspects of psychological strain since, here, stress refers to light, or short-term, strain and burnout to heavy, or long-term, strain. A second-order factor structure for this variable was expected and an example item is: "During the past four weeks, how much of the time did you feel stressed?", with answers running from 1 = never to 5 = always.

Vigor. This variable was defined as the extent to which an employee has high levels of energy and mental resilience while working. The three-item scale of Schaufeli et al. (2006) was used to measure this variable, an example-item being: "At my job, I feel strong and vigorous".

WLB (work-life balance) satisfaction. This variable was defined as the extent to which an employee is content resulting from the degree of success at meeting work and family role demands. The variable was measured using a three-item scale based upon Abendroth and den Dulk (2011), an example item being: "I am satisfied with the way I divide my time between work and personal life".

Together, psychological strain, vigor, and WLB satisfaction conceptualize the well-being construct. This is further described in Chapter 6.

Job performance. This variable was defined as the extent to which an individual adequately carries out the duties that are part of the job. A single item was used to measure job performance: "On a scale from 1 to 10, please indicate to the best of your ability how your supervi-

sor rated your performance as expressed during your most recent performance review". The item was recoded in a 5-point scale for further analyses. This item was based on Schoorman and Mayer (2008) who have shown that self-reported job performance is more accurately measured (hence, to have better validity) when respondents are asked for their supervisor's assessment of the employee's performance than when employees are asked for their own assessment.

Measurement of contingency variables

Age. Respondents were asked their year of birth, and this was subtracted from the year of data collection to calculate their chronological age. Subsequently, four age groups were established: (1) ≤ 34 years, (2) 35-44 years, (3) 45-54 years, and (4) ≥ 55 years. This classification is considered to have ecological validity as it is in line with age categorizations used by the central bureau of statistics (CBS) in the Netherlands to classify the working population in the hospital sector, and by a Dutch research consortium that monitors the healthcare labor market in the Netherlands (AZW, 2016).

Job type. The participating hospitals provided a database with information on all the respondents' jobs. Using this, I was able to link the jobs to respondents' survey answers, and place them in one of five job groups: (1) basic nurses, (2) advanced nurses, (3) non-nursing medical employees (e.g. X-ray technicians), (4) assisting/clerical employees (e.g. nursing aides), (5) employees with management jobs and management support functions (e.g. in HR). This classification is based on categorizations used by the participating hospitals themselves and by a Dutch research consortium that monitors the national healthcare labor market (AZW, 2015), and is therefore considered ecologically valid.

Inclusion of control variables

In line with previous employability research (e.g. De Vos et al., 2011), control variables for gender, educational level, plus job and organizational tenures were included. In addition, as respondents are nested in one of three hospitals, this was included as an additional control variable.

Measurement quality (reliability and validity)

To assess the reliability of the multi-item measures, Cronbach's alphas were calculated with an acceptance level set at 0.70 (Nunnally, 1978). As can be seen in Table 3.3, apart from task variety, the reliability of all the variables (after deleting one item from each of the job autonomy and task variety scales as this considerably increased the reliability) was above this threshold. Nevertheless, the task variety scale was retained as it has been used extensively in other studies (e.g. Van Veldhoven et al., 2005).

Next, to determine the relationship between the observed variables (survey items) and the latent variables (constructs), confirmatory factor analyses (CFAs) were conducted. The results of these analyses confirmed the presumed factor structure for all the variables and demonstrated construct validity (including for the second-order factor structures for the complex variables of up-to-date expertise, employment opportunities, supportive HR practices, and psychological strain). As shown in Table 3.3, the standardized factor loadings ranged from 0.37 to 0.99.

Table 3.3 Cronbach's Alpha (α) and lowest and highest factor loading (λ) using CFAs for all multi-item scales

Scale	α	Lowest λ	Highest λ
Up-to-date expertise	0.78	0.37	0.77
Willingness to change	0.71	0.44	0.74
Employment opportunities	0.76	0.53	0.92
Job autonomy	0.82	0.68	0.99
Task variety	0.64	0.54	0.87
Workload	0.83	0.54	0.89
Supportive HR practices	0.86	0.72	0.84
Tailor-made arrangements	0.86	0.74	0.86
Supervisor support well-being	0.91	0.81	0.90
Supervisor support development	0.87	0.73	0.83
Psychological strain	0.82	0.67	0.87
Vigor	0.84	0.65	0.89
WLB satisfaction	0.90	0.82	0.90

Finally, as a single questionnaire was used to collect data, the data could be subject to common method bias (CMB) that would undermine the validity of the results (Podsakoff et al., 2003). This potential problem was minimized by constructing the survey in such a way that the items for the different variables were spread among various sections of the survey and also by including reversed items. Further, various measurement models were compared using CFA. One-factor models, in which all items were loaded onto a single latent variable, were compared with various multi-factor models, in which each item was loaded onto the factor for which it was supposedly an indicator. The results of these comparisons are presented in Chapters 5 and 6. The CFAs provided evidence against CMB being present, as the hypothesized measurement model, with multiple second-order factors, always fitted the data better than models with fewer factors or one factor.

3.4.3 Analyses

To test the relationships between the variables in the research model, structural equation modeling (SEM) was applied using Mplus software (Muthén and Muthén, 2010). SEM has several advantages over 'simple' regression analyses (as conducted in SPSS for example). First, SEM can more accurately test the construct validity of variables through CFA and, by assessing the measurement model, reduce the error variance caused by measurement errors (Kline, 2010). Further, using SEM, the relationship between an independent variable (IV) and a dependent variable (DV) can be tested while the relationships of other IVs with the DV in question are taken into account. Furthermore, one can directly test for *mediation effects*, and so there is no need for a Sobel test (Muthén and Muthén, 2010). To assess the goodness of fit of the various models, the root-mean-square error of approximation (RMSEA), the compara-

tive fit index (CFI), and the Tucker-Lewis index (TLI) were used. Values above 0.90 for CFI and TLI and below 0.08 for RMSEA are indicative of an acceptable fit (Hu and Bentler, 1999).

Multiple-group SEM was employed to test for *moderating effects* of the two contingency variables (worker's age and job type). In this way, the relationships between the variables in the different age and job groups can be assessed, and by using Wald's test of parameter constraints, it was examined whether the tested relationships differed significantly between the groups (i.e. as a function of age or job type). Multiple-group analysis has the advantages over other moderating analysis techniques that all relationships can be tested simultaneously, in our case for the age and job groups, and that results are easy to interpret. Nevertheless, it also has drawbacks. For example, dividing the total sample into smaller subgroups risks losing statistical power (Edwards and Lambert, 2007). However, this dissertation's sample was sufficiently large to be able to divide it into various age and job groups ($N \geq 192$ respondents for all groups, see also Chapters 7 and 8) without losing statistical power. Further, establishing multiple age and job categories seems sensible as this reflects common Dutch practice in hospitals (AZW, 2016).

In addition to SEM analyses, each of the empirical chapters contains descriptive results and correlation tables. In Chapters 7 and 8, analyses of variance (ANOVAs) are also included as these provide insights into the descriptive results for every subgroup (by age or job type), and show whether the differences between the group were statistically significant (using Bonferroni post-hoc tests).

4



**SETTING THE
SCENE: THE
IMPORTANCE OF
SUSTAINABLE
EMPLOYABILITY
IN A HOSPITAL
CONTEXT**

Abstract

This chapter's aim is to provide a thorough contextual analysis of the Dutch hospital sector and to explain why sustainable employability has become a relevant issue for the hospital sector. This is achieved by examining developments that have occurred in the Dutch hospital sector and that have led to an increase in the importance of sustainable employability, whether the importance of sustainable employability has been recognized by both employers and employees, and whether and how this is reflected in organizational policies and employees' attitudes and behaviors. This chapter shows that there is a need for sustainably employable hospital workers that can deal with the consequences of ongoing developments linked to an ageing population, technological innovations, the introduction of market mechanisms, changing governmental regulations, and labor market transitions. Many sector-wide and organization-specific policies that are adopted by hospital employers to stimulate employees' sustainable employability are identified in this chapter. Nevertheless, this chapter also shows that, at the same time, there may be a gap between the policies' intentions and the sustainable employability attitudes and behaviors found on the hospitals' shop floors. In addition, it is found that hospital employees' perceptions of their sustainable employability are often rather low. This indicates that continuous efforts are needed to boost sustainable employability.

Parts of this chapter are based on:

Van Harten, J., Leisink, P., Thijssen, J., and Knies, E. (2013). Only time will tell? Confronting scientific assumptions and hospital employees' ideas about career expectations. Paper presented at *Improving People Performance in Healthcare Seminar, Dublin, Ireland*, September 6, 2013.

4.1 Introduction

This chapter elaborates upon this dissertation's societal and practical relevance by closely analyzing the context in which this study took place and by showing why sustainable employability is important for hospital workers and employers. Another reason to set the scene is to increase understanding of this study's findings, and to explain in more detail what really happens in hospitals. This resonates with the call to pay sufficient attention to the context in HRM studies (Boxall et al., 2007; Godard, 2014; Paauwe, 2004).

As explained in the previous chapters, most studies have failed to pay adequate attention to the specific context in which sustainable employability or related concepts are being examined (a notable exception being Forrier and Sels (2003a)). This is surprising given that most researchers claim that lifetime/sustainable employability is especially relevant for employees and organizations in dynamic industries or turbulent economic environments (Thijssen et al., 2008; Van Dam, 2004; Grip et al., 2004). Instead of linking this claim to examples or case studies that provide context-specific information, it is usually simply illustrated by mentioning general contextual changes occurring in Western countries, such as increasing technological advancements or ageing populations (Van den Broeck et al., 2014; Van Emmerik et al., 2012).

A few studies have shed some light on how specific contextual variables affect employability. For example, Green (2011) examined differences in employability between employed and unemployed individuals, and others have studied employability differences between temporary and fixed-term employees (e.g. Forrier and Sels, 2003a; Kinnunen et al., 2011; Kirves et al., 2011). However, in general, research has not provided a detailed understanding of how specific contexts, sectors, or industries are changing, and how this increases the relevance of concepts such as sustainable employability.

From an institutional perspective, it is relevant to take the broader context of national and industry-specific policies and legislation into consideration as these are likely to affect organizational HR practices aimed at sustainable employability. For example, Paauwe (2004, p. 41) argues that "organizational practices are often either direct reflections of, or responses to, rules and structures built into their larger environments". Again, this aspect is rarely addressed in recent studies despite such an investigation potentially contributing to unravelling what really happens in organizations.

In response to these limitations, I provide a thorough description of the context of the Dutch hospital sector in this chapter. The hospital sector in most Western countries is faced with changes such as the introduction of market mechanisms, cost cutting, and ongoing technological innovations (Townsend and Wilkinson, 2010). Further, despite the ageing populations increasing demand for care, the labor force is shrinking (Hasselhorn et al., 2008). While these contextual developments seem likely to impact on the need for sustainably employable hospital workers, whether and why this is the case has not been addressed in great detail. For example, it is unclear whether hospital employers and employees perceive sustainable employability as of growing significance, and how contextual developments affect the need for sustainably employable hospital workers.

Therefore, this chapter examines whether and why sustainable employability has become a relevant issue for the hospital sector. This is achieved by, first, examining which developments that are relevant to the issue of sustainable employability have occurred in the Dutch hospital sector. Second, by examining whether the importance of sustainable employability has been

recognized by both employers and employees, and whether this is reflected in organizational policies and employees' attitudes and behaviors. This leads to the following research questions that are central to this chapter:

- RQ 1. *How are hospitals' contexts changing and how does this increase the need for sustainably employable workers?*
- RQ 2A. *What initiatives and policies to stimulate sustainable employability are employed in the Dutch hospital sector? (employer perspective)*
- RQ 2B. *How do hospital employees perceive their own sustainable employability attitudes and behaviors? (employee perspective)*

Section 4.2 below answers RQ 1, and RQs 2A and 2B are examined in Sections 4.3 and 4.4 respectively. The insights obtained in answering these questions are then combined in Section 4.5, leading to conclusions on whether and why sustainable employability has become a relevant issue for the Dutch hospital sector. Overall, this chapter leads to a sound understanding of this study's context and forms a solid basis for interpreting and making sense of the research findings in the later chapters of this dissertation.

4.2 Developments in the hospital sector

In this section, four major contextual developments are discussed that have had an impact on the hospital sector and that are relevant to the issue of sustainable employability. In the section's conclusion, I summarize why the developments call for sustainably employable hospital workers and organizational policies aimed at achieving this goal.

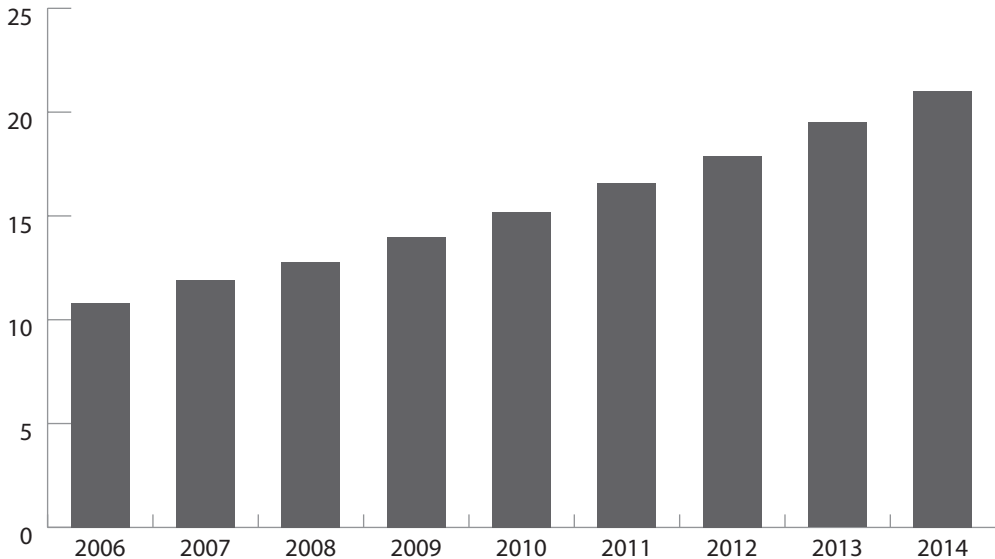
4.2.1 Demographic trends: the double burden of ageing

The populations of economically advanced countries are ageing (OECD, 2014). This reflects declining birth rates and increasing life expectancy, together resulting in a higher mean age, a proportionally larger share of older inhabitants, and a declining labor force (*ceteris paribus*). These demographical developments are seen in the Netherlands, where the old age dependency ratio¹³ is expected to double from 27.2 % in 2012 to 52.5 % in 2050 (OECD, 2014). In order to receive sufficient pensions while sustaining national welfare systems, people will need to work longer leading to significant macro-level challenges for governments and social partners in stimulating longer working lives (Colley, 2013; Froehlich et al., 2014). One approach, currently being enacted in the Netherlands and elsewhere, is to increase the state retirement age (OECD, 2014).

The effects of an ageing population combined with an increased retirement age are becoming visible in the Dutch hospital sector. The mean age of hospital workers has steadily grown from 40.3 years in 2006 to 42.8 years in 2014 (AZW, 2016), and the proportion of workers aged over 55 has increased as well (see Figure 4.1). An ageing population is expected to impose a double burden on the hospital sector as ageing not only entails a growing demand for care, it also leads to a decreasing labor force, which means that labor shortages can be expected (AZW, 2016; Colley, 2013; OECD, 2007).

¹³The old age dependency ratio is the ratio of the population aged 65 and above to the population aged between 20-64 (OECD, 2014).

Figure 4.1 The proportion of Dutch hospital workers aged 55 and above (2006-2014)



Source: AZW (2016), <http://www.azwinfo.nl/>.

The need to continue working to a higher pension age means that it is becoming increasingly important for *employees* to remain able and willing to perform productive labor, in other words to be sustainably employable. Hospital *employers* also have a need for their workers to remain sustainably employable as the expected labor shortages suggest that hospitals may face increasing retention challenges. Retaining employable workers is a constant challenge for hospitals, with research demonstrating that hospital nursing jobs are especially characterized by early exits and high turnovers (Estryn-Béhar et al., 2010; Hasselhorn et al., 2008; Maurits et al., 2012).

An ageing population also leads to increases in the complexity of healthcare demands, as people aged over 55 increasingly have multiple chronic diseases (multimorbidity) (RIVM 2014; RVZ, 2011). This has consequences for hospital workers and their jobs, with the increased complexity requiring care providers to have up-to-date expertise and to be able to collaborate and communicate with other healthcare specializations (RVZ, 2011). Again, this implies a growing need for sustainably employable workers, that is employees that have up-to-date expertise and that stay abreast of developments in their expert area so that they are able to deal with the increasing complexity in their work.

4.2.2 Developments in governmental policies and regulations: market mechanisms

The pressure for efficiency and effectiveness is high in the resource-intensive hospital sector. Over the past 25 years, there have been large public sector reforms all over the world – including in the hospital sector – focusing on structural changes, cost containment, and the introduction of market mechanisms (Hood, 1991; Townsend and Wilkinson, 2010). Since 2006, the Dutch government has introduced market mechanisms in the healthcare sector with the aim of increasing quality of care and decreasing spending (NZA, 2016). This means that hos-

pitals are increasingly becoming more like firms in that they have to efficiently control their resources and expenditures. They also have to deal with growing competition, meaning that hospitals have to deliver high quality care in order to satisfy and retain clients.

Patients, or clients, in their turn are progressively becoming customers rather than passive recipients of care. They have different and higher expectations of healthcare professionals, who now have to act as service providers (Veld, 2012). Healthcare organizations are increasingly being rated by clients on independent websites initiated by Dutch patient associations.¹⁴ At the same time, the ageing population and growing technological and medical possibilities (see Section 4.2.3) lead to rising healthcare costs that put pressure on healthcare budgets (Burke et al., 2015). In addition, the hospital sector is very labor-intensive with increasing labor costs in part due to an ageing workforce.¹⁵

Together, these market developments pressure hospitals to pay attention to both quality and efficiency. As a result, various innovations are seen in hospitals including lean management initiatives such as the 'Productive Ward'. Here, nurses organize their own ward and improve processes themselves, with the result that there is more time for direct patient care and waste is decreased (NHS, 2010; Van den Broek, 2014). Having hospital workers who are sustainably employable can contribute to beating the challenges of high quality and efficiency, as highly capable employees are more likely to perform well. Further, sustainably employable workers tend to have flexible attitudes, an asset when it comes to implementing innovations.

Alongside the introduction of market mechanisms, the Dutch government maintains control over the hospital sector by ensuring fair competition between hospitals through regulating doctors' fees, by determining the prices of treatments, and by imposing quality and safety laws and regulations. The Dutch Healthcare Authority, the Healthcare Inspectorate, and The Netherlands Authority for Consumers and Markets are all important agencies in supervising these tasks. To ensure the quality of care providers, healthcare professionals such as doctors, nurses, midwives, and therapists have to be listed in a national register maintained by the Ministry of Health, Welfare, and Sport in order to practice their jobs.¹⁶ Since 2009, healthcare professionals have to re-register every five years, and show that they have sufficient work and education experience, and that they are able to do their job. This means, for many hospital workers, that up-to-date expertise (one of the employability components in this study) is vital in obtaining and retaining their license to practice.

4.2.3 Technological developments: the need to keep track

Ongoing technological innovations have major impacts on both daily and working lives and, more than ever, people need to constantly be learning how to work with new tools and technologies in order to keep up with our knowledge-based economies (OECD, 2010). In the healthcare sector, technological and medical innovations are generally implemented with the aim of improving healthcare delivery, and these advances usually also mean an increase in healthcare spending (OECD, 2004). Technological innovations constantly affect the nature of healthcare jobs, such as the introduction of electronic patient files that affect front and back office work, or the increasing possibilities of using computers, tablets and new technologies in the care delivery process.

¹⁴A popular website is www.zorgkaartnederland.nl.

¹⁵Labor costs form 60 % of total hospital expenditure (NVZ, 2013).

¹⁶www.bigregister.nl.

The introduction of so-called consumer eHealth possibilities also affects healthcare workers. In the near future, patients will increasingly have digital tools with which to diagnose and monitor their own health problems, or to have time- and place-independent contact with caregivers. This will increase the complexity of healthcare jobs, as patients can answer simple questions with the help of such tools and only turn to care professionals for more complicated problems (RVZ, 2015).

Overall, this means that hospital workers are, and will continue to be, confronted with ongoing changes in their jobs, and in the organization of work, that require them to adapt. Repeatedly, employees will have to learn to work with new or improved technologies, tools, and medicines. This has been seen as a major challenge in recent reports on labor in the Dutch healthcare sector (AZW, 2014; RVZ, 2015 and 2011). It is, for instance, argued that, because of the technological developments, diagnostic and treatment tasks that were once performed by highly-educated physicians can now be carried out by workers with a more limited education that are trained in handling new tasks and techniques. The organization of work therefore also changes (RVZ, 2011). Hence, in order to follow technological advances and ultimately to be able to deliver high quality healthcare, hospital employees need to stay up-to-date in their expertise and be willing to further develop themselves or to adapt to changes – which is the core of sustainable employability in this dissertation.

4.2.4 Labor market trends: decreased security

An important and general labor market development is the ageing of the labor force and the need to continue working up to greater ages. As noted in Subsection 4.2.1, the Dutch government has increased the state pension age but, so far, this measure does not seem sufficient in itself to stimulate longer working lives. Therefore, other measures have been taken such as cutting the opportunities for early retirement and increasing the incentives to work (OECD, 2014). Simultaneously, the Dutch government is slimming the social welfare state and labor security laws as raising the retirement age seems insufficient to keep the welfare state affordable. As part of this move, there is less governmental support for the unemployed and to help those with disabilities work (SZW, 2015).

Also, the Dutch government has reduced the legal protection against dismissal, as it is believed that this provides more leeway for organizations to react quickly to market changes and to be more innovative, but also to stimulate employees to remain valuable to the labor force (OECD, 2014). In broad terms, Dutch labor market policies and measures are oriented by the discourse on the so-called transition ‘from lifetime employment to lifetime employability’. This means that employees will no longer be provided with the security of working for one employer throughout their entire careers, but instead should be offered possibilities to secure their capabilities to obtain and keep a job (Thijssen et al., 2008). This is reflected in social charters made by the government, employer federations, and unions in which measures are agreed through which employees are provided with budgets to educate themselves further or to help them find another job. Such measures can also be found in the specific labor agreements of the hospital sector, which are further discussed in Section 4.3.

These labor market trends, with extended working lives and less employment security, highlight the importance of individual workers being sustainably employable. Perhaps surprisingly given the trend towards less employment security, the majority of all employment contracts in the Dutch hospital sector are still open-ended (i.e. tenured positions). An annual

survey among hospital employers shows that the workforce division into open-ended and fixed-term contracts remains rather stable (open-ended: 79.5 % in 2014 and 78.5 % in 2015, fixed-term: 20.5 % in 2014 and 21.6 % in 2015). However, within the group of fixed-term contracts, the number of short-term contracts and small-sized contracts (e.g. on-call workers, seconded staff, and freelancers) has increased from 4.1 % in 2014 to 7.4 % in 2015 (AZW, 2015a).

These figures suggest a relatively stable labor market in the hospital sector. Nevertheless, as discussed earlier in this chapter, changes *within* hospital jobs and in the organization of work are highly prevalent. Expected developments in the near future will involve a shift from lower-skilled jobs to a growing need for higher-skilled workers (AZW, 2015a). This means that sustainably employable workers who remain up-to-date and who are willing to develop themselves to fill other, higher-skilled, jobs will be necessary to deal with current and forthcoming changes.

4.2.5 Concluding remarks: the importance of sustainably employable hospital workers

In the previous four subsections, I have demonstrated that several developments have led to sustainably employable workers becoming increasingly important in the Dutch hospital sector. The extension of working lives, combined with decreasing labor protection and changing jobs and workplaces, means that hospital employees will themselves have to invest in their sustainable employability in order to ensure future employment. Further, it also seems vital that hospital employers stimulate sustainable employability as they will have an increasing need for employees that are able and willing to keep up with changes caused by technological advancements and by the further marketization of the hospital sector. Enhancing the sustainable employability of workers is also likely to benefit the quality of care, and could serve as an effective retention strategy. Here, research has shown that workers are more motivated to stay, and become more loyal towards their employer, when they feel that they have opportunities to expand their employability (De Cuyper and De Witte, 2011).

4.3 Current initiatives and policies in the hospital sector

The previous section has shown that it is important for both hospital employees and employers to avoid human resource strategies that are purely ‘consuming’, i.e. that use or exploit the current capacities of employees without investing in human capital (Thijssen et al., 2008). Given the rapid pace of change in the hospital sector, the value of current capacities soon decreases as knowledge and skills become obsolete. This indicates that investing in the continuous advancement of human resources will be a much more effective strategy. In the present section, I therefore investigate sector-wide and organization-specific policies aimed towards increasing sustainable hospital employability (RQ 2A).

4.3.1 Collective labor agreements in the hospital sector

In 2013, the social partners in the Netherlands (employers and unions) agreed on a national social charter in which they outlined a route towards a new form of industrial relations that involves achieving sustainable employability (Stichting van de Arbeid, 2013). Training, vitality, working conditions, diversity, and individual choices are the charter’s main elements (OECD, 2014). With the charter, the Dutch social partners are striving to stimulate consultation and

agreement between employers' federations and unions within specific sectors (including the hospital sector). In a similar vein, the Dutch Ministry of Social Affairs and Employment has initiated a sustainable employability program aimed at decreasing unemployment and illness and increasing productivity.¹⁷ Organizations can voluntarily participate in the program, use examples of sustainable employability measures that are developed in the program, and implement these in a way that is appropriate for them (OECD, 2014; SZW, 2014).

On the sectoral level, the employers' federation for Dutch hospitals (NVZ) and four trade unions (ABVAKABO FNV, CNV Publieke Zaak, FBZ, and NU'91) have, in line with the national social charter, negotiated a collective labor agreement that includes a specific agreement on sustainable employability (NVZ, 2011 p. 9)¹⁸: "all parties (employers and employees) acknowledge the importance of sustainable employability in order to give employees the opportunity to remain healthy and active up to high ages." The labor agreement mentions various ways to achieve this; the exemption from irregular shifts for workers older than 58 years, the need to discuss employability during the annual performance appraisal talk, and the personal life stage budget that increases as employees age, and that they can use for education or extended leave for example (NVZ, 2011).

The collective labor agreement applies to all 105 Dutch general hospitals and their employees.¹⁹ Collective labor agreements have a strong influence on hospitals' HRM policy, as formally these regulations have to be incorporated in hospitals' HRM policies. Table 4.1 provides an overview of terms in the labor agreement that hospitals have to reflect in their HR practices.²⁰ The terms are categorized using the classification of HR practices outlined in Chapter 3. These categories are: HR practices aimed at well-being (e.g. vitality, health, work-life balance, task changing or easing), HR practices aimed at training and development (e.g. training, education, career advice), and HR practices aimed at performance appraisal and rewards (e.g. compensation and benefits, performance assessments, pay-for-performance).

Many terms in the labor agreement reflect practices that can be regarded as impacting on workers' sustainable employability. For example, as can be seen in Table 4.1, hospital employees are entitled to be allocated a budget and time for training, and, once every five years, to career advice. As such, the agreement provides employees with the opportunity to update their expertise and to explore career changes or developmental opportunities. Employees are also allowed room for personal flexibility by being entitled to personal life-stage budgets, and do not have to work long or excessively irregular shifts. In addition, employees older than 58 are specifically exempted from irregular shift working. These measures are in place to ensure that employees have sufficient time to recover so that high job strain or burnout can be prevented. This is important for sustainable employability as burnout could jeopardize the motivation or energy that is needed to update, learn, and adapt. Finally, the function categorizations devel-

¹⁷www.duurzameinzetbaarheid.nl

¹⁸This statement was introduced in the hospital sector's collective labor agreement for 2011-2014, which means that the hospital sector was ahead of the national social charter of 2013.

¹⁹As explained in Chapter 3, Dutch general hospitals can be divided into regional hospitals and training hospitals. The eight university hospitals have their own employer federation and negotiate a separate labor agreement.

²⁰The terms that are presented in Table 4.1 were concluded in the hospital sector's collective labor agreement for 2011-2014, as well as in the collective labor agreement for 2014-2016 (NVZ, 2014).

oped in the collective labor agreement makes it clear to employees which competencies they need in order to carry out another equivalent or higher function. It also defines the related salary increase, which can be regarded as a minor extrinsic motivator to enhance sustainable employability.

Table 4.1 Categorization of hospital collective labor agreement into three groups of HR practices

Well-being	Training and development	Performance appraisal and rewards
Employees get a personal life-stage budget (for additional education or to take extended leave when their life-stage gives rise to such a need)	Hospitals are required to have a training plan and budget with opportunities for employees to develop themselves within and outside current job	Predetermination of salaries based on a categorization of functions (and stated in collective labor agreements)
Predetermination of maximum number of working hours, as well as limits on overtime and irregular shifts (e.g. night work)	Employees are entitled to career advice once every five years	Performance appraisal to be based on experience with fixed annual salary increases plus incidental extra rewards based on, for example, excellent performance
Employees \geq 58 years and employees that are pregnant are exempted from irregular shift working	Hospitals need to compensate (in terms of time and money) their employees undergoing training	Predetermined compensation for overtime working

Overall, several of the HR practices related to sustainable employability are predetermined by the hospital sector's collective labor agreement. The specific statement on sustainable employability indicates that contextual changes, such as those explained in Section 4.2, have led to increased attention being given to sustainable employability in the collective labor agreement. Also, the age exemption from working irregular shifts was raised from 55 to 58 in 2011, reflecting that hospitals perceive a need for their workers to continue working longer. However, the impact of the agreement may be limited as it does not address its implementation by managers and direct supervisors. I therefore now explore briefly organization-specific policies aimed at increasing sustainable employability.

4.3.2 Organizational policies

Hospitals are obliged to implement the terms of the collective labor agreement, and these can therefore be regarded as the minimum requirements for a hospital's HRM policies. Dutch hospitals are free to initiate additional policies that can stimulate workers' sustainable employability, and many do. There is a wide variety in the foci of such initiatives and policies. For example, some hospitals increase career opportunities for nurses by creating new, advanced positions such as nurse specialist or physician assistant (Van Offenbeek and Knip, 2004). Other hospitals have established job differentiation for surgical technologists. An example of this is the creation of various levels within the function of surgical technologist that range from jobs directed at assisting in simple surgeries to those linked to highly complicated procedures

(StAZ, 2011). Yet other hospitals have aimed to decrease workloads, for instance by training line managers so that they can recognize stress and make appropriate agreements with employees in order to sustain their employability and well-being (www.staz.nl).

The extent to which such initiatives are developed, and whether they are accessible to all employees, to an extent depends on the size of the hospital. Large hospitals possess greater resources to develop and implement sustainable employability practices, and have a larger workforce that could benefit from such HR practices, than a small hospital. This pattern was observed in the hospitals that participated in the present research.²¹ The participating small regional hospital does not have formal sustainable employability policies. Rather, this hospital has a general HR policy stating that direct HR involvement of line managers is encouraged on all kinds of subjects, thereby enabling supervisors to negotiate suitable agreements with their employees. The participating teaching hospitals 1 and 2 are much larger than the regional hospital. Both hospitals have the means to initiate HR practices aimed at sustainable employability. Teaching hospital 1 mainly focuses on the provision of career opportunities and career advice to their employees. The hospital has a career department that develops career policies and practices, and provides career advice and training to hospital employees. The HR department of teaching hospital 2 has initiated a project on sustainable employability that covers a broad range of subjects (vitality, personal development, etc.). The project is being gradually introduced across the organization and, every six months, a new department or unit is included in the project. Once a department is included, its employees can use several tools and instruments that help them to expand their sustainable employability.

4.3.3 Concluding remarks: a broad array of sustainably employability practices is present

In the previous two subsections, I have shown that there are a considerable number of collective labor agreement terms and organizational practices aimed at stimulating sustainable employability in the hospital sector. A large proportion of the terms in the collective labor agreement are aimed at hospital employees in general, and there are several age-specific terms. Although these terms have to be implemented by all Dutch hospitals, the hospitals differ in how they implement them. Some hospitals develop additional occupation-specific initiatives (such as the creation of advanced job opportunities for nurses).

Following this brief outline of sector-wide and organization-specific sustainable employability practices, I turn to the perceptions and behaviors of the hospital employees themselves. Here, I investigate how they regard their own sustainable employability and their employer's support to stimulate this.

4.4 Perceptions of the hospital workers themselves

In this section, I first describe the hospital workforce structure to explain the different jobs and occupations in Dutch hospitals. Second, using a recent research report based on hospital employee survey data (AZW, 2015), I investigate the perceptions and behaviors of hospital workers regarding their sustainable employability, and I further illustrate these by using interview data that I collected from hospital employees. Together, these activities result in an answer to RQ 2B.

²¹The participating hospitals are not named because of agreements on confidentiality and anonymity.

4.4.1 Hospital workforce structure

Below, four different groups of hospital workers are described: nurses, non-nursing medical employees, support or assisting employees, and management employees. According to the Dutch Association for Hospitals NVZ (2013), managers and management support functions account for roughly 3 % of the Dutch hospital workforce. About 70 % of the Dutch hospital workforce have direct patient contact, and this covers the first three of the above categories as well as doctors. Doctors are excluded from this study because they establish their own ventures (that are then contracted by the hospital) in the hospitals that participated in this study (as in most Dutch general hospitals). As such, doctors cannot be considered as employees to be targeted by the hospital collective labor agreement and organizational HR policies. The remainder of the workforce consists of back office workers and employees filling a range of non-medical functions with no patient contact (e.g. cooks and cleaners).

Nurses: a large proportion of Dutch hospitals' workforces are nurses, who are often divided into basic and advanced nurses. A basic nurse has received several years of intermediate vocational education. An advanced nurse has a higher educational degree and advanced expertise in a particular nursing field such as pediatrics, intensive care, or oncology. In recent years, hospitals have created further nurse functions, such as the nurse physician or nurse practitioner, which are seen as more advanced and often require a university degree. As such, nurse physicians are situated 'between' the nursing staff and doctors, they are licensed to diagnose diseases, and have their own consultation appointments.²² All nurses have to be registered in the national register for healthcare professionals. A single occupational professional association, V&VN, oversees education and training for nurses, and represents their interests in the Netherlands.

The nursing profession can be characterized as a largely female occupation. In fact, in the Netherlands almost 82 % of the hospital workforce is female (AZW, 2016). Research has found that career development is affected by pregnancy, childbirth, and family commitments, with consequent time away from the workplace. As a consequence, many nursing jobs are part-time and nurses tend to work for relatively long periods of time in one job (Maurits et al., 2012; Townsend et al., 2012). Research also shows that, in general, hospital nurses experience demanding, high stress jobs, which seems to lead to early exits and high turnover (Estryndéhar et al., 2010; Hasselhorn et al., 2008; Maurits et al., 2012).

Non-nursing medical employees: the term 'paramedical employees' is frequently used in the Netherlands to label a diverse group of hospital workers that have medico-social or medico-technical jobs but do not have nursing tasks. These jobs include X-ray and endoscopy technicians, medical laboratory assistants, surgical technologists, and therapists. Each of these requires a distinct non-nursing specialized higher educational degree. All non-nursing medical employees, just as with nurses, have to be registered in the national BIG register for healthcare professions. To reinforce the distinction, nurses are not allowed to perform non-nursing medical jobs without a special educational degree, and non-nursing medical employees are not allowed to perform nursing jobs without a nursing degree (LVO, 2012). This has direct consequences for the range of job opportunities open to non-nursing medical workers in the Dutch hospital sector. This is a different situation to that found in many other countries where non-nursing medical employees are frequently nurses that have undergone additional training. Finally, similar to nurses, non-nursing medical employees have professional associations

²²www.venvn.nl

that provide occupation-specific education and training and represent their interests.

Typically, research on employability and careers in the hospital sector focuses on nurses or doctors (e.g. Armstrong-Stassen and Stassen, 2013; De Cuyper et al., 2011a; Lindberg, 2013; Stordeurs and D'Hoore, 2007) and largely ignores other hospital workers such as non-nursing medical employees. This is surprising since, at least in a Dutch context, such employees have very different jobs and career opportunities than nurses and doctors, which is likely to impinge on their sustainable employability.

Support or assisting employees: alongside nurses and non-nursing medical employees, there is a group of employees that have support jobs involving direct patient contact. This category consists of nursing aides and medical office assistants, who provide medical and administrative support, and clerical staff, who typically do not have nursing, medical, or caring tasks but carry out purely administrative tasks (e.g. planning patient appointments). In general, such support jobs require a limited education, and employees do not have to be registered in the national register for healthcare professions.

Employees with management jobs and management support functions: A small proportion of the Dutch hospital workforce fill management jobs and carry out management support functions such as HR and Research and Development. Typically, line managers are employees who have received excellent performance appraisals in the past and have followed additional management training.

4.4.2 Survey and interview results

The independent research consortium AZW – commissioned by the Dutch Ministry of Health, Welfare and Sport plus healthcare employer federations and employee unions – surveys Dutch healthcare employees every two years to find out how they perceive their job and organization in general, their level of employability, and development opportunities. The 2015 employee survey included 1,267 employees working in general hospitals. The findings are highly informative for the purposes of this dissertation. The relevant information is presented here in order to outline the general background to my study and to provide initial insight into the sustainable employability perceptions of Dutch hospital employees (RQ 2B).

In this section, the characteristics of the sampled hospital workers are first described, followed by an overview of the findings that are relevant to RQ 2B. The survey findings are illustrated and interpreted using data from 21 interviews that I conducted with hospital employees and line managers. The selection of respondents and the collection of the interview materials are explained in Chapter 3. The presentation of the findings is structured according to the three components of sustainable employability that are central to this dissertation (up-to-date expertise, willingness to change, employment opportunities). The section ends by discussing findings regarding the amount of support that hospital employees perceive from their employer for increasing their sustainable employability.

The hospital jobs represented in the AZW sample are in line with the workforce structure described in Subsection 4.4.1: 24.1 % of the hospital respondents were basic or advanced nurses, 19 % non-nursing medical employees, 23.9 % support or assisting employees, and 7.7 % management and management support employees. The remainder consisted of back office workers and service employees. Of the respondents, 83 % were female, and the largest age category was 45 to 54 years old with 31.3 % of the sample population. These characteristics reflect those of the total Dutch hospital workforce (AZW, 2016).

The first observation is that the survey findings indicate that the hospital respondents regarded their expertise as highly up-to-date, which is one of the sustainable employability components in this dissertation. Almost all respondents (92.7 %) said that their educational degree matched the required job level. Further, 80.4 % reported that their skills and competencies were up-to-date, and 93.3 % did not experience any problems related to their skills and competencies in their current job. The majority of the respondents had actively updated their expertise during the previous year by undergoing training or going on a course (more than 70 %), reading professional literature (51.8 %), attending professional conferences (43.1 %), and/or consulting colleagues (39 %).²³

Turning to the second sustainable employability component ‘willingness to change’, the AZW findings show that most respondents wanted to develop themselves further. Here, 72.9 % reported a desire for further development in the current job, and 62.6 % stated a willingness to develop outside their current job. This high willingness could be linked to the number of changes experienced in their current jobs that forced respondents to update and develop themselves. More specifically, just over half of the hospital respondents reported having experienced changes in their current jobs. In most cases, respondents said that this had required them to acquire new expertise (43.4 %) or forced them to work in a different location (22.7 %). These findings were supported by the interview results that showed that hospital employees were aware of the need to constantly update and develop their expertise for the current job, as the following excerpt from a basic nurse further explains:

“Compared to 30 years ago, it is more dynamic now. Before, a patient remained in the hospital for two weeks. Now, every patient is gone within one week. In the morning, someone leaves and, an hour later, there is a new intake. So you have to keep up with the pace.” (Interviewee 17, basic nurse, aged 47)

Although these findings suggest that hospital employees’ willingness to change is rather high, other survey results provide reasons to question this. The majority of the hospital respondents (60.9 %) had worked for at least ten years for their current employer, and had not even changed jobs during this time. Only 5.3 % of the respondents had changed jobs during the previous two years. In addition, the survey results indicated that the hospital workers were not very proactive in changing jobs, with the majority not reflecting regularly on their career wishes and career possibilities. That is, only one-third explored employment opportunities, and just 1 in 4 workers discussed their careers with others. Several of the interviewed employees were similarly unwilling to change, and mostly explained this using either one or both of the reasons the following interviewee offered:

“I do not want to change, because of my [high] age and because I really like it here. That is the most important thing; that you enjoy going to work.” (Interviewee 1, doctor’s assistant, aged 53)

Third, the survey results regarding the final sustainable employability component – employees’ beliefs regarding their employment opportunities – show that most respondents were primarily focused on continuing in their current jobs, with 82.5 % of the hospital respondents

²³Respondents could select more than one option. Only the most frequently reported categories are referred to in this chapter.

not currently looking for another job and expecting to continue in their current job for a considerable period. Many respondents thought that their job would still exist in 10 to 20 years and, moreover, that they will still be performing that job.

The interviews show similar findings. That is, when the interviewed employees were asked about their career expectations for the next five years, more than half stated that they expect to be performing the same job as now. Frequently, respondents explained this expectation by stating very firmly that they were not interested in a job switch and seemed unwilling to change jobs. Another group of interviewees had not really thought about the future and, when they were asked about it, thought that they would continue performing their current job. Their main reason was that they were satisfied with their job and their work environment and, consequently, saw no need for a career change. Often, these respondents said that they found it very difficult to answer the question on how they perceived their future career, as they were not used, or stimulated, to think about this.

Further, the survey results show that respondents were somewhat pessimistic regarding other employment opportunities, such as switching to a new job. Just over a quarter (27.6 %) of the hospital respondents perceived sufficient career perspectives in their current organization, while the rest of the respondents perceived insufficient opportunities. Further, only 25.9 % thought that they would obtain a new job within three months if they were forced to look for one. These findings are not surprising given the employees' dominant focus on their current job. The interviews provided additional explanations. Interviewees in non-nursing medical jobs did not perceive there to be career opportunities beyond continuing in their current jobs, and therefore felt stuck. An X-ray technician explains this further:

“When you have performed a job for many years, you come to a point where you are looking for new possibilities. I have experienced that. (...) However, the X-ray technician diploma is useless elsewhere in healthcare: you have to start from zero [if you want to do something else].” (Interviewee 6, X-ray technician, aged 47)

Several interviewees explained that non-nursing medical education is highly specific, and employees with such training are therefore limited in their career options. Interviewed nurses were aware of the broader range of career possibilities they have compared to non-nursing medical occupations:

“If you no longer like your job, then such a thing [switching to a different healthcare job] is possible. It is difficult when you do not have a nursing degree. In that sense, you are broadly educated: you have that basis as a nurse. There are people working in the operating rooms that immediately went on to complete surgical technologist education after high school - then you cannot do anything else in the hospital.” (Interviewee 10, advanced nurse, aged 54)

These interview outputs help to explain the AZW research findings that hospital employees have low perceptions of employment opportunities. The interview results do however show that there are differences between hospital occupational groups, with non-nursing medical occupations having fewer alternative employment opportunities.

Finally, the AZW research report contains information on hospital employees' perceptions of the sustainable employability support provided by their employer. Around 40 % reported that their organization did not provide sufficient opportunities for development in general, and just over half were dissatisfied with the provision of career development opportunities. Only 1 in 4 respondents felt stimulated to think about their future careers, and less than half of the respondents had made a personal development plan with their direct supervisor. The interviewed employees and their supervisors also noted low development support. An employee provided the following explanation:

“Every year I am asked whether I have [development] wishes. Of course I have, and every year they are the same. But the excuse is always the limited budget.” (Interviewee 6, X-ray technician, aged 47)

The line managers interviewed provided a different explanation for the limited career support they offer to their employees. They did not always feel that they received sufficient support from the hospital to adequately help their employees with their development and career wishes. For instance, line managers said that they lacked sufficient knowledge on the career possibilities within the hospital, and that the HR department does not assist them with this.

In addition, the survey found that almost 40 % of the hospital respondents were dissatisfied with their employer's policies aimed at increasing health, supporting a good work-life balance, and decreasing absence. Respondents were more positive over the amount of supervisor support for their daily functioning and well-being, and on the extent of the autonomy in their jobs (just over half of the respondents agreed with items related to good supervisor support and high job autonomy). Conversely, more than half of the respondents perceived a high workload, and almost 80 % reported that the workload had increased over recent years. The following quote from an interviewed nurse manager expands on this:

“The high pace of healthcare changes makes it hard at the moment. The high tempo of the digitalization process is not easy for older employees, sometimes also not for younger ones. Hospital stays are also shorter; all in all, everything becomes shorter, more complex, and faster and, in the middle of that, you have all these innovations and changes coming at you [as an employee].” (Interviewee 13, Head pediatric and obstetric unit, aged 64)

It seems that the tempo at which changes occur places a burden on employees. Interviewees explained that this is one of the reasons that they perceive an increasing workload, which corresponds with the AZW survey findings on workload. Especially older interviewees were worried about their abilities to keep up with the increased pace of work:

“Sometimes I worry about whether I can keep up with this tempo. I am 54 now, suppose I have to work until I am 65. At this tempo, you cannot keep up. (...) You are pretty tired at the end of the week, almost exhausted.” (Interviewee 10, advanced nurse, aged 54)

Taken together, the survey and interview findings provide an initial depiction of, and explanation for, how hospital employees perceive their sustainable employability, and the opportunities their employer provides to enhance their sustainable employability.

4.4.3 Concluding remarks: low employee perceptions on sustainable employability

Section 4.4 has considered how hospital workers perceive their sustainable employability and whether they behave accordingly. Both the survey and the interview findings show that, in general, hospital employees are aware of their changing work environment and the consequent need to remain up-to-date in their expertise. As such, they were motivated to constantly develop their expertise so that they could continue to perform their *current* jobs.

However, hospital employees seemed to lack an awareness that the vast number of ongoing changes in hospitals could also mean that, in the near future, they would have to adapt to changes outside their current jobs. More specifically, hospital respondents were not used to reflecting on their own career wishes and opportunities, and generally believed that they would be able to remain in their current job for the rest of their career. Further, their expectations on future employment opportunities outside their current job were not very optimistic. The interviews highlighted that many respondents lacked any future orientation in their thinking.

Taken together, the quantitative- and qualitative-based findings demonstrate that it is questionable whether Dutch hospital employees in general are adequately sustainably employable. Hospital employees, based on their reported level of up-to-date expertise and willingness to keep developing this, seem to be reasonably employable in their present job. However, the results show that they are less prepared for changes in the near future, which means that the sustainability of their employability in the longer term is far from guaranteed. In addition, the survey and interview results show that hospital employees do not always perceive sufficient sustainable employability support, especially in terms of future career development. This could mean that the sector-wide and organization-specific practices, explained in Section 4.3, are not sufficient to stimulate sustainable employability, or that the practices are inadequately implemented by HR managers and direct supervisors.

Finally, the description of the hospital workforce and the interview results suggest that hospital employees should not always be regarded as a homogeneous group (as is done in the AZW survey research report). Rather, it could be beneficial to differentiate between groups of employees. For example, the non-nursing medical staff interviewed perceived considerably fewer career opportunities than the nurses, and this seemed linked to their highly specialized educational background. The interviews also indicate that, when hospital workers grow older, they become increasingly worried about their abilities to keep up with the increased pace of work and to adjust to constant developments. However, one should recognize that the data reported here are too limited to draw firm conclusions, and that the findings should be regarded as initial indications that hospital employees' age and job type play a role in becoming and remaining sustainably employable.

4.5 Conclusions and Discussion

This chapter's aim was to explain whether and why sustainable employability has become an important issue for the hospital sector as a consequence of contextual developments. I have examined these developments and their consequences (RQ 1), and investigated whether the importance of sustainable employability has been recognized by both hospital employers and employees, and whether this is reflected in organizational policies and employees' attitudes

and behaviors (RQs 2A and 2B). Below, I discuss the main conclusions from this chapter's context analysis.

First, I have demonstrated that an ageing population, ongoing technological innovations, the introduction of market mechanisms, changing governmental regulations, and labor market transitions have had a major impact on the Dutch hospital sector. All these changes result in a need for sustainably employable hospital workers. To be able to deliver high quality and efficient care, hospitals need sustainably employable workers who stay abreast of developments in their expertise and who are willing to adapt to the constantly changing jobs and workplaces. Further, to ensure continuous employment during their extended working lives, it is highly relevant for employees that they do whatever it takes to remain sustainably employable.

Second, the sector-wide and organization-specific sustainable employability agreements, policies, and initiatives show that hospital employers and unions are well aware of the need to stimulate sustainable employability. In the hospital sector's collective labor agreement, both sides have agreed upon practices aimed at enhancing sustainable employability. Further, an array of organization-specific sustainable employability initiatives can be witnessed. However, there may be a gap between what these policies intend (i.e. to increase sustainable employability) and the behaviors related to sustainable employability on the hospital shop floors. More specifically, the results of this chapter's examination of hospital employees' perceptions provide good reasons to question whether employees perceive the importance of continuously working on enhancing their sustainable employability, and whether they act accordingly. Although hospital employees take action to ensure they are generally employable in their present jobs, they seem less prepared for changes in the near future, meaning that their current employability may not be sustained in the longer term.

Third, the survey and interview results reported in this chapter give rise to serious concerns regarding the implementation of the agreements, policies, and initiatives that aim to enhance sustainable employability. Several hospital workers seemed to be unaware of the need to enhance their sustainable employability, and scored rather low on the various components of sustainable employability (for example, many were not motivated to adapt to changes outside their current job, and numerous respondents did not have clear ideas about their future career). In addition, the survey and interview findings show that quite a substantial proportion of the hospital employees were dissatisfied with the amount of career support and opportunities they perceive their employer as offering.

Overall, these results indicate that the mere existence of collective labor agreements and organization-specific policies is not sufficient to stimulate sustainable employability. Rather, an effective implementation is needed, and this is highly dependent on the functioning of the hospitals' HR departments and on direct supervisors' people management support (Knies and Leisink, 2014; Purcell and Hutchinson, 2007). It may be that a failure of these actors to implement policies effectively explains the discrepancies between the substantial amount of sector-wide and organizational specific measures to stimulate sustainable employability, and the hospital workers' relatively low perceptions. Other research in a hospital setting showing that line or ward managers do not always have the capacities to provide people management support provides support for this explanation (Townsend et al., 2012). Additionally, discrepancies are found between how hospital management intends HR practices and how they are perceived by the workforce, caused by differences in implementation and communication (Veld et al., 2010).

To summarize, this chapter's context analysis has demonstrated that there is a need for sustainably employable hospital workers that are able to deal with ongoing developments in the context of Dutch hospitals. Although hospital employers and unions have tried to stimulate sustainable employability through a broad array of sector-wide and organization-specific policies, this chapter shows that continuous efforts are needed in organizations if they are to boost sustainable employability. Besides providing evidence on the need to enhance hospital workers' sustainable employability in general, this chapter has provided initial indications that employees' age and job type should be taken into account when attempting to stimulate sustainable employability. To date, the role of age and job type has not been studied in employability research, and this is further examined in Chapters 7 and 8.

5



**EMPLOYER'S
INVESTMENTS
IN HOSPITAL
WORKERS'
EMPLOYABILITY
AND EMPLOYMENT
OPPORTUNITIES**

Abstract

The purpose of this paper is to examine the relationship between employer's investments (through job characteristics and managerial support) and employees' employment opportunities, with employability, conceptualized as perceived up-to-date expertise and willingness to change, as a mediating variable. Hypotheses are tested using structural equation modeling on survey data collected from 1,626 employees of three Dutch hospitals. Consistent with the hypotheses, the results indicate that job characteristics and managerial support are indirectly related to employees' beliefs on employment opportunities, with the relationship mediated by up-to-date expertise and willingness to change. Further, managerial support is directly related to employees' employment opportunities. This paper shows that employers, by providing an attractive and challenging job in combination with adequate supervisory support, can enhance their employees' employability and employment opportunities. This paper contributes to the literature by elaborating a consistent conceptualization and measurement of employability, by incorporating as antecedents both job characteristics and managerial support, and by examining to what extent employability mediates between these antecedents and employment opportunities. Previous studies refer to the same definition of employability but conceptualize this in different ways, and focus on either job characteristics or managerial support, and so fail to provide a systematic and comprehensive examination.

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5.1 Introduction

Increasingly, organizations emphasize the need for highly employable employees. They want to be able to respond to environmental pressures and technical developments (Van Dam, 2004) that threaten to render their employees' existing skills obsolete (Rowold and Kaufeld, 2009; Van Emmerik et al., 2012). Research shows that highly employable employees possess a variety of skills and are willing to adapt to changing job demands (Sparrow, 1998; Van der Heijde and Van der Heijden, 2006), ultimately reporting higher levels of job performance (Camps and Rodríguez, 2011; De Cuyper and De Witte, 2011).

These are all potential benefits for organizations confronted with ongoing environmental changes (Van den Broeck et al., 2014). Therefore, several authors (Pearce and Randel, 2004; Van der Heijde and Van der Heijden, 2006) argue that employers should take responsibility for enhancing their employees' employability. Several studies provide valuable insights into how employer's investments influence workers' employability although two issues have not been adequately studied.

First, previous research uses the concept of employability in different ways. The majority of employability studies refer to Rothwell and Arnold's definition of employability as "the individual's ability to keep the job one has, or to get the job one desires" (2007, p. 25). However, some studies understand and measure employability as individuals' beliefs regarding their employment opportunities (e.g. Van den Broeck et al., 2014; Wittekind et al., 2010), while others focus on individuals' abilities and use variables such as (up-to-date) expertise or competences (e.g. Camps and Rodríguez, 2011; Van Emmerik et al., 2012). Sometimes the openness or willingness to change is also included in the latter understanding and measurement of employability (e.g. Van der Heijde and Van der Heijden, 2006). However, it remains unclear how employees' employment opportunities, up-to-date expertise, and willingness to change are related.

Second, there is a lack of research offering a comprehensive perspective on employer's investments in employability, with studies focusing either on job characteristics or on managerial support as antecedents of employability. There are studies showing that job characteristics such as task variety or job autonomy are positively related to employee skill development (Peterson et al., 1995 in: Snape and Redman, 2010) and employability (Van Emmerik et al., 2012). Other research demonstrates the positive associations between managerial support variables, such as providing training opportunities or competence development support, and employability (De Vos et al., 2011; Nauta et al., 2009). Due to these limited foci, the sole and combined contributions to employability of these various employer investments remain unclear.

The contributions of this paper are threefold. First, by examining how workers' employability - measured in terms of up-to-date expertise and willingness to change - links to their employment opportunities, we systematically relate variables that previous studies have referred to using the label 'employability'. This also enables us to provide evidence for the commonly assumed, yet under-researched, relationships between these variables. Second, by incorporating both job characteristics and managerial support as antecedents of employability, we are able to comprehensively study employer's investments in employability. Third, we include the presumption that the effects of job characteristics and managerial support on employees' employment opportunities are mediated by their employability. A mediated model with this broad range of employer's investments as antecedents has not been studied before.

Applying a mediated model enables us to answer the following research question: *‘To what extent do job characteristics and managerial support relate to hospital employees’ employment opportunities and to what extent is this relationship mediated by their employability?’*

We answer this question using data from a survey of 1,626 employees from three hospitals in the Netherlands. Hospitals provide a particularly relevant setting for research on employability as ongoing changes are likely to increase hospitals’ needs for employable employees. For example, Western populations are ageing, increasing the demand for care, while the labor force is shrinking (Hasselhorn et al., 2008). Simultaneously, the sector is faced with pressures such as the introduction of market mechanisms, cost cutting, and ongoing technological innovations (Townsend and Wilkinson, 2010). Given these trends, research showing how employer’s investments impact on their workers’ employability is of great practical importance.

5.2 Theoretical framework

Below, we first define employability and explain why we conceptualize this as up-to-date expertise and willingness to change. We then describe how this relates to the dependent variable ‘employment opportunities’. Next, we introduce job characteristics and managerial support as antecedents. Finally, we present the model that provides an overview of this study’s expectations.

5.2.1 Employability

We define employability as the extent to which an employee feels able and willing to perform productive labor.²⁴ Since jobs are constantly changing as a result of ongoing changes in and around organizations (Van den Broeck et al., 2014), we use the term ‘productive labor’ to refer to adequately performing one’s current job or, in the event of a change, other tasks or jobs. This links to Rothwell and Arnold’s (2007) notion of keeping the job one has, or getting the job one desires. In a changing environment, up-to-date job expertise or competences to perform the current job are required, but this is not sufficient to survive in the labor market (Süß and Becker, 2013; Thijssen et al., 2008). Many authors argue that employees have to be willing to adapt to changes in terms of employment, job contents, conditions, or locations (Fugate and Kinicki, 2008; Kluytmans and Ott, 1999 in: Van der Heijde and Van der Heijden, 2006).

However, there is no consensus in the employability literature on the status of variables such as expertise and willingness (Forrier and Sels, 2003; Rothwell and Arnold, 2007). Some authors include variables of both types in their concept of employability (e.g. Fugate and Kinicki, 2008), while others treat willingness to change as an antecedent (e.g. Boom and Metselaar, 2001 in: Forrier and Sels, 2003). In this study, we assume that it is essential to be both up-to-date in one’s expertise as well as willing to adapt to changes in order to perform productive labor, and in the long run to survive in the labor market. Hence, we include both aspects in our definition and conceptualization of employability.

More specifically, we conceptualize up-to-date expertise using three dimensions (Thijssen and Walter, 2006): the extent to which employees are physically and psychologically able to keep pace with the job; the extent to which employees’ knowledge and skills are up-to-date

²⁴Although this definition of employability slightly differs from the definition that is used in Chapter 2, the content has remained the same.

given technological innovations etc.; and the extent to which employees' ideas about the job are in line with relevant occupational developments in the organization and society. Willingness to change refers to employees' attitudes and openness toward developing themselves and adapting to work changes (van Dam, 2004).

In essence, we follow Thijssen et al. (2008) notion of employability by including both up-to-date expertise as well as willingness to change in our measurement of employability, and focus on individuals' own perceptions of these. This links us to those researchers who understand and measure employability by assessing individuals' perceptions of their capabilities (e.g. Camps and Rodríguez, 2011; Van der Heijde and Van der Heijden, 2006) because they believe that individuals "are likely to act upon their perceptions rather than upon any objective reality" (Van den Broeck et al., 2014; Van Emmerik et al., 2012).

5.2.2 Employment opportunities

In this study, employees' beliefs in their employment opportunities not only refer to their expectations over getting another job (in their current or another organization) but also to their expectations on continuing to perform in their current job. Several authors argue that individuals' employment opportunities strongly depend on their expertise, competences, and willingness to change (Forrier and Sels, 2003; Fugate and Kinicki, 2008). Despite this, there is little empirical research reported that examines the relationships between employees' up-to-date expertise and willingness to change, in this study combined into employability, and their beliefs regarding employment opportunities (an exception being Wittekind et al., 2010).

We assume that individuals are likely to positively assess their employment opportunities if they regard themselves as being up-to-date in their expertise and willing to change. For instance, we would expect employees that are highly motivated to adapt to changes to positively rate their chances of jobs that require new skills. As such, they should perceive a broader spectrum of employment opportunities than employees who are not open to changes (Wittekind et al., 2010). On this basis, we hypothesize the following:

H1: Employees' employability is positively related to their employment opportunities.

5.2.3 Employer's investments in employability and employment opportunities

A vast body of research that uses job characteristic models (e.g. Hackman and Oldham, 1976; Parker and Cordery, 2001) or social exchange theory (Blau, 1964; Eisenberger et al., 1986) has shown that outcomes such as well-being, work motivation, organizational commitment, and performance result from employees experiencing their job as challenging and perceiving support from their organization or manager (e.g. Bakker and Demerouti, 2007; Snape and Redman, 2010; Van Ruyseveldt et al., 2011). Although there are a few studies that examine how employability is affected by a range of job characteristics or managerial support (e.g. De Vos et al., 2011; Van Emmerik et al., 2012), no-one has simultaneously used job characteristic and social exchange theories to predict employability.

However, in a study of the impact of HRM practices on employees' behaviors, Snape and Redman (2010) argued that there is a need for combining these theories. HRM practices, which include the management of work and people (Boxall and Purcell, 2015), are not only significant as currency in a social exchange relationship, but also for their role in boosting employees' sense of job influence which may, in turn, motivate them to engage in behaviors such

as meeting the demands of the modern workplace. We follow Snape and Redman's argument by using both job characteristics and social exchange theories when hypothesizing how employer's investments affect workers' employability and ultimately employment opportunities. In this way, we contribute to a deeper understanding of the specific mechanisms that explain the development of employability.

More specifically, we have included those job characteristics that incentivize employees to use and develop their expertise and openness towards change, and in particular job autonomy, task variety, and workload. Based on Knies and Leisink (2014), we conceptualize managerial support as the implementation of supportive HR practices and supervisor support.

As described above, we expect employees' employability to affect their employment opportunities (H1), and hence we assume that employer's investments will relate indirectly to employment opportunities through employees' employability. The underlying mechanisms for these relationships are now elaborated.

Job characteristics

It is assumed that employability can only be sustained if employees are provided with relevant experiences and are able to acquire new knowledge and skills in their job (De Vos et al., 2011; Farr and Ringseis, 2002; Forrier and Sels, 2003). Jobs that are characterized by high autonomy and task variety are likely to provide employees with opportunities to practice and expand their competences (Hackman and Oldham, 1975; Van der Heijden et al., 2009). It has also been shown that employees in challenging jobs develop high intrinsic motivation for learning and personal growth (De Lange et al., 2010).

More specifically, employees who experience job autonomy are expected to feel responsible for their work, leading to a willingness to go the 'extra mile' to complete tasks or improve work effectiveness (Snape and Redman, 2010). Employees sense that their performance is dependent on their own choices, making them feel better and more secure about their own abilities (Hackman and Oldham, 1976). Providing employees with sufficient autonomy might make them feel free to experiment with, for example, work scheduling procedures leading to new expertise and, consequentially, increased employment opportunities.

When employees have a job that is characterized by high task variety, they are required to use a wide range of their skills and abilities (Hackman and Oldham, 1976; Van Emmerik et al., 2012). In order to carry out the job adequately, the job itself encourages employees to use their motivation to change and continuously update their expertise, leading to increased employment opportunities. Van Emmerik et al. (2012) also show positive effects of job autonomy and task variety on employability measured as up-to-date skills and competences. For these reasons, we hypothesize the following:

- H2: Job autonomy has a positive relationship with employees' employment opportunities mediated by their employability.
- H3: Task variety has a positive relationship with employees' employment opportunities mediated by their employability.

To take advantage of job autonomy and task variety, employees need sufficient time to acquire new expertise and keep up with changes. Research has shown that employees under time pressures are likely to fall back on routines and will be unable to update themselves (Taris and

Kompier, 2004) or be less flexible in their attitudes (Van Dam, 2004). In other words, a high workload may be detrimental to enhancing employability. Nevertheless, theory and evidence on the effect of workload on employee development is mixed. A high workload might also motivate employees to update current, or develop new, expertise since their actual competences and skills are insufficient to effectively carry out the job (De Lange et al., 2010; Van Ruysseveldt and van Dijke, 2011).

Another mechanism that might play a role is that a high workload negatively affects employees' mental and physical resources leading to exhaustion (Bakker and Demerouti, 2007). Exhausted employees are less likely to be able to update their expertise. However, a continuous high workload might increase employees' intention to leave their current job (e.g. Hasselhorn et al., 2008) and look for other jobs. In order to obtain this new job, it might be necessary to update and expand one's expertise. This suggests a positive relationship between workload and employment opportunities mediated by employability. Given the conflicting arguments and a lack of conclusive evidence, we do not specify a direction in the following hypothesis:

H4: There is a relationship between workload and employees' employment opportunities mediated by their employability.

To sum up, we regard job autonomy, task variety, and workload as essential for developing one's employability. Job autonomy, which is closely related to the job influence construct that is central to the work of Snape and Redman (2010), and task variety, which together with autonomy is central to Parker's studies of job enrichment (e.g. Parker and Wall, 1998), are the key job characteristics on which the former studies focus. These characteristics are also likely to influence employees' employability. Although we believe task identity and task significance (Hackman and Oldham, 1976) to be vital job characteristics for work motivation generally, we did not include them as these characteristics are somewhat distal antecedents. In comparison, job autonomy, task variety, and workload can be viewed as proximal antecedents of employability. Feedback from the job, another characteristic in the Hackman and Oldham model (1976), was also not included in this study as it overlaps with the managerial support variable 'supervisor support of employee well-being and functioning' that was included and is presented in the next section.

Managerial support

Social exchange theory argues that employees who perceive benefits and support from their organizations are likely to repay these by displaying positive attitudes and behaviors (Blau, 1964). Through its HR policies, an organization can show that employees are valued and supported, which is likely to lead to desirable responses. For example, by providing development opportunities in combination with flexible job arrangements and by investing managerial time in appraising employees, an organization shows that it is willing to invest in the utilization and development of employees and cares about their well-being. This will lead to increased human capital (Snape and Redman, 2010; Takeuchi et al., 2007). The importance of managerial support is also shown in recent studies investigating the effect of HR policies, through the role of managers, in shaping employees' perceptions of HRM (e.g. Knies and Leisink, 2014; Purcell and Hutchinson, 2007).

Through the same mechanism, we assume that supportive HR practices will provide an incentive for employees to continuously update their expertise and make them willing to develop themselves in order to perform according to current job requirements. Subsequently, they are likely to perceive greater employment opportunities. Following Guest (2007 in: Knies and Leisink, 2014), we distinguish between general and tailor-made HR practices. Nowadays, supervisors increasingly implement HR practices, including in a hospital environment (Townsend and Wilkinson, 2010), and they are expected to make tailor-made arrangements, for example in matching development and flexibility to their employees' needs (Hornung et al., 2013). This leads to the following hypotheses:

- H5: Supportive HR practices have a positive relationship with employees' employment opportunities, mediated by their employability.
- H6: Tailor-made arrangements have a positive relationship with employees' employment opportunities, mediated by their employability.

Apart from in the implementation of HR practices, managerial support is also reflected in a supervisor providing emotional support through acts that aim to help the employee. Examples include showing concern for employees' feelings and needs, appraising their work, providing feedback, and facilitating their development (Knies and Leisink, 2014). It is argued that, through appropriate feedback and communication, a supervisor can make employees feel satisfied and confident in their own capabilities (Van der Heijden, 2003). It is then likely that they will assess their employability and employment opportunities more favorably. Moreover, the active encouragement of further development might stimulate an employee to act accordingly, boosting their willingness to change. Research shows positive relationships between supervisor support and employability when measured as up-to-date expertise, willingness to change, and employment opportunities (Camps and Rodríguez, 2011; Van Dam, 2004; Wittekind et al., 2010).

Thus, by providing various forms of support, a manager is able to positively influence employees' employability and employment opportunities. Following Knies and Leisink (2014), we split this support into supervisor support of employees' well-being and functioning, and their support of employees' development. This results in the following hypotheses:

- H7: Supervisor support of employees' well-being and functioning is positively related to employees' employment opportunities mediated by their employability.
- H8: Supervisor support of employees' development is positively related to employees' employment opportunities mediated by their employability.

Figure 5.1 graphically represents our hypotheses.

Figure 5.1 Research model



Notes: W= supervisor support of employees' well-being and functioning; D= supervisor support of employees' development

5.3 Method

5.3.1 Sample and procedure

The data, collected in the autumn of 2012, come from a study of Dutch hospital employees. Three non-academic hospitals (two training hospitals and one regional hospital) voluntarily participated in this study. The three hospitals are based in different parts of the Netherlands and provide similar facilities. Hospital A invited all its employees involved in healthcare services to participate (N = 970), and hospitals B and C invited between one-third and one-half of their workforce (N = 1,500 each). Based on guidelines provided by the researchers, all the hospitals selected a variety of similar nursing departments and non-nursing units such as medical laboratories and X-ray departments. Under the Dutch system, the doctors in these three hospitals are self-employed professionals, and were not included in this study. The hospitals' HR departments passed on information about the online survey to the 3,970 potential participants. Participants received a letter in which the confidentiality of responses was stressed and anonymity guaranteed. In addition, the letter explained that all the data would be collected and stored by the researchers, and that only aggregated results would be reported. These measures were taken to boost the response rate and to limit the risk of a social desirability bias.

After removing cases with missing data, our final sample used for the analyses in this paper amounted to 1,626 respondents - a response rate of 41 percent. Of these, 22 percent were employed by hospital A, 45 per cent by hospital B, and 33 per cent by hospital C. Nursing staff

accounted for 39 percent of the total, 25 percent were medical office assistants or clerical staff, 24 percent were non-nursing medical employees (e.g. X-ray technicians, medical laboratory assistants, surgical technologists), and 12 percent were middle and higher managers or staff service members. Of our sample, 89 percent were female and 11 percent male. The mean age of all respondents was 42.94 years (SD=10.4), mean job tenure was 10.52 years (SD=9.3), and mean organizational tenure was 12.82 years (SD=10.1). In terms of two important variables (age and gender), our sample is fairly representative of employees of Dutch non-academic hospitals with the branch report of the Dutch Association of Hospitals showing similar figures (NVZ, 2013).

In order to determine whether it was justified to merge the three hospital subsamples, we compared the responses from employees in hospitals A, B, and C on the employability and employment opportunities variables using a one-way ANOVA. The differences between the group means of employees in hospitals A, B, and C on the employability variables (up-to-date expertise and willingness to change) were non-significant.²⁵ The results of our ANOVA were significant for employment opportunities ($F(2, 1602) = 6.56, p = 0.01$). However, our post-hoc analysis revealed only one small significant difference in the employment opportunities of employees of hospitals A and B ($\Delta M = 0.17, p < 0.05$). Based on these results, we decided to merge the data to form a single sample, and to include the variable 'hospital' as a control in our further analyses.

5.3.2 Measures

All the variables used rate respondents' perceptions and were measured using five-point Likert scales, with a score of 1 indicating very weak support for the statement, and a 5 very strong support. Multi-item measures were used for all the variables. To assess the reliability of these measures, we calculated Cronbach's alphas with an acceptance level of 0.70 (Nunnally, 1978). As can be seen from Table I, the reliability of all the variables apart from task variety was good. Nevertheless, we decided to retain the task variety scale as it has been used extensively in other studies.

Job autonomy. Job autonomy was measured using a three-item scale based on the Job Diagnostic Survey (Hackman and Oldham, 1975). A sample item being "my job provides me the opportunity to decide on my own how I do my work".

Task variety. A three-item scale was used to measure task variety based on the Job Diagnostic Survey (Hackman and Oldham, 1975), including "I have a substantial amount of task variety in my job".

Workload. Here a four-item scale was used composed of items from the Job Content Questionnaire (Karasek and Theorell, 1990) and the Copenhagen Psychosocial Questionnaire (Pejtersen et al., 2010) - an example item being "I have to work very fast".

Supportive HR practices. Based upon Knies and Leisink (2014), we used a six-item scale to measure this variable. Following Kooij et al. (2014), we expect this variable to comprise development, maintenance, and accommodative HR bundles. As such, we anticipated a second-order factor structure, and each factor (bundle) was measured using two items. An example item being "I experience the HR 'education and development' policy in my department as supporting me in my job".

²⁵One-way ANOVA results: up-to-date expertise ($F(2, 1610) = 1.75, p = 0.17$); willingness to change ($F(2, 1610) = 2.92, p = 0.06$).

Tailor-made arrangements. We used the two-item scale of Knies and Leisink (2014) to measure this variable with an example item being “My supervisor tailors employment conditions to my personal situation”.

Supervisor support of employees' well-being and functioning. This variable was measured using the four-item scale of Knies and Leisink (2014) with “My supervisor shows an interest in how I do my job” being a sample item.

Supervisor support of employees' development. This was measured using the four-item scale of Knies and Leisink (2014). An example item being “My supervisor informs me about opportunities for training and development”.

Up-to-date expertise. For this variable, we used a nine-item scale based upon Thijssen and Walter (2006). Here, respondents were asked to indicate to what extent they perceive their expertise to be up-to-date in terms of three dimensions: technical expertise, economic expertise, and perceptual expertise (see the section on employability in the theoretical framework). Thus, we are expecting a second-order factor structure, and each dimension was measured with three items. An example item is: “As a result of technological developments, much of my knowledge and skills have become redundant.”

Willingness to change. This variable was measured with a four-item scale based upon Wittekind et al. (2010) and Van Dam (2004) with a sample item being “I find it important to develop myself in a broad sense, so I will be able to perform different task activities or jobs within the organization”.

Employment opportunities. This variable was measured by a six-item scale in which respondents were asked to indicate their employment expectations for the next year in terms of three dimensions: gaining promotion within the current organization, getting a job elsewhere, and continuing in their current job. Again, this reflects a second-order factor structure. Each dimension was measured with two items. We based our scale on De Cuyper and De Witte (2011) and Wittekind et al. (2010) but extended this with two items related to expectations of continuing in the current job, and added a time horizon. An example item being “In the next year, I expect my chances of an equivalent job in another organization to be high”.

Control variables. In line with previous employability research (e.g. De Vos et al., 2011) we included control variables for gender, age, educational level, plus job and organizational tenures. In addition, as respondents are nested in one of three hospitals, we included this as a control variable.

5.3.3 Data analysis

To determine the relationships between this study's variables, we followed Anderson and Gerbing's (1988) two-step approach, using confirmatory factor analysis (CFA) and structural equation modeling (SEM) in Mplus (Muthén and Muthén, 2010). To assess the various models' goodness of fit, we used the root-mean-square error of approximation (RMSEA), the comparative fit index (CFI), and the Tucker-Lewis index (TLI). Values above 0.90 for CFI and TLI and below 0.08 for RMSEA are indicative of an acceptable fit (Hu and Bentler, 1999).

Table 5.1 Means, standard deviations, reliabilities, and correlations

	M (SD)	α	1	2	3	4	5	6	7	8	9	10
1. Job autonomy	3.48 (0.85)	0.82	1.00									
2. Task variety	3.55 (0.84)	0.64	0.47***	1.00								
3. Workload	3.20 (0.65)	0.83	0.01	0.16***	1.00							
4. Supportive HR practices	3.06 (0.71)	0.86	0.22**	0.35***	-0.11***	1.00						
5. Tailor-made arrangements	3.31 (0.97)	0.78	0.22**	0.27***	-0.03	0.70***	1.00					
6. Supervisor support W ¹	3.59 (0.91)	0.91	0.22***	0.28***	-0.06*	0.64***	0.80***	1.00				
7. Supervisor support D ¹	3.15 (0.92)	0.87	0.22***	0.31***	-0.06*	0.75***	0.82***	0.75***	1.00			
8. Up-to-date expertise	3.85 (0.59)	0.78	0.34***	0.53***	-0.05	0.36***	0.33***	0.37***	0.33***	1.00		
9. Willingness to change	3.26 (0.77)	0.71	0.01	-0.19**	0.04	0.02	-0.03	-0.02	0.04	0.04	1.00	
10. Employment opportunities	2.78 (0.73)	0.76	0.11***	0.01	0.04	0.24***	0.16***	0.14***	0.28***	0.21***	0.59***	1.00

Notes: ¹W= supervisor support of employees' well-being and functioning; D= supervisor support of employees' development; *p < .05; **p < .01; ***p < .001

5.4 Results

The means, standard deviations, reliabilities, and correlations of this study's variables are presented in Table 5.1 (p. 94). We deleted one item from each of the job autonomy and task variety scales as this considerably increased their reliability. As can be seen from Table 5.1, respondents were fairly positive about their up-to-date expertise (3.85) and willingness to change (3.26), while their perceptions of employment opportunities were considerably lower (2.78). The data show considerable variance in the reported variables (SDs between 0.59 and 0.97).

5.4.1 Measurement model

To assess the dimensionality and fit of our hypothesized model, we compared three different models. First, we specified a one-factor model, in which all items loaded onto a single latent variable. Second, we constructed a measurement model where each item was loaded onto the factor for which it was supposed to be an indicator (job autonomy, task variety, etc.). Third, we extended the second model by including three second-order factors: supportive HR practices, up-to-date expertise, and employment opportunities. For these three second-order variables, we expected factor structures with three sub-factors and one latent second-order factor. We expected the third model to best fit the data.

As can be seen from Table 5.2, the CFA results for the third hypothesized measurement model provided good fit indices, while models one and two provided poor to very poor fits to the data. Further, chi-square difference tests also indicated that model three was to be preferred to the other two.

Table 5.2 CFA with results of model comparisons

	χ^2	df	$\Delta \chi^2$ (df)	CFI	TLI	RMSEA
Measurement model 1	18934.46	860	0.46	0.43	0.11	
Measurement model 2	5015.34	815	13919.12 (45)*	0.87	0.86	0.05
Measurement model 3	3284.95	806	1730.39 (9)*	0.93	0.92	0.04

Notes: CFI = Comparative Fit Index, TLI = Tucker-Lewis Index, RMSEA = Root Mean Square Error of Approximation. * $p < 0.001$

5.4.2 Structural modelling and hypothesis testing

We had hypothesized a model in which the 'up-to-date expertise' and 'willingness to change' employability variables mediated the relationships of job characteristics and managerial support with employment opportunities. In order to provide support for this, we compared the fit of the hypothesized structural model with an alternative. First, the hypothesized model with fully mediated paths was tested. Next, a partially mediated model was tested in which direct paths from the antecedents to the outcome variable were added. If the addition of direct paths significantly improved the model fit, this would indicate that direct paths should be included in the final model. Only significant direct paths were included in the partially mediated model.

The fit indices show an acceptable fit for the hypothesized fully mediated model ($\chi^2 = 4072.17$, $df = 1139$, $p < 0.001$, $CFI = 0.91$, $TLI = 0.90$, $RMSEA = 0.04$). Significant paths were found from the 'job characteristics' and 'managerial support' variables to 'up-to-date expertise' and 'willingness to change', and from 'up-to-date expertise' and 'willingness to change' to 'employment opportunities'.

The model with partial mediation included the addition of two paths: from both 'supportive HR practices' and 'supervisor support of employee development' to 'employment opportunities' and resulted in the following fit indices ($\chi^2 = 4026.1$, $df = 1137$, $p < 0.001$, $CFI = 0.91$, $TLI = 0.90$, $RMSEA = 0.04$). The difference in the chi-square values between the two models is significant ($\Delta \chi^2 (2) = 46.01$, $p < 0.001$) as were the regression coefficients of the two direct paths ($\beta = 0.10$, $p < 0.05$ and $\beta = .12$, $p < 0.01$). This indicates that the alternative model with partial mediation better fits the data.

Therefore, the hypotheses were examined on the basis of the results from the partially mediated model. Table 5.3 shows the significant regression paths of the final, partially mediated, model. Our results supported H1, as the 'up-to-date expertise' and 'willingness to change' employability variables were positively related to the 'employment opportunities' outcome variable ($\beta = 0.11$, $p < 0.001$ and $\beta = 0.52$, $p < 0.001$ respectively). Up-to-date expertise was significantly predicted by job autonomy ($\beta = 0.10$, $p < 0.001$), by task variety ($\beta = 0.42$, $p < 0.001$), by workload ($\beta = -0.07$, $p < 0.001$), and by supervisor support of employees' well-being and functioning ($\beta = 0.24$, $p < 0.001$). Willingness to change was significantly predicted by job autonomy ($\beta = 0.10$, $p < 0.001$), by task variety ($\beta = -0.24$, $p < 0.001$), by workload ($\beta = 0.11$, $p < 0.001$), by supervisor support of employees' development ($\beta = 0.26$, $p < 0.001$), and by tailor-made HR arrangements ($\beta = -0.26$, $p < 0.001$). As such, the indirect effects of job autonomy, task variety, workload, and supervisor support of employees' well-being and functioning on employment opportunities, mediated by up-to-date expertise, were significant, as were the indirect effects of job autonomy, task variety, workload, supervisor support of employees' development, and tailor-made HR arrangements, mediated by willingness to change. See Table III for these indirect effects.

These results fully supported H2 (indirect effect of job autonomy) and H4 (indirect effect of workload). H3 was partially supported, with task variety positively related to up-to-date expertise but negatively to willingness to change. H7 and H8 were also only partially supported as supervisor support of employees' well-being and functioning did not relate to willingness to change, and supervisor support of employees' development did not relate to up-to-date expertise. H5 and H6 were not supported, with no significant relationships found between supportive HR practices and either up-to-date expertise or willingness to change (H5), and the paths from tailor-made arrangements to up-to-date expertise and to willingness to change were non-significant and negative respectively (H6).

In addition, as can be seen from Table 5.3, several control variables had significant effects. For example, organizational tenure was negatively related to up-to-date expertise, to willingness to change, and to employment opportunities ($\beta = -0.10$, $p < 0.01$, $\beta = -0.18$, $p < 0.001$ and $\beta = -0.11$, $p < 0.01$ respectively). To control for employees being nested in the three hospitals A, B, and C, we included two dummy variables using hospital B (largest hospital) as a reference category. All effects of these control variables were non-significant, which indicates that there are no significant differences between employees coming from hospitals A, B, and C.

Together with the control variables, job characteristics and managerial support explain 38 percent of the variance in up-to-date expertise and 23 percent of willingness to change. In total, 48 percent of the variance in the employment opportunities outcome variable is explained.

Table 5.3 Regression coefficients of the final (partially mediated) model

	1. Up-to-date expertise	2. Willingness to change	Employment opportunities	
			Indirect effect ^b	Direct effect
<i>Antecedents:</i>				
Job autonomy	0.08 (0.03)**	0.10 (0.03)**	1: 0.01 (0.01)* 2: 0.05 (0.02)**	--
Task variety	0.44 (0.04)***	-0.25 (0.04)***	1: 0.05 (0.02)*** 2: -0.13 (0.02)***	--
Workload	-0.10 (0.03)***	0.11 (0.03)***	1: -0.01 (0.01)* 2: 0.06 (0.02)***	--
HR practices	--	--	--	0.10 (0.05)*
Tailor-made arrangements	--	-0.21 (0.07)***	2: -0.11 (0.04)**	--
Supervisor support W ^a	0.23 (0.03)***	--	1: 0.03 (0.01)**	--
Supervisor support D ^a	--	0.23 (0.07)***	2: 0.12 (0.04)***	0.12 (0.05)**
<i>Mediator variables:</i>				
Up-to-date expertise	--	--	--	0.11 (0.03)***
Willingness to change	--	--	--	0.52 (0.03)***
<i>Control variables^c:</i>				
Age	--	--	--	-0.06 (0.03)*
Organizational tenure	-0.10 (0.03)**	-0.18 (0.03)***	1: -0.02 (0.01)*** 2: -0.07(0.02)***	-0.11 (0.04)**
Job tenure	--	-0.28 (0.03)***	2: -0.10 (0.04)**	-0.10 (0.04)**
Educational level: high education (<i>dummy</i>)	--	--	--	0.12 (0.06)*
R ²	0.38	0.22	0.48	

Notes: Standardized coefficients are shown. ***p < 0.001; **p < 0.01; *p < 0.05; -- = not included in final model because of non-significant effects.

^aW= supervisor support of employees' well-being and functioning; D= supervisor support of employees' development;

^b1 = indirect effect mediated by up-to-date expertise, 2 = indirect effect mediated by willingness to change.

^cThe effects of the gender, hospital, and educational level (middle education) control variables (all dummy variables) were non-significant and are excluded to enhance readability.

5.5 Conclusions and Discussion

The purpose of this study has been to examine whether the relationships between both job characteristics and managerial support with hospital employees' employment opportunities are mediated by their employability (conceptualized as up-to-date expertise and willingness to change). The job characteristics and managerial support are seen as representing employers' investments in employability.

First, our results provide support for the theoretical assumption seen in earlier research (e.g. De Cuyper and De Witte, 2011) that employability, as perceived by employees, is an important factor in determining their beliefs regarding future employment opportunities. Our results show that willingness to change has a much stronger association with employment opportunities than does up-to-date expertise. An explanation for the importance of an open attitude towards change may lie in the turbulent environment in hospitals that is resulting in ongoing changes in employees' jobs. Remarkably, although our respondents were relatively positive about their up-to-date expertise and willingness to change, they assessed their employment opportunities as fairly poor. This may be because they are experiencing uncertainty due to the environmental turbulence such as the introduction of market mechanisms and ongoing technological innovations that have slowed the previous job growth in healthcare. The economic crisis may also be contributing to employees' pessimistic rating of their employment opportunities. Support for this idea can be found in Berntson et al. (2006) who showed that employability, measured as perceived employment opportunities, is higher during times of economic prosperity than during recessions.

Second, our findings indicate that up-to-date expertise and willingness to change are important mediators in the relationships of both job characteristics and managerial support with employees' employment opportunities. Further, our results show that managerial support also has a direct effect. These results support the view that employers can enhance their workers' employability and employment opportunities by creating challenging jobs and offering managerial support.

However, in contrast to our hypotheses, we found that a few of our antecedents had non-significant or even negative relationships with employees' employability and employment opportunities. This indicates that investing in some of the proposed antecedents included in this study are unlikely to simultaneously boost employees' expertise, willingness to change, and employment opportunities. In terms of non-significant paths, we found that supervisor support of employee development has a significant relationship with willingness to change but not with up-to-date expertise. Developmental support is mainly concerned with future advancement rather than keeping up-to-date, and this could explain the latter non-significant relationship. Also, supportive HR practices did not significantly relate to up-to-date expertise or willingness to change, although a significant direct association with the employment opportunities outcome variable was found. A possible reason is that employees understand HR practices as generic instrumental possibilities that can be used for future employment opportunities. In order to retain an open attitude toward possible changes and remain up-to-date in their expertise, employees need personal support, such as their direct supervisor showing concern for their well-being and functioning.

In terms of unexpected negative paths, we found that task variety and tailor-made arrangements have negative relationships with willingness to change, while task variety is posi-

tively related to up-to-date expertise. In addition, although we had not presumed the direction of the workload effect, we still find it surprising that workload was positively related to willingness to change but negatively to up-to-date expertise. One explanation for these results could be that employees who experience high task variety, a low workload, and sufficient room to make tailor-made arrangements with their supervisor perceive a good fit between their own abilities and needs and their job and organization. This leads to high job satisfaction (Kristof-Brown et al., 2005) and, as our results show, makes employees less eager to consider a change (see also Van Dam, 2004). Variety is considered a core job characteristic and a critical component of experienced job meaningfulness, which determines job satisfaction (Armstrong-Stassen and Stassen, 2013).

In total, our research makes three important contributions to the literature. First, by systematically examining three different variables that have been labeled as 'employability' in prior studies, we were able to provide empirical evidence for the theoretically assumed but rarely tested relationships between the three variables. We showed that both up-to-date expertise and willingness to change have significant positive associations with employment opportunities. Notably, we found that willingness to change is the most important variable in determining employees' perceived employment opportunities. Second, by simultaneously examining how job characteristics and managerial support variables affect employability, we have provided a rich understanding of the individual and combined contributions to employability of employer's investments. The structural model shows that up-to-date expertise and willingness to change have different antecedents, indicating that the employer's investments do not boost the employability variables in the same way. Third, our mediated model offers more comprehensive insights into how employer's investments contribute to employees' employment opportunities, namely that they are mediated through their employability.

Practical implications

Our findings suggest that it is possible for employers to stimulate their workers' employability and subsequently their employment opportunities by providing them with challenging jobs and managerial support. Although employers might think that employees who perceive good employment opportunities both inside and outside their current organization are more likely to quit, the social-exchange perspective argues that employees interpret an employer's investments as a signal that their employer wants to establish a long-term employment relationship. Employees will value their employer because of the offered possibilities and, in return, become strongly committed to the organization and hence stay. Research shows that employable employees are both good performers and highly committed to their organization, thus supporting the social exchange argument (Camps and Rodríguez, 2011; De Cuyper and De Witte, 2011). This emphasizes the importance of employers taking an active and responsible role in enhancing employability.

Our results show that willingness to change is enhanced by antecedents that are different from the predictors of up-to-date expertise, which indicates that organizations should customize the job characteristics and the support they offer employees according to the desired outcome. For example, our study showed that supervisor support of employees' development was of particular importance in boosting their willingness to change. A concrete way in which supervisors could stimulate their employees' willingness to change is by providing employees with the opportunity to self-assess their employment opportunities, their willingness to

change, and the personal development activities they have undertaken during the last year. Such a self-assessment would give employees insight into whether their career expectations are aligned with their attitudes and actions. Discussing the outcome of such a self-assessment with their supervisor may enhance their self-reflections and contribute to determining whether an appropriate follow-up action is possible within the organization.

Limitations and future research directions

This study is not without its limitations. First, because this is a cross-sectional study, we are not able to extract conclusive causal relationships from the results. Although we have solid theoretical grounds for assuming that job characteristics and managerial support influence employees' employability and employment opportunities, reversed causality might also play a role. That is, highly employable people may feel more secure about their own abilities and for this reason feel able to take advantage of, for instance, job autonomy or task variety. Future research could valuably gather longitudinal data to clarify this study's causal relationships.

Second, our results may be susceptible to common source bias as our data came from a single source. To assess common source bias, we compared the multiple-factor structure of the hypothesized measurement model with a one-factor model in which all survey items loaded onto one factor. The fit of the one-factor model is much poorer (CFI = 0.46, TLI = 0.43, RMSEA = 0.11) than that of the multiple-factor model (CFI = 0.93, TLI = 0.92, RMSEA = 0.04) suggesting an absence of common source bias. Nevertheless, future research could reduce the risk of common source bias by using additional sources such as the supervisor.

Third, it would be dangerous to generalize our findings beyond the Dutch hospital sector. We controlled for the effects of the employees being nested in three hospitals but did not find any significant effects. This indicates that the results are consistent across the three hospitals, which differ in size and type, suggesting that the results might be valid for other Dutch hospitals. Nevertheless, since circumstances that affect employability vary between organizations and sectors, similar research in other organizational settings would be valuable.

A final recommendation for future research would be to investigate whether variables such as job satisfaction moderate the relationship of employers' investments with employability and employment opportunities since we found some unexpected relationships that might be affected by moderators. Also age and tenure, used as the control variables, may act as moderators (Innocenti et al., 2013) since we found substantial negative effects of these variables on up-to-date expertise, willingness to change, and employment opportunities.

Conclusions

First, our findings lead us to conclude that employability is positively related to employees' employment opportunities. Employees' willingness to change is especially important in determining how they see their employment opportunities. Second, we saw that employers' investments contribute to employees' employment opportunities through boosting their employability. This should encourage employers to provide challenging jobs and managerial support.

6



**DO EMPLOYERS'
INVESTMENTS
IN WORKERS'
EMPLOYABILITY PAY
OFF IN TERMS OF
WELL-BEING AND
JOB PERFORMANCE?**

Abstract

The increasing calls for employers to invest in their workers' employability requires insights into the effects of such investments. The purpose of this study is to examine whether and to what extent workers' employability (conceptualized as up-to-date expertise and willingness to change) mediates the relationships between, on the one hand, job characteristics and managerial support (together labelled as employer's investments) and, on the other, employees' well-being and job performance. To date, this has not been researched in depth, with studies focusing on either antecedents or outcomes of employability, and hence failing to examine whether employability constitutes an actual link. A survey of hospital employees ($N = 1,626$) shows that the employability component of up-to-date expertise partially mediates the relationship between employer's investments and outcomes, whereas willingness to change does not mediate this relationship. Most forms of employer's investments investigated were found to directly and/or indirectly increase workers' well-being as well as their job performance. These results indicate that employer's investments in employability are beneficial for both employers (in terms of increased job performance) and employees (in terms of improved well-being).

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Van Harten, J. Do employer's investments in workers' employability pay off in terms of well-being and job performance? *Manuscript in Preparation for Submission*.

6.1 Introduction

In both science and practice, it is increasingly argued that, because of the impacts of the changing work environment (such as technological developments, changing jobs, decreasing job security), employer's investments in workers' employability are highly necessary (OECD, 2010; Van den Broeck et al., 2014; Van der Heijde and van der Heijden, 2006). It is claimed that, in order to survive in the labor market and to maintain their well-being, employees need their employer to provide employability-enhancing opportunities (Baruch, 2006; Berntson and Marklund, 2007; Thijssen et al., 2008). Employers, it is argued, can also expect to benefit from this investment, as enhanced employability could present a competitive advantage (i.e. increased human capital) and may lead to high job performance and economic returns (De Cuyper et al., 2014; Van der Heijde and Van der Heijden, 2006). Studies have demonstrated that workers' employability (in this paper, comprising up-to-date expertise and willingness to change) is boosted when they experience that their employer is providing them with resourceful jobs and managerial support (Solberg and Dysvik, 2015; Van Emmerik et al., 2012; Chapter 5).

Despite these arguments and research findings, there is evidence suggesting that, in reality, employers are not significantly investing in their workers' employability. Several studies show that organizations in Western countries generally make only modest investments in their (older) workers' development and employability (Canduela et al., 2012; Van Beek et al., 2011), implement only a few measures to extend working lives (Conen et al., 2012; Fleischmann et al., 2015), and provide fewer opportunities to enhance employability to employees with temporary contracts when compared to permanent employees (Forrier and Sels, 2003a). These results raise the question as to why employer's investments in employability remain modest. Do employers perhaps consider such investments to be only really beneficial for employees, and not for themselves? Perhaps, they are insufficiently convinced by the evidence on the positive effects of investing in employability on workers' performance.

A closer investigation of the employability literature reveals various limitations. First, the effects of employers investing in workers' employability have not been systematically studied. As a result, it remains unclear whether the investments are beneficial for employers, for employees, or for both. Some studies have shown that job characteristics and managerial support – antecedents of employability that we together label as employer's investments – impact on workers' employability (De Vos et al., 2011; Nauta et al., 2009; Van Emmerik et al., 2012). Other studies show that employability leads to outcomes such as increased well-being (relevant for employees) or increased job performance (relevant for employers) (De Cuyper and De Witte, 2011; Kinnunen et al., 2009; Kirves et al., 2014). That is, studies include either the antecedents or the effects of employability but not both. Second, other research has shown that job characteristics and managerial support variables are related to job performance and well-being (e.g. Bakker and Demerouti, 2007; Hackman and Oldham, 1975; Snape and Redman, 2010), but these studies do not address employability. Overall, this reflects an absence of research in which employability is examined simultaneously with both its antecedents and its outcomes. It is therefore uncertain whether employability is a genuine link between employer's investments and desirable outcomes for both employers and employees. Hence, the question as to whether it pays employers to invest in their workers' employability remains unanswered.

In responding to this knowledge gap, this study makes an important contribution by examining whether, and to what extent, workers' employability mediates the relationships between employer's investments and their workers' well-being and job performance. A second contribution is that this research answers the question as to who benefits from employer's investments in workers' employability. We achieve this by including outcome variables that are relevant from an employee perspective (well-being) and from a managerial perspective (job performance). This is in line with the balanced HRM approach that emphasizes the importance of including both organizational and employee outcomes when studying the effects of HRM (Boselie et al., 2009; Paauwe, 2004).

6.2 Theoretical Framework

This section starts by defining the concept of employability. Next, we elaborate upon employer's investments and the relationships with workers' employability. We then explain the dependent variables (DVs) of well-being and job performance, and how these are related to employability. Finally, we describe how the DVs are assumed to be affected by the independent variables (IVs) of employer's investments. We explain why we expect these effects to be partially mediated through employability.

6.2.1 Employability

We define employability as the extent to which an employee is able (conceptualized as up-to-date expertise) and willing (conceptualized as willingness to change) to perform productive work. The term 'productive work' encompasses not only performing in the current job, but also in other tasks or jobs (in the event of changes). This is relevant given the ongoing changes in and around organizations that continuously affect jobs and make jobs more volatile (Van Emmerik et al., 2012; Van den Broeck et al., 2014). The focus on both up-to-date expertise and willingness to change links to other research that understands employability in much the same way. For example, Thijssen et al. (2008) regard an individual's abilities and readiness as the essence of employability. Other authors argue that, in order to survive in a changing work environment and labor market, up-to-date expertise is necessary for employability, but also needs to be accompanied by a flexible and open attitude towards change and development (Nauta et al. 2009; Grip et al., 2004; Van der Heijde and Van der Heijden, 2006). We focus on workers' own perceptions of their employability, a stance seen in many other employability studies, because it is believed that "perceptions rather than reality triggers cognitions, behavior, and psychological functioning" (Vanhercke et al., 2015, p. 180; see also Van Emmerik et al., 2012).

There is also a group of researchers that regard and measure employability as an individual's perceptions of their employment opportunities (De Cuyper et al., 2014; Wittekind et al., 2010). Recent studies have started to show that workers' up-to-date expertise and willingness to change (also referred to as 'movement capital') positively affect their beliefs regarding employment opportunities (Forrier et al., 2015; Wittekind et al., 2010; Chapter 5). For instance, employees who are highly motivated to adapt to changes perceive more opportunities in jobs that require new skills than do employees who are not open to changes. Further, the sense of being up-to-date could make employees feel that they have good chances of a

similar job outside their current organization. In this study, the employment opportunities variable is excluded because it seems likely that both an individual's *current* well-being and their job performance are affected by their *current* up-to-date expertise and willingness to adapt, rather than by their current perceptions of their employment opportunities *in the near future*. Hence, the latter is regarded as a more distal factor, while up-to-date expertise and willingness to change are viewed as proximal factors directly impacting on well-being and job performance.

6.2.2 Employer's investments in workers' employability

We regard employer's investments in workers' employability as the provision of resourceful and challenging jobs as well as adequate managerial support. The extent to which a job is resourceful and challenging is assessed using the job characteristics of job autonomy, task variety, and workload (e.g. De Lange et al., 2010). Managerial support is viewed as supportive HR practices and supervisors' supportive behavior (Knies and Leisink, 2014). Taken together, our understanding of employer's investments encompasses a broad range of variables that have been related to employability in other research but that are rarely examined simultaneously with employability. In another study, we found support for the assumption that employer's investments impact on employability, with the latter being conceptualized using 'up-to-date expertise' and 'willingness to change' components (Chapter 5). Below, we explain the relationships in more detail.

Resourceful and challenging jobs

In this study, it is presumed that the job autonomy and task variety job characteristics boost workers' employability. Several researchers argue that these characteristics provide employees with opportunities to practice and expand their competences, which relates to our employability component of up-to-date expertise (De Vos et al., 2011; Hackman and Oldham, 1975; Van der Heijden et al., 2009). Regarding the other employability component, of willingness to change, De Lange et al. (2010) have shown that employees who are in a job that is characterized by high autonomy and variety are intrinsically motivated towards learning and personal growth. For example, autonomy can provide employees with a sense of being free to experiment, which leads to new expertise (De Lange et al., 2010; Hackman and Oldham, 1975). Further, employees are stimulated to update their expertise and become more open to changes when they have a variety of tasks requiring a range of expertise (Hackman and Oldham, 1975). Van Emmerik et al. (2012) provide further empirical evidence in support of our assumptions.

Next, we assume that the 'workload' job characteristic is related to employability. On the one hand, a high workload can damage employability. That is, employees will not have sufficient time to maintain and develop their employability, as they are likely to rely on routines and be unable to update themselves when under time pressure (Taris and Kompier, 2004). Similarly, a high workload could demotivate employees to develop themselves or to be open to changes (Van Dam, 2004). Conversely, because of a high workload, employees may be keen to update their current, or develop new, expertise. That is, they regard their current expertise as insufficient to perform in their challenging/demanding job (De Lange et al., 2010; Van Ruyseveldt and van Dijke, 2011). Here, we take both the negative and positive effects of

workload into consideration, which leads us to the following hypotheses:

- H1: Job autonomy and task variety have positive relationships with employability.
 H2: There is a relationship between workload and employability.

We regard the above job characteristics as essential for developing one's employability. Other researchers also frequently regard these three variables as key job characteristics. For example, autonomy and variety are seen as central to the concept of job enrichment, which then initiates learning and development (e.g. Parker and Wall, 1998; Parker et al., 2001). Further, De Lange et al. (2010) regard autonomy and variety, together with job demands (measured as workload), as vital to learning-related behavior. We have not included other job characteristics, such as task significance (Hackman and Oldham, 1975), as they are somewhat distal antecedents of employability and presumably more closely related to general work motivation.

Managerial support

In line with Knies and Leisink (2014), we conceptualize managerial support as the implementation of supportive HRM and supportive behavior by supervisors. We distinguish between general and tailor-made HR practices (Guest, 2007 in: Knies and Leisink, 2014), and further divide supervisors' supportive behavior into, first, helping employees with their functioning and well-being and, second, helping with their personal development.

Based on research applying human capital theory, we expect managerial support to have a positive effect on the employability component of up-to-date expertise. For example, HR practices aimed at training and development have been found to help in creating and maintaining workers' skills and abilities (Boxall and Macky, 2009; Jiang et al., 2012; Snape and Redman, 2010). Further, when supervisors regularly provide their workers with feedback on, and appraisal for, their performance, workers can improve their own capabilities (in our study: update their expertise), and also become more confident in their capabilities, which leads to a more positive assessment of their up-to-date expertise (Van der Heijden, 2003).

Next, based on social exchange mechanisms, it is assumed that managerial support positively impacts on the employability component of willingness to change. That is, when employees are offered HR practices such as flexible work arrangements, they are likely to repay such investments by showing positive attitudes and behaviors. Similarly, Solberg and Dysvik (2015) found that development HR practices positively affect employees' openness to change because employees feel obliged to maintain such an attitude in return for their employer's HRM investment. Moreover, when supervisors actively encourage their employees to develop themselves further, for example into new career roles, employees could be stimulated to think and behave accordingly (such that their willingness to change will also increase). Research has indeed shown positive associations between supervisor support and employability (Van Dam, 2004; Wittekind et al., 2010). Based on these earlier findings and theoretical underpinnings, we expect to find that:

- H3: Supportive HR practices, tailor-made arrangements, supervisor support of employees' well-being/functioning, and supervisor support of employees' development are positively related to employability.

6.2.3 Well-being and job performance and their relationships with employability

Well-being is defined as the overall quality of an employee's experiences and functioning at work (Van de Voorde et al., 2012; Kooij et al., 2013). Van de Voorde et al. (2012) argue that it is important in research to include several well-being variables as they are related in different ways to concepts such as HRM. The authors place the well-being variables that are used in research into three categories. First, there are health-related variables such as psychological strain/burnout and engagement/vigor. Second, there are happiness-related variables such as job satisfaction and affective commitment, and, third, relationship-related variables such as co-operation and the relationship with the supervisor.

We also conceptualize well-being as made up of three variables: psychological strain, vigor, and satisfaction with the work-life balance (WLB). The first two variables have been used in studies investigating the relationship between employability and well-being (Kirves et al., 2014; De Cuyper et al., 2009). Following those who argue that comprehensive evaluations of employee well-being should consider the employee as a whole, and therefore include both work and non-work demands (Brough et al., 2014), we include satisfaction with the balance between work and private life (Abendroth and den Dulk, 2011). In our approach, we therefore measure well-being variables that are related to the first two dimensions of Van de Voorde et al. (2012). However, we exclude their third dimension as this would duplicate the managerial support variables used in this study.

We expect workers' well-being to be positively affected by their employability. In general, studies portray employability as a personal resource that stimulates well-being in today's labor market (Vanhercke et al., 2015). This is in line with the Conservation of Resources (COR) theory that argues that personal resources (i.e. aspects of the self) serve as a means to acquire and maintain other resources such as resiliency (Hobfoll, 2001). More specifically, highly employable workers are probably able to meet the challenges caused by changes and uncertainty more successfully than workers with low levels of employability (Kirves et al., 2014). Highly employable workers feel able to cope with potential hazards, such as required changes, as they have the necessary resources of up-to-date expertise and a willingness to adapt to changes. This results in them experiencing less stress and increases their sense of well-being (Berntson and Marklund, 2007). In addition, De Cuyper et al. (2008) argue that employability stimulates the feeling of being in control of one's career – it reduces the fear of becoming unemployed for instance – which leads to improved well-being.

Next, we focus on job performance as an outcome variable of employability, and we view this as how well an individual carries out the duties that are part of the job (Christian et al., 2011). Research has shown that workers' employability positively affects their job performance (De Cuyper et al., 2014; Kinnunen et al., 2011). This is because highly employable workers possess up-to-date occupational expertise that enables them to do the job and therefore they can be expected to perform well (De Cuyper et al., 2011; Dries et al., 2014). It is also argued that employable workers can concentrate more fully on their current job tasks and thus perform better. Such employees are confident that they are capable of doing their job and feel prepared for future changes. Subsequently, they feel less need to invest time and energy in other activities that would distract them from their current job (Kinnunen et al., 2011). Further, because of their willingness to change, employable workers can proactively adapt, which then positively links to performance (Camps et al., 2016; Fugate et al., 2004 in: De Cuyper et al., 2011). On the basis of the above arguments, we hypothesize that:

H4: Employability is positively related to well-being.

H5: Employability is positively related to job performance.

6.2.4 Employability as a partial mediator in the link between investments and outcomes

So far, we have argued that employers can enhance their workers' employability by investing in resourceful, challenging jobs and adequate managerial support. In turn, this employability is likely to enhance employee well-being and job performance as the feeling of being employable leads employees to regard themselves as capable of dealing with their job requirements and their changing work environment. This suggests that we should regard employability as a mediating mechanism in the relationships between an employer's investments and the outcomes. We expect this to be a *partial* mediation effect, with other mechanisms also partly explaining the relationships.

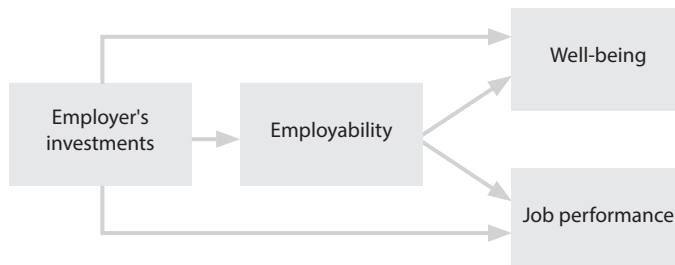
For example, the behavioral HRM perspective argues that HR practices can encourage productive behaviors by employees. In other words, through supportive HR practices, employees feel stimulated and therefore more motivated to perform (which is different from the employability construct), leading to actual improvements in job performance (Jiang et al., 2012; Snape and Redman, 2010). Next, by providing managerial support (e.g. reflected in supportive HR practices), employers show their commitment to their employees and demonstrate concern for their welfare (Snape and Redman, 2010). Presumably, employees therefore feel they are being taken care of and, for this reason, that their well-being is higher.

Additionally, research into job characteristics shows that job autonomy and task variety produce 'critical psychological states' such as perceived meaningfulness that, in turn, lead to improved work effectiveness (Hackman and Oldham, 1975) and increased well-being (Humphrey et al., 2007 in: Snape and Redman, 2010). Besides, workload (when perceived as a stressor) has been found to directly impact on well-being (e.g. increased strain) (Schaufeli and Bakker, 2004). Altogether, we have various reasons to expect that employability is a partially mediating mechanism which is reflected in our final hypothesis:

H6: The relationships between employer's investments and both well-being and job performance are *partially* mediated by employability.

Our hypotheses are schematically positioned in the research model (see Figure 6.1 below).

Figure 6.1 Research model



6.3 Method

6.3.1 Sample and procedure

We collected data through an online survey in three Dutch hospitals. Health sectors in the West face turbulent climates caused by ongoing changes such as aging populations, medical and technological advancements, and an increasing shift towards market-driven systems (Townsend and Wilkinson, 2010). It is argued that, in order to deal with these challenges, it is crucial to build and maintain a productive and resilient workforce that can provide high-quality care while maintaining a sense of well-being (Cooke and Bartram, 2015). In the present study, we examine whether hospital management could achieve this by investing in their workers' employability. As such, the hospital sector provides an ideal setting for testing our research hypotheses.

The participating hospitals are non-academic hospitals all offering similar facilities and based in different parts of the Netherlands. With the assistance of the hospitals' HR departments, we invited the 3,970 employees to participate in the research by completing our questionnaire. Hospital A invited all its employees involved in healthcare services to participate in our research (N = 970), and hospitals B and C invited between one-third and one-half of their workforce (N = 1,500 each). In the invitation letter, we informed employees of the study's purpose and assured anonymity. We explained that individual responses would not be reported and that the data would be used exclusively for research objectives.

After removing responses with missing data, our final sample used for the analyses in this paper consisted of 1,626 respondents (response rate: 41 percent) of whom 22 percent were employed by hospital A, 45 percent by hospital B, and 33 percent by hospital C. In terms of jobs, 39 percent of the respondents were nurses, 25 percent were support/assisting staff, 24 percent were non-nursing medical employees (e.g. X-ray technicians, surgical technologists), and 12 percent were managers or HR employees.²⁶ 89 percent were female and 11 percent male. The mean age was 42.94 years (SD=10.4), mean job tenure was 10.52 years (SD=9.3), and mean organizational tenure was 12.82 years (SD=10.1). Comparing the figures on age and gender with those for the total Dutch non-academic hospital workforce, our sample is fairly representative (AZW, 2016).

6.3.2 Measures

All the variables discussed below are measured based on self-perceptions using five-point Likert scales with a score of 1 indicating very weak support for the statement, and a 5 very strong support. We calculated Cronbach's alphas, setting the acceptance level at 0.70, to assess reliability (Nunnally, 1978). As can be seen from Table 6.2 (see page 115), the reliability of all the variables apart from task variety was good. Nevertheless, we decided to retain the task variety scale as it has been used extensively in other studies (e.g. Van Veldhoven et al., 2005).

IVs: job characteristics

Job autonomy. This was measured using a three-item scale based on the Job Diagnostic Survey (Hackman and Oldham, 1975). A sample item being: "my job provides me the opportunity to decide on my own how I do my work".

²⁶Under the Dutch system, doctors in the three hospitals are contracted as self-employed professionals, and were therefore not included in this study of employees.

Task variety. A three-item scale was used to measure task variety, again based on the Job Diagnostic Survey (Hackman and Oldham, 1975), including “I have a substantial amount of task variety in my job”.

Workload. A four-item scale was used composed of items from the Job Content Questionnaire (Karasek and Theorell, 1990) and the Copenhagen Psychosocial Questionnaire (Pejtersen et al., 2010) – an example item being “I have to work very fast”.

IVs: managerial support variables

Supportive HR practices. Following Kooij et al. (2014), we presume that this variable consists of development, maintenance, and accommodative HR bundles. We therefore expect a second-order factor structure, and measured each factor (bundle) with two items based on Knies and Leisink’s (2014) six-item scale. An example item is “I experience the HR ‘education and development’ policy in my department as supporting me in my job”.

Tailor-made arrangements. Knies and Leisink’s (2014) two-item scale was used for this variable, an example item being: “My supervisor tailors employment conditions to my personal situation”.

Supervisor support of employees’ well-being and functioning. This variable was measured using the four-item scale of Knies and Leisink (2014). “My supervisor shows an interest in how I do my job” being an example item.

Supervisor support of employees’ development. This was measured using the four-item scale of Knies and Leisink (2014) including “My supervisor informs me about opportunities for training and development”.

Mediators: employability components

Up-to-date expertise. A nine-item scale based on Thijssen and Walter (2006) was applied to measure this variable. Respondents were asked to indicate to what extent they perceive their expertise to be up-to-date in terms of three dimensions: technical expertise (being physically and psychologically able to keep pace with the job), economic expertise (their knowledge and skills are up-to-date given technological innovations etc.), and perceptual expertise (their ideas about the job are in line with occupational developments). The three dimensions are expected to form a second-order factor structure. Each dimension was measured using three items. An example item being: “As a result of technological developments, much of my knowledge and skills have become redundant”.

Willingness to change. This variable was measured with a four-item scale based on Wittekind et al. (2010) and Van Dam (2004). A sample item being: “If the hospital offered me a possibility to obtain new work experiences, I would take it”.

DVs: well-being and job performance

Psychological strain. This variable was measured with two two-item scales for stress and burnout respectively, taken from the short version of the Copenhagen Psychosocial Questionnaire (Pejtersen et al., 2010). These two scales enable us to address various aspects of psychological strain since stress can refer to light, or short-term, strain and burnout to heavy, or long-term, strain. We thus expect a second-order factor structure for this variable. An example item being: “Over the last four weeks, how much of the time did you feel stressed?”, with answers running from 1 = never to 5 = always.

Vigor. The three-item scale of Schaufeli et al. (2006) was used to measure this variable, an example-item being: "At my job, I feel strong and vigorous".

WLB (work-life balance) satisfaction. This variable was measured using a three-item scale based upon Abendroth and den Dulk (2011), an example item being: "I am satisfied with the way I divide my time between work and personal life".

Job performance. For this variable, a single item was used: "On a scale from 1 to 10, please indicate to the best of your ability how your supervisor rated your performance as expressed during your most recent performance review". The item was recoded in a 5-point scale for further analyses. We used this item because Schoorman and Mayer (2008) have shown that self-reported job performance is more accurately measured when respondents are asked for their supervisor's assessment of their performance.

Control variables. In line with previous employability research, we included control variables for gender, age, educational level, plus job and organizational tenures. In addition, as respondents are nested in one of three hospitals, we included hospital as a control variable.

6.3.3 Data quality and analysis

The data were collected from the same individuals and are thus potentially subject to common method bias (CMB) (Podsakoff et al., 2003). We addressed this potential problem by constructing the questionnaire in such a way that the items for the various variables were spread among different sections of the questionnaire, and through regularly using reversed items. Moreover, three sets of confirmatory factor analyses (CFA) were conducted in which different measurement models were compared. First, we specified a one-factor model in which all the items were loaded onto a single latent variable (i.e. we applied Harman's single factor test to assess CMB). Second, we constructed a model in which each item was loaded onto the factor for which it was supposedly an indicator (job autonomy, task variety, etc.). Third, we extended the second model by including the three second-order factors: supportive HR practices, up-to-date expertise, and psychological strain. For these second-order variables, we expected factor structures with either two or three sub-factors and one latent second-order factor. We expected this third model to best fit the data, and this was confirmed with chi-square difference tests indicating that model 3 was preferable to the other two (see Table 6.1). This provides evidence that CMB is not a problem in our data.

We followed SEM guidelines as provided by Muthén and Muthén (2012) in testing for direct and indirect relationships using Mplus. We used the root-mean-square error of approximation (RMSEA), the comparative fit index (CFI), and the Tucker-Lewis index (TLI) to assess the goodness of fit of each model. Values above 0.90 for CFI and TLI and below 0.08 for RMSEA are indicative of an acceptable fit (Hu and Bentler, 1999).

Table 6.1 CFA with results of model comparisons

	χ^2	df	$\Delta \chi^2$ (df)	CFI	TLI	RMSEA
Measurement model 1	25165.59	1034	-	0.40	0.37	0.11
Measurement model 2	3740.62	950	21424.97 (84)*	0.93	0.92	0.04
Measurement model 3	3784.90	960	44.28 (10)*	0.93	0.92	0.04

Notes: * $p < 0.001$. CFI = Comparative Fit Index, TLI = Tucker-Lewis Index, RMSEA = Root Mean Square Error of Approximation.

6.4 Results

Table 6.2 shows the variables' means, reliabilities, and correlations. On average, the respondents assessed their well-being and job performance as high (means just below 4.00), and were also rather positive about their up-to-date expertise (3.85) and willingness to change (3.26). The data show considerable variance, with the SDs varying between 0.59 and 0.97.

We had hypothesized a model in which the 'up-to-date expertise' and 'willingness to change' employability variables partially mediated the relationships between the employer's investments and both well-being and job performance. In order to test this model, we compared the fit of the hypothesized partially mediated model with an alternative fully mediated model. If the fully mediated model fitted the data better, then this model should be preferred. The fit indices show an acceptable fit for the hypothesized partially mediated model ($\chi^2 = 4221.42$, $df = 1245$, $p < 0.001$, $CFI = 0.92$, $TLI = 0.91$, $RMSEA = 0.04$). The fit indices for the alternative fully mediated model are slightly worse ($\chi^2 = 4530.15$, $df = 1256$, $p < 0.001$, $CFI = 0.91$, $TLI = 0.90$, $RMSEA = 0.04$). The chi-square difference test shows that the partially mediated model is to be preferred ($\Delta \chi^2 (11) = 308.74$, $p < 0.001$).

6.4.1 Hypothesis testing

Considering our first three hypotheses (H1-H3: relationships between employer's investments and employability), the results are as follows. The 'up-to-date expertise' employability variable was significantly influenced by job autonomy ($\beta = 0.10$, $p < 0.01$), task variety ($\beta = 0.43$, $p < 0.001$), workload ($\beta = -0.10$, $p < 0.001$), and supervisor support of employees' well-being and functioning ($\beta = 0.22$, $p < 0.001$). The 'willingness to change' employability variable was significantly affected by job autonomy ($\beta = 0.09$, $p < 0.01$), task variety ($\beta = -0.24$, $p < 0.001$), workload ($\beta = 0.10$, $p < 0.001$), supervisor support of employees' development ($\beta = 0.19$, $p < 0.01$), and tailor-made HR arrangements ($\beta = -0.18$, $p < 0.01$). As such, we found full support for H2, and partial support for H1 and H3 in that not all the employer's investments were significantly related to both the employability variables. Further, as the β values indicate, task variety and tailor-made HR arrangements were negatively related to willingness to change, whereas positive relationships had been hypothesized in H1 and H3.

Similarly, the results partly supported H4 and H5 (relationships between employability and the 'well-being' and 'job performance' outcome variables). Up-to-date expertise was positively related to the three well-being variables (β values between 0.28 and 0.40, $p < 0.001$) and job performance ($\beta = 0.17$, $p < 0.001$), whereas willingness to change did not show significant relationships with the outcome variables.

Our final hypothesis, H6, anticipated partially mediated relationships between employer's investments and the outcome variables (mediated through the two employability components). This means that we take into account that direct relationships between the investments and outcome variables could also appear. Table 6.3 provides an overview of the related findings and shows that the hypothesis is partly supported as not all possible relationships were found. That is, in testing H4 and H5, we had found that the employability component 'willingness to change' did not significantly relate to the outcome variables and, consequently, any indirect effects must be through up-to-date expertise and not through willingness to change. Indeed the results show that, for example, supervisor support of employees' functioning/well-being positively affected job performance both directly ($\beta = 0.29$, $p < 0.001$) and

Table 6.2 Means, standard deviations, reliabilities, and correlations

	M	α	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Job autonomy	3.48 (0.85)	0.82	1.00												
2. Task variety	3.55 (0.84)	0.64	0.47***	1.00											
3. Workload	3.20 (0.65)	0.83	0.01	0.16***	1.00										
4. Supportive HR practices	3.06 (0.71)	0.86	0.22***	0.35***	-0.11***	1.00									
5. Tailor-made arrangements	3.31 (0.97)	0.78	0.22***	0.27***	-0.03	0.70***	1.00								
6. Supervisor support W ¹	3.59 (0.91)	0.91	0.22***	0.28***	-0.06*	0.64***	0.80***	1.00							
7. Supervisor support D ¹	3.15 (0.92)	0.87	0.22***	0.31***	-0.06*	0.75***	0.82***	0.75***	1.00						
8. Up-to-date expertise	3.85 (0.59)	0.78	0.35***	0.53***	-0.07*	0.37***	0.33***	0.37***	0.34***	1.00					
9. Willingness to change	3.26 (0.77)	0.71	0.01	-0.19***	0.04	0.08	-0.03	-0.03	0.03	0.06	1.00				
10. Psych. strain	3.84 (0.66)	0.82	0.24***	0.37	-0.03	0.29***	0.22***	0.26***	0.23***	0.48***	-0.02	1.00			
11. Vigor	3.97 (0.71)	0.84	0.14***	0.22***	-0.27***	0.26***	0.15***	0.20***	0.16***	0.50***	-0.05	0.59***	1.00		
12. WLB satisfaction	3.94 (0.80)	0.90	0.15***	0.16***	-0.20***	0.21***	0.21***	0.18***	0.13***	0.32***	-0.09**	0.51***	0.56***	1.00	
13. Job performance	4.01 (0.60)	-- ²	0.13***	0.19***	-0.01	0.20***	0.35***	0.39***	0.29***	0.28***	-0.03	0.20***	0.20***	0.18***	1.00

Notes: *p < 0.05; **p < 0.01; ***p < 0.001

¹W = supervisor support of employees' well-being/functioning; D = supervisor support of employees' development;

² As job performance is a one-item variable, CA (α) is not calculated.

Table 6.3 Regression coefficients of the partially mediated model

	Up-to-date expertise		Willingness to change		Psychological strain		Vigor		WLB satisfaction		Job performance	
			Direct effect	Indirect effect ^b	Direct effect	Indirect effect ^b	Direct effect	Indirect effect ^b	Direct effect	Indirect effect ²	Direct effect	Indirect effect ²
<i>Antecedents:</i>												
Job autonomy	.10 (.03) ^{**}	.09 (.03) ^{**}	-.04 (.01) ^{**}	.03 (.01) ^{**}	--	.03 (.01) ^{**}	--	.02 (.01) ^{**}	--	.02 (.01) ^{**}	--	--
Task variety	.43 (.04) ^{***}	-.24 (.04) ^{***}	.17 (.02) ^{***}	.14 (.02) ^{***}	.16 (.03) ^{***}	.12 (.02) ^{***}	--	.07 (.02) ^{***}	--	.07 (.02) ^{***}	--	--
Workload	-.10 (.03) ^{***}	.10 (.03) ^{***}	-.04 (.01) ^{***}	-.04 (.01) ^{***}	--	-.03 (.01) ^{**}	-.19 (.03) ^{***}	-.02 (.01) ^{**}	--	-.02 (.01) ^{**}	--	--
HR practices	--	--	.07 (.03) [*]	--	.11 (.03) ^{**}	--	.09 (.04) [*]	--	--	--	--	-.16 (.05) ^{***}
Tailor-made arrangements	--	-.18 (.07) ^{**}	--	--	--	--	.23 (.06) ^{***}	--	--	--	--	.18 (.07) ^{**}
Supervisor support W ¹	.22 (.03) ^{***}	--	.09 (.01) ^{***}	.07 (.01) ^{***}	--	.06 (.01) ^{***}	--	.04 (.01) ^{***}	--	.04 (.01) ^{***}	--	.29 (.06) ^{***}
Supervisor support D ¹	--	.19 (.07) ^{**}	--	--	--	--	-.22 (.06) ^{***}	--	--	--	--	--
<i>Mediator:</i>												
Up-to-date expertise	--	--	.40 (.03) ^{***}	.33 (.04) ^{***}	--	.28 (.03) ^{***}	--	.17 (.04) ^{***}	--	.17 (.04) ^{***}	--	--
<i>Controls²:</i>												
Gender	--	--	--	--	.06 (.02) ^{**}	--	--	--	--	--	--	--
Age	--	--	--	--	--	--	--	--	--	--	--	-.11 (.02) ^{***}
Educational level: high	--	--	--	--	-.05 (.02) [*]	--	--	--	--	--	--	--
Organizational tenure	-.13 (.03) ^{***}	-.18 (.03) ^{***}	-.05 (.03) ^{**}	-.05 (.01) ^{***}	--	-.04 (.01) ^{***}	.07 (.03) [*]	-.02 (.01) [*]	--	-.02 (.01) [*]	--	--
Job tenure	--	-.28 (.03) ^{***}	--	--	--	--	--	--	--	--	--	.11 (.03) ^{***}
R ²	.36	.23	.26	.25	.17	.21						

Notes: Standardized coefficients are shown. ^{***}p < .001; ^{**}p < .01; ^{*}p < .05; -- = excluded from final model because of non-significant effects.

¹W = supervisor support of employees' well-being/functioning; D = supervisor support of employees' development.

²mediated by up-to-date expertise, willingness to change was not significantly related to the outcomes.

³The effects of the hospital control variables (dummies) were non-significant and are excluded to enhance readability.

indirectly through up-to-date expertise ($\beta = 0.04, p < 0.001$). Similarly, task variety also positively affected the well-being variable 'vigor' both directly ($\beta = 0.14, p < 0.001$) and indirectly via up-to-date expertise ($\beta = 0.16, p < 0.001$).

We also found that a few of the tested employer's investments only impacted directly, and not indirectly, on the outcome variables, and that these direct effects were not always uniform across the outcome variables. For example, tailor-made arrangements significantly affected job performance and the 'WLB satisfaction' well-being variable ($\beta = 0.18, p < 0.01$ and $\beta = 0.23, p < 0.001$ respectively), but were not significantly related to the 'psychological strain' and 'vigor' well-being variables. Another example of this differential effect is that supportive HR practices had a direct positive impact on all the well-being variables (β values between 0.07 and 0.11, $p < 0.05$), but impacted negatively on job performance ($\beta = -0.16, p < 0.001$). Further, supervisor support of employee development negatively affected WLB satisfaction ($\beta = -0.22, p < 0.001$) but was unrelated to the other outcome variables.

Finally, several control variables had significant effects. For example, organizational tenure was negatively related to up-to-date expertise, to willingness to change, and to job performance ($\beta = -0.13, p < 0.01, \beta = -0.18, p < 0.001$, and $\beta = -0.02, p < 0.05$ respectively). The dummy variable representing the different hospitals had no significant effects, indicating that there were no hospital-specific factors at play.

Taken together, the control variables, the job characteristics, and managerial support explained 36 percent of the variance in up-to-date expertise and 23 percent in willingness to change. Similarly, 26, 25, and 17 percent respectively of the variance in the three well-being variables (psychological strain, vigor, WLB satisfaction) was explained, and 21 percent of the variance in job performance.

6.5 Discussion and Conclusions

The purpose of this study was to examine whether and to what extent workers' employability mediates the relationships between various job characteristics and managerial support variables (together labelled as employer's investments) on the one hand, and employees' well-being and job performance on the other. Our results lead to the conclusion that only the employability component of up-to-date expertise mediates the relationships between employer's investments and both outcome variables. Second, in addition to these indirect effects, various employer's investments also impacted directly on well-being and job performance, generally positively, but sometimes also in a negative direction. These main conclusions are further discussed below.

First, we should emphasize that although the employability component of up-to-date expertise played an important mediating role, the results show that employability is not the only link between employer's investments and workers' well-being and job performance. The direct paths from the investments to the outcomes indicate that, as hypothesized, there are other mechanisms in play. In addition, and contrary to what we had hypothesized, the employability component of willingness to change was not significantly related to the outcomes and so did not function as a mediator. Nevertheless, it may be that willingness to change does begin to affect job performance at a later stage, perhaps when a job change is made for example. It could also have a similar delayed effect on well-being. That is, employees could

start to feel better within themselves when they start a new job, as they experience reaping the benefits from their openness to change. On the other hand, up-to-date expertise is instantly beneficial for performing the current job, and for feeling able to handle the current work situation (therefore leading to better well-being).

Second, the findings show that although employer's investments have predominantly positive (both direct and indirect) effects on both job performance and well-being, a few negative effects and one tradeoff effect were present. In the case of the latter, supportive HR practices were found to be *negatively* related to job performance and as having a *positive* relationship with well-being. This can be associated with the conflicting outcomes perspective in HRM research, which argues that HR practices that maximize well-being do not necessarily stimulate performance (Peccei, 2004 in: van de Voorde et al., 2012). It could be that the HR practices in our study primarily address the stress experienced by workers because of high work demands rather than being designed to create a reasonable level of challenges or cognitive demands to stimulate creativity and productivity (see also Parker et al., 2001).

We also found that supervisor support of employee development was not significantly related to job performance, but did impact negatively on the 'work-life balance satisfaction' well-being variable. It could be that employees who experience a high level of development support from their supervisor feel pressured to behave accordingly. This could lead to them spending more time on their professional lives, creating a perceived work-life imbalance. Elsewhere, research has shown that developmental activities such as accepting new job tasks and switching jobs can lead to a perceived work-life imbalance (Hobson et al., 2001).

Theoretical implications

This study makes two important contributions to the literature. First, this study is one of the first to show that employability – specifically up-to-date expertise – is a linking mechanism between, on the one hand, job characteristics and managerial support and, on the other, employee well-being and job performance. The partial mediation that was found indicates that, in general, employer's investments result in better job performance and enhanced well-being, but that these effects are not solely a consequence of an increase in workers' employability.

Second, this research demonstrates that, in most cases, both employees and employers benefit from an employer's investments in workers' employability. More specifically, investments in job autonomy, task variety, tailor-made arrangements, and supervisor support of employees' functioning/well-being positively affect both workers' well-being and job performance (partially mediated by up-to-date expertise). Additionally, we were able to show one investment where there was a tradeoff with both winners and losers. Investing in supportive HR practices benefits employees' well-being but at the cost to the employer of a reduction in job performance. Together, these results emphasize the importance of taking a balanced approach when studying the effects of employers investing in workers' employability, and hence the need to include outcomes that are relevant from both the employee and the management perspectives (Boselie et al., 2009).

Limitations and future research directions

This study has two major limitations. First, because this is a cross-sectional study using single source data, we were unable to establish conclusive causal relationships. Although we have

solid theoretical grounds for assuming that job characteristics and managerial support influence employees' employability, and consequentially their well-being and job performance, it is plausible that reciprocal relationships exist. For example, a high level of job performance could stimulate employees to improve themselves further, thereby increasing their employability. Longitudinal research, ideally using multiple raters such as supervisors as well as workers to assess workers' employability and their job performance, would resolve this uncertainty. In addition, our findings could be strengthened by using archival organizational data to assess the effect of individual job performance on unit- or organization-level performance. This would also provide greater insight into the economic returns on employer investments.

Second, one should be cautious in generalizing this study's results beyond the context of our study (the Dutch hospital sector). For example, the relationships between employability and its antecedents and outcomes could be affected by the amount of turbulence in the environment. Hospital environments are currently characterized as highly turbulent, and research in a more stable environment might well result in different findings (see also suggestions made by Kirves et al., 2014). Further employability research that compares different organizational settings that vary in the degree of turbulence, would be valuable.

Practical implications

In general, this study shows that it pays employers to invest in employability-enhancing opportunities. More specifically, employers can increase their workers' up-to-date expertise, and consequentially their well-being and job performance, by empowering their employees with a job that offers sufficient task variety and job autonomy. These effects are further boosted when employers ensure that their workers have supportive direct supervisors who show concern for their employees' well-being and help them with their functioning. Ultimately, both employees and employers benefit from such investments. In contrast, the observed tradeoff effect of supportive HR practices suggests that only employees benefit from this investment, as their well-being increases. We would however recommend employers to provide their workforce with supportive HR practices, for it could be argued that it is a societal responsibility of employers to ensure a certain degree of employee welfare.

In addition, our findings provide insights into how employers could stimulate their workers' willingness to change, such as by providing them with a supervisor that helps them with their personal development. This is relevant for organizations because employees who are highly motivated to change are likely to be valuable assets (even though willingness to change was not a significant linking mechanism between the investments and the outcomes). For example, when organizations, as is increasingly the case, have to adapt to a changing environment to survive, it is essential that the workforce is also willing to adapt to changing work. Other research has shown that employable workers are more strongly committed to their current organization (De Cuyper and De Witte, 2011), and do not report stronger intentions to leave their current employer than less employable employees (Dries et al., 2014). This suggests that there are other beneficial outcomes of investing in willingness to change than those examined in the present study.

7



**EMPLOYERS'
EMPLOYABILITY
INVESTMENTS
AND WORKERS'
EMPLOYMENT
OPPORTUNITIES:
AGE AS A
MODERATOR**

Abstract

This paper examines the moderating effect of age on the relationships between employers' investments (through providing a resourceful job and adequate managerial support), workers' employability (i.e. up-to-date expertise and willingness to change), and workers' employment opportunities. A survey of 1,785 employees in three Dutch hospitals provides support for our hypothesis that most employers' investments are significantly related to workers' employment opportunities, either directly or indirectly through workers' employability. Workers' age plays an important moderating role in these relationships, with some age effects being positive and others negative. Interestingly, the relationships often only become significant from a certain age onwards (e.g. 45 years). This study shows that employers can boost their workers' employability and employment opportunities, but not in the same ways for employees of different ages. The insights that this paper offers in the impact of age on the relationships between employers' employability investments and workers' employment opportunities are valuable for organizations that are increasingly dealing with aging workforces. This is one of the first employability studies to have tested the moderating age effect, providing a nuanced insight into when, how, and why age matters. The theoretical value of this paper lies in the extension of employability theories and their combination with stereotyping and lifespan theories.

This chapter is based on:

Van Harten, J., Knies, E., and Leisink, P. (2015). Employers' investments in workers' employability and employment opportunities: age as a moderator. *Academy of Management Proceedings*, 2015 (1), 12114.

7.1 Introduction

Workers' employability is, in theory and practice, portrayed as a valuable asset for organizations experiencing turbulent environments that cause changes in and around jobs. This implies that it is beneficial for employers to invest in their workers' employability (Baruch, 2001; Forrier and Sels, 2003; Solberg and Dysvik, 2015). Previous research has indeed revealed positive relationships between employers' investments (i.e. through providing resourceful jobs and managerial support) and workers' employability (De Vos et al., 2011; Van Emmerik et al., 2012), defining employability sometimes as up-to-date expertise and/or willingness to change (Fugate and Kinicki, 2008; Van der Heijde and Van der Heijden, 2006), and sometimes as individuals' beliefs regarding their employment opportunities (Van den Broeck et al., 2014). In a prior study, we found that workers' up-to-date expertise and willingness to change (together labelled as employability) have a positive impact on their employment opportunities (see also: Forrier et al., 2015; Wittekind et al., 2010), and that the effect of employer's investments on workers' employment opportunities is mediated through employability (Chapter 5). Yet, it remains unknown whether and how workers' age impacts on these relationships, which is a relevant issue to examine given that many organizations increasingly have aging workforces.

The hypothesis that age may play a moderating role in the mediated relationship between employers' investments in workers' employability and their employment opportunities can be derived from age-related stereotyping theories (Posthuma and Campion, 2009) and lifespan theories (Carstensen, 1995; Kooij et al., 2013). More specifically, the moderating age effect might be expected because these theories explain that older workers are likely to make less use of employers' investments and benefit less from high levels of employability than their younger counterparts. However, the empirical validity of this theoretical claim has never been studied because the majority of employability studies includes age as a control variable only (De Vos et al., 2011; Wittekind et al., 2010). Very few scholars have examined whether the relationships between employability and its antecedents and effects indeed vary with age (notable exceptions suggesting that age matters, are: Froehlich et al., 2014; Van der Heijden et al., 2009).

Therefore, the aim of this paper is to examine the moderating role of age in the relationships linking employers' investments, workers' employability, and their employment opportunities, using employee survey data from three Dutch hospitals. The hospital sector is highly relevant for employability research (Armstrong-Stassen and Stassen, 2013) as it faces environmental pressures such as the introduction of market mechanisms and technological innovations (Townsend and Wilkinson, 2010) that increase the need for employable workers.

We contribute to the literature by providing a more comprehensive understanding of the general and conditional relationships between employability, its antecedents, and its outcomes using insights from stereotyping and lifespan theories. In doing so, we theoretically explain why age might play a moderating role. Further, by testing a moderated model we investigate *whether* and *how* the relationships between employers' investments, workers' employability, and their employment opportunities change with age.

7.2 Theoretical framework

Below we define our main concepts, their relationships, and the moderating effect of age.

7.2.1 Employability and employment opportunities

Following several authors (e.g. Fugate and Kinicki, 2008; Nauta et al., 2009), we believe that workers' employability not only involves their up-to-date capabilities to perform a variety of jobs, but also their willingness or openness towards changes. Therefore, we define employability as the extent to which an employee is able (conceptualized as up-to-date expertise) and willing (conceptualized as willingness to change) to perform productive work. Since jobs are constantly changing as a result of ongoing transformations in and around organizations (Van Emmerik et al., 2012), we use the term 'productive work' to refer to adequately performing one's current job or, in the event of changes, other tasks or jobs. This links to Rothwell and Arnold's (2007) employability notion of keeping the job one has, or getting the job one desires.

More specifically, the component up-to-date expertise is conceptualized using three dimensions (Thijssen and Walter, 2006): the extent to which employees are physically and psychologically able to keep pace with the job; the extent to which employees' knowledge and skills are up-to-date given technological innovations; and the extent to which employees' ideas about their work are in line with relevant occupational developments. Willingness to change refers to employees' attitudes and openness towards developing themselves and adapting to work changes (van Dam, 2004).

By including both components, we follow Thijssen et al.'s (2008) understanding of employability and connect to those researchers who regard employability as individuals' capabilities (e.g. Van der Heijde and Van der Heijden, 2006). More precisely, we focus on individuals' own perceptions of their employability, following the argument that workers are likely to act upon their employability perceptions rather than upon any objective reality indicators (Van Emmerik et al., 2012).

We define workers' beliefs on employment opportunities as their expectations of getting another job (in their current or another organization), and of continuing to perform in their current job. Individuals' employment opportunities are considered to strongly depend on their expertise and willingness to change (also called: 'movement capital') (Forrier et al., 2015; Fugate and Kinicki, 2008). For instance, it is likely that employees who are highly motivated to adapt to changes, positively rate their chance to get a job that requires new skills. As such, they will experience a broader spectrum of employment opportunities than employees who are not open to change (Wittekind et al., 2010). Yet, there is little empirical research that studies these relationships (exceptions: Forrier et al., 2015; Wittekind et al., 2010; Chapter 5). We therefore hypothesize the following:

H1: There is a positive relationship between workers' employability and their employment opportunities.

7.2.2 Employers' investments in workers' employability and employment opportunities

We define employers' investments in workers' employability as the provision of resourceful jobs and adequate managerial support, which can be seen as concrete manifestations of the

responsibility of employers to invest in their employees' employability called for by Pearce and Randel (2004), and Van der Heijde and Van der Heijden (2006). We use job characteristics and social exchange theories to explain how we conceptualize employers' investments and to clarify the mechanisms underlying the mediated relationship between employers' investments, workers' employability, and employment opportunities (H2).

A simultaneous use of job characteristics and social exchange theories to predict employability is scarce. In their study of HRM practices' effects on employees' behaviors, Snape and Redman (2010) argue for such a combination of theories. They state that HRM practices are not only significant as currency in a social exchange relationship, but also for their role in boosting employees' sense of job influence which may, in turn, motivate them to engage in behaviors such as meeting the demands of the modern workplace. We follow Snape and Redman's argument by including both resourceful jobs – linked to the job characteristics theory – and managerial support – linked to social exchange theory – in our conceptualization of employers' investments. Through this combination we contribute to a fuller understanding of the antecedents of employability as prior studies have examined how employability is affected by either job characteristics or managerial support variables (e.g. De Vos et al., 2011; Van Emmerik et al., 2012).

Resourceful job

We presume that job autonomy and task variety are two job characteristics that incentivize employees to use and develop their employability, leading to better future job chances, as these job characteristics provide employees with opportunities to practice and expand their competences (Hackman and Oldham, 1975; Van der Heijden et al., 2009). Employability can only be sustained if employees are provided with relevant experiences and are able to acquire new expertise in their job (De Vos et al., 2011; Forrier and Sels, 2003). Also, prior research shows that employees in resourceful jobs develop high intrinsic motivation for learning and personal growth (De Lange et al., 2010). By providing employees with sufficient autonomy, they feel free to experiment with, for example, work scheduling procedures leading to new expertise (De Lange et al., 2010; Hackman and Oldham, 1976). Further, employees are likely stimulated to update their expertise and to use their motivation to change if offered a variety of tasks requiring them to use different skills and abilities (Hackman and Oldham, 1976).

Van Emmerik et al. (2012) show positive effects of job autonomy and task variety on employability. We regard these two characteristics as indispensable for developing one's employability, which is in line with Snape and Redman's (2010) focus on job influence, and with studies of job enrichment in which task variety together with autonomy is often central (e.g. Parker and Wall, 1998). We did not include other job characteristics, such as task significance (Hackman and Oldham, 1976), as they are somewhat distal antecedents of employability and more closely related to general work motivation.

Managerial support

Based on the work by Knies and Leisink (2014), we conceptualize managerial support as (1) the implementation of supportive HRM, and (2) supervisor support. Following studies that use social exchange and human capital theories to explain the positive effects of managerial support (Jiang et al., 2012; Solberg and Dysvik, 2015), we expect a positive impact on workers' employability, ultimately leading to increased employment opportunities.

First, through its HR policies, an organization can show that employees are valued and supported, which is likely to lead to desirable responses. For example, by providing development opportunities in combination with flexible job arrangements, an organization shows that it is willing to invest in employees and cares about their well-being. This will lead to increased human capital (Snape and Redman, 2010) and employability (Solberg and Dysvik, 2015). We thus assume that supportive HR practices will provide an incentive for employees to continuously update their expertise and increase their willingness to develop themselves in order to perform according to job requirements. Following Guest (2007 in: Knies and Leisink, 2014), we distinguish between general and tailor-made HR practices.

Second, managerial support can be shown through supervisor support of employees' well-being/functioning and development (Knies and Leisink, 2011 and 2014). With appropriate feedback and communication, a supervisor can make employees feel satisfied and have confidence in their own capabilities (Van der Heijden, 2003). It is then likely that they will assess their employability more favorably. Moreover, the active encouragement of further development might stimulate an employee to act accordingly, boosting their willingness to change. This is underpinned by research showing an effect of supervisor support on employability (e.g. Van Dam, 2004; Wittekind et al., 2010).

Therefore, we expect the relationship between the employers' investments and workers' employment opportunities to be partially mediated by workers' employability. We do not expect full mediation as it is highly likely that, apart from employability, other variables explain the relationship as well (e.g. person-job fit). This leads to the following hypothesis:

H2: There is a positive relationship between employers' investments and workers' employment opportunities that is partially mediated by workers' employability.

7.2.3 Aging in the workplace

Following Bal et al. (2008) and Kooij et al. (2013), chronological age can be seen as a proxy indicator for possible changes in an individual's health, abilities, motives, and goals. Differences between younger and older workers regarding these aspects seem to be caused by age-related processes (De Lange et al., 2010; Kanfer and Ackerman, 2004). Moreover, it is increasingly acknowledged that the differences between individuals increase with age (Bal and Jansen, 2015). As such, it seems an over-simplification to split employees into just two groups of young and old employees. Therefore, instead of dividing workers into two categories, we create multiple age groups as further discussed in the Method section.

We expect age to play a moderating role in the mediated relationship between employers' investments in workers' employability and workers' employment opportunities. This assumption is based on the Selection Optimization Compensation theory (Baltes et al., 1999), Socio-Emotional Selectivity theory (Carstensen, 1995), and theories on age-related stereotyping (Posthuma and Campion, 2009). Prior studies that examined the moderating role of age in the relationships of job characteristics and managerial support variables with employee attitudes and behaviors, also grounded their hypotheses on these theories. Their results show that these theories are valuable sources to understand the moderating role of age (Drabe et al., 2015; Innocenti et al., 2013; Kooij et al., 2013). We therefore follow the theories when hypothesizing the moderating effect of age in our model of employers' investments in workers'

employability and employment opportunities. In this way, we add new insights to the employability literature in which the role of age is under-studied.

Employers' investments and employability: moderation of age

Lifespan theories suggest that employees' needs and motives change with age (e.g. Baltes et al., 1999). For instance, because of losses such as deteriorating physical abilities, older individuals will allocate fewer resources to growth (e.g. updating or developing oneself) and more resources to maintenance and regulation of loss (Kooij et al., 2013). Accordingly, Innocenti et al. (2013) and Kooij et al. (2013) show that the relationships between HRM and employee outcomes change with age. We therefore expect that employees' need for their employer to invest in their employability will decrease with age. Given their changing motivational structures (Kanfer and Ackerman, 2004), the provision of resourceful jobs and managerial support to elicit ongoing learning – which will in turn result in enhanced employability – is likely to be less effective with workers at an older age, because they will *utilize* these opportunities less than workers at a younger age.

Another reason why employers' investments may have less effect on workers' employability as they get older is that employees could internalize negative age-related stereotypes that are prevalent in their work environment (Van der Heijden et al., 2009). Such stereotyping includes the belief that older employees are less flexible, less adaptable, and less able to learn (Posthuma and Campion, 2009), and that the short period in which to recoup investments in older workers makes them not worthwhile (Armstrong-Stassen and Templer, 2005; Fleischmann et al., 2015). In our study, if workers at an older age adopt these stereotypes, they are less likely to use employer's investments designed to boost their employability. So, even if opportunities are offered to older workers, they will likely utilize these to a lesser extent than workers at a younger age. This leads to the following hypothesis:

H3: The positive relationship between employers' investments and workers' employability is moderated by a worker's age, being weaker at an older age than a younger age.

Employability and employment opportunities: moderation of age

Lifespan theories offer the insight that employees' needs change with age. This also leads to hypothesizing a moderating effect of age in the relationship between workers' employability and their employment opportunities. Since developmental needs, such as getting a promotion or a making a career change, tend to decrease with age (Kooij et al., 2013), we would expect the relationship between workers' employability and their employment opportunities to be less strong for employees at an older age compared to workers with a younger age. The reasoning of Kooij et al. (2013) seems especially relevant in case of *external* employment opportunities (beliefs regarding promotion for example). However, particularly in a changing job environment, it could be argued that employees need to constantly develop themselves to continue to perform in their *current* jobs (which is part of our employment opportunities construct). We therefore expect to find a negative moderation effect of age on the relationship between workers' employability and their overall employment opportunities.

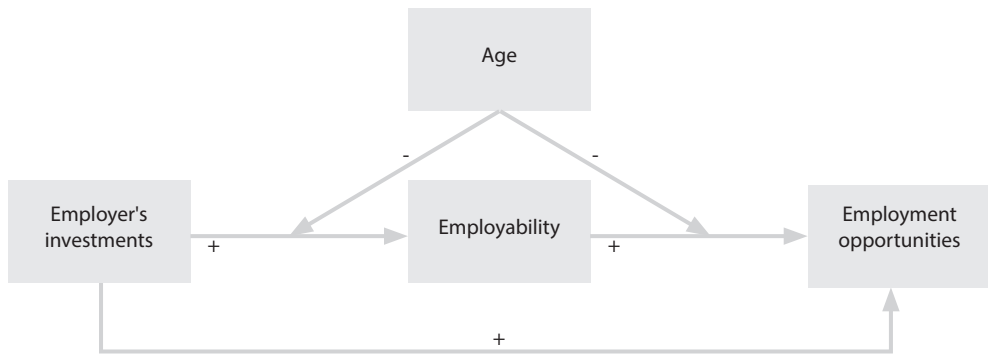
Additionally, because of a shorter time horizon of older workers' remaining career, employers may believe that older workers have fewer employment opportunities because the period of productivity in a new job will be too short. If older employees perceive their em-

ployer as holding this stereotype, they are susceptible to also believing it (Van der Heijden et al., 2009) and to regarding their employability as less of an asset in their remaining careers. Hence, we expect the following:

H4: The positive relationship between workers' employability and their employment opportunities is moderated by their age, being weaker at an older age than a younger age.

The following model displays our hypotheses:

Figure 7.1 Research model



7.3 Method

7.3.1 Sample and procedure

Online survey data were collected from employees of three Dutch non-academic hospitals. The hospitals provide similar facilities and are based in different parts of the Netherlands. The hospitals selected a variety of similar nursing and non-nursing departments (e.g. medical laboratories) based on guidelines we provided. Doctors are self-employed professionals, and were therefore not included in this study. In total, 3,970 potential participants were identified and these received an invitation to participate in our study. We stressed the confidentiality of responses and guaranteed anonymity in order to boost the response rate and to limit the risk of a social desirability bias.

After removing responses with missing data, our final sample amounted to 1,785 respondents (a response rate of 45 percent). Of these, nursing staff made up 39 percent, 25 percent were clerical staff, 24 percent were non-nursing medical employees (e.g. X-ray technicians, surgical technologists), and 12 percent were managers or employees in management support jobs. Of our sample, 89 percent were female and 11 percent male. The mean age was 43.11 years ($SD=10.5$), mean job tenure was 10.52 years ($SD=9.3$), and mean organizational tenure was 12.82 years ($SD=10.1$). The sample is fairly representative of Dutch non-academic hospital employees in terms of age and gender (AZW, 2014).

7.3.2 Measures

This study's variables are based on employees' perceptions and measured using five-point Likert scales (1: very negative, 5: very positive). Multi-item measures were used for all variables. To assess the reliability, we calculated Cronbach's alphas (CA) with an acceptance level of 0.70 (Nunnally, 1978).

Independent variables (IVs): employer's investments

Job autonomy. This was measured using a three-item scale based on Hackman and Oldham (1975). A sample item is "my job provides me the opportunity to decide on my own how I do my work". After deleting one item (as this considerably increased the reliability), CA for this variable was .82.

Task variety. A three-item scale was used to measure task variety based on Hackman and Oldham (1975), including the item "I have a substantial amount of task variety in my job". After deleting one item (as this considerably increased the reliability), the CA for this variable was .64. Although this was slightly below the threshold of .70, we retained this scale as it has been used extensively in other studies (e.g. Van Veldhoven et al., 2005).

Supportive HR practices. Based upon Knies and Leisink (2014), we used a six-item scale to measure this variable. An example item is "I experience the HR training and development practice in my department as being implemented to support me in my job". CA for the scale was .86.

Tailor-made arrangements. We used the two-item scale of Knies and Leisink (2014) to measure this variable. An example item is "My supervisor tailors employment conditions to my personal situation". CA for the scale was .78.

Supervisor support of employees' well-being and functioning. This variable was measured using the four-item scale of Knies and Leisink (2014). A sample item being "My supervisor shows an interest in how I do my job". CA for the scale was .91.

Supervisor support of employees' development. This was measured using the four-item scale of Knies and Leisink (2014) with an example item being "My supervisor informs me about opportunities for training and development". CA for the scale was .87.

Mediators: employability variables

Up-to-date expertise. For this variable, we used a nine-item scale based on Thijssen and Walter (2006). Respondents were asked to indicate to what extent they perceive their expertise to be up-to-date on three dimensions: technical, economic, and perceptual expertise. Each dimension was measured using three items. An example item is "As a result of technological developments, much of my knowledge and skills have become redundant". CA for this scale was .78.

Willingness to change. This variable was measured using a four-item scale based on Wittekind et al. (2010) and Van Dam (2004). An example item is "If the hospital offered me a possibility to obtain new work experiences, I would take it". CA for the scale was .72.

Dependent variable (DV): employment opportunities

This variable was measured by a six-item scale based on De Cuyper and De Witte (2011) and Wittekind et al. (2010), but extended with a defined time horizon and with two items related to expectations of continuing in the current job. Respondents were asked to indicate their

employment expectations for the next year on three dimensions: vertical job mobility within the current organization, getting a job elsewhere, and continuing in their current job. Each dimension was measured using two items, an example being “In the next year, I expect my chances of an equivalent job in another organization to be high”. CA for the scale was .76.

Moderator: age

Studies differ in their age categorizations: some dichotomize age and use 40 or 45 years as the boundary age (e.g. Van der Heijden et al., 2009), while others use three groups (≤ 30 , 31-44, ≥ 45) (De Lange et al., 2010). As the meaning of the term ‘older worker’ is contested (De Lange et al., 2010; Ng and Feldman, 2009), we opted for multiple age groups so that we could detect whether there were differences within the broad category of older workers. We asked respondents their year of birth, and subtracted this from the year of data collection to calculate their chronological age. We defined four age groups: (1) ≤ 34 years, (2) 35-44 years, (3) 45-54 years, and (4) ≥ 55 years. Our classification is in line with age categorizations used by the central bureau of statistics (CBS) in the Netherlands to classify the working population in the hospital sector, and by a Dutch research consortium that monitors the national healthcare labor market (AZW, 2014).

We included gender, educational level, and hospital as control variables.

7.3.3 Analyses²⁷

First, ANOVAs were used to determine whether there were significant differences between the four age groups’ mean scores on this study’s variables. Second, we applied Structural Equation Modelling (SEM) using Mplus, in which we tested the relationships in the partially mediated model that is reflected in our first two hypotheses. Third, we applied multiple-group SEM using Wald’s test of parameter constraints to examine whether the proposed relationships in the model differed significantly between the four age groups (as a function of age; H3 and H4). We followed SEM guidelines for testing indirect relationships and multiple-group SEM as provided by Muthén and Muthén (2012). We used the root-mean-square error of approximation (RMSEA), the comparative fit index (CFI), and the Tucker-Lewis index (TLI) to assess the models’ goodness of fit. Values above 0.90 for CFI and TLI and below 0.08 for RMSEA are indicative of an acceptable fit (Hu and Bentler, 1999).

Multiple-group analysis has the advantage that all relationships can be tested simultaneously for the four age groups, and that results are easy to interpret. Dividing the total sample into smaller subgroups risks losing statistical power (Edwards and Lambert, 2007), but we considered our sample to be large enough to make four age groups ($N \geq 235$ respondents for all groups) and having multiple age categories reflects common Dutch practice (AZW, 2014).

²⁷We calculated a mean score for all variables measured with multiple items on a five-point Likert scale, and used this single mean in further analyses. For variables with multiple dimensions, we first calculated the mean scores for the separate dimensions, and then used these to calculate the mean score for the overall variable.

7.4 Results

We start this section with describing the age groups' mean scores on this study's variables (ANOVAs), followed by a test of the structural model testing H1 and H2. We then test the moderating role of age in this model by using multiple-group SEM (H3 and H4).

7.4.1 ANOVAs

The ANOVA results in Table 7.1 show that employees under 35 years have the highest mean score on the DV 'employment opportunities' (3.13) and that this score decreases to 2.22 for the ≥ 55 employees. These group differences are significant ($p < 0.05$). Further, the mean scores for the 'up-to-date expertise' and 'willingness to change' employability components decrease significantly with age ($p < 0.05$). Additional results for group mean differences on the IVs can be found in Table 7.1. In most cases, the SDs are larger for the oldest age groups, indicating that the variances are larger for older employees. The correlations between all variables are presented in Table 7.2 (next page).

Table 7.1 ANOVA results

	Total sample M (SD)	Groups 1 (≤ 34) M (SD)	2 (35-44) M (SD)	3(45-54) M (SD)	4 (≥ 55) M (SD)
<i>Variables</i>					
1. Job autonomy	3.48 (.85)	3.39 (.78) ⁴	3.50 (.83)	3.49 (.89)	3.56 (.89) ¹
2. Task variety ^b	3.55 (.84)	3.51 (.82)	3.54 (.83)	3.60 (.85)	3.51 (.87)
3. Supportive HR practices	3.07 (.71)	3.14 (.71) ⁴	3.14 (.70) ³⁴	3.02 (.71) ²	2.95 (.69) ¹²
4. Tailor-made arrangements	3.32 (.97)	3.38 (.90) ⁴	3.44 (.94) ³⁴	3.28 (.97) ²	3.12 (.99) ¹²
5. Supervisor support W ^{a,b}	3.62 (.91)	3.63 (.87)	3.65 (.92)	3.62 (.92)	3.56 (.92)
6. Supervisor support D ^a	3.16 (.91)	3.26 (.95) ⁴	3.22 (.90) ⁴	3.12 (.90)	3.00 (.87) ¹²
7. Up-to-date expertise	3.85 (.59)	3.91 (.53) ³⁴	3.93 (.58) ³⁴	3.80 (.61)	3.69 (.66) ¹²³
8. Willingness to change	3.24 (.78)	3.46 (.67) ²³⁴	3.32 (.75) ¹³⁴	3.18 (.79) ¹²⁴	2.92 (.84) ¹²³
9. Employment opportunities	2.76 (.74)	3.13 (.66) ²³⁴	2.91 (.67) ¹³⁴	2.62 (.66) ¹²⁴	2.22 (.75) ¹²³

Notes: Total N=1785; N group 1=407; 2=456; 3=592; 4=259.

^a W= supervisor support of employees' well-being/functioning; D= supervisor support of employees' development.

^b non-significant ANOVA.

¹²³⁴ a suffix indicates that the Bonferroni Post Hoc tests show a significant difference of the group mean with that of another group ($p < 0.05$).

Table 7.2 Correlation matrix

Variables	1	2	3	4	5	6	7	8	9
1. Job autonomy	1.00								
2. Task variety	.33**	1.00							
3. Supportive HR practices	.20**	.23**	1.00						
4. Tailor-made arrangements	.20**	.15**	.55**	1.00					
5. Supervisor support W ^a	.20**	.19**	.56**	.67**	1.00				
6. Supervisor support D ^a	.18**	.21**	.62**	.67**	.67**	1.00			
7. Up-to-date expertise	.26**	.32**	.27**	.22**	.28**	.25**	1.00		
8. Willingness to change	.01	-.13**	-.02	-.03	-.04	.01	.07*	1.00	
9. Employment opportunities	.09*	.06*	.19**	.14**	.12**	.20**	.21**	.38**	1.00

Notes: ^aW= supervisor support of employees' well-being/functioning; D = supervisor support of employees' development.

* $p \leq 0.01$ ** $p \leq 0.001$

7.4.2 SEM

A partially mediated model to test H1 and H2 resulted in a good fit ($\chi^2 = 27.39$ df = 9, $p < 0.001$, CFI = 0.98, TLI = 0.95, RMSEA = 0.04). We compared this model with a model in which employability fully mediates the relationships, a chi-square difference test shows that the partially mediated model better fits the data, supporting our assumption ($\Delta \chi^2 (3) = 50.3$, $p < 0.001$).

Table 7.3 (next page) shows that 'up-to-date expertise' and 'willingness to change' had significant positive effects on employment opportunities ($\beta = 0.09$, $p < 0.001$ and $\beta = 0.30$, $p < 0.001$ respectively), thereby supporting H1. We also found significant positive relationships between employers' investments and the two employability components, although there were also a few significant negative effects, which is contrary to what we hypothesized. For example, task variety had a significant positive effect on expertise ($\beta = 0.23$, $p < 0.001$), but a negative effect on willingness to change ($\beta = -0.16$, $p < 0.001$), leading to only partial support for our hypothesis. We found direct and indirect paths between the IVs and the DV (see Table 7.3), providing support for H2. Finally, we included age as a control variable and found that age had significant direct effects on all our mediating and dependent variables (e.g. $\beta = -0.32$, $p < 0.001$ for the DV), indicating that age indeed plays a significant role, justifying further examination of the role of age and not merely using it as a control variable.

7.4.3 Multiple-group SEM²⁸

To test the moderating effects of age (H3-H4), we ran the partially mediated model for the four age groups. The model fit was good ($\chi^2 = 55.08$ df = 32, $p < 0.01$, CFI = 0.97, TLI = 0.90, RM-

²⁸In addition to the analyses to test the moderation effects of age hypothesized in H3 and H4, we examined the moderation of age on the indirect relationships (moderated mediation) and the direct relationships of the IVs on the DV. This is in line with recent suggestions (Preacher et al., 2007). The Wald's tests indicate that none of the effects differ significantly, implying that age does not moderate these relationships.

Table 7.3 Partially mediated model (age as control variable)

	1.Up-to-date expertise	2.Willingness to change	Employment opportunities	
			Indirect effect ^b	Direct effect
<i>IVs:</i>				
Job autonomy	.13 (.02)***	.06 (.03)*	1: .01 (.01)*** 2: .02 (.01)*	.05 (.02)*
Task variety	.23 (.02)***	-.16 (.03)***	1: .02 (.01)*** 2: -.05 (.01)***	--
Supportive HR practices	.11 (.03)**	--	1: .01 (.01)** 2: --	.09 (.03)**
Tailor-made arrangements	--	-.07 (.03)*	--	---
Supervisor support W ^a	.15 (.03)***	--	1: .02 (.01)*** 2: --	--
Supervisor support D ^a	--	--	--	.11 (.03)***
<i>Mediator variables:</i>				
Up-to-date expertise				.09 (.02)***
Willingness to change				.30 (.02)***
<i>Control variables^c:</i>				
Age	-.14 (.02)***	-.25 (.02)***	1: -.07 (.01)*** 2: -.01 (.01)***	-.32 (.02)***
Hospital B (reference category: hospital A)	--	.06 (.03)*	1: -- 2: .02 (.01)*	-.05 (.02)*
Hospital C (reference category: hospital A)	-.07 (.02)**	--	1: -.01 (.01)* 2: --	-.08 (.02)***
R ²	.22	.09		.32

Notes: Standardized coefficients are shown. *p ≤ .05, **p ≤ .01, ***p ≤ .001.

-- = not included in final model because of non-significant effects.

^aW= supervisor support of employees' well-being/functioning; D= supervisor support of employees' development.

^b1 = indirect effect mediated by up-to-date expertise; 2 = indirect effect mediated by willingness to change.

^cAll the gender and educational level control variable effects (all dummy variables) were non-significant and have been excluded to enhance readability of the table.

SEA = 0.04). As shown in Figure 7.2 (see page 136), most of the effect sizes of the regression coefficients differ between the four age groups. However, only a few of the coefficients' differences are significant according to the Wald's test. Significant differences indicate that age plays a moderating role. Below we concentrate on our main findings of the multiple-group SEM.

Regarding H3, the results of the Wald's tests show that the effects of *some* employers' investments on the employability components were moderated by age (providing partial support

for H3). However, most of the moderation effects were not in the direction hypothesized. For example, in terms of up-to-date expertise, workers ≥ 55 years benefited *more* from supportive HR practices ($\beta = 0.18, p < 0.01$) than those aged 35-44 ($\beta = 0.03, p > 0.05$), Wald test: $\chi^2 = 3.29 (1), p < 0.05$. Contrary to what was argued in H3, we found support for a *positive* moderating role of age, meaning that the HR practices have a stronger positive effect on up-to-date expertise for employees in older ages than on their younger counterparts. This was also true for the effect of supervisor support for employee development on willingness to change. This effect was strongest for employees ≥ 55 years ($\beta = 0.20, p < 0.05$), and significantly higher than for those ≤ 35 years ($\beta = -0.02, p > 0.05$), Wald test: $\chi^2 = 5.14 (1), p < 0.05$. We also found a significant *negative* moderating role of age: tailor-made arrangements negatively affected both the employability components for employees ≥ 55 years ($\beta = -0.29, p < 0.001$ and $\beta = -0.29, p < 0.001$), but had no significant effect in any of the three younger age groups. The Wald's test confirm these results indicating a negative moderating role of age.

These examples suggest that some employers' investments only have a significant effect on the employability components above a certain age, indicating a non-linear moderation effect. Further, the lack of significant differences between some regression coefficients indicate that certain employers' investments (e.g. in task variety) have significant effects on up-to-date expertise and willingness to change regardless of age, implying that age does not have a moderating effect.

Testing H4, we see that age does not significantly moderate the effect of the 'willingness to change' employability component on employment opportunities. Regarding the component 'up-to-date expertise', the effect on employment opportunities in the two youngest age groups (i.e. younger than 45 years) is close to zero and non-significant, but it increases to $\beta = 0.17$ ($p < 0.05$) and $\beta = 0.25$ ($p < 0.05$) for employees in age categories 3 (45-54 years) and 4 (≥ 55 years). Wald tests show that groups 3 and 4 differ significantly from the younger age groups. This indicates that age moderates the relationship and that the positive effect of up-to-date expertise is stronger for older employees than for their younger colleagues. This is in the opposite direction to what was expected in H4.

7.5 Conclusions and Discussion

The aim of this research was to examine the moderating effects of age on the relationships linking employers' investments in resourceful jobs and managerial support to hospital workers' employability (i.e. up-to-date expertise and willingness to change), and to their employment opportunities. In general terms, this study shows that such employers' investments contribute to workers' employment opportunities, either directly and/or indirectly through our employability conceptualization. We also conclude that workers' age matters and that this variable impacts on the relationships between employers' investments, workers' employability, and their employment opportunities in several ways. The relationships often only become significant at a certain age. We elaborate on this below.

First, our findings indicate that age moderates the relationships between several employers' investments and workers' employability, sometimes positively but also negatively. Further,

the relationships between the IVs and workers' employability often only become significant at 45 or 55 years, indicating that the moderating effect of age is not always gradual. Especially the managerial support variables have significant effects as of higher ages, suggesting that the employability of workers at older ages is more strongly affected by supervisors' support and HR policies than the employability of workers at younger ages.

For instance, the strongest *positive* effect of supportive HR practices was on the up-to-date expertise of the oldest group of workers (≥ 55 years), whereas tailor-made arrangements had a *negative* effect on both this group's up-to-date expertise and their willingness to change, but no effect on their younger colleagues' employability. That HR practices only positively impact on the up-to-date expertise of the oldest age group might be explained by the collective labor agreement in the Dutch hospital sector that exempts workers older than 58 years from having to work night shifts and offers them life stage specific budgets to update their expertise. In our view, it is plausible that the HR practices following from the collective agreement simultaneously decrease the room for tailor-made arrangements. Bal and Jansen (2015) argued that tailor-made arrangements are especially useful for older workers since they have more heterogeneous needs and therefore benefit from flexibility. If, in our situation, the collective agreement hampers making individual arrangements, this could explain the hindering rather than boosting effect of tailor-made arrangements on older workers' employability.

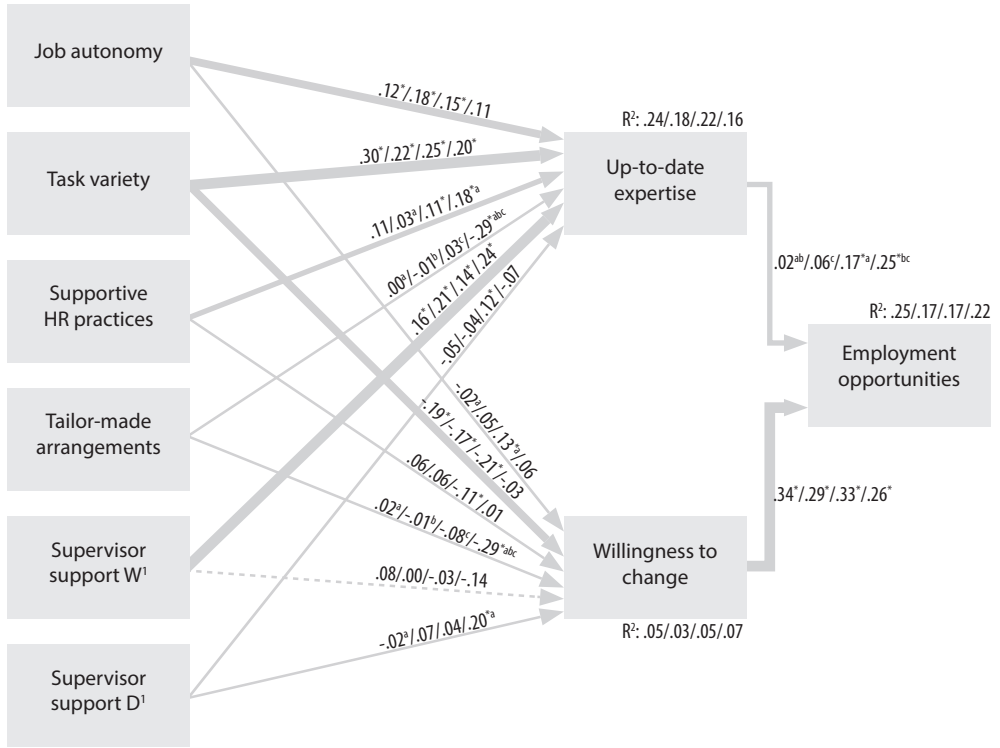
Second, we have found that age also affects the relationships between employability and employment opportunities. The findings show that up-to-date expertise becomes more beneficial for workers' employment opportunities as they grow older. This could be because aging workers are very aware that up-to-date expertise is crucial for boosting their employment opportunities, whereas younger workers may view their up-to-date expertise as self-evident. The relationship between willingness to change and employment opportunities is not dependent on age. Here, we did not find a moderating role of age, yet the results of the SEM analyses to test H1-H2 show that workers' age has a negative direct and indirect (through employability) effect on their employment opportunities, which again demonstrates that age matters.

Theoretical contributions

Our first important contribution lies in enriching the theory on employability by linking insights from lifespan and stereotype-based theories to general ideas on how employers can boost their workers' employability and employment opportunities. In this way, we were able to explain why certain effects of employers' investments on employability and employment opportunities are less for older employees. Second, this has been one of the first employability studies to empirically test the moderating effect of age. We have demonstrated that the role of age is more complicated than what was theoretically expected. Sometimes, workers' age plays no role at all and, when it does, both positive and negative moderating effects manifest themselves most frequently in the higher age categories (≥ 45 years). This could well be related to the institutional context (specifically the collective labor agreement) which reflects societal values in reaching out to older employees. Also, age is directly and indirectly related to workers' employability opportunities.

Overall, this paper has provided a rich nuanced insight into when, how, and why age matters when it comes to stimulating employees' employability and employment opportunities. Future studies should not automatically assume aging has negative effects, but rather consider the role played by the antecedents and outcomes of employability.

Figure 7.2 Results of multiple age-group SEM



Notes: Standardized coefficients are shown for the four age groups (≤ 34 ; 35-44; 45-54; ≥ 55 years).

* $p < 0.05$.

The thickness of the arrow represents the number of significant regression paths in the different groups; the thicker, the more significant paths. Dashed arrow = all paths are non-significant.

^{abc} two matching suffixes (a, b, c) indicate that the regression coefficients between two groups differ significantly from each other according to Wald's test.

¹W = supervisor support of employees' well-being/functioning; D = supervisor support of employees' development.

Control variables' effects are excluded to enhance readability.

Limitations and suggestions for further research

A first limitation is that using cross-sectional data means we cannot be certain of the causality in the observed relationships. Our causal assumptions are based on extensively tested theories such as the job characteristics model and social exchange theory. Nevertheless, reversed causality is possible, or there might be feedback loops from employability to employers' investments. Longitudinal research is needed to clarify such causal relationships.

Second, as with many studies, we used chronological age as a proxy for an extensive array of age-related processes (Kanfer and Ackerman, 2004). However, it could be that employees within a certain age group are more diverse in their abilities, needs, and motives than this assumes, and that age is not always a sufficient proxy for aging processes. We have provided insights into how age affects the relationships between employers' investments, workers' employability, and their employment opportunities. Future research could dig further into aging effects by measuring chronological age alongside related individual-level constructs, such as whether employees perceive themselves as older workers (Desmette and Gaillard, 2008; Kooij et al., 2008), whether age-related stereotypes are internalized, and what kind of work-related motives employees hold.

Third, our results cannot be simply generalized to other settings. It seems highly plausible that hospital-specific circumstances such as the type of work (night shifts, emotional involvement, etc.) and the presence of collective labor agreements shape the content of employers' investments and employability. Therefore, additional research in different organizations, sectors, and countries would be highly informative.

Practical implications

Our results suggest that employers can boost their workers' employability and employment opportunities in many ways, and that the effects of employer's investments can be both general (as with the effects of task variety) and age-dependent. For instance, in terms of increased employability, aging workers benefit more from supportive HR practices and supervisor developmental support than their younger counterparts do. Even though development motives generally decrease with age, older employees need developmental opportunities to combat obsolescence and prevent reduced performance (Kooij et al., 2013). Likewise, this study indicates that workers older than 45 need high levels of employability to increase their employment opportunities (i.e. to continue to perform their current job and to increase their chances to other jobs).

Hence, we would argue that organizations should invest in their workers' employability and employment opportunities, regardless of age. This fits with a personnel philosophy based on the idea of the conservation of human resources: that one invests in all employees, regardless of age, because they are all seen as renewable resources (Yeats et al., 2000). However, providing all workers with equal opportunities is not enough: this study shows that organizations also need to create a life-stage-friendly climate and endeavor to reduce the negative effects of stereotypical beliefs about older workers (see also: Fleischmann et al., 2015).

8



**EMPLOYABILITY IN A
HOSPITAL CONTEXT:
THE RELEVANCE OF
DIFFERENTIATING
BETWEEN
OCCUPATIONAL
GROUPS**

Abstract

This paper examines whether employees in various hospital job groups differ in their perceptions of their employer's investments (in providing them with resourceful jobs and managerial support), their employability (conceptualized as up-to-date expertise and willingness to change), and their employment opportunities. Following this, how the relationships between employer's investments, employability, and employment opportunities are moderated by job type is examined. This research focus is relevant given the scarcity of employability research that includes contingency variables such as job type, or addresses the specific features of a heterogeneous hospital workforce. A survey of Dutch hospital employees ($N = 1,764$) identifies several differences between the hospital job groups with regard to employer's investments, employability, and employment opportunities but no support was found for a moderating effect of job type. Based on these findings, a classification system is constructed that extends the employability literature by showing how a worker's employability and employment opportunities can be explained by the combination of a job's educational requirements and the degree of specialization.

This chapter is based on:

Van Harten, J. (2015). Employability in a hospital context: the relevance of differentiating between occupational groups. Paper presented at *Dutch HRM Network Conference*, Utrecht, the Netherlands, November 12-13, 2015.

Manuscript in Preparation for Submission

8.1 Introduction

It is fairly common to nowadays view employers as having responsibility for providing employees with opportunities to enhance their employability (Baruch, 2006; Grip et al., 2004; Veld et al., 2015). Especially when organizations are situated in dynamic environments, employability is argued to be highly valuable for both employees and employers (Thijssen et al., 2008; Forrier et al., 2015). A good example is the hospital sector in that it faces challenges, such as technological and medical innovations and the increasing introduction of market mechanisms, that lead to ongoing changes in jobs and in the organization of work (Townsend and Wilkinson, 2010). It seems important for hospital workers and their employers to keep abreast of these rapid changes (Pool et al., 2013), and this can be achieved through high employability (i.e. having employees who have up-to-date expertise and are willing to adapt to changes).

To date, studies have provided insights into the ways in which employers can meet their responsibility for boosting their workers' employability. Job and organizational characteristics such as task variety and supervisor support, that we together label as employer's investments in workers' employability, have been shown to be positively related to workers' employability (De Vos et al., 2011; Solberg and Dysvik, 2015; Van Emmerik et al., 2012). In another study (Chapter 5), we found that workers' up-to-date expertise and willingness to change (together labelled as employability) have a positive impact on their employment opportunities (see also: Forrier et al., 2015; Wittekind et al., 2010), and that the effects of employer's investments on workers' employment opportunities are mediated through employability.

This means that we know how workers' employability and employment opportunities can be stimulated by the opportunities provided by their employer. However, whether and how this is affected by specific contingencies, such as workers' job type, has not been adequately researched. First, because employability research that includes contingency variables is scarce, with 'contract type' being the only contingency variable so far related to employability (Forrier and Sels, 2003a; Kinnunen et al., 2011; Kirves et al., 2011). Second, when employability has been studied in the specific context of healthcare organizations, attention is hardly ever paid to specific features of healthcare workers' employability or its enhancement (e.g. De Cuyper et al., 2011a).

In this study, we reason that job type is an important contingency variable that should be considered when studying employability in a hospital setting, and therefore that it is relevant to differentiate between various hospital occupational groups. A hospital workforce is heterogeneous (Harris et al., 2007) with various job types such as doctors, nurses, medico-technical or medico-social employees, assistants, and managers. This list contains very different jobs that require different educational backgrounds and that vary in the extent to which an employee needs general as against specialized expertise. Consequentially, hospital jobs can have different career trajectories and employment opportunities within the hospital sector. Taking these aspects together, it is highly plausible that workers' employability, their employment opportunities, and the ways in which these can be enhanced, differ for the various hospital job types. This is a premise that has not been studied before.

This leads to two research aims. First, we examine whether the perceptions on employer's investments, employability, and employment opportunities differ between employees in the various hospital job groups. Second, we examine how the relationships between employer's

investments, employability, and employment opportunities are moderated by job type. In seeking clarity on these relevant issues, we use survey data from 1,764 employees from three hospitals in the Netherlands.

Our study makes several scientific contributions. First, we extend the current employability literature by applying insights from various bodies of literature to develop hypotheses on the multiple roles that job type might fill. We draw insights from the strategic HRM literature (i.e. Lepak and Snell, 2002), and also apply micro-level theories explaining the effects of specialized/general jobs on individuals (Nauta et al., 2005; Thijsen and Van der Heijden, 2003). Second, this study is one of the first to empirically answer the question as to whether, and how, job type affects employability and its enhancement.

8.2 Theoretical Framework

In this study, we extend a model that was developed and tested in two earlier studies (Chapters 5 and 7). In this section, we first recap the basic model in which we related employer's investments to workers' employability and employment opportunities. The two earlier studies provide an extensive explanation of the conceptualization of the model's variables and of the relationships between them.²⁹ Following this, we extend the model by adding 'job type' as a contingency variable, which we explain in detail in the second part of this section.

8.2.1 A model of employer's investments in workers' employability and employment opportunities

We define employer's investments as the provision of resourceful jobs as well as adequate managerial support. We regard job autonomy and task variety as important job characteristics that stimulate employees to use and develop their employability. We base this assumption on job characteristics and job enrichment theories, and employability studies that have found support for these theories (De Lange et al., 2010; Hackman and Oldham, 1976; Parker and Wall, 1998; Van Emmerik et al., 2010). Drawing on Knies and Leisink (2014), we conceptualize managerial support as comprising the implementation of supportive HR practices (both general and tailor-made) and the provision of supervisor support (of both employees' functioning/well-being and of their development). Social exchange and human capital theories, and employability studies applying these theories, suggest that managerial support has a positive effect on workers' employability (Jiang et al., 2012; Solberg and Dysvik, 2015; Wittekind et al., 2010).

Employability is understood as an employee's ability (conceptualized as up-to-date expertise) and willingness (conceptualized as willingness to change) to perform productive work. This understanding connects to those researchers who view and measure employability by assessing an individual's capabilities (e.g. Van der Heijde and Van der Heijden, 2006). We focus on workers' own perceptions of their employability because, it is argued, individuals are likely to act upon their perceptions rather than on any objective reality (Vanhercke et al., 2015; Van Emmerik et al., 2012). Our understanding of employability has two components,

²⁹These two papers form Chapters 5 and 7 of this dissertation, in which the model of employer's investments in workers' employability and employment opportunities is elaborated.

up-to-date expertise and willingness to change, on the basis that up-to-date expertise is not only sufficient to survive in the labor market (Süß and Becker, 2013; Thijssen et al., 2008). Many authors argue that employees have to be willing to adapt to changes in terms of employment, job content, or working locations (Fugate and Kinicki, 2008; Kluytmans and Ott, 1999 in: Van der Heijde and Van der Heijden, 2006).

It is argued that workers' up-to-date expertise and willingness to change will positively affect their beliefs regarding employment opportunities. We consider 'employment opportunities' as workers' expectations of continuing to perform in their current job or of getting another job (in their current or another organization). Recent empirical research supports the assumption that these two employability components directly affect workers' employment opportunities (Forrier et al., 2015; Wittekind et al., 2010).

Overall, the variables making up employer's investments are likely to impact on the extent to which workers have up-to-date expertise and are willing to change, and these, in turn, will increase belief in their employment opportunities. The model thus involves mediated relationships between the employer's investments and workers' employment opportunities through these two employability components.

8.2.2 The roles of job type in our model

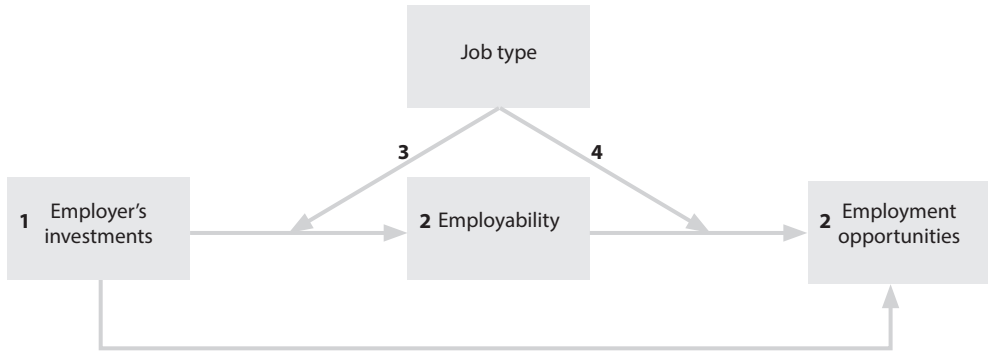
Before we develop our hypotheses regarding the various roles that job type has in greater detail, we briefly outline the job groups that are examined in this study. This will enable us to directly apply the arguments arising from our theoretical investigation to the research context.

1. *Nurses* can be divided into basic nurses (lower educational degree) and advanced nurses (higher educational degree). Advanced nurses have expertise in a particular nursing field such as pediatrics, intensive care, or oncology.
2. *Non-nursing medical employees* are hospital workers that have non-nursing, but medico-technical or medico-social jobs. These include X-ray and endoscopy technicians, medical laboratory analysts/technicians, surgical technologists, and therapists. In the Netherlands, each of these jobs requires a distinct specialized non-nursing, higher educational degree.
3. *Supporting/assisting employees* are nursing aides or medical office assistants who provide medical and administrative support, plus clerical staff, who typically do not have nursing, medical, or caring tasks and carry out purely administrative tasks (e.g. planning patient appointments). The assisting jobs require limited education.
4. *Employees with management jobs and management support functions*, such as in HR or Research and Development, requiring high-level education.

According to the Dutch Association for Hospitals (2013), most (about 70 percent) Dutch hospital employees have direct patient contact, and therefore fall within the first three categories. Although doctors belong to the group that has direct patient contact, they are excluded from this study as, contractually, they are self-employed professionals within most Dutch general hospitals (including those participating in this study) and, therefore, cannot be considered as employees to be targeted by employer's investments. The remainder of the hospital workforce consists of managers and management support functions, back office workers, and employees filling a range of non-medical functions with no patient contact (e.g. cooks and cleaners).

We would expect the contingency variable of job type to play several roles in our model of employer's investments in workers' employability and employment opportunities.³⁰ This is visualized in Figure 8.1 in which the numbers indicate the four distinct roles of job type as explained below.

Figure 8.1 Research model



1. Job group differences in perceived employer's investments: strategic value of the job

In this study, we first expect that employees in jobs with a low strategic value to the organization to perceive fewer opportunities to expand their employability than employees in jobs with a high strategic value. This assumption is based on HRM research that shows that because different groups of employees have skills that vary in importance to an organization (i.e. strategic value), the HR practices that are used to manage these groups are also likely to vary. According to Lepak and Snell (2002, p. 519), the strategic value of human capital concerns “the potential to improve the efficiency and effectiveness of the firm, exploit market opportunities, and/or neutralize potential threats”. Ultimately, strategic value is reflected in an employee's potential to contribute to the competitive advantage or core competence of an organization (Lepak and Snell, 1999; Purcell et al., 2004; Wright and Nishii, 2013). In addition, in order to have strategic value, employees with core skills must somehow contribute to consumer-based perceptions of value (Lepak and Snell, 1999). It is argued that employers should invest heavily in employees with strategic value, and try to retain them in the organization.

In a hospital setting, employees that diagnose, treat, or nurse have jobs that are directly aimed at curing patients, which is the core ‘business’ of hospitals. These employees can therefore be considered strategically valuable for the hospital. Hospital managers also have strategic value, as management jobs are typically occupied with exploiting market opportunities and/or neutralizing potential threats. This is increasingly important in Dutch hospitals that are confronted with growing market mechanisms resulting in, amongst other changes, higher

³⁰Although, in theory, the job autonomy and task variety job characteristics that are part of the employer's investments could somehow overlap with job type, the latter variable encompasses much broader features that become clear from the description on the pages 145 to 148. Ultimately, this means that part of the variance of workers' employability and employment opportunities could not be explained when job type would be deleted from this study.

competition (NZA, 2016). Supporting/assisting workers are indirectly, or more distantly, connected to the core business since they offer support to core activities and therefore have skills that will be seen as more peripheral. Workers with peripheral skills are usually of less strategic value, and therefore less valuable to invest in (Lepak and Snell, 1999; Purcell et al., 2004). For these reasons, we would expect supporting/assisting workers to perceive less resourceful jobs and managerial support than employees in the other job groups. This leads to the following hypothesis:

H1: There are differences between hospital job groups in the perceived extent of employer's investments. That is, employees whose jobs have a high strategic value (nurses; non-nursing medical employees; managers/management support jobs) perceive higher levels of employer's investments than employees with low strategic value jobs (supporting/assisting employees).

II. Job group differences in employability and employment opportunities: education

The educational background required for a job is a second mechanism that might explain the role of job type in our model. Research has shown positive associations between education and employability (understood as up-to-date expertise and/or openness to change) (Grip et al., 2004; Van der Heijden et al., 2009). In essence, individuals with a higher educational level have developed more knowledge and skills, meaning that their personal capabilities will be greater than individuals with a more limited education. The general cognitive abilities of higher-educated persons are better, and research has previously shown that such people learn faster and acquire knowledge more quickly and deeply (Ployhart and Moliterno, 2011). In other words: learning produces learning (Grip et al., 2004). We therefore expect that employees whose jobs require a higher-education degree (e.g. advanced nurses) are more up-to-date in their expertise and are more willing to adapt to changes than employees whose jobs have fewer educational demands (e.g. supporting/assisting workers and basic nurses).

Research has also shown that it is easier for employees to have a career when they have completed higher education (Becker, 1993 and Sicherman and Galor, 1990 in: Berntson et al., 2006). The likelihood of promotion is greater when individuals have been highly educated. Berntson et al. (2006) found that education positively affects an individual's perceived employment opportunities, which leads to the following hypothesis:

H2: There are differences between hospital job groups in the perceived degree of employability and employment opportunities. That is, workers in jobs requiring higher levels of education (advanced nurses; non-nursing medical employees; managers) perceive better employability and employment opportunities than workers in jobs with less demanding education requirements (supporting/assisting employees; basic nurses).

III. Moderating the paths between investments and employability: professionalization

As a third role, we expect job type to moderate the relationships between employer's investments and employability. We use the concept of professionalization to explain this assumption. In general, workers that are regarded as professionals are highly skilled and have received extensive education and training, and have complex job tasks (Noordegraaf, 2007). Recent research shows that nurses are increasingly participating in Continuing Professional

Development (CPD). This involves the ongoing participation in learning activities to boost competences and professional practice, and as such can be regarded as a way to professionalize the nursing occupation. Research also shows that nurses are becoming increasingly aware of the need for CPD in order to deliver high quality care, and to stay abreast of healthcare developments (Gould et al., 2008; Pool et al., 2013). This professionalization process of nursing is quite widespread in hospitals in the USA and the UK. It is also becoming visible in Dutch hospitals where nurses, or at least advanced nurses, are increasingly regarded as members of a professional occupation (Pool et al., 2013, 2015).

Professionals, or employees who are in a professionalization process, are used to thinking and behaving autonomously. They are able to adapt their behavior to a specific situation and to use skills that are appropriate for that situation (Noordegraaf, 2007). This means that, by themselves, they know when they need to update or learn new skills, and that they are used to constantly developing themselves. This implies that they are accustomed to making use of a resourceful job and of managerial support that offers them opportunities to update, develop, or adapt themselves. Hence, professional employees are used to continuously maintaining their employability by utilizing employer's investments that are targeted towards this.

We therefore expect job type to have a moderating effect on the relationships between employer's investments and employability. These relationships are expected to be stronger for employees regularly involved in professional activities than with non-professional workers. This is reflected in the following hypothesis:

H3: The positive relationship between employers' investments and workers' employability is moderated by a worker's job type. The relationship will be stronger for professional job groups (nurses, non-nursing medical employees, managers) than for non-professional groups (supporting/assisting workers).

IV. Moderating the paths between employability and employment opportunities: specialization

Our final expected moderating role of job type is in the relationship between workers' employability and their employment opportunities. We use the extent of a job's specialization as an explanatory mechanism. Nauta et al. (2005) have shown that older workers in fairly general jobs have stronger beliefs in their employment opportunities than older workers with specialized jobs. The authors argue that general jobs are varied, and therefore require creativity and a capacity for learning/adaptation. In contrast, workers in a specialized job develop discipline-specific expertise that benefits only their current job, rather than opening up other job opportunities. Hence, in the event of work changes, workers in specialized jobs are likely to be disadvantaged. This mechanism has also been labelled experience concentration (Thijssen, 1992; Thijssen and van der Heijden, 2003). Similarly, research on job prospects for graduates found that generic (transferable) competencies are more important in boosting employment opportunities and labor market success than occupation-specific competencies (Bridgstock, 2009; Heijke et al., 2003; Semeijn, 2005).

Overall, these studies indicate that a high level of employability boosts the employment opportunities of workers in specialized jobs to a lesser extent than it does for those with general jobs. In essence, because of the nature of their job, workers with general jobs tend to have more job options, which they can realize provided they are sufficiently capable (i.e. employable). This positive relationship is less tenable for specialized workers as high employability is less valuable when employment opportunities are limited beforehand.

In the Dutch hospital sector, there are many highly specialized jobs. For instance, many non-nursing medical jobs, such as those of surgical technologists and physiotherapists, require a specialized higher educational degree that is different from nursing education and that prepares them only for their chosen job's tasks (LVO, 2012). The educational background therefore limits the employment opportunities of such non-nursing medical workers. As such, increasing their up-to-date expertise or willingness to change would not be as beneficial for their future careers as it would be for employees with general jobs. This leads to our fourth hypothesis:

H4: The positive relationship between workers' employability and their employment opportunities is moderated by their job type and is stronger for workers with general jobs (nurses, managers, supporting/assisting workers) than for workers with specialized jobs (non-nursing medical employees).

8.3 Method

8.3.1 Sample and procedure

We collected data through an online survey distributed to 3,970 employees in three Dutch non-academic hospitals, all providing similar facilities and based in different parts of the Netherlands. The hospitals each selected a variety of similar nursing and non-nursing departments (e.g. pediatric nursing units and medical laboratories) based on guidelines we provided. After removing incomplete responses, the sample consisted of 1,764 respondents (a response rate of 44 percent). Of our sample, 89 percent were female and 11 percent male. The mean age was 43.22 years ($SD=10.5$), mean job tenure was 10.68 years ($SD=9.4$), and mean organizational tenure was 13 years ($SD=10.2$). The sample was a good reflection of the entire population (Dutch non-academic hospital employees) in terms of age and gender composition (AZW, 2014). Our sample's composition in terms of job type is displayed in Table 8.1.

Table 8.1 Division of job groups in the sample

Job group	N
1. Basic nurses	396 (22 %)
2. Advanced nurses	279 (16%)
3. Non-nursing medical employees	435 (25 %)
4. Supporting/assisting employees	462 (26 %)
5. Employees with management jobs and management support functions	192 (11 %)

8.3.2 Measures

This study's variables are based on employees' perceptions and were measured using five-point Likert scales (ranging from 1: very negative to 5: very positive). Multi-item measures were used for all the variables. To assess the reliability of each scale, we calculated Cronbach's alphas (CAs) with an acceptance level of 0.70 (Nunnally, 1978). As can be seen from Table 8.2, the reliability of all the variables, apart from task variety, was good. We deleted one item from the job autonomy and the task variety scales as this considerably increased the reliability. Although the CA for task variety remained slightly below the acceptance level, we decided to keep the two-item scale as it has been used frequently in other studies (e.g. Van Veldhoven et al., 2005).

Employer's investments

Job autonomy. This was measured using a three-item scale based on Hackman and Oldham (1975). A sample item being "my job provides me the opportunity to decide on my own how I do my work".

Task variety. A three-item scale was used to measure task variety, again based on Hackman and Oldham (1975), including the item "I have a substantial amount of task variety in my job".

Supportive HR practices. We used a six-item scale based upon Knies and Leisink (2014) to measure this variable. An example item being "I experience the HR training and development practices in my department as being implemented to support me in my job".

Tailor-made arrangements. We used the two-item scale of Knies and Leisink (2014) to measure this variable. An example item being "My supervisor tailors employment conditions to my personal situation".

Supervisor support of employees' well-being and functioning. This variable was measured using the four-item scale of Knies and Leisink (2014). A sample item being "My supervisor shows an interest in how I do my job".

Supervisor support of employees' development. This was measured using the four-item scale of Knies and Leisink (2014) including the item "My supervisor informs me about opportunities for training and development".

Employability variables

Up-to-date expertise. For this variable, we used a nine-item scale based on Thijssen and Walter (2006). Respondents were asked to indicate to what extent they perceive their expertise to be up-to-date in terms of three dimensions: technical (the extent to which employees are physically and psychologically able to keep pace with the job), economic (the extent to which employees' knowledge and skills are up-to-date given technological innovations etc.), and perceptual expertise (the extent to which employees' ideas about the job are in line with relevant occupational developments in the organization and in society). Each dimension was measured using three items. An example item being "As a result of technological developments, much of my knowledge and skills have become redundant".

Willingness to change. This variable was measured using a four-item scale based on Wittekind et al. (2010) and Van Dam (2004). An example item being "If the hospital offered me the possibility to obtain new work experiences, I would take it".

Employment opportunities

This variable was measured using a six-item scale based on De Cuyper and De Witte (2011) and Wittekind et al. (2010) but extended to include a defined time horizon, and with two items specifically related to expectations of continuing in the current job. Respondents were asked to indicate their employment expectations for the next year in terms of three dimensions: vertical job mobility/gaining promotion, horizontal job mobility/getting a similar job, and continuing in their current job. Each dimension was measured using two items, an example being “In the next year, I expect my chances of an equivalent job in another organization to be high”.

Job type

The participating hospitals provided a database with information on all the respondents' jobs. We were then able to link the jobs to respondents' survey answers, and place respondents in one of the five job groups (see Table 8.1). Our job classification is based on categorizations used by the participating hospitals themselves and by a Dutch research consortium that monitors the national healthcare labor market (AZW, 2015).

Control variables

Lastly, we included gender, age, and hospital as control variables.

8.3.3 Analyses³¹

First, ANOVAs with Bonferroni post hoc tests were used to determine whether there were significant differences between the job groups' mean scores for this study's variables (addressing H1 and H2). Second, we applied multiple-group SEM, using Wald's test of parameter constraints, to examine whether the relationships in the model differed significantly between the five job groups (testing for a moderating role of job type – H3 and H4).³² We followed the guidelines for testing multiple-group SEM in Mplus as provided by Muthén and Muthén (2012). Here, we used the root-mean-square error of approximation (RMSEA), the comparative fit index (CFI), and the Tucker-Lewis index (TLI) to assess a model's goodness of fit. Values above 0.90 for CFI and TLI and below 0.08 for RMSEA are indicative of an acceptable fit (Hu and Bentler, 1999).

³¹We calculated a mean score for all variables measured with multiple items on a five-point Likert scale, and used this single mean in further analyses. For variables with multiple dimensions, we first calculated the mean score for each dimension, and then used these averages to calculate the mean score for the overall variable.

³²The basic model had been tested using SEM. This is discussed in the Chapters 5 and 7 of this dissertation.

Table 8.2 Correlation matrix

Variables	α	1	2	3	4	5	6	7	8	9
1. Job autonomy	0.82	1.00								
2. Task variety	0.64	.33**	1.00							
3. Supportive HR practices	0.86	.20**	.23**	1.00						
4. Tailor-made arrangements	0.78	.20**	.15**	.55**	1.00					
5. Supervisor support W ^a	0.91	.20**	.19**	.56**	.67**	1.00				
6. Supervisor support D ^a	0.87	.18**	.21**	.62**	.67**	.67**	1.00			
7. Up-to-date expertise	0.78	.26**	.32**	.27**	.22**	.28**	.25**	1.00		
8. Willingness to change	0.71	.01	-.13**	-.02	-.03	-.04	.01	.07*	1.00	
9. Employment opportunities	0.76	.09*	.06*	.19**	.14**	.12**	.20**	.21**	.38**	1.00

Notes: ^aW= supervisor support of employees' well-being/functioning; D= supervisor support of employees' development.

* $p \leq .01$ ** $p \leq .001$

8.4 Results

In this section, we first report on the ANOVAs, and then turn to the multiple-group SEM analyses. The correlations between all the variables are presented in Table 8.2, and the mean scores and standard deviations of the variables can be found in Table 8.3.

8.4.1 ANOVAs³³

The ANOVA results in Table 8.3 show that the supporting/assisting employees and the non-nursing medical employees perceived the least amount of employer's investments. More specifically, supporting/assisting employees had the lowest mean score for task variety (3.23), and non-nursing medical employees had the lowest mean scores for job autonomy (3.29) and for supportive HR practices (2.94). Further, these two groups scored the lowest on supervisor support of employee development (3.08 and 3.02 respectively). In most instances, these groups' mean scores differed significantly from those of the other job groups ($p < .05$). In most instances, the groups of managers and of both basic and advanced nurses gave the highest scores for employer's investments.

The ANOVA results also show that the differences between the highest and the lowest group mean scores for the job characteristics were larger than the differences for the managerial support variables. For example, the highest mean score for job autonomy was 4.05 (managers) and the lowest 3.29 (non-nursing medical employees), such that the range of the means of job autonomy was 0.76 (on a scale ranging from 1 to 5). The highest mean score for supportive HR practices was 3.19 (specialized nurses) and the lowest 2.94 (non-nursing medical employees) giving a range of only 0.25. The mean scores across the five job groups for the tailor-made arrangements and supervisor support of employee functioning/well-being variables were not significantly different from each other.

³³ANCOVAs with worker's age as a covariate provide similar results to the ANOVAs. This indicates that the ANOVA results can be regarded as robust when controlling for age.

Table 8.3 ANOVA results ³⁴

Variables	Total N M (SD)	Groups				
		1 M (SD)	2 M (SD)	3 M (SD)	4 M (SD)	5 M (SD)
1. Job autonomy	3.48 (.85)	3.43 (.74) ⁵	3.51 (.82) ⁴⁵	3.29 (.91) ⁴⁵	3.43 (.90) ⁵	4.05 (.64) ¹²³⁴
2. Task variety	3.56 (.83)	3.69 (.73) ⁴	3.62 (.81) ⁴⁵	3.54 (.81) ⁴⁵	3.23 (.92) ²³⁵	3.87 (.73) ²³⁴
3. SupportiveHR practices	3.07 (.70)	3.19 (.69) ³	3.12 (.73) ³	2.94 (.69) ¹²	3.07 (.70)	3.05 (.69)
4. Tailor-made arrangements ^a	3.32 (.97)	3.34 (.93)	3.32 (.96)	3.45 (.97)	3.34 (.99)	3.45 (.95)
5. Supervisor support W ^a	3.62 (.91)	3.66 (.85)	3.62 (.88)	3.52 (.90)	3.67 (.99)	3.64 (.92)
6. Supervisor support D	3.18 (.91)	3.30 (.87) ³⁴	3.31 (.94) ³⁴	3.02 (.86) ¹²⁵	3.08 (.95) ¹²	3.26 (.88) ³
7. Up-to-date expertise	3.84 (.59)	3.76 (.58) ²⁵	3.93 (.51) ¹⁴	3.85 (.59) ⁵	3.77 (.65) ²⁵	4.08 (.51) ¹³⁴
8. Willingness to change	3.24 (.78)	3.07 (.76) ²⁴⁵	3.33 (.76) ¹³⁵	3.14 (.80) ²⁴⁵	3.30 (.75) ¹³⁵	3.57 (.66) ¹²³⁴
9. Employment Opportunities	2.76 (.74)	2.76 (.80) ²	3.01 (.71) ¹³⁴	2.65 (.71) ²⁵	2.65 (.71) ²⁵	2.91 (.65) ³⁴

Notes: group 1 = basic nurses, 2 = advanced nurses, 3 = non-nursing medical workers, 4 = supporting/assisting workers, 5 = management employees; ^a ANOVA is non-significant; ¹²³⁴⁵ The suffixes indicate that Bonferroni post hoc tests show that significant differences exist between two group means (p<.05). For example, in terms of supportive HR practices, there are significant differences between groups 1 and 3 and between groups 2 and 3 (but not between groups 1 and 2).

As such, the results offer some support for H1 in that employees with jobs of low strategic value (supporting/assisting employees) tended to experience fewer employer’s investments than employees with high strategic value jobs such as nurses. Nevertheless, we also found contradicting results. For example, although we would not naturally classify non-nursing medical employees as filling jobs of low strategic value, these employees did have some of the lowest scores for employer’s investments. Further, the differences in the scores for the managerial support variables were rather low and sometimes, despite our large sample, non-significant. Overall, we did not find sufficient support for H1.

Turning to H2, the ANOVA results show that the job groups of basic nurses, supporting/assisting employees, and non-nursing medical employees had the lowest mean scores for both the employability components and the employment opportunities variable. Advanced nurses

³⁴The high SDs on job autonomy and task variety indicate that these job characteristics do not overlap with the job type variable, as there is quite some variance on the two job characteristics between employees within one job group.

³⁵A model in which employer’s investments were regressed on to employability and employment opportunities, and in which employability was viewed as a potential partial mediator between the investments and employment opportunities, showed that the partially mediated model best fitted the data. This was reported in the Chapters 5 and 7 of this dissertation.

and managers had the highest mean scores (significantly different from the other groups). For example, supporting/assisting employees and medical non-nursing employees both reported means of 2.65, and basic nurses a mean of 2.76, for the employment opportunities variable, while advanced nurses scored significantly higher (3.01, $p < 0.05$).

Overall, these results partly support H2 in that job groups requiring a more limited education (supporting/assisting employees and basic nurses) perceived a lower level of employability and employment opportunities than the more highly educated advanced nurses and managers/management support employees. However, non-nursing medical employees also tend to be well educated but, in contrast to what H2 suggests, their scores were more in line with the lower-educated supporting/assisting employees and basic nurses than with the advanced nurses and managers.

8.4.2 Multiple-group SEM

To test the moderating effects of job type (H3 and H4), we ran a partially mediated model³⁵ for the five job categories and used Wald's test to check whether the regression coefficients significantly differed between the job groups. The results showed that there are hardly any significant differences between the five job categories. For example, although the regression coefficients of the 'willingness to change' employability component onto the 'employment opportunities' dependent variable varied between $\beta = 0.18$ to $\beta = 0.38$ ($p < 0.001$) for the five job groups, these effect sizes were not significantly different from each other.

As such, willingness to change was equally important for all hospital workers' employment opportunities. This finding indicates that the relationships between employer's investments, employability, and employment opportunities should be regarded as general rather than as dependent on job type. Overall, the results do not provide support for H3 and H4 in that they show that job type does not play a moderating role. As the multiple-group SEM results do not provide additional insights to the results as presented above they are not presented in a table or figure.

8.5 Conclusions and Discussion

In this study, we have focused on the multiple roles that job type might fill in the relationships between employer's investments (in the sense of providing resourceful jobs and managerial support), hospital workers' employability, and their employment opportunities. These relationships were studied in two earlier studies (Chapters 5 and 7). In this paper, our aims were twofold. First, we have examined whether the employees' perceptions of employer's investments, their own employability (understood as up-to-date expertise and willingness to change), and employment opportunities differ between the various job groups identified in a hospital. Second, we have examined whether the relationships between employer's investments, employability, and employment opportunities are moderated by job type.

In terms of the first aim, we conclude that it is relevant to differentiate between various hospital job groups as we found numerous significant differences in terms of employer's investments, employability, and employment opportunities. Regarding the second aim, we conclude that job type does *not* moderate the relationships between employer's investments, workers' employability, and their employment opportunities, but rather that the relationships

are generic (that is, independent of job type). Based on these findings, we have developed a classification system that can be used to plot the employability and employment opportunities of employees in different jobs (Figure 8.2). Below, we elaborate on our conclusions leading to an explanation of the classification system.

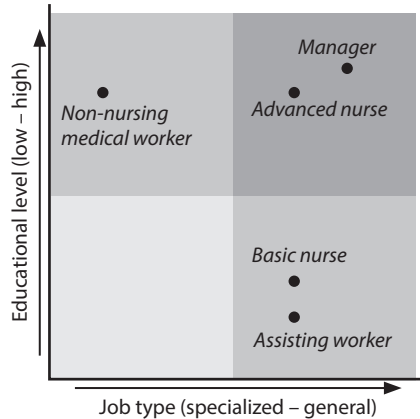
First, this study shows that hospital workers differ in their perceptions of employer's investments, with supporting/assisting workers and non-nursing medical workers perceiving that they are offered less resourceful jobs and less managerial support, than that perceived by nurses and managers. Based on Lepak and Snell's (1999, 2002) HR architecture, we had expected supporting/assisting workers to receive and therefore experience less employer investment than those in jobs with a high strategic value, such as nurses and other medical employees, because their jobs are of low strategic value to the hospital. However, these expectations are contradicted by the low scores given by the non-nursing medical workers despite them having a strategic value, and also by the small and often non-significant differences between all the job groups for the managerial support variables. This suggests that the HR architecture is less valid as an explanatory model in a Rhineland context, where social security, employment protection, and employee equality are important values, and in which stakeholders strive for harmony of interests (Brewster, 2004), than in the Anglo-Saxon context in which Lepak and Snell developed their HR architecture. Likewise, the provision of equal development opportunities to *all* employees in order to improve their employability is regarded as important by the Dutch cabinet and social partners (Stichting van de Arbeid, 2008).

Second, this research indicates that hospital workers differ in their levels of employability and employment opportunities, and that these differences can partly be explained by their educational background. That is, the job groups that demand the least education, namely the supporting/assisting workers and basic nurses, rated their expertise as the least up-to-date, and were also rather negative about their employment opportunities. The advanced nurse and management job groups, where a higher level of education is demanded, were the most positive about their employability and employment opportunities. However, in contrast to what we had expected, and going against this pattern, the non-nursing medical workers, who are usually also required to follow higher education, had a low perception of their employment opportunities and, together with the basic nurses, the lowest willingness to change. We suggest that this 'anomaly' can be linked to the highly specialized nature of non-nursing medical jobs that in effect severely limits their employment opportunities. Aware of these constraints, employees perhaps become less willing to change because they believe that a job change will require extensive re-education.

Third, we did not find support for job type having a moderating role. In other words, employer's investments can stimulate hospital workers' up-to-date expertise and willingness to change in similar ways, regardless of their job type. In addition, the positive effects of workers' up-to-date expertise and willingness to change on their employment opportunities were not moderated by job type. These findings can be related to the employability discourse in the Netherlands in which it is stressed that investing in employability enhances the employment opportunities of all employees as all occupational groups are similarly confronted with the need to continue working up to a greater age, and to adapt to changing technologies (Stichting van de Arbeid, 2008 and 2013).

Based on these conclusions, we have developed a classification system that can be used to plot workers' employability and employment opportunities in the various jobs (Figure 8.2).

Figure 8.2 Employability and employment opportunities plotted against a worker's job (applied to a hospital context)



Notes:

- Dark grey box: highly educated workers with general jobs are expected to have high employability and employment opportunities (in our sample: managers and advanced nurses).
- Medium grey boxes: highly educated workers with specialized jobs (in our sample: non-nursing medical workers) and less-educated workers with general jobs (in our sample: basic nurses and support workers). These are expected to score similarly with moderate-to-low levels of employability and employment opportunities.
- Light grey box: less-educated workers with specialized jobs (such a combination was not present in this sample). These are expected to score lowest on employability and employment opportunities.

We would expect this classification to be applicable in various settings and not merely in a hospital context, but this has to be validated in further research. In this classification, we apply the required educational level together with the extent of job specialization as explanatory variables given that the other potential explanatory mechanisms investigated (i.e. strategic value and professionalization) were not supported by our findings. Although we initially used the level of specialization in hypothesizing a *moderating* role for job type in the relationships between workers' employability and their employment opportunities, the ANOVA results suggest that the employment opportunities of non-nursing medical workers are negatively affected by their highly specialized job in a *direct way*.

As can be seen from Figure 8.2, the classification consists of two axes: workers' educational level, varying from low to high education, and the level of specialization in the job, ranging from specialized to general jobs. The combination of these two factors helps in understanding differences between employees' levels of employability and employment opportunities.

More specifically, a high level of education is expected to increase workers' employability and employment opportunities, and this increase is likely to be further boosted when workers have a general job. In our sample, the two job groups that met both these criteria were the managers (and management support functions) and the advanced nurses (with the first group slightly outscoring the advanced nurses).

Next, we saw that the boost that a highly educated background normally gives to workers' employability and employment opportunities can be reduced when employees have a highly specialized job. In our sample, the non-nursing medical workers fitted this description. Further, although a limited educational background reduces one's employability and employment opportunities, the effect is not so severe when workers have a general job as there are more jobs that they could potentially fill. In our sample, the basic nurses and supporting/assisting workers demonstrated this finding (with the latter group, because of their limited education, scoring slightly lower than basic nurses). Overall, highly educated workers with specialized jobs scored similarly, in terms of perceived employability and employment opportunities, to lower-educated workers with general jobs.

The combination of limited education and a highly specialized job did not occur in our sample, and this combination is somewhat unlikely in a hospital setting as specialization usually requires advanced (higher) education. However, such jobs do exist in other industries (e.g. skilled workers such as hairdressers where only limited vocational education is required), and, based on our findings, we would expect such employees to report the lowest levels of employability and employment opportunities.

Scientific contributions

Our contributions to scientific research are twofold. First, we are one of the first to link the 'job type' contingency variable to employability and employment opportunities, and in theorizing on the various roles that job type plays in the relationships between employer's investments, workers' employability, and their employment opportunities. We have described several mechanisms that might explain why workers' perceptions of employer's investments and their own employability and employment opportunities differ as a function of job type. Ultimately, this study has enriched the current employability literature by suggesting that the combination of a job's educational level and degree of specialization helps to understand a worker's employability and employment opportunities.

Second, we have empirically tested various roles that job type might fill, and this has enabled us to deliver the first empirical evidence into the exact role that job type plays, and to draw the findings together in the classification discussed above. We have observed that job type does not play a moderating role, but rather that it directly relates to our model's variables as reflected in the significant differences between the hospital job groups.

Limitations and suggestions for further research

Our study has several limitations. First, in order to explain the effects of job type, we have used several mechanisms and factors such as the strategic value and the level of specialization of the job. However, we have not directly measured these factors, but instead used them as explanatory approximates to provide initial insights into the role of job type. Future research could delve further into this issue by, for instance, directly measuring these factors and, in so doing, test the validity of our classification.

Second, we have used general theoretical ideas to develop explanatory mechanisms for the roles of job type, but we have then tested these in the specific setting of hospitals. Therefore, it would be valuable if further research were to compare employees working in different countries, sectors, and organizations. In this way, our classification could be extended and its

validity tested. We would expect the setting of our study to have influenced the results. The requirements for specific hospital jobs in the Netherlands can be very different to those found in other countries, and this will impact on the career paths of hospital workers and their perceptions of these. In addition, several employer's investments are shaped by collective labor agreements and these differ by sector and by country.

Third, having used cross-sectional data, we cannot be certain of the causality in the observed relationships. Our results suggest that feedback loops, or reinforcing mechanisms, may be present. For example, if employees with specialized jobs perceive their employment opportunities to be low because of the nature of their job, they could then become less willing to adapt to changes which, in turn, reduces their employment opportunities yet further. Longitudinal research is needed to clarify this.

Practical implications

This study shows that all hospital workers, irrespective of their job type, benefit from opportunities to maintain and develop their employability and employment opportunities. However, at the same time, we have found that employees in jobs that require only limited education or in highly specialized jobs perceive a lower level of such investments by employers than others, and their perceptions regarding employment opportunities are also relatively low. We consider the employees in highly specialized jobs to be particularly vulnerable because specialized jobs, when compared to general jobs, provide few opportunities to broaden one's employability and to increase one's employment opportunities (Nauta et al., 2005). Combining this reality with low perceived levels of employer's investments could be detrimental for these employees by decreasing their low employability and employment opportunities further. We therefore call these jobs 'entrapped employment', and reason that people in such jobs particularly need their employer's support to safeguard their future employability and, in the end, their employment. Especially in dynamic settings, such as the hospital sector, achieving high employability, so that employees can cope with changes such as technical innovations or even job transitions, is beneficial for both the employee and the employer (Forrier et al., 2015; Pool et al., 2015). Supervisors of employees with entrapped functions could offer their workers other, more general, job tasks (such as management tasks or participating in projects) that would be relevant in a broader range of jobs to help boost their employability.

9



CONCLUSIONS AND DISCUSSION

This dissertation set out to enhance the understanding of the antecedents and outcomes of hospital workers' sustainable employability. In the introductory chapter, four research gaps were identified that have guided the dissertation's research and analysis. These gaps were: (1) a consistent conceptualization and measurement of sustainable employability is lacking; (2) how employer's investments jointly affect sustainable employability is under-researched; (3) it is unclear whether sustainable employability mediates the relationship between employer's investments and outcomes; and (4) the role of contingency variables is rarely studied. In this final chapter, the insights obtained throughout this dissertation are pulled together and discussed in-depth. The chapter starts, in Section 9.1, with the presentation and discussion of the main findings regarding each research gap. The hospital-specific information that was obtained in Chapter 4 is used to interpret the research findings. The section ends with an answer to the central research question. Next, the theoretical and practical implications of this research, including suggestions for further research, are discussed in Section 9.2. Subsequently, an evaluation of the limitations is provided in Section 9.3, followed by concluding remarks that draw this dissertation to a close (Section 9.4).

9.1 Discussion of the main study findings related to the four research gaps

9.1.1 Gap I: a consistent conceptualization and measurement of sustainable employability is lacking

The great variety in the ways in which employability and sustainable employability are conceptualized and measured has provoked criticisms, including that the concepts are both fuzzy and poorly defined, and that the research field is scattered (Forrier et al., 2015; McQuaid and Lindsay, 2005). In this dissertation, I have responded to these criticisms by elaborating and justifying a consistent definition, conceptualization, and measurement of sustainable employability.

Sustainable employability is defined as the extent to which an employee is able and willing to work productively throughout their career. This is conceptualized as comprising the following three components: up-to-date expertise, willingness to change, and future employment opportunities. Up-to-date expertise and willingness to change are viewed as constituting an employee's *current* level of employability. By including the employment opportunities variable, employees' current beliefs regarding their career prospects in the *near future* are also addressed. This corresponds with the long-term perspective that is key to the concept of sustainable employability.

It was found that respondents were most positive about their up-to-date expertise, and also were rather willing to adapt to changes. Notably, they assessed their employment opportunities as fairly poor, which could perhaps be attributed to the slowdown in the previous job growth in healthcare that was being witnessed at the time of data collection (AZW, 2016). More recent calculations show that future labor shortages, especially in higher-educated jobs, are expected in the Dutch hospital sector (AZW, 2015a). Nevertheless, at the time of data collection, the slowdown in job growth was presumably influenced by developments such as technological advancements and market mechanisms. In addition, the economic crisis could have been contributing to employees' pessimism over their employment opportunities. Re-

search has indeed shown that employees perceive higher employment opportunities during times of economic prosperity than during recessions (Berntson et al., 2006). In combination, the job growth slowdown and the economic crisis could have provided respondents with a general feeling of job insecurity that negatively affected their assessment of their employment opportunities. However, this is only one possible explanation, and it was not tested in the dissertation.

Next, I had expected employees' perceptions of their up-to-date expertise and willingness to change to positively affect their perceptions of future employment opportunities. This hypothesis was based on earlier studies that often assume, but rarely empirically test, such relationships. The research results presented in this dissertation show that, indeed, employees' perceptions of their up-to-date expertise and willingness to change were important factors in determining their beliefs regarding their future employment opportunities. In particular, the employability component of willingness to change was important, with this variable's relationship with employment opportunities stronger than that of up-to-date expertise. It could be that up-to-date expertise had a weaker effect on employment opportunities in this study because the majority of respondents (i.e. nurses and non-nursing medical employees) are required to update themselves by following annual refresher courses. This was evident in the relatively small variance in up-to-date expertise ($SD = 0.59$ compared to 0.77 for willingness to change). In other words, updating one's expertise might be perceived as self-evident for many hospital workers, and therefore has less impact on their employment opportunities.

The importance attached to willingness to change could be related to the turbulence that characterizes the work environment of hospital workers. In general, in a work environment where there are ongoing changes in and around jobs, an open attitude to changes is required (Fugate and Kinicki, 2008; Thijssen et al., 2008). In Chapter 4, the Dutch hospital sector was analyzed and the considerable developments in the sector demonstrated. The analysis showed that continuous technological and medical advancements require hospital employees to constantly adapt and to learn new skills and knowledge (AZW, 2014; RVZ, 2015). This also impacts on the ways in which hospital work is organized. For example, because of technological developments, certain diagnostic tasks and treatments that were once performed by highly-educated physicians can now be carried out by workers with a lower level of education that have been trained in handling specific tasks and techniques (RVZ, 2011). The increasing introduction of market mechanisms in the hospital sector has also led to constant adjustments in the structure and organization of work. Market developments mean that hospitals have to be efficient and must deliver high quality care to their demanding patients. New ways of working, such as the 'Productive Ward' (NHS, 2010; Van den Broek, 2014), have therefore been introduced, and these require hospital workers to change their work routines and, hence, to be open to adapting to new circumstances.

9.1.2 Gap II: how employer's investments jointly affect sustainable employability is under-researched

How organizations can nurture sustainable employability has been relatively under-researched (Van den Broeck et al., 2014). More specifically, there is a lack of a comprehensive perspective on employers' enhancement of their workers' sustainable employability, with studies focusing either on job characteristics or on managerial support variables. To gain a deeper understanding of the specific factors that explain the development of sustainable employability, this

dissertation has integrated these variables into the concept of employer's investments. This includes the provision of resourceful, challenging jobs and of adequate managerial support to employees. It is examined how these investments affect the 'up-to-date expertise', 'willingness to change', and 'employment opportunities' components of sustainable employability.

The findings indicate that up-to-date expertise and willingness to change (current employability) act as important mediators in the relationships between employer's investments and employees' employment opportunities. Thus, for example, employees who had a job that they characterized as having high autonomy, and who felt supported by their direct supervisor, positively rated their current employability, which, in turn, increased their beliefs regarding their future employment opportunities. In addition to these mediated relationships, the results also show that employees' perceived employment opportunities were directly influenced by some managerial support variables. For example, supportive HR practices boosted workers' beliefs regarding their employment opportunities because such practices could enable them to change jobs or to receive career advice. Taken together, the results show that employers are able to stimulate their workers' sustainable employability through creating resourceful, challenging jobs and offering managerial support.

The research in this dissertation also shows that some forms of employer's investments had non-significant or even negative relationships with components of sustainable employability. For example, in contrast to what was expected, it was found that supportive HR practices did not significantly relate to up-to-date expertise or willingness to change, although it was significantly associated with the employment opportunities variable. Rather, it was direct supervisor support that was found to impact on up-to-date expertise and willingness to change. It seems that supervisors should ideally have direct dialogues with their employees and demonstrate supportive behavior if they want to stimulate, or even provoke, employees to update their expertise, and to develop an open attitude to change (Van der Heijden, 2003). However, if employees want to broaden their employment opportunities, or even effect a job change, then they presumably benefit more from organizational HR practices that facilitate this. Here, direct supervisors could be less aware of the possibilities outside the team or unit, or they could be unwilling to encourage and support their team members' mobility. These various possibilities may explain the different relationships that the 'HR practices' managerial support variable had with the components of sustainable employability.

Regarding the negative relationships between an employer's investments and the sustainable employability components, it was found that 'task variety' and 'tailor-made arrangements' types of investment decreased willingness to change, while 'task variety' positively affected up-to-date expertise. In addition, 'workload' was positively related to willingness to change, but negatively to up-to-date expertise. A possible explanation for these findings could be that employees who experience high task variety, a low workload, and sufficient room to make tailor-made arrangements with their supervisor, are more likely to perceive a good fit between, on the one hand, their own abilities and needs and, on the other, their job and/or supervisor. Research on these 'person-job' and 'person-supervisor' fits has shown that a good fit leads to positive outcomes such as high job satisfaction (Kristof-Brown et al., 2005). The present study's results show that, at the same time, this makes employees less eager to consider a change (see also Van Dam, 2004). Presumably, if employees are satisfied with their job, they become more attached to it over time, which makes them less willing to adapt to changes and keener to maintain the status quo (Thijssen, 1992; Thijssen and van der Heijden, 2003).

Further, employees could become less willing to change jobs when they are able to negotiate individual job arrangements with their supervisor. I label this potential effect as the ‘spoiled worker alert’, and further reflect upon this in Subsection 9.2.2.

To summarize, most of the employer’s investments investigated were found to boost hospital workers’ sustainable employability. However, the research findings also indicate that investing in some of the proposed antecedents was unlikely to *simultaneously* boost employees’ up-to-date expertise, willingness to change, and employment opportunities. Sometimes, only one or two of the sustainable employability components were enhanced by a particular investment, and occasionally at the cost of the other component(s).

9.1.3 Gap III: it is unclear whether sustainable employability mediates the relationship between employer’s investments and outcomes

To date, it is unclear whether sustainable employability is a linking mechanism between employer’s investments and desirable outcomes because research has either examined employability antecedents or outcomes, but not both simultaneously. As a consequence, there is insufficient empirical evidence to confirm the assumption that employer’s investments in employability are beneficial for both employers and employees. In response, I have examined the relationships linking employer’s investments, the up-to-date expertise and willingness to change components of sustainable employability, and the job performance (relevant from a managerial perspective) and well-being at work (relevant from an employee perspective) outcomes.

The research results show that employees’ up-to-date expertise partially and positively mediates the relationships between an employer’s investments and the outcome variables of interest. As such, up-to-date expertise constituted an actual link. However, contrary to what was expected, willingness to change was not significantly related to the outcomes and so did not function as a mediator. However, it is still possible that willingness to change affects job performance and well-being *at a later stage*, for example after an employee has changed jobs. That is, employees could start to perform and feel better in a new job once they experience the benefits of their openness to change. In comparison, up-to-date expertise is immediately beneficial in performing current job tasks, and in producing feelings of being able to handle the current work situation (therefore leading to enhanced well-being).

The partial mediation through up-to-date expertise means that, alongside the indirect effects, there are also direct positive effects of employer’s investments on employees’ well-being and job performance (such as investing in task variety or supervisor support). As had been anticipated, this indicates that not only up-to-date expertise but also other variables explain the positive relationships between investments and outcomes. For example, perceiving managerial support may make employees feel they are being taken care of leading to a heightened sense of well-being.

However, a few *negative* direct effects of employer’s investments were identified. First, supervisor support of employee development did not significantly relate to job performance, and was negatively related to the ‘work-life balance satisfaction’ well-being variable. It could be that employees who experience high levels of development support from their supervisor feel pressured to behave accordingly. They may then spend more time on their professional lives than before, thereby creating a perceived work-life imbalance. Here, other research has indeed shown that individuals generally view developmental activities such as accepting new

job tasks, switching jobs, or starting with new education as events that cause a work-life imbalance (Hobson et al., 2001).

Second, while supportive HR practices had a positive relationship with well-being, they were found to *negatively* relate to employee job performance. A possible explanation for this finding is that HR practices that enable employees to cope with high work demands could increase well-being while, simultaneously, removing the pressure to perform. Such a tradeoff in the effects of HR practices has also been witnessed in other HRM research and labeled as the conflicting outcomes perspective. That is, “According to Peccei (2004), HR practices that maximize employee well-being might not be the ones that maximize organizational performance. Hence, organizations may need to make a trade-off in terms of which outcomes to prioritize” (Van de Voorde et al., 2012, p. 393). In contrast to this dissertation’s findings, Van de Voorde et al. (2012) present an instance of the conflicting outcomes perspective as one in which HRM has non-significant or negative effects on well-being but positive impacts on performance. The present study’s findings represent another variant of the conflicting outcomes perspective.

To summarize, this study’s findings show that most of the employer’s investments investigated had positive direct and indirect effects on both job performance and well-being, but that a few investments led to negative, and in one instance conflicting, outcomes. By taking a balanced approach and including both well-being and job performance outcomes, reflecting employee and managerial perspectives respectively (Boselie et al., 2009), this dissertation has been able to show that, in most instances, both employees and employers benefit from employer’s investments in workers’ sustainable employability. Whereas up-to-date expertise was found to be a partial link in the positive relationships between the investments and outcomes, willingness to change was not. However, as outlined in Subsection 9.1.1, the latter is beneficial elsewhere in that it was found to increase workers’ employment opportunities.

9.1.4 Gap IV: the role of contingency variables is rarely studied

In line with contingency theories (Beersma et al., 2003; Hersey and Blanchard, 1993; Kinnie et al., 2005), it was assumed that workers’ sustainable employability, and the ways in which employer’s investments affect this, were unlikely to be consistent across all types of hospital workers, and would depend on contingencies such as workforce characteristics. In this dissertation, the roles of (1) a hospital worker’s age and (2) their job type have been investigated to provide more insight into the under-studied effects of contingency variables.

Regarding the first of these contingency variables, this research shows that a worker’s age matters. This variable was found to impact on the relationships between employers’ investments and the sustainable employability components in several ways. Age acted as a moderating mechanism in these relationships and, remarkably, the relationships often only became significant at a certain age. Some of the most relevant age-influenced results are highlighted below.

The paths from several employer’s investments through to up-to-date expertise and willingness to change were found to be moderated by age in either positive or negative directions. For example, the effect of supportive HR practices on up-to-date expertise was positively moderated by age, whereas the effect of tailor-made arrangements was negatively moderated by age. This indicates that it is not always the case, as is often assumed, that, as employees grow old, they benefit less from a resourceful job and managerial support. Rather, it seems that the

‘supportive HR practices’ and ‘developmental supervisory support’ investments have significant positive effects on older workers. That is, these manifestations of employer’s investments positively affect the up-to-date expertise and willingness to change of older workers but not those of younger colleagues.

The context analysis in Chapter 4 has provided information that offers possible explanations for these findings. In the collective labor agreement for the Dutch hospital sector, measures are included that are specifically aimed at keeping older workers in the labor force for a longer period of time (NVZ, 2011 and 2014). For example, hospital employees aged over 58 are exempted from having to work irregular shifts. Further, hospital workers are offered life-stage-specific budgets that they could, for example, use to update their expertise. If employees interpret these measures as specifically relevant and useful for older workers, this could encourage older workers to start using them. This idea is based on Nishii et al’s (2008) HR attribution theory, which states that the relationships between HR practices and employees’ attitudes and behaviors depend on the meanings that employees attach to those practices.

Next, this dissertation shows that age also moderated the relationship between the up-to-date expertise and employment opportunities components of sustainable employability. As discussed in Subsection 9.1.1, up-to-date expertise and willingness to change were both found to positively affect employment opportunities. The moderating role of age indicates that up-to-date expertise has a stronger beneficial effect on workers’ beliefs regarding their employment opportunities as they grow older. Perhaps, aging workers in general are very aware that up-to-date expertise is crucial in boosting their employment opportunities, whereas younger workers may feel their expertise is self-evidently up-to-date. This awareness could be further stimulated by the hospital sector’s collective agreement having labor terms explicitly aimed at older workers (see above). Although age appeared not to moderate the relationship between willingness to change and employment opportunities, age was found to relate to employment opportunities, both directly, as well as indirectly (mediated through willingness to change). This means that, as employees age, their willingness to change and their beliefs in there being employment opportunities decrease. Overall, the worker’s age contingency variable was found to play various important roles in the topic researched.

Turning to the second contingency variable, job type, it was examined (1) whether hospital employees in different occupational groups differ in their perceptions of employer’s investments and of the sustainable employability components, and (2) whether job type moderates the relationships between employer’s investments and the sustainable employability components.

The results indeed show several significant differences between employees in the various occupational groups regarding their levels of sustainable employability and, to a lesser extent, regarding their perceptions of employer’s investments. Some of the differences to an extent contradicted this study’s expectations, and these are extensively discussed in Chapter 8 (pp. 152-153). In order to understand the differences between job groups, a classification system was developed that included the explanatory factors of a job’s educational requirements together with the extent that a job was specialized. This enabled the sustainable employability components for workers in different jobs to be plotted on a single graph (see Figure 8.2 on p. 154). The combination of these two factors helped to understand the reasons behind the differences in employees’ sustainable employability. This classification system was inductively established and provides a potentially useful tool for future research.

In essence, a high educational background can be expected to increase a worker's sustainable employability, and this increase is likely to be further enhanced when workers have a general job (in this study, the advanced nurses and managers) but expected to be reduced when employees have a highly specialized job (in this study, non-nursing medical employees). Hence, highly educated employees in specialized jobs have lower levels of sustainable employability than their peers in more general jobs. Further, less-educated workers with general jobs (in this study, the basic nurses and supporting/assisting employees) seem to have comparable levels of sustainable employability to highly educated, highly specialized employees. That is, the negative effect of their limited education on sustainable employability is compensated by the increased range of possibilities potentially open to them due to the broad experiences gained in their general job. Finally, the implication is that less-educated workers in specialized jobs (e.g. skilled workers such as hairdressers where only limited vocational education is required) can be expected to be the least sustainably employable.

Second, the research leading up to this dissertation failed to find any support for job type having a moderating role. In other words, employer's investments similarly stimulated hospital workers' up-to-date expertise and willingness to change irrespective of their job type. Further, the importance of up-to-date expertise and willingness to change in enhancing the employment opportunities was the same for all hospital workers, regardless of their job type. These findings can be tied to the sustainable employability discourse in the Netherlands, in which it is stressed that it is important for all employees to achieve sustainable employability, as everyone is confronted with the need to continue working up to a greater age and to adapt to changing technologies.³⁶ The Dutch social partners have agreed upon investing in sustainable employability of all employees (Stichting van de Arbeid, 2008 and 2013). Recently, this has been further institutionalized in the Dutch hospital sector's collective labor agreement for 2014-2016: "investments are needed in the continuous development of all employees; both permanent and temporary workers, and also young and old employees, covering every job within the organization" (NVZ, 2014, p. 12).

9.1.5 Answering the research question

This dissertation has three main conclusions that contribute to answering the central research question: *How is employees' sustainable employability related to individual, job, and organizational characteristics and to organizational and employee outcomes?* First, I can conclude that providing resourceful, challenging jobs and adequate managerial support generally boosts hospital workers' sustainable employability (conceptualized as up-to-date expertise, willingness to change, and employment opportunities). That is, the majority of the employer's investments (conceptualized into job characteristics and managerial support) were found to increase, directly and/or indirectly, workers' beliefs in their employment opportunities through their up-to-date expertise or their willingness to change, and sometimes through both components. Second, it can be concluded that most employer's investments not only enhance hospital workers' sustainable employability, but also positively impact on their well-being and job performance. The present research shows that various employer's investments are directly related to the well-being and job performance outcome variables, and also indirectly, mediated through the 'up-to-date expertise' component of sustainable employability. The latter

³⁶www.duurzameinzetbaarheid.nl

finding indicates that up-to-date expertise is a genuine link between the investments and outcomes. In most instances (but not all), the investments directly and indirectly increase both workers' well-being and their job performance, thereby benefitting the employee as well as the employer. Third, the relationships between employer's investments and the sustainable employability components were frequently found to be contingent on a hospital worker's age. The findings also indicate that the level of sustainable employability varies between employees in different hospital job groups, and that this is a result of a job's educational requirements and the extent of its specialization. Hence, it can be concluded that a hospital worker's sustainable employability is partly dependent on their age and job type, and, additionally, that enhancements to sustainable employability are sometimes conditional on the age of the employees.

9.2 Implications and suggestions

In this section, the theoretical implications and suggestions for further research are first discussed, followed by an overview of the practical implications and suggestions.

9.2.1 Theoretical implications and suggestions for further research

In general, this dissertation has contributed to the knowledge on sustainable employability by combining theories at the individual and job levels (Organizational Behavior and Psychology) with theories at the higher organizational level (HRM). The empirical results highlight the relevance of integrating these various theories for explaining the enhancement of sustainable employability and its consequences. For example, it was found that workers' sustainable employability is enhanced by supportive HR practices as well as a job that provides employees with individual autonomy, but that the effectiveness of HRM on sustainable employability partly depends on a worker's age. Together, such results provide a rich and nuanced view on the enhancement of sustainable employability.

Further, this dissertation has offered a context-sensitive understanding of sustainable employability by situating the central research question in the Dutch hospital sector. This is highly relevant, as research has previously failed to pay adequate attention to the specific context in which sustainable employability is examined, despite the assumption that sustainable employability is especially relevant in turbulent environments (Thijssen et al., 2008; Van Emmerik et al., 2012). Here, the context analysis in Chapter 4 shows that the hospital sector is characterized by a great deal of turbulence that calls for sustainably employable hospital workers. The in-depth analysis of the hospital sector has helped in interpreting the research findings of Chapters 5 to 8, and facilitated identifying and explaining what really happens in hospitals. This resonates with the call to pay adequate attention to the specific context of HRM studies (Boxall et al., 2007; Godard, 2014; Paauwe, 2004).

Below, paralleling the four research gaps that were discussed in the previous section, I discuss the scientific implications of this dissertation in more detail, and draw upon these implications to provide suggestions for further research. I summarize the scientific contributions in a concluding paragraph.

Implications and suggestions regarding gap I

This dissertation has tackled the conceptual fuzziness that characterizes previous research by elaborating a consistent definition, conceptualization, and measurement of sustainable employability. A strength of this dissertation's understanding of sustainable employability is that the commonly used variables of *present* up-to-date expertise and willingness to change as well as *future* employment opportunities are all considered in a single model and causally related to each other. This provides a comprehensive understanding of sustainable employability, but one that needs to be validated by research in other organizational settings, as well as through longitudinal research.

Longitudinal empirical research is needed to explore how sustainable employability develops over time. A few studies on employability (measured as perceived employment opportunities) have used a multiple-wave study design, but most still only assessed employability at one point in time, and used the additional waves to measure outcomes of employability. Kirves et al. (2014) were one of the first to examine workers' beliefs in their employment opportunities using measurements from three points in time. They concluded that various trajectories are possible, ranging from stable to fluctuating employability, with most respondents being placed in the stable trajectories. However, they also noted that their sample (of Finnish university workers) was not particularly generalizable. Moreover, they could not explain the development, or stability, of employability over time. For example, the study failed to determine whether the high level of stability in their sample was attributed to the relatively steady sector in which the respondents worked. Consequently, further research is needed that uses a longitudinal design and examines *whether* and *why* the various sustainable employability components are stable over time.

Implications and suggestions regarding gap II

The present research has provided a comprehensive understanding of how a broad range of employer's investments enhance workers' sustainable employability. That is, I have shown both the individual and the joint contributions of investments made to sustainable employability, and the similarities and differences between the effects of investments on three sustainable employability components. These findings can inform further research when deciding which investments are relevant to include, as this should be influenced by the dependent variables that are to be studied. For example, it was found that task variety and supervisor support of employee's well-being/functioning particularly contributed to up-to-date expertise, while development supervisory support predominantly stimulates willingness to change, and supportive HR practices were found to only boost employment opportunities.

In addition, this dissertation found that some employer's investments (e.g. task variety) stimulate one component of sustainable employability while simultaneously decreasing another, and this provides a starting point for future research to investigate the mechanisms behind such effects. A promising avenue that could be examined in future research is the role of person-environment fit (Kristof-Brown et al., 2005). For example, if employees experience a high person-job and/or person-supervisor fit, their expertise is likely to be up-to-date. Further, they may feel happy as things stand, and therefore be unenthusiastic about changing and be more focused on retaining the status quo. Here, fit theories could be used to explain the relationships between sustainable employability and its antecedents. Further, some of this dissertation's results suggest that the effects of investments might not be uniform across an

organization, and are in part dependent on their implementation by line managers. Future research could study this explanatory mechanism by applying insights linked to Wright and Nishii's (2013) distinction between intended, actual, and perceived HR practices (e.g. by comparing multiple teams of employees and their supervisors in various organizations).

Implications and suggestions regarding gap III

This study is one of the first to show that up-to-date expertise acts as a *partially* mediating mechanism between employer's investments and outcomes, whereas willingness to change does not. Further, by taking a balanced approach that led to the inclusion of well-being and job performance as outcome variables, this dissertation provides initial empirical evidence for the assumption that both employees and employers benefit from an employer's investments in sustainable employability. That is, both well-being and job performance were directly and indirectly stimulated by job autonomy, task variety, tailor-made arrangements, and supervisor support of employees' well-being/functioning. At the same time, this study found a tradeoff effect with the investment 'supportive HR practices' benefiting employees' well-being at the cost to the employer of a reduction in job performance. This tradeoff effect provides a new variant to the conflicting outcomes perspective in the HRM literature that, to date, has been interpreted as HRM having non-significant or negative effects on well-being, and positively impacting on performance (Van de Voorde et al., 2012).

Although this dissertation provides initial insights into the outcomes of investing in sustainable employability, more research is needed on the 'hard' outcomes. Research to date, including the present study, has shown that sustainable employability is related to workers' well-being, self-rated job performance, organizational commitment, and subjective career success. However, studies fail to include more objective outcomes on the unit or organizational level such as absenteeism, turnover, unit productivity, and customer satisfaction. By including such outcomes, future research can increase the insights into the returns on investing in sustainable employability.

Implications and suggestions regarding gap IV

This dissertation has offered a rich nuanced insight into when, how, and why a worker's age and job type matter when examining sustainable employability and how it can be enhanced. The theory on sustainable employability has been enriched by using insights from various bodies of literature (e.g. lifespan theories) to hypothesize on the roles of the age and job type contingency variables. The empirical results have extended the theoretical assumptions, and have shown when and how the two contingency variables play a role. These findings are highly informative for future research as, for example, the theoretical and empirical examination of the role of job type has resulted in a classification system that can be used to plot employees' up-to-date expertise, willingness to change, and employment opportunities in a range of jobs. The classification system is expected to be applicable in various organizational settings as it is based on general theoretical insights regarding the effects of workers' educational background and the extent to which their jobs are general/specialized. Further research is needed to test the validity and generalizability of the classification system.

In addition, it is uncertain whether this dissertation's findings are generalizable both within and beyond the turbulent hospital sector. It would be informative to conduct comparative research that examines sustainable employability in various sectors that differ in the level of

turbulence. Additional research within the hospital sector is also likely to be needed as it is expected that, in the near future, hospitals will differ from each other as a result of ongoing market developments. The type and amount of care offered is likely to differ between hospitals, and this will have consequences for hospital workforces' capacities (AZW, 2015). Whether this will have consequences for the need for sustainable employability and, consequentially, whether hospitals will have to differentiate their investments in sustainable employability, needs further examination. Comparisons with academic hospitals would also provide additional insights as, in the Netherlands, academic hospitals are in a lesser degree affected by the influence of market mechanisms than general hospitals are. Further, as doctors working in academic hospitals are employed by the hospital rather than working on a self-employed contractual basis, there is the question as to whether the sustainable employability of doctors in academic hospitals should be regarded as being similar to, or even worse than, that of non-nursing medical employees as doctors are highly educated, specialized employees.

Another reason to examine whether this dissertation's results are generalizable beyond the Dutch hospital sector is that the content of employer's investments in sustainable employability is shaped by institutional agreements (notably collective labor agreements in a Dutch context). At the same time, the context analysis in Chapter 4 has suggested that hospitals have sufficient room to develop and implement additional sustainable employability policies. This raises the question as to how much room for maneuver employers in Rhineland countries perceive themselves as having, and what strategies they apply when developing organizational sustainable employability policies. Also, given the numerous significant sustainable employability differences that were found between age and job groups, one could question the effectiveness of sectoral or organizational approaches, and consider whether tailor-made arrangements are in fact more appropriate. Future research could study sustainable employability from the perspective of employers in different organizations, sectors, and countries to provide insights into the first question. Comparisons between organizations that differ greatly in the ways in which they implement HRM would help in answering the second question.

Summary of scientific contributions

This research has enriched the sustainable employability literature by studying complex mediation and moderation relationships and by including a broad range of antecedents, contingency variables, and outcome variables that are relevant from the perspectives of both employees and managers. In this research, construct muddiness has been avoided by adopting a consistent conceptualization and operationalization of sustainable employability. Moreover, the value of sustainable employability in the context of hospitals has been shown, and the reasons explained. The study's empirical materials provide robust support for these contributions with data from large samples of employees in three different hospitals that showed consistent results across the hospitals.

9.2.2 Practical implications and suggestions

This dissertation offers useful insights for practice. As was explained in Chapter 4, both hospital employees and employers are in need of sustainable employability because of various developments and ongoing changes. The unions and employers' federation have emphasized the importance of sustainable employability in the collective labor agreement, and agreed upon several practices to stimulate sustainably employable hospital workers (NVZ, 2014). How-

ever, the analysis in Chapter 4 has revealed that there may be a gap between what sector-wide and organization-specific policies intend (i.e. to increase sustainable employability), and the behaviors related to sustainable employability on the hospital shop floors. That is, employees are possibly unaware of the desire to enhance their sustainable employability, and therefore do not always act accordingly. In addition, research shows that, in general, they are not very positive about their employers' policies (AZW, 2015). The research results in Chapters 5 to 8 provide ideas on more explicit and actionable ways in which hospital employers can stimulate their workers' sustainable employability (although this is not to deny employees' responsibility for maintaining and enhancing their own sustainable employability). Overall, this dissertation can help bridge the gap between theory, or policy, and practice. Below I describe the practical implications and suggestions in more detail. It should be noted that the majority of the recommendations are not only relevant for the hospital sector, but also for employers elsewhere that are seeking to stimulate sustainably employable workforces.

First, the present study has specified how employers can boost their workers' sustainable employability by providing them with a resourceful, challenging job and with adequate managerial support. More specifically, the results show that there are similarities but also differences in the ways in which the three components of sustainable employability can be enhanced through investments. This indicates that organizations should customize the job characteristics and support they offer employees according to the desired outcomes. For instance, supervisor support of employees' development is particularly important when wanting to enhance willingness to change and employment opportunities. Supervisors could strengthen their support by providing employees with the opportunity to use a self-assessment tool (the 'Loopbaanspiegel') in which they could rate their employment opportunities and their willingness to change against the personal development activities undertaken over the past year.

This self-assessment tool was customized for the hospital sector in the applied research project of which this dissertation research was part, and could similarly be customized for use elsewhere. If employees are enabled by their employer to make use of such a tool and, subsequently, to discuss the self-assessment outcomes with their supervisor, this could enhance their self-reflections and contribute to determining what follow-up actions are necessary to avoid them becoming stuck in their jobs. This may also lead to employees becoming more aware of the need to enhance their sustainable employability. As was explained in Chapter 4, the absence of such awareness is currently seen as problematic. Such an awareness could result in employees becoming more willing to change and being open to development suggestions coming from their supervisor.

Second, this dissertation has revealed that employer's investments in workers' sustainable employability pay off in terms of increased employee well-being and enhanced job performance. This means that both the employee and the employer benefit from employers investing in their workers' sustainable employability. More specifically, employees' up-to-date expertise and, consequentially, their well-being and job performance are boosted when they are empowered through a job that is characterized by having sufficient task variety and job autonomy. These effects are further stimulated when employers ensure that their workers have supportive line managers who show concern for their employees' well-being and help them with their functioning. In addition, if supervisors have the room to make individual arrangements with their employees that suit the employees' private lives and job tasks, both employees' job performance and their satisfaction with their work-life balance are stimulated. Here,

both stakeholders again benefit from the employer's investment.

However, supervisors should be aware of the 'dark side' of being such a supportive manager, as this dissertation shows that tailor-made arrangements may simultaneously lead to employees becoming less open towards changes, because they feel comfortable in their current jobs. This could ultimately result in employees becoming stuck in their jobs and resistant to adapting to changes, which will endanger their sustainable employability. Hence, supervisors should be aware of this 'spoiled worker alert', and ensure that any provision of tailor-made arrangements is accompanied with stimulation of employees' development and flexibility. For example, when an employee is confronted with informal care tasks, a supervisor could support the employee by adjusting work schedules to the employee's care tasks. After a while, when the employee expresses to be able to balance work and family demands and is able to carry out his/her job tasks, the supervisor could start to motivate the employee to think ahead.

Third, the results of this research suggest that hospitals should provide *all* their workers with a resourceful, challenging job and with managerial support. Both younger and older employees benefit from this, as well as nurses and surgical technologists in non-nursing medical jobs. However, this dissertation also suggests that equal provision is not always sufficient. For example, regarding employee age, organizations need to create a life-stage-friendly climate and endeavor to reduce the negative effects of stereotypical beliefs about older workers, such as them being less able/willing to develop (see also: Fleischmann et al., 2015). The research results show that, in terms of increased sustainable employability, aging workers benefit more from supportive HR practices and supervisor developmental support than do their younger counterparts. Hence, even though development motives generally decrease with age, older employees do need developmental opportunities to combat obsolescence and prevent reduced performance (Kooij et al., 2013). It is therefore important that older workers feel supported by their employer, and this could be achieved by implementing age-specific HR practices as is done in the Dutch hospital sector.

Turning to job type, this study found that hospital employees in jobs that require only limited education, or in highly specialized jobs, perceive a lower level of employer's investments than others. Also, their levels of sustainable employability are relatively low when compared to nurses and employees in management jobs. Hospital employees with highly specialized jobs are considered to be particularly vulnerable because their specialized jobs, when compared to general jobs, provide fewer opportunities to enhance sustainable employability (Nauta et al., 2005). The combination of this with low perceptions of employer's investments could be detrimental for specialized employees, as this further decreases their sustainable employability. As such, these jobs could be characterized as 'entrapped employment'. It is likely that employees in such jobs would benefit from having their jobs enriched in such a way that they become more varied, providing opportunities to develop expertise in other fields. More specifically, supervisors could provide such workers with job tasks that are not directly related to their current job, such as management tasks and participating in departmental or organizational projects (e.g. membership of the works council or participation in projects on the regulation of care quality). The execution of such tasks would require employees to develop new knowledge and skills that would be useful in a broader range of jobs.

Taken together, the above recommendations mainly stress the ways in which *employers* can stimulate sustainable employability among their workforce. As this topic had not been extensively researched, it is the focus of this dissertation. However, this does not imply that

employees bear no responsibility for their own sustainable employability. After all, employees benefit from a high level of sustainable employability as well (for example because it increases their chances of survival in a volatile labor market). Further, employer's investments are only effective when employees are receptive to such provided opportunities, and when they are aware of the need to increase their sustainable employability.

9.3 Limitations

The research in this dissertation is not without its limitations. First, this study's conclusions are based on cross-sectional data. Although the research was originally designed as a two-wave study, the hospitals gradually cancelled their participation in the second wave. Mostly, the hospital management said that they had to shift their attention to dealing with sudden changes such as downsizing, relocations, mergers, etc. Such a tension between researchers' long time horizon and managers' focus on solving immediate problems has frequently been recognized as a main issue in conducting rigorous management research (Bansal et al., 2012; Bartunek and Rynes, 2014; Walsh et al., 2007). Overall, the cross-sectional nature of the research in this dissertation means that the concept of sustainable employability is not examined over time, despite a long-term perspective being key to sustainable employability. Instead, this perspective was in some way addressed by emphasizing the future orientation of the 'employment opportunities' component of sustainable employability. Nevertheless, this study's measurement of the concept should be regarded as a cross-sectional proxy, and future research should ideally make use of longitudinal panel data when studying sustainable employability.

Another drawback of cross-sectional data is that definitive causal relationships cannot be established from the research findings, and reversed causality or feedback loops could be present but unobserved. Again, longitudinal research is needed to clarify this. For example, highly employable workers may feel more secure about their own abilities and, for this reason, feel able to take advantage of, for instance, a resourceful job. Despite this lack of longitudinal data, it should be noted that the causal relationships hypothesized are based on extensively tested theories including job characteristic models and social exchange theory. As such, the theoretical basis for the causal relationships is rather robust. Nevertheless, an illustration here can explain the possibility of reverse causality. One could imagine that employees with high levels of well-being have the energy needed to expand their sustainable employability and, in this case, well-being would act as an antecedent of sustainable employability rather than as an outcome of it. Notwithstanding this possibility, support for my original causality assumptions comes from studies using multiple-wave datasets that have shown similar results to those in this dissertation (Berntson and Marklund, 2007; Kirves et al., 2014). A more recent two-wave study by Vanhercke et al. (2015) also supports the present study's results. Although those authors did not find support for well-being acting as an antecedent of workers' employability, they did find a positive effect of employability on well-being.

A second limitation of this study is that the quantitative data were collected from a single source (i.e. the employees) and are based on self-reporting. However, this research design is considered as adequate for answering the central research question since, for instance, it is the employees' *perceptions* of adequate managerial support that will stimulate them to develop desirable attitudes and behaviors (Wright and Nishii, 2013). Further, it is because of *feeling*

that one is sustainably employable (and thereby feeling in control) that an employee starts to feel well. Nevertheless, the research design runs the risk of common method or common source bias (Podsakoff et al., 2003). To assess the likelihood of common source bias, multiple-factor structures of the hypothesized measurement models were compared with one-factor models in which all survey items loaded onto a single factor. This is explained in detail in Chapters 5 and 6. In essence, these comparisons suggested an absence of common source bias. Further, Spector (2006) demonstrated that self-reporting does not automatically lead to apparently significant results, and that mono-method correlations are not always higher than multi-method correlations. This was also noted by Lance et al. (2010, p. 450) who comment that “in contrast to conventional wisdom, common method effects do not appear to be so large as to pose a serious threat to organizational research.” That being said, to strengthen this study’s findings, future research could use other sources and methods, such as supervisor ratings or organizational records, to assess aspects such as employee job performance.

Third, this study has been conducted in a specific setting, and this has consequences for the generalizability of the findings. The context analysis in Chapter 4 shows that the Dutch hospital sector constitutes a relevant setting for a study on sustainable employability because its high level of turbulence calls for sustainably employable workers. Data have been collected in three hospitals, and the results were consistent across the hospitals, suggesting that they are probably valid for other Dutch hospitals. However, one should be cautious in further generalizing the research findings, to other turbulent sectors or organizations. There are various reasons for urging caution. For example, it is highly plausible that hospital-specific circumstances, such as the nature of the job (irregular shifts, emotional involvement, etc.), influences sustainable employability and well-being, and that the specifics of the hospital collective labor agreements shape the content of the employer’s investments. Future research could provide greater clarity on the generalizability of this study’s findings by collecting information in different organizations, sectors, and countries, and then comparing the contexts with each other.

Finally, the roles of job type and employee age were attributed to various underlying mechanisms that were not directly measured. As in many studies (e.g. Bal et al., 2008; Kooij et al., 2013), chronological age was used as a proxy for an array of age-related processes but it could be that employees within a certain age group are diverse in their abilities, needs, and motives, and that chronological age is not always a sufficient proxy for aging processes. To examine this aspect, future employability research could measure chronological age alongside related individual-level constructs. For example, one could address whether employees perceive themselves as older workers (Desmette and Gaillard, 2008), whether age-related stereotypes are internalized, and what kind of work-related motives employees hold. In terms of the role of job type, the present study provides some initial insights into the differences in sustainable employability that exist between job groups. Future research could examine this further by testing whether this study’s finding, that a combination of educational background and level of specialization affects sustainable employability, holds in other sectors.

9.4 In conclusion

This dissertation has shown that, in general, employer's investments in job characteristics and managerial support boost employees' sustainable employability. Furthermore, this research has demonstrated that when making such investments in sustainable employability, employers should take individual characteristics such as age into consideration, and be aware that the level of workers' sustainable employability partly depends on their job type. Importantly, both employees and employers can benefit from employer's investments in sustainable employability, with most forms of investments positively affecting workers' well-being as well as their job performance.

Based on these main conclusions, this dissertation has provided explicit and actionable ways in which employers can stimulate their workers' sustainable employability, and thereby their well-being and job performance. The recommendations offered in Subsection 9.2.2 can help the nurse and her manager – who were introduced at the start of this dissertation – who were both worried about the ongoing changes and struggling to keep up. A promising starting point for employees and employers in dealing with their changing environment is illustrated by the following exchange between hospital work council members (during a group interview):

Interviewee 1: "Employees need to make a mental switch. (...) You need to start thinking about what you want to do." (...)

Interviewee 4: "The employer needs to activate such a thinking process."

This dissertation has suggested that, by providing a resourceful and challenging job, as well as adequate managerial support, employers can stimulate such a thinking process and related sustainable employability attitudes and behaviors.

"This department has a training and education policy. All employees have an annual budget to spend on training. We were the first in this hospital to arrange that. Now, there is a joint commitment to go to conferences and to take part in re-education. Additionally, we organize our own courses. (...) Employees track their developments in a portfolio which we discuss annually. This is a real transformation compared with what went before."

The above quote from a manager illustrates one way in which employers can concretize their investments, and thereby hopefully stimulate employees to remain employable ever after.

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APPENDIX 1 | Topic list and interview protocol

The interviews consisted of an introduction, a main part with questions, and a concluding reflection. The main part for interviews with employees differed from that for managers.

Introduction

- Description of research and researcher
- Interview process
- Confidentiality, anonymity, recording

Main part - employees

- *General information about the interviewee* (age, education, job type, professional experience and history). Example question: Could you please say something about yourself?
- *Current job perceptions*. Example questions: What do you think of your current job? What do you need to perform your job adequately?
- *Future job expectations*. Example questions: If you look into the near future, say five to ten years ahead, what do you think you will be doing then? What conditions influence your expectations?

Main part - managers

- *General information about the interviewee* (age, education, job type, professional experience and history). Example question: Could you please say something about yourself?
- *Department perceptions*. Example questions: Could you describe the current structure and situation in your department? What do you think of the abilities of your employees to provide productive work, now and in the future? What conditions influence this? What possibilities are there for your employees to expand their abilities or to change jobs?

Conclusion

- Summary of the topics discussed in the interview
- See if the respondent wants to discuss additional topics or add comments

APPENDIX 2 | Survey items

This appendix contains an overview of all the items used to measure the research model's variables (excluding the control variables). If applicable, the dimensions (factors) of the variables are also shown. All the variables rate respondents' perceptions and were measured using five-point Likert scales, with a score of 1 indicating very weak support for the statement, and a 5 very strong support.³⁷ Reversed items are coded (R).

Sustainable employability components

I. Up-to-date expertise – three dimensions: technical (1-3), economic (4-6), and perceptual (7-9)

1. I experience an eight-hour working day to be more physically straining than before. (R)
2. Nowadays, I am less able to cope with mentally strenuous work. (R)
3. I am less able to keep up with many of my job tasks than my younger colleagues. (R)
4. The job tasks that I am really good at are increasingly becoming less important. (R)
5. As a result of technological developments, much of my knowledge and skillset has become redundant. (R)
6. Many of my skills are less valuable than before. (R)
7. I regard new occupational developments as real progress.
8. I am annoyed by the changes in the content of my job that have occurred in the past year. (R)
9. I think the expansion of administrative accountability in my department contradicts healthcare objectives. (R)

II. Willingness to change

1. I find it important to develop myself in a broad sense, so I will be able to perform different task activities or jobs within the organization.
2. I am not willing to start in another job. (R)
3. If the hospital offered me the possibility to gain new work experiences, I would take it.
4. In the event of organizational changes, I would prefer to stay in my current department with my colleagues. (R)

III. Employment opportunities – dimensions: vertical job mobility/gaining promotion (1-2), horizontal job mobility/getting a similar job (3-4), continuing in the current job (5-6)

1. In the next year, I have a reasonable chance to move to a higher-level job in this hospital.
2. I expect to be eligible for a higher-level job.
3. In the next year, I expect my chances of an equivalent job in another organization to be high.
4. I expect that I can easily get an equivalent job in another hospital.
5. In the next year, my productivity will grow.
6. I will perform better in my current job.

³⁷The answer categories for psychological strain went from 1=never to 5=always, and for self-rated job performance from 1 to 10 (afterwards recoded in a 5-point scale for further analyses).

Employer's investments

I. Job autonomy

1. My job provides me with the opportunity to decide on my own how I do my work.
2. In my job, I cannot use my personal initiative. (R)
3. I can decide on my own about the ways in which I carry out my job tasks.

II. Task variety

1. I have a substantial amount of task variety in my job.
2. In order to adequately carry out my job, it is necessary that I am able to use different types of skills.
3. Basically, my job requires me to carry out the same things. (R)

III. Workload

1. I have to do a lot of work.
2. I have to work fast to finish tasks.
3. I have to work under high time pressure.
4. I have enough time to carry out my job tasks. (R)

IV. Supportive HR practices – dimensions: development (1-2), maintenance (3-4), accommodative HR bundles (5-6)

1. I experience the HR 'education and development' policy in my department as supporting me in my job.
2. I experience the HR 'mobility and career advice' policy in my department as supporting me in my job.
3. I experience the HR 'appraisal' policy in my department as supporting me in my job.
4. I experience the HR 'compensation and benefits' policy in my department as supporting me in my job.
5. I experience the HR 'task changing and easing' policy in my department as supporting me in my job.
6. I experience the HR 'vitality (e.g. prevention and health)' policy in my department as supporting me in my job.

V. Tailor-made arrangements

1. My supervisor tailors employment conditions to my personal situation.
2. My supervisor tailors employment conditions to my individual needs so I can do a better job.

VI. Supervisor support of employees' well-being and functioning

1. My supervisor shows an interest in how I do my job.
2. My supervisor shows an interest in my personal functioning.
3. If my supervisor appreciates the job I have done, he/she does not let this pass unnoticed.
4. My supervisor asks me if I can manage my job.

VII. Support of employees' development

1. My supervisor informs me about opportunities for training and development.
2. My supervisor offers me opportunities to participate in training
3. My supervisor supports me in utilizing opportunities for vertical mobility.
4. My supervisor supports me in utilizing opportunities for horizontal mobility.

Outcome variables

I. Psychological strain – dimensions: stress (1-2) and burnout (3-4)

1. During the past four weeks, how much of the time did you feel stressed? (R)
2. During the past four weeks, how much of the time did you feel irritated? (R)
3. During the past four weeks, how much of the time did you feel mentally worn out? (R)
4. During the past four weeks, how much of the time did you feel burnt out? (R)

II. Vigor

1. In my job, I feel strong and vigorous.
2. At my work, I feel bursting with energy.
3. When I get up in the morning, I feel like going to work.

III. Work-life balance

1. I am satisfied with the way I divide my time between work and personal life.
2. I am satisfied with the extent to which I can live up the needs of my work and my personal life.
3. I am satisfied with the opportunities I have to adequately perform both job and private tasks.

IV. Job performance

1. On a scale from 1 to 10, please indicate to the best of your ability how your supervisor rated your performance as expressed during your most recent performance review.

SUMMARY IN ENGLISH

It has been argued that, because of ongoing changes (e.g. globalization, technological innovations, ageing populations) that have affected Western labor markets, including those in the Netherlands, flexibility and adaptability from both employers and employees are required (Stichting van de Arbeid, 2013). In both scholarship and practice, it is therefore claimed that, for *employees*, it is increasingly important to safeguard their likelihood of survival throughout their extended working lives by equipping themselves to deal with the ever-changing work environment and labor market. In short, this is what is referred to as lifetime or sustainable employability (Forrier et al., 2015; Thijssen et al., 2008). Stimulating workers to become sustainably employable is also regarded as beneficial for *employers* because, for instance, such employees are expected to perform well (Forrier et al., 2015; Van der Heijde and Van der Heijden, 2006; Van der Klink et al., 2011).

For these reasons, research that provides insights into employees' sustainable employability, its consequences, and how it can be enhanced is highly relevant for practice. However, the current literature on sustainable employability can be characterized as fuzzy, with multiple definitions and conceptualizations of the concept that, moreover, are not always measured in a consistent way. Further, a comprehensive view on how sustainable employability can be enhanced and how this pays off has yet to be established. This leads to the following research question that is central to this dissertation:

How is employees' sustainable employability related to individual, job, and organizational characteristics and to organizational and employee outcomes?

Therefore, in this dissertation, it is examined how various antecedents and contingency variables on the individual, job, and organizational levels are related to workers' sustainable employability, and how the latter impacts on outcomes that are relevant for both the employee and the employer. By including a broad range of antecedents, contingency factors, and outcomes of sustainable employability, a rich understanding is provided of how sustainable employability can be enhanced and whether and how this pays off.

In this dissertation, sustainable employability is defined as *being able and willing to productively work throughout one's career*. This could refer to adequately performing one's current job or other tasks or jobs. The label of 'employer's investments' is used to encompass a broad range of job and organizational characteristics that are expected to impact on sustainable employability and on organizational and employee outcomes.

The research question is studied in the Dutch hospital sector. This provides a particularly relevant context for this study on sustainable employability as it is especially in dynamic contexts, such as this, that achieving high sustainable employability, so that employees can cope with changes, is potentially beneficial for both the employees and the employer (Forrier et al., 2015; Pool et al., 2015; RVZ, 2015). In terms of a dynamic context, hospitals are increasingly confronted with market mechanisms and ongoing technological and medical innovations (Cooke and Bartram, 2015; Townsend and Wilkinson, 2010). In addition, populations are ageing, thereby increasing the demand for care, while at the same time the labor force as a per-

centage of the working population is shrinking (AZW, 2016; OECD, 2007). Being sustainably employable enables hospital employees to deal with such a turbulent environment. Further, as sustainably employable hospital workers are expected to perform well (in this context, to deliver high quality care), enhancing the sustainable employability of the workforce is also beneficial for hospital employers.

From four research gaps to a research model

Four research gaps can be identified in the sustainable employability literature that have driven this dissertation's theoretical framework and research model. First, *a consistent conceptualization and measurement of sustainable employability is lacking*. There is a great variety in the ways in which the concepts of employability and sustainable employability are conceptualized and measured. This variety has provoked criticisms that the concepts are fuzzy and poorly defined, and that this has led to a scatter of stand-alone studies with few attempts at coming to a consensus (Forrier et al., 2015; McQuaid and Lindsay, 2005). This dissertation responds to these criticisms by consistently elaborating a conceptualization and measurement of sustainable employability that is in line with the above definition. In this, workers' perceived up-to-date expertise, willingness to change, and their future employment opportunities are regarded as the three components of sustainable employability. It is examined how up-to-date expertise and willingness to change (that together are regarded as comprising *current* employability) relate to an employee's beliefs regarding their *future* employment opportunities, which reflects the long-term perspective that is key to the concept of sustainable employability. In essence, 'sustainable' refers to being continuously employable throughout one's working life, from entering the labour market through to retirement (Thijssen et al., 2008). This long-term perspective distinguishes sustainable employability from the concept of employability, which is usually focused on the present (Berntson et al., 2006; Van Emmerik et al., 2012).

Second, *how employer's investments jointly affect sustainable employability is under researched*. That is, a comprehensive perspective on employers' enhancement of their workers' sustainable employability is lacking, with studies focusing on either job characteristics (e.g. Van Emmerik et al., 2012) or on managerial support variables (e.g. Nauta et al., 2009) as antecedents. Here it is argued that, to gain a deeper understanding of the specific antecedents that explain the development of sustainable employability and to detect the antecedents' individual and combined contributions to sustainable employability, it is necessary to combine the various potential antecedents in a single study. This dissertation has integrated these variables into the concept of employer's investments. This encompasses providing employees with resourceful, challenging jobs (measured as job autonomy, task variety, and workload) and adequate managerial support (measured as supportive HR practices, tailor-made arrangements, supervisor support of employees' well-being/development, and development supervisory support). It is examined how such investments affect the up-to-date expertise, willingness to change, and employment opportunities components of sustainable employability. Job characteristic models (De Lange et al., 2010; Hackman and Oldham, 1975; Van Emmerik et al., 2012) as well as social exchange and human capital theories (Knies and Leisink, 2014; Snape and Redman, 2010; Solberg and Dysvik, 2015; Takeuchi et al., 2007) are used to hypothesize relationships between these investments and sustainable employability.

Third, *it is unclear whether sustainable employability mediates the relationship between employer's investments and outcomes*. This is because research has either examined sustain-

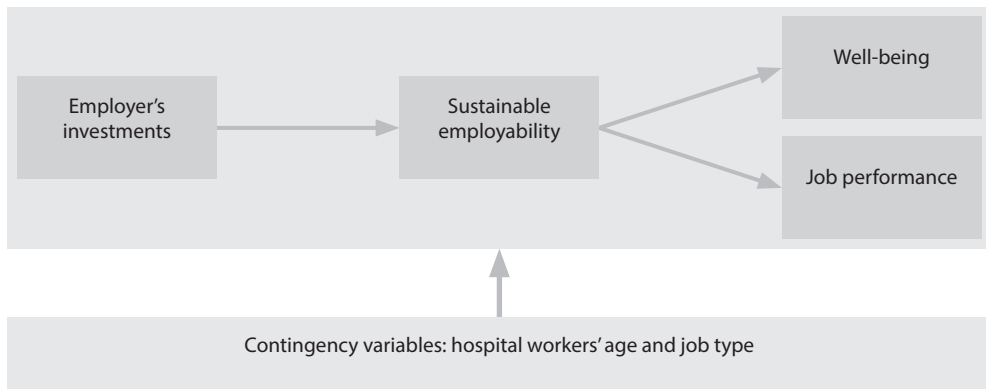
able employability antecedents (e.g. Wittekind et al., 2010) or outcomes (e.g. de Cuyper et al., 2014; Kinnunen et al., 2011), and failed to examine them simultaneously. As such, the premise that investing in workers' sustainable employability leads to beneficial outcomes has not been adequately evaluated. In response, this dissertation examines whether, and to what extent, the up-to-date expertise and willingness to change components of sustainable employability act as mediating mechanisms in the relationships between employer's investments and the job performance (relevant from a managerial perspective) and well-being (relevant from an employee perspective) outcome variables. The choice of these two variables is partly based on the Balanced HRM Approach which emphasizes the importance of including both economic and employee outcomes when studying the effects of HRM (Boselie et al., 2009; Paauwe, 2004). Amongst others, the Conservation of Resources Theory (Hobfoll, 2001) is used to hypothesize relationships between the two sustainable employability components and the outcome variables.

Fourth, *the role of contingency variables is rarely studied*. This is surprising given that contingency theories in organizational science state that there is no single best way of organizing, but rather that elements such as the optimum organizational structure, leadership style, and job design are dependent on specific contingencies that are both internal and external to the organization (Fiedler, 1964; Hersey and Blanchard, 1993; Kinnie et al., 2005; Yukl, 2012). Applying such a contingency approach to this research topic, leads to the expectation that the effects of employer's investments on workers' sustainable employability are unlikely to be consistent for all types of workers, and will depend on internal contingencies such as workforce characteristics. Despite this, there are very few studies that have shed any light on these conditional relationships (exceptions being Forrier and Sels, 2003a; Kinnunen et al., 2011; Kirves et al., 2011). Therefore, this dissertation examines whether, and to what extent, sustainable employability and its enhancement are contingent upon (1) a hospital worker's age and (2) their job type. In both theory and practice, age is seen as an important factor in sustainable employability, and therefore deserves further research. Lifespan theories (Carstensen, 1995; Kooij et al., 2013) and theories on age-related stereotyping (Posthuma and Campion, 2009) are used here to hypothesize on the moderating role of age. Second, examining the role of job type will provide valuable information on possible differences between occupational groups. Various theoretical insights are applied to develop hypotheses on the multiple roles that job type might fill. For example, insights from the strategic HRM literature (Lepak and Snell, 2002) are drawn upon, as well as micro-level theories that explain the effects of specialized/general jobs on individuals (Nauta et al., 2005; Thijssen and Van der Heijden, 2003). Dutch hospitals, with their ageing workforces and the range of occupations, present an ideal setting for testing the validity of viewing age and job type as contingency factors.

The four research gaps lead to the research model shown in Figure 1, which visualizes the focus of this dissertation.

Research design and methodology

This research has combined qualitative and quantitative research methods to answer the central research question. Qualitative data were gathered to gain a comprehensive insight into the research context of the Dutch hospital sector and to assist in interpreting the quantitative data, which were collected and used to test the relationships hypothesized in the research model.

Figure 1 Research model

First, a range of sector- and organization-specific documents were analyzed to understand how contextual developments have impacted upon the hospital sector and created a need for sustainably employable workers. In addition, the qualitative research method of interviewing was used to gain in-depth insight into the perceptions of Dutch hospital workers and their supervisors regarding the workers' sustainable employability and the conditions needed to enhance this. In total, 21 respondents from three Dutch non-academic hospitals were interviewed. The interviewees filled various hospital occupations (i.e. nurses, non-nursing medical employees, medical office assistants, line managers).

Second, the quantitative data, used to test the research model, were collected through a cross-sectional survey distributed to employees of the three Dutch non-academic hospitals (N = 1,815). As the concepts adopted in this research focus on the perceptions of employees, an employee survey can be seen as an appropriate research strategy since it provides a measure of the individual perceptions of many employees, rather than the opinions of a few (Gerhart, 2007). The quantitative data were analyzed using Structural Equation Modeling (SEM) techniques.

Findings and conclusions regarding the four research gaps

First, in terms of their sustainable employability, the respondents were most positive about the 'up-to-date expertise' component, followed by 'willingness to change', but assessed their 'employment opportunities' as fairly poor. As expected, this research shows that employees' perceptions of their up-to-date expertise and willingness to change (which together represent current employability) were important factors in determining their beliefs regarding future employment opportunities. Here, the willingness to change component was especially important, with this variable's relationship with employment opportunities stronger than that of up-to-date expertise. In a turbulent context, this is perhaps not surprising in that a willingness to adapt seems intuitively of greater value to deal with constant changes than updating one's current expertise.

Second, it was found that up-to-date expertise and willingness to change acted as significant, partially mediating mechanisms in the relationships between employer's investments and employees' employment opportunities. Overall, the findings indicate that employers can

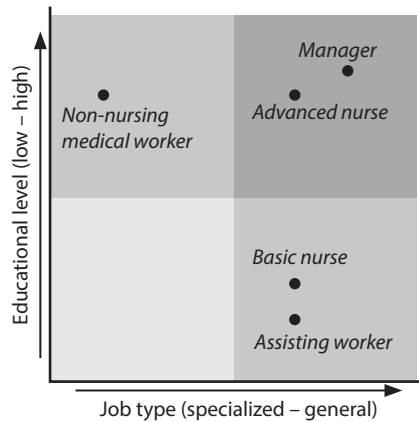
stimulate their workers' sustainable employability by providing them with resourceful, challenging jobs and with adequate managerial support. However, not all forms of investment simultaneously boost all three facets of sustainable employability. In some cases, only one or two of the sustainable employability components (up-to-date expertise, willingness to change, and employment opportunities) were enhanced by a particular investment and, on occasions, gains in some were offset by losses in others.

Third, the research showed that most forms of employer's investments had positive direct and indirect (i.e. partially mediated through up-to-date expertise) effects on both job performance and well-being. However, not all effects were significant and, in one instance, a tradeoff effect was found. In the latter case, supportive HR practices positively affected well-being but at the cost of job performance. Overall, the results show that, in most instances, both employers and employees benefit from employer's investments in workers' sustainable employability.

Fourth, this research found that a worker's age matters and that therefore it should be included as a contingency variable. That is, the variable was found to moderate the relationships between employers' investments and the sustainable employability components in several ways. For instance, the up-to-date expertise and willingness to change of older workers was positively affected by supportive HR practices and developmental supervisory support, but not those of their younger colleagues. Further, the second contingency variable, of worker's job type, was also found to play a role in that there were significant differences between employees from the various occupational groups regarding their levels of sustainable employability (and to a lesser extent their perceptions of employer's investments). Combining a job's educational requirements with the extent of its specialization enabled the differences in the sustainable employability of the different job groups to be understood. These explanatory factors were used to construct a classification system, in which the sustainable employability components for workers in different jobs can be plotted. This is illustrated in Figure 2 below for the job groups in the present study, but would be applicable elsewhere.

Overall, this dissertation shows that, in general, by providing a resourceful and challenging job as well as adequate managerial support, employers can stimulate employees to become and remain employable ever after. Further, this research has demonstrated that, when employers invest in enhancing sustainable employability, they should take account of individual characteristics such as age and, also, that the level of workers' sustainable employability, and how this might be enhanced, may also to an extent depend on their job type. Ultimately, both employees and employers benefit from employer's investments in sustainable employability, with the majority of investments investigated positively affecting workers' well-being as well as their job performance.

Figure 2 Sustainable employability plotted against a worker's job (applied in a hospital context)



Notes:

- Dark grey box: highly educated workers with general jobs (in this study, managers and advanced nurses). These are expected to have high levels of sustainable employability.
- Medium grey boxes: highly educated workers with specialized jobs (here, non-nursing medical workers) and less-educated workers with general jobs (here, basic nurses and support workers). These are expected to score similarly with moderate-to-low levels of sustainable employability.
- Light grey box: less-educated workers with specialized jobs. These are expected to score lowest on sustainable employability. Such a combination was not present in this sample (examples are skilled workers such as hairdressers where only limited vocational education is required).

Scholarly implications and suggestions for further research

By studying complex mediation and moderation relationships, and by including a broad range of antecedents, contingency variables and outcome variables that are relevant from the perspectives of both employees and managers, this dissertation has enriched the sustainable employability literature. Construct muddiness has been avoided by adopting a consistent conceptualization and operationalization of sustainable employability. Moreover, the value of sustainable employability in the context of hospitals has been shown and explained. The study's empirical materials provide robust support for these contributions in that the survey of a large sample of employees across three different hospitals has produced consistent results.

Paralleling the four research gaps, this dissertation's contributions to the research field and subsequent suggestions for further research are shown in Table 1. Naturally, the research design used in this dissertation has some limitations (e.g. cross-sectional self-reported data, single context analysis). To enhance the readability of this summary, these limitations are not discussed here (see pages 173 -174 for an extensive description of the limitations) but are reflected in the further research suggestions in Table 1.

Table 1 Scientific contributions and suggestions

Scientific contributions	Suggestions for further research
<p>The conceptual fuzziness that has characterized prior research has been addressed by elaborating a consistent definition, conceptualization, and measurement of sustainable employability, which can be used in future research. A strength of this dissertation's understanding of sustainable employability is that the frequently used employability variables of current up-to-date expertise and willingness to change have been combined with future employment opportunities, and have been causally related to each other.</p>	<p>Empirical research is needed that uses a longitudinal design to confirm the causality, and to examine whether and why, or why not, the various sustainable employability components are stable over time.</p>
<p>The individual and joint contributions of the various employer's investments to sustainable employability have been revealed, as well as the similarities and differences between the effects of various investments on the three components of sustainable employability. These findings can inform future research in deciding which investments are relevant to include (based on the dependent variables that are to be studied).</p>	<p>The mechanisms that may explain the sometimes unexpected effects of employer's investments on sustainable employability need to be examined further. One option would be to include the possible explanatory role of person–environment fit (Kristof-Brown et al., 2005) in sustainable employability studies. Future research could also study whether the effects of a given investment are influenced by their implementation by line managers (possibly using Wright and Nishii's (2013) distinction between intended, actual, and perceived HR practices).</p>
<p>Preliminary empirical evidence is provided in support of the assumption that both employees and employers benefit from an employer's investments in sustainable employability, and that up-to-date expertise partially links the investments to the well-being and job performance outcomes. In addition, the tradeoff effect linked to supportive HR practices that was found provides an additional variant to the conflicting outcomes perspective in the HRM literature. To date, this perspective has mainly considered the option of HRM having non-significant or negative effects on well-being, while positively impacting on performance (Van de Voorde et al., 2012), whereas this study found supportive HR practices that were positively related to well-being and negatively to job performance.</p>	<p>More research is needed on the 'hard' outcomes of investing in sustainable employability. Here, more objective outcomes on the unit or organizational level, such as absenteeism, turnover, unit productivity, customer satisfaction, could be included</p>
<p>A rich nuanced insight has been offered into when, how, and why a worker's age and job type matter when examining sustainable employability and how to enhance it. The findings provide valuable information for future research. For example, the theoretical and empirical examination of job type has resulted in a classification system that can be used to plot and understand employees' sustainable employability in different jobs and different organizational settings.</p>	<p>Further research is required to determine whether this dissertation's findings and conclusions (e.g. regarding the classification system) are generalizable both within and beyond the turbulent hospital sector. It would be particularly informative to conduct comparative research and examine sustainable employability in sectors that differ in the amount of turbulence present.</p>

Practical implications: explicit actionable ways to boost sustainable employability

This research provides concrete suggestions on how employers could stimulate their workers' sustainable employability (although this is not to deny employees' responsibility for maintaining and enhancing their own sustainable employability). Table 2 summarizes the practical recommendations of this dissertation, in which examples are provided that employers could apply when investing in their workers' sustainable employability, along with the potential results of such investments.

Table 2 Practical recommendations

Recommendations for practice	Explicit and actionable suggestions	Potential results
Invest in your workers' sustainable employability by providing them with a resourceful, challenging job and adequate managerial support. Customize these investments according to the desired sustainable employability component.	Concretize managerial support that is focused on employee development by providing your workers with the opportunity to use a self-assessment tool (such as the 'Loopbaanspiegel'), in which they can rate their employment opportunities and their willingness to change against the personal development activities they have undertaken over the past year.	Employees' self-reflections will be enhanced, and they will become more aware of the need to increase and maintain their sustainable employability. This will result in employees becoming more open towards development suggestions coming from their supervisor, and acting accordingly.
Ensure you provide sufficient and appropriate investments. Most, but not all, of the employer's investments in workers' sustainable employability that were considered in this study pay in terms of increased employee well-being and job performance.	Empower your employees with task variety and job autonomy, show support for their well-being, and help them with their functioning. Make individual arrangements that suit the employees' private lives and job tasks.	Workers' up-to-date expertise is boosted through the various employer's investments and, consequently, their well-being and job performance are enhanced. This means that both the employee and the employer benefit from such employer investments in their workers' sustainable employability.
	However, be aware of the 'spoiled worker alert', where workers become too comfortable in their current job because of good managerial support for their functioning. This could result in employees becoming stuck in their jobs and reluctant to adapt to changes, which will endanger their sustainable employability.	Further, employer's investments positively affect employees' willingness to change and their future employment opportunities.
	Hence, when providing tailor-made arrangements, always ensure that you also stimulate employees' development and flexibility.	

First, provide all your workers with equal opportunities (investments) to enhance and maintain their sustainable employability.

Second, take possible age differences, or age effects, into account.

Create a life-stage-friendly climate and endeavor to reduce the negative effects of stereotypical beliefs about older workers, such as them being less able to develop. This research suggests that older workers can and need to develop themselves.

Depending on the size and age-composition of your workforce, implement supportive HR practices that are specifically aimed at helping older workers (such as exempting them from night shifts and physically demanding job tasks).

All employees, including older workers, will feel supported when their employer provides them with opportunities that enable them to increase their sustainable employability. In response, they begin to act accordingly (such as by becoming more flexible).

Pay particular attention to the sustainable employability of workers in vulnerable positions.

Using this dissertation's classification system (see Figure 2), assess the extent to which your workforce includes employees with job types that have potentially low sustainable employability.

Especially enrich the jobs of employees who are in 'entrapped employment' (often highly educated employees in highly specialized jobs) where there are few alternatives open to them. Provide them with general job tasks such as management tasks (such as membership of the work council) and the opportunity to participate in departmental or organizational projects (such as projects on regulating quality of services).

The sustainable employability of workers in entrapped functions can be broadened when their jobs are enriched with general tasks. This is likely to result in them becoming more flexible and adaptable when, for example, confronted with organizational changes.

SAMENVATTING IN HET NEDERLANDS

Veranderingen op de arbeidsmarkt zoals globalisering, technologische innovaties en vergrijzende populaties vragen van zowel werknemers als werkgevers om in toenemende mate flexibel en aanpassingsgericht te zijn (Stichting van de Arbeid, 2013). In de wetenschap en in de praktijk leeft de overtuiging dat het voor werknemers van toenemend belang is om de mogelijkheid of het vermogen tot werk gedurende de loopbaan te verzekeren. Dit is in het kort waar het concept van duurzame inzetbaarheid om draait (Forrier et al., 2015; Thijssen et al., 2008). Een dergelijke duurzaam inzetbare medewerker is in staat om met de constant veranderende werkomgeving om te kunnen gaan. Onderzoekers beargumenteren dat het niet alleen voor medewerkers zelf belangrijk is om duurzaam inzetbaar te zijn, maar dat werkgevers er ook baat bij hebben. Bijvoorbeeld omdat duurzaam inzetbare medewerkers geacht worden beter te presteren binnen hun organisaties (Van der Klink et al., 2011; Van der Heijde en Van der Heijden, 2006).

Om deze redenen is onderzoek dat inzicht verschaft in de duurzame inzetbaarheid van medewerkers, hoe dit gestimuleerd kan worden alsook wat het oplevert, relevant voor de praktijk. Huidig onderzoek kenmerkt zich echter door meerdere, verschillende definities en conceptualiseringen voor het concept van duurzame inzetbaarheid die niet altijd op een consistente wijze zijn geoperationaliseerd. Verder ontbreekt het aan een brede kijk op hoe duurzame inzetbaarheid gestimuleerd kan worden en wat dit precies oplevert. Daarom staat de volgende onderzoeksvraag centraal in het proefschrift:

Hoe is de duurzame inzetbaarheid van medewerkers gerelateerd aan individuele, baan- en organisatiekenmerken alsook aan uitkomsten voor de werkgever en werknemer?

In deze dissertatie wordt onderzocht hoe diverse antecedenten en contingentie variabelen (op individueel, baan- en organisatieniveau) gerelateerd zijn aan de duurzame inzetbaarheid van werknemers, en hoe deze invloed hebben op uitkomsten die voor zowel de werkgever als de werknemer relevant zijn. Door een variëteit aan antecedenten, contingentie factoren (omstandigheden), en uitkomstvariabelen mee te nemen, kan dit onderzoek een rijk inzicht geven in duurzame inzetbaarheid. Duurzame inzetbaarheid is in dit onderzoek gedefinieerd als *het vermogen en de bereidheid van een medewerker om productieve arbeid te leveren gedurende de loopbaan*. Productieve arbeid verwijst naar het adequaat uitvoeren van de huidige baan, of van andere taken of functies (mocht de arbeidsomgeving veranderen). In dit proefschrift is de term van ‘werkgeverinvesteringen’ gebruikt om een diversiteit aan baan- en organisatiekenmerken te omvatten, waarvan verwacht wordt dat deze invloed hebben op de duurzame inzetbaarheid van medewerkers alsook op uitkomsten relevant voor de werkgever en werknemer.

Bovenstaande vraag is onderzocht in de Nederlandse ziekenhuissector. Er wordt verwacht dat deze dynamische context bij uitstek geschikt is voor dit onderzoek naar duurzame inzetbaarheid (Forrier et al., 2015; Pool et al., 2015; RVZ, 2015). Zo worden ziekenhuizen in toenemende mate geconfronteerd met marktwerking en met aanhoudende technologische en medische innovaties (Cooke en Bartram, 2015; Townsend en Wilkinson, 2010). Daarnaast stijgt de vraag naar zorg als gevolg van een vergrijzende bevolking, maar tegelijkertijd daalt de

omvang van de beroepsbevolking om aan de groeiende zorgvraag te kunnen voldoen (AZW, 2016; OECD, 2007). Duurzaam inzetbare ziekenhuismedewerkers worden verondersteld beter om kunnen gaan met deze constante veranderingen (Forrier et al., 2015; Pool et al., 2015; RVZ, 2015). Op die manier zijn ze tevens in staat kwalitatief goede zorg te leveren, wat een reden kan vormen voor werkgevers om te investeren in de duurzame inzetbaarheid van hun medewerkers.

Van vier lacunes naar een onderzoeksmodel

Vier lacunes in het huidige onderzoek naar duurzame inzetbaarheid geven richting aan het theoretisch kader en het bijbehorende onderzoeksmodel van dit proefschrift.

Ten eerste ontbreekt een consistente conceptualisering en meting van duurzame inzetbaarheid. Er is een grote verscheidenheid aan manieren waarop ten eerste, inzetbaarheid en, ten tweede, duurzame inzetbaarheid tot nu toe zijn geconceptualiseerd en gemeten. Dit heeft geleid tot de kritiek dat de concepten niet eenduidig geformuleerd zijn en dat het onderzoeksveld gefragmenteerd is (Forrier et al., 2015; McQuaid en Lindsay, 2005). Dit onderzoek reageert op deze kritieken door, in lijn met de eerdergenoemde definitie van duurzame inzetbaarheid, het concept op consistente wijze te conceptualiseren en te operationaliseren. Duurzame inzetbaarheid van medewerkers wordt geconceptualiseerd door middel van drie componenten: (1) up-to-date expertise, (2) bereidheid tot veranderen en (3) percepties van toekomstige loopbaankansen (in het kort: loopbaanverwachtingen). Onderzocht wordt in hoeverre de up-to-date expertise en bereidheid tot veranderen van een medewerker (samen gezien als de *huidige* mate van inzetbaarheid) gerelateerd zijn aan de verwachtingen van de *toekomstige* loopbaankansen. Dit sluit aan bij het lange termijnperspectief dat centraal staat in het concept van duurzame inzetbaarheid. 'Duurzaam' refereert in essentie aan het continu inzetbaar zijn en blijven gedurende de loopbaan, vanaf de loopbaanstart tot aan de pensionering (Thijssen et al., 2008). Dit lange termijnperspectief onderscheidt het begrip 'duurzame inzetbaarheid' van 'inzetbaarheid', dat gewoonlijk op het heden is gericht (Berntson et al., 2006; Van Emmerik et al., 2012).

Ten tweede is tot op heden slechts beperkt onderzocht hoe een breed scala aan werkgeverinvesteringen gezamenlijk duurzame inzetbaarheid beïnvloeden. Een brede kijk op hoe werkgevers de duurzame inzetbaarheid van medewerkers kunnen bevorderen ontbreekt, aangezien onderzoek zich enkel richt op baankenmerken (bijvoorbeeld Van Emmerik et al., 2012), ofwel op managementondersteuning (bijvoorbeeld Nauta et al., 2009) als antecedenten. Om een diepgaand inzicht te verkrijgen in de specifieke antecedenten die de ontwikkeling van duurzame inzetbaarheid verklaren en om de unieke en gecombineerde bijdragen van de antecedenten te kunnen achterhalen, is het noodzakelijk om de diverse variabelen te combineren in één onderzoek. De antecedenten zijn in dit onderzoek geïntegreerd in het concept van werkgeverinvesteringen dat zowel het bieden van een verrijkende en uitdagende baan omvat (gemeten als de mate van autonomie, variëteit en werkdruk), alsook het geven van adequate managementondersteuning (gemeten als ondersteunende HR-praktijken, maatwerkafspraken, ondersteuning door de leidinggevende in dagelijks functioneren en ondersteuning door de leidinggevende in persoonlijke ontwikkeling). In dit proefschrift wordt onderzocht hoe dergelijke investeringen de drie duurzame inzetbaarheidscomponenten beïnvloeden. Hypothesen hierover zijn ontwikkeld op basis van modellen betreffende baankenmerken (De Lange et al., 2010; Hackman en Oldham, 1975; Van Emmerik et al., 2012) en theorieën over

sociale uitwisseling en menselijk kapitaal (Knies en Leisink, 2014; Snape en Redman, 2010; Solberg and Dysvik, 2015; Takeuchi et al., 2007).

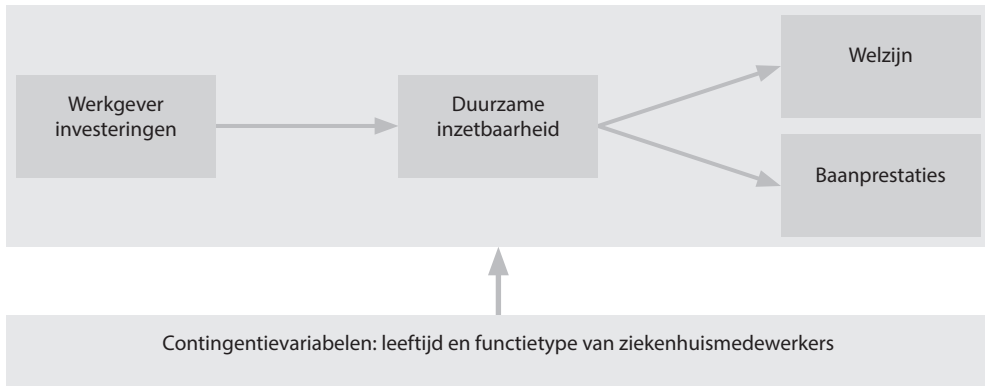
Ten derde is het onduidelijk of duurzame inzetbaarheid een mediërende variabele is in de relatie tussen werkgeverinvesteringen en uitkomstvariabelen. Eerder onderzoek heeft zich enkel gericht op ofwel de antecedenten van duurzame inzetbaarheid (bijvoorbeeld Wittekind et al., 2010), ofwel de uitkomsten (bijvoorbeeld De Cuyper et al., 2014; Kinnunen et al., 2011). Onderzoek dat zowel de antecedenten als uitkomsten tegelijkertijd bestudeert, ontbreekt voorsnog. Zodoende is het niet voldoende empirisch onderbouwd dat het voordelig is om te investeren in de duurzame inzetbaarheid van werknemers door de positieve uitkomsten die het zou opleveren. Daarom wordt in dit proefschrift onderzocht of en in hoeverre de duurzame inzetbaarheidscomponenten up-to-date expertise en bereidheid tot veranderen mediëren in de relaties tussen werkgeverinvesteringen enerzijds, en de uitkomstvariabelen baanprestaties en welzijn anderzijds. Baanprestaties zijn relevant vanuit het werkgever- of organisatieperspectief en welzijn is een relevante uitkomst gezien vanuit het medewerkersperspectief. De keuze voor deze twee uitkomstvariabelen is deels gebaseerd op de *Balanced HRM Approach* waarin wordt benadrukt dat HRM-onderzoek zowel economische uitkomsten als medewerker-uitkomsten dient mee te nemen (Boselie et al., 2009; Paauwe, 2004). Verder is onder andere de *Conservation of Resources* theorie (Hobfoll, 2001) gebruikt om hypothesen te ontwikkelen over de relaties tussen de duurzame inzetbaarheidscomponenten en de uitkomstvariabelen.

Ten vierde is de rol van contingentievariabelen nauwelijks bestudeerd. Dit is opvallend, aangezien een veelheid aan contingentietheorieën in de organisatiewetenschappen beargumenteert dat één optimale wijze van organiseren niet bestaat. Integendeel, elementen als een passende organisatiestructuur, leiderschapsstijl en baanontwerp zijn juist afhankelijk van bepaalde contingenties (omstandigheden) binnen en buiten organisaties (Fiedler, 1964; Hersey en Blanchard, 1993; Kinnie et al., 2005; Yukl, 2012). Geredeneerd vanuit een dergelijk contingentieperspectief is het zeer aannemelijk dat het effect van werkgeverinvesteringen op de duurzame inzetbaarheid van werknemers niet gelijk is voor alle soorten medewerkers, maar juist afhankelijk is van bijvoorbeeld kenmerken van de medewerker zelf en zijn/haar baan. Tot nu toe zijn er echter weinig studies die inzicht hebben gegeven in deze plausibele veronderstelling (uitzonderingen zijn Forrier en Sels, 2003a; Kinnunen et al., 2011; Kirves et al., 2011). Daarom wordt in dit proefschrift onderzocht of en in hoeverre duurzame inzetbaarheid en de invloeden hierop afhankelijk zijn van (1) de leeftijd van medewerkers en (2) hun functietype. Ten eerste geldt leeftijd, zowel in de wetenschap als in de praktijk, als een belangrijke duurzame inzetbaarheidsfactor die nadere aandacht verdient. Levenslooptheorieën (Carstensen, 1995; Kooij et al., 2013) en theorieën over leeftijd-gerelateerde stereotypering (Posthuman en Champion, 2009) zijn gebruikt om hypothesen te ontwikkelen over de modererende rol van leeftijd in dit onderzoek. Ten tweede wordt verwacht dat het onderzoeken van de rol van functietype waardevolle informatie oplevert over de mogelijke verschillen tussen beroepsgroepen (zowel in het algemeen gesproken als ziekenhuis-specifiek). Diverse theoretische inzichten zijn toegepast om hypothesen te ontwikkelen over de meerdere rollen die functietype mogelijk speelt in dit onderzoek. Zo worden inzichten uit de strategische HRM-literatuur gebruikt (Lepak en Snell, 2002), alsook theorieën op microniveau die het effect van gespecialiseerde versus generieke functies op individuen uitwerken (Nauta et al., 2005; Thijssen en Van der Heijden, 2003). De Nederlandse ziekenhuizen bieden een ideale onderzoekscontext

om de validiteit van de contingentierollen van leeftijd en functietype te testen, aangezien het personeelsbestand van ziekenhuizen vergrijsd en er een grote diversiteit is aan beroepen.

De vier lacunes leiden tot het volgende onderzoeksmodel dat de focus van dit proefschrift visualiseert:

Figuur 1 Onderzoeksmodel



Onderzoeksontwerp en methodologie

In dit onderzoek zijn kwalitatieve en kwantitatieve methoden gecombineerd om antwoord te kunnen geven op de centrale onderzoeksvraag. De *kwalitatieve* data zijn verzameld om een gedegen inzicht te verkrijgen in de onderzoekscontext (Nederlandse ziekenhuissector) en om de *kwantitatieve* data te interpreteren, die verzameld en gebruikt zijn om de veronderstelde relaties in het onderzoeksmodel te testen.

Ten eerste is een scala aan sector- en organisatiespecifieke documenten geanalyseerd om te begrijpen hoe contextuele ontwikkelingen invloed hebben (gehad) op de ziekenhuissector, en om te duiden waarom deze ontwikkelingen vragen om duurzaam inzetbare medewerkers. Daarnaast zijn semigestructureerde interviews gehouden met ziekenhuismedewerkers en hun leidinggevenden. Deze interviews hadden tot doel om inzicht te krijgen in de percepties van medewerkers en leidinggevenden over de duurzame inzetbaarheid van medewerkers en de condities die nodig zijn om dit te verbeteren. In totaal zijn 21 respondenten geïnterviewd, afkomstig uit diverse functies (te weten: verpleegkundigen, paramedici als OK-assistenten, poli-assistenten, leidinggevenden) en werkzaam in drie verschillende, algemene ziekenhuizen. De kwalitatieve inzichten zijn tevens gebruikt om het kwantitatieve onderzoeksontwerp te valideren.

Ten tweede zijn, om het onderzoeksmodel te testen, kwantitatieve data verzameld door middel van een cross-sectioneel vragenlijstonderzoek. De vragenlijst is verspreid onder medewerkers van drie Nederlandse, algemene ziekenhuizen (N = 1,815). Aangezien veel concepten in dit onderzoek de percepties van medewerkers betreffen, is een enquête onder veel medewerkers de meest geschikte onderzoeksstrategie (Gerhart, 2007). De kwantitatieve data zijn geanalyseerd door middel van *Structural Equation Modeling* (SEM) technieken.

Bevindingen en conclusies aan de hand van de vier lacunes

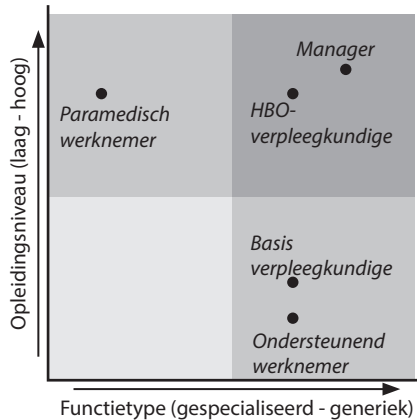
Allereerst laat dit onderzoek zien dat respondenten het meest positief zijn over de up-to-date expertise component van duurzame inzetbaarheid, gevolgd door de bereidheid tot veranderen. Respondenten schatten hun toekomstige loopbaankansen (de derde component) relatief laag in. Zoals verwacht laat dit onderzoek zien dat de percepties van de *huidige* up-to-date expertise en bereidheid tot veranderen belangrijke determinanten zijn van *toekomstige* loopbaanverwachtingen van medewerkers. Vooral bereidheid tot veranderen is een belangrijke factor; het effect van deze variabele op loopbaanverwachtingen is sterker dan het effect van up-to-date expertise. Dat is niet verrassend gezien de mate van turbulentie die de Nederlandse ziekenhuissector karakteriseert en waardoor medewerkers zich constant dienen aan te passen.

Ten tweede laten de bevindingen zien dat up-to-date expertise en bereidheid tot veranderen belangrijke, partieel mediërende mechanismen zijn in de relaties tussen gepercipieerde werkgever-investeringen en loopbaanverwachtingen. Globaal gesproken tonen de resultaten dat werkgevers de duurzame inzetbaarheid van hun medewerkers kunnen stimuleren door ze een verrijkende en uitdagende baan te bieden samen met adequate managementondersteuning. De drie duurzame inzetbaarheidscomponenten worden echter niet altijd *gelijktijdig* bevorderd door de werkgever-investeringen; soms worden slechts één of twee componenten positief beïnvloed door de onderzochte investeringen en in sommige gevallen gaat dit zelfs ten koste van een derde duurzame inzetbaarheidscomponent.

Ten derde hebben de meeste werkgeverinvesteringen in dit onderzoek positieve, directe en indirecte effecten (gedeeltelijk gemedieerd door up-to-date expertise) op zowel de baanprestaties als het welzijn van respondenten. Enkele investeringen leiden tot een negatieve uitkomst en in een enkel geval is er zelfs een *trade-off* gevonden: ondersteunende HR-praktijken hebben een positieve invloed op welzijn, maar een negatief effect op baanprestaties. Al met al laten de resultaten zien dat, in de meeste gevallen, zowel werkgevers als werknemers profiteren van werkgever-investeringen in duurzame inzetbaarheid.

Ten vierde laat dit proefschrift zien dat de contingentievariabele leeftijd van belang is voor de (bevordering van) duurzame inzetbaarheid van medewerkers. Zo heeft de variabele een modererende invloed op de relaties tussen de werkgeverinvesteringen en de duurzame inzetbaarheidscomponenten op verschillende manieren. De up-to-date expertise en bereidheid tot veranderen van werknemers van 45 jaar en ouder worden bijvoorbeeld gestimuleerd door ondersteunende HR-praktijken alsook door ondersteuning van de leidinggevende in de persoonlijke ontwikkeling, terwijl de up-to-date expertise en bereidheid tot veranderen van hun jongere collega's niet significant worden beïnvloed door voornoemde variabelen. De tweede contingentievariabele die onderzocht is in dit proefschrift betreft het functietype. Dit onderzoek laat talrijke verschillen zien tussen ziekenhuismedewerkers in verschillende beroepsgroepen betreffende hun percepties van duurzame inzetbaarheid (en in mindere mate betreffende de gepercipieerde werkgeverinvesteringen). Om deze verschillen te kunnen begrijpen is een classificatie ontwikkeld waarin de opleidingsvereisten en de specialisatiegraad van een functie tezamen zijn gebruikt als verklarende factoren. De duurzame inzetbaarheidscomponenten voor medewerkers in verschillende functies kunnen zodoende worden bepaald (zie figuur 2).

Figuur 2 Duurzame inzetbaarheid afgezet tegen de functie van een medewerker (toegepast op de ziekenhuiscontext)



Legenda:

- Donkergrijze box: hoogopgeleide werknemers met generieke banen (in dit onderzoek: managers en Hbo-opgeleide verpleegkundigen). Van hen wordt verwacht dat zij een goede duurzame inzetbaarheid hebben.
- Middengrijze boxen: hoogopgeleide werknemers met gespecialiseerde functies (in dit onderzoek: paramedische werknemers als OK-assistenten of analisten) en laagopgeleide werknemers met generieke functies (in dit onderzoek: basis verpleegkundigen en assisterende/ondersteunende werknemers als poli-assistenten). Van deze groepen wordt verwacht dat zij een lage tot middelmatige duurzame inzetbaarheid hebben.
- Lichtgrijze box: laagopgeleide werknemers met gespecialiseerde functies (dergelijke werknemers waren niet vertegenwoordigd in dit onderzoek en zijn daarom niet weergegeven in figuur 2. Voorbeelden hiervan zijn kappers waarvoor enkel een Mbo-vakopleiding vereist is). Van deze werknemers wordt verwacht dat ze een lage duurzame inzetbaarheid hebben.

Samengevat laat dit onderzoek zien dat werkgevers hun werknemers kunnen stimuleren om voor altijd inzetbaar te worden en te blijven. Dit kunnen ze bewerkstelligen door werknemers een verrijkende en uitdagende baan alsook adequate managementondersteuning te bieden. Verder laat dit onderzoek zien dat werkgevers er goed aan doen om rekening te houden met individuele kenmerken zoals leeftijd, wanneer ze voornoemde investeringen doen. Daarnaast toont dit proefschrift aan dat de duurzame inzetbaarheid van werknemers deels afhankelijk is van hun functietype. Uiteindelijk profiteren zowel werkgevers als werknemers van werkgever-investeringen in duurzame inzetbaarheid, aangezien de meerderheid van de investeringen in dit onderzoek een positief effect hebben op baanprestaties en welzijn van werknemers.

Wetenschappelijke bijdragen en suggesties voor vervolgonderzoek

Dit onderzoek verrijkt de literatuur over duurzame inzetbaarheid door complexe mediatië- en moderatiepaden te testen en door een breed scala aan antecedenten, contingentievariabelen en uitkomstvariabelen te bestuderen die relevant zijn vanuit een werkgever- en werknemersperspectief. Een consistente definiëring, conceptualisering en operationalisering van het concept is gehanteerd in dit onderzoek. Bovendien is de waarde van duurzame inzetbaarheid in de context van ziekenhuizen aangetoond. Deze wetenschappelijke bijdragen worden stevig ondersteund door de empirische bevindingen van dit onderzoek, bijvoorbeeld doordat een grote steekproef van medewerkers is verzameld in drie verschillende ziekenhuizen, waarvan de resultaten tussen de drie ziekenhuizen consistent blijken.

De bijdragen van dit proefschrift en de bijbehorende suggesties voor vervolgonderzoek zijn in tabel 1 weergegeven. De bespreking van de bijdragen en suggesties correspondeert met de bespreking van de vier onderzoekslacunes waarop het onderzoek in dit proefschrift gebaseerd is. Uiteraard kent het onderzoeksontwerp van dit proefschrift enkele beperkingen (bijvoorbeeld het gebruik van cross-sectionele en zelf-gerapporteerde data, of de analyse van duurzame inzetbaarheid in één context). Deze samenvatting bevat geen uitgebreide reflectie op de beperkingen van dit onderzoek, maar ze zijn indien mogelijk wel meegenomen in de onderstaande aanbevelingen voor toekomstig onderzoek (zie pagina's 173 -174 voor een uitgebreide beschrijving van de beperkingen).

Tabel 1 Wetenschappelijke bijdragen en suggesties

Wetenschappelijke bijdragen	Suggesties voor vervolgonderzoek
<p>Dit proefschrift doet verslag van een onderzoek waarin een consistente definitie, conceptualisering, en operationalisering van duurzame inzetbaarheid is gebruikt. Een sterkte van dit proefschrift is dat de veelgebruikte variabelen huidige 'up-to-date expertise', en 'bereidheid tot veranderen' en 'toekomstige loopbaanverwachtingen' zijn opgenomen in de opvatting van duurzame inzetbaarheid, en ook aan elkaar gerelateerd zijn.</p>	<p>Empirisch onderzoek is nodig dat een longitudinaal onderzoeksontwerp hanteert. Zo doende kan causaliteit in de gevonden relaties worden bevestigd, en kan de stabiliteit van de verschillende duurzame inzetbaarheidscomponenten worden onderzocht.</p>
<p>Dit onderzoek toont aan hoe werkgever-investeringen individueel en gezamenlijk bijdragen aan duurzame inzetbaarheid. Ook laat het onderzoek de overeenkomsten en verschillen zien tussen de effecten van de investeringen op de drie duurzame inzetbaarheidscomponenten. Toekomstig onderzoek kan zich baseren op deze bevindingen wanneer keuzes moeten worden gemaakt over het opnemen van relevante investeringen (bijvoorbeeld afhankelijk van de specifieke duurzame inzetbaarheidsvariabelen die worden bestudeerd).</p>	<p>Meer onderzoek moet uitwijzen welke mechanismen de (onverwachte) effecten van de werkgever-investeringen op de duurzame inzetbaarheid van werknemers verklaren. Bijvoorbeeld, de mate waarin er overeenstemming ('fit') is tussen een individu en zijn werkomgeving kan worden bestudeerd als verklarend mechanisme in toekomstig duurzame inzetbaarheidsonderzoek (Kristof-Brown et al., 2005). Daarnaast kan verder onderzoek uitwijzen in hoeverre het effect van werkgeverinvesteringen op medewerkers afhankelijk is van de specifieke implementatie door leidinggevendenden (bijvoorbeeld door het onderscheid tussen beoogde, geïmplementeerde en ervaren HR-praktijken van Wright en Nishii (2013) te gebruiken).</p>

Dit onderzoek geeft als één van de eerste studies empirische evidentie voor de veronderstelling dat zowel werkgevers als werknemers profiteren van werkgeverinvesteringen in duurzame inzetbaarheid. Dit onderzoek toont aan dat up-to-date expertise een partieel mediërend mechanisme is in de relaties tussen de investeringen en de twee uitkomstvariabelen baanprestaties en welzijn. Tegelijkertijd laat dit onderzoek zien dat er ook een trade-off is in de effecten van de investering 'ondersteunende HR-praktijken' (namelijk: positief effect op welzijn, maar negatief effect op baanprestaties). Deze bevinding biedt een nieuwe variant op het 'conflicterende uitkomsten perspectief van HRM' (Van de Voorde et al., 2012). Dit perspectief werd tot nu toe namelijk veelal geïnterpreteerd als de mogelijkheid dat HRM niet significante of negatieve effecten heeft op welzijn, en positieve effecten op prestaties (tegenovergesteld aan voornoemde bevinding van dit proefschrift).

Dit proefschrift geeft rijke en genuanceerde inzichten in wanneer, hoe en waarom duurzame inzetbaarheid en de bevordering daarvan beïnvloed worden door de leeftijd en het functietype van medewerkers. De bevindingen zijn informatief voor toekomstig onderzoek. Zo kan de ontwikkelde functieclassificatie (figuur 2) gebruikt worden om de duurzame inzetbaarheid van individuen, werkzaam in verschillende functies, te bepalen en te begrijpen. Er wordt verwacht dat deze classificatie van toepassing is op diverse organisatiecontexten.

De 'harde' uitkomsten van werkgeverinvesteringen in duurzame inzetbaarheid dienen nader te worden onderzocht. Voorbeelden van dergelijke, meer objectieve uitkomsten op afdelings- en/of organisatieniveau zijn: absentiecijfers, verlooperpercentages, productiviteitscijfers, klant (patiënt) tevredenheid, et cetera.

Vergelijkend onderzoek is nodig naar duurzame inzetbaarheid in meerdere sectoren die verschillen in de mate van turbulentie. Zodoende wordt duidelijk in hoeverre de bevindingen en conclusies van dit onderzoek generaliseerbaar zijn, en met welke andere contingentievariabelen rekening gehouden dient te worden.

Praktische bijdragen: concrete stimuli voor duurzame inzetbaarheid

Dit proefschrift biedt concrete manieren waarop werkgevers de duurzame inzetbaarheid van hun werknemers kunnen stimuleren (wat overigens niet betekent dat werknemers geen verantwoordelijkheid dragen voor het onderhouden en bevorderen van de eigen duurzame inzetbaarheid). Tabel 2 laat de praktische aanbevelingen van dit proefschrift zien. In de tabel zijn concrete voorbeelden gegeven die werkgevers en direct leidinggevenden kunnen toepassen om de duurzame inzetbaarheid van hun werknemers te bevorderen. De potentiële resultaten van de werkgeverinvesteringen zijn tevens benoemd.

Tabel 2 Praktische bijdragen

Aanbevelingen	Concrete voorbeelden	Potentiële resultaten
<p>Investeer in duurzame inzetbaarheid door medewerkers een verrijkende en uitdagende baan te geven (bijvoorbeeld door ze autonomie en taakvariëteit te geven) en adequate managementondersteuning te bieden.</p>	<p>Concretiseer adequate managementondersteuning dat is gericht op het ontwikkelen van medewerkers, door je werknemers de mogelijkheid te geven om een self-assessment te maken (bijvoorbeeld 'de Loopbaanspiegel') waarin ze hun eigen loopbaanverwachtingen en veranderingsbereidheid kunnen beoordelen en dit kunnen afzetten tegen de ondernomen ontwikkelactiviteiten gedurende het afgelopen jaar.</p>	<p>Zelfreflecties van medewerkers zullen toenemen, en ze worden zich waarschijnlijk meer bewust van de noodzaak om de eigen duurzame inzetbaarheid te vergroten en op peil te houden. Uiteindelijk zullen medewerkers meer ontvankelijk worden voor ontwikkelingssuggesties van hun leidinggevende, en zullen ze zich daarnaar gaan gedragen.</p>
<p>Investeer in een variëteit aan mogelijkheden om de duurzame inzetbaarheid van medewerkers te bevorderen, zodat zowel de organisatie ervan profiteert (bijvoorbeeld door middel van verbeterde baanprestaties van medewerkers) als de individuele medewerker (bijvoorbeeld door toegenomen welzijn).</p>	<p>Versterk je medewerkers door ze taakvariëteit en autonomie te geven, ondersteun ze in hun welbevinden en help ze met hun functioneren. Maak individuele maatwerkafspraken die passen bij de persoonlijke situatie en bij de baan van een medewerker.</p> <p>Echter, wees je bewust van het zogenaamde 'verwende werknemer-effect'. Dit betekent dat werknemers zich té comfortabel voelen in hun huidige functie wanneer ze goede ondersteuning ervaren in hun dagelijks functioneren. Dit kan er uiteindelijk toe leiden dat medewerkers vastzitten in hun huidige baan en zich verzetten tegen veranderingen. Dit brengt hun duurzame inzetbaarheid in gevaar.</p>	<p>De up-to-date expertise van werknemers wordt gestimuleerd door diverse werkgeverinvesteringen, wat vervolgens hun welzijn en baanprestaties bevordert. Dit betekent dat zowel de werkgever als de werknemer profiteren van werkgeverinvesteringen in duurzame inzetbaarheid. Daarnaast vergroten werkgeverinvesteringen de bereidheid tot veranderen en de toekomstige loopbaankansen van medewerkers.</p>

Zorg er daarom voor dat je als leidinggevende een balans bewaart in enerzijds het bieden van hulp bij het dagelijks functioneren en individuele maatwerkafspraken, en anderzijds het stimuleren van de persoonlijke ontwikkeling en het verbreden van de horizon.

Ten eerste, bied al je werknemers gelijke mogelijkheden (investeringen) om hun duurzame inzetbaarheid te vergroten en te consolideren.

Ten tweede, houd rekening met leeftijdsverschillen of leeftijdseffecten.

Creëer een levensfasebewust en leeftijdsvriendelijk organisatieklimaat en ga de negatieve effecten van stereotypisch denken over oudere werknemers tegen (denk aan: 'ouderen zijn minder bereid en in staat om zich te ontwikkelen'). Dit onderzoek laat zien dat oudere werknemers zich kunnen en ook moeten ontwikkelen. Implementeer ondersteunende HR-praktijken specifiek gericht op oudere werknemers. Voorbeelden hiervan zijn oudere werknemers vrijstellen van nachtarbeid of van fysiek zware taken.

Alle werknemers, inclusief oudere werknemers, voelen zich ondersteund wanneer hun werkgever hen mogelijkheden biedt om duurzame inzetbaarheid te vergroten en te consolideren. Zodoende zullen werknemers zich hier ook naar gaan gedragen (bijvoorbeeld: ze worden flexibeler).

Geef aandacht aan de duurzame inzetbaarheid van medewerkers in kwetsbare functies.

Gebruik de functieclassificatie die is ontwikkeld in dit proefschrift (zie figuur 2) om te bepalen in hoeverre het personeelsbestand bestaat uit medewerkers met mogelijk lage duurzame inzetbaarheid (als gevolg van hun functietype).

Verrijk vervolgens met name functies die gekenmerkt kunnen worden als fuikfuncties. Dit zijn hoogopgeleide en gespecialiseerde functies waarin medewerkers op den duur mogelijk vast komen te zitten. Geef deze medewerkers generieke taken zoals managementtaken (bijvoorbeeld: lidmaatschap van de ondernemingsraad) en de mogelijkheid om deel te nemen aan afdelings- of organisatiebrede projecten (bijvoorbeeld: kwaliteitszorgprojecten).

De duurzame inzetbaarheid van medewerkers in fuikfuncties zal worden vergroot wanneer hun functies worden verrijkt met algemene taken. Dit zal resulteren in flexibele en aanpassingsgerichte medewerkers die om kunnen gaan met veranderingen.

CURRICULUM VITAE

Jasmijn van Harten studied Public Administration and Organizational Science at Utrecht University. She received her bachelor's degree in 2009 and subsequently completed the two-year Research Master in Public Administration and Organizational Science, a joint program of Utrecht University, Erasmus University Rotterdam, and Tilburg University. She graduated in 2011 with a master's thesis that she presented at the 2011 Annual Conference of the European Group of Public Administration. The thesis concerned the adaptive leadership behavior of directors of Dutch arts and cultural education organizations.

In 2011, Jasmijn worked as a junior researcher at the Utrecht University School of Governance (USG) on a project commissioned by the Stichting Arbeidsmarkt Ziekenhuizen (StAZ) in which a sustainable employability self-assessment instrument was developed for Dutch hospital employees.

In 2012, Jasmijn started her PhD research at USG on hospital workers' sustainable employability. She has presented her research at international conferences organized by the Academy of Management (2014, 2015), Dutch HRM Network (2013, 2015), European Group of Public Administration (2012), Improving People Performance in Healthcare (2012, 2013), and Work, Employment and Society (2013). She has published in international scientific journals (Personnel Review) and national professional journals (PW de Gids). She has given several talks about her research to practitioners at various hospitals.

Alongside her research, Jasmijn teaches undergraduate (bachelor) and graduate (master) courses and supervises master students in the field of Strategic HRM. In 2015, she obtained her teaching qualification degree (BKO) from the Faculty of Law, Economics, and Governance of Utrecht University.

Since 2014 Jasmijn has participated as an academic consultant in several projects in which public sector workers' perceptions of safety and their ability to manage client aggression are evaluated.

In 2015, Jasmijn was a member of the local organizing committee of the Dutch HRM Network Conference that was hosted by Utrecht University. She organized the pre-conference doctoral consortium and was a co-convener of the panel on 'Recontextualising work and management of care professionals'.

Jasmijn has been a member of the Faculty Council of the Faculty of Law, Economics, and Governance since 2013. As of September 2016, Jasmijn will be an Assistant Professor at USG and Chairperson of the Faculty Council.

