

Should I stay or should I go?

A workplace perspective on
older persons' labour market participation

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Zal ik blijven of zal ik gaan?

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Chapter 1

Introduction

1.1 Explaining variation in older persons' labour market participation

The central aim of this dissertation is to investigate how variation in older persons' labour market participation can be explained. With increasing age, one question becomes ever more pressing for an older worker: "Should I stay or should I go?". Older persons will make a host of considerations before answering this question. First and foremost, they have to ask themselves whether or not retirement is economically feasible. Can I already afford withdrawing from the labour market, or do I still have to supplement my income by participating? Further considerations may for example involve the partner: Does s/he encourage retirement? Also in the event of poor health or health-related limitations in performing work tasks, the inclination to retire is likely to be greater.

While in the first place this appears to be an individual choice, older persons' decisions are effectively restricted by external factors. At a level beyond the individual worker, the eligibility for and availability of pension benefits plays a role in older persons' considerations regarding retirement. Generous and easily accessible pension benefits reduce financial constraints with regard to retirement, and affect older persons' withdrawal decisions.

Clearly, older persons' deliberations regarding the decision whether to remain in the labour market or to withdraw from it through retirement are structured at different levels and take place in various domains. Health and income are for example located on the micro-level, in the domain of the individual older persons and their household or family. The provision of retirement benefits through the welfare state's pension system is an example of an aspect positioned on the macro-level.

A level that is frequently not considered in research on older persons' labour market participation is the meso-level: The characteristics of the workplace, i.e. the characteristics of the job itself as well as employer- provided policies and practices, might also affect older persons' deliberations with regard to their labour market participation. Older workers in a favourable workplace might find their work less strenuous and consider to prolong their participation. Little physical demands or possibilities for the autonomous planning of working days might, for example, alleviate their demands. Additionally, employers can exert influence on the characteristics of the workplace through the provision of policies or practices. The implementation of age-aware human resources practices and provision of training or courses might change the workplace in ways that can prolong older persons' working careers. This way, employers' (strategic) behaviour affects their

older workers' participation deliberations.

Deliberations regarding the labour market participation of older workers can, thus, be explained from a macro, micro, and meso-level perspective. In this dissertation, I contribute to prior research by focussing on the characteristics of the workplace as meso-level factors. I do not specifically investigate whether older persons' labour market participation is externally restricted. Prior research acknowledged that retirement might occur voluntarily or involuntarily (e.g. Dorn & Sousa-Poza, 2010; Shultz, Morton, & Weckerle, 1998; Van Solinge & Henkens, 2007). In the following, I give an overview of the prior explanations and research results located at the different levels.

1.2 Micro-level and macro-level explanations

The diversity in deliberations affecting older persons' labour market participation is reflected in various different theoretical explanations in the scientific literature. Most of these are situated at the micro and the macro-level.

1.2.1 Theoretical explanations

Most theoretical macro-level as well as micro-level approaches make one common (implicit) assumption: older workers' are (bounded) rational actors and take their decision whether to remain in the labour market or to retire based on an evaluation of the costs and benefits these alternatives entail. This idea is reflected in the, originally economic, perspective that individuals have an income-leisure preference, and that they have to find their perfect fit between the supply of work to earn income and the enjoyment of leisure time (Killingsworth, 1983). A person's income-leisure equilibrium is in part determined by personal characteristics and circumstances. For example, higher accumulated economic resources or a poor health is argued to increase the value of leisure time. Persons with a greater preference for leisure time might realize this desire through (early) retirement.

As the framework of income-leisure preference argues, the individual retirement decision is the result of a search for an optimal equilibrium between income and leisure. While this decision is essentially dependent on the individual, individuals are constrained by the opportunity structure imposed by the macro-level. For example, the provision of pension benefits by the welfare state might affect individuals' deliberations. If public pension benefits are meagre, older persons need to provide for their pension income themselves. In a situation like this, older persons may ascribe greater value to income. As a result, their inclination to enjoy additional leisure time through retirement may be hampered. The

contrary applies if public pension benefits are generous: They provide a different source of income for older persons and, thus, shift the equilibrium towards leisure.

Also the life-course principle (Elder & Pavalko, 1993) and the notion of mid-life experiences (Damman, Henkens, & Kalmijn, 2010; Schils, 2008), rather used in the sociological literature, tie up to the notion that individuals take decisions based on an evaluation of costs and benefits (Schils, 2008). These theoretical frameworks append the income-leisure idea by the notion that human agency occurs within a structure of earlier life events affecting later life outcomes (Elder & Pavalko, 1993). Rather than including current features into the evaluation of costs and benefits of retirement, these theories consider the past as being important for today's decisions.

Also the push-and-pull framework (Ebbinghaus, 2006; Hofäcker & Unt, 2013; Van Oorschot & Jensen, 2009), which was initially used to formulate hypotheses on the macro-level, considers costs and benefits of retirement. In this framework, 'push' factors are poor macro-economic circumstances that decrease older persons' benefits from labour market participation. 'Pull' factors might be generous public pension benefits that make retirement more attractive, and, thus, 'pull' older persons towards retirement (Blöndal & Scarpetta, 1999; Buchholz, Hofäcker, & Blossfeld, 2006; Hofäcker & Unt, 2013). Though via different mechanisms, push and pull factors both provide arguments for retirement. In addition, this literature sometimes introduces 'stay' factors as examples for macro-level characteristics providing reasons for individuals to remain in the labour market longer (Hofäcker & Unt, 2013). One could for instance think of an increase in the statutory retirement age as a stay factor.

1.2.2 Prior research

Summarizing prior research is complicated for several reasons. First, there is great variety in the dependent variable that is studied to assess older persons' labour market participation. Entry into retirement or early retirement, the intention to retire, the willingness or ability to retire or to remain in the workforce, labour market participation, the age at which people (intend to) retire are just examples of variables that were used to assess older persons' labour market participation. The most striking difference is probably that studies focussing on the labour market participation compared active and inactive persons, while those looking at the intention or age of retirement were restricted towards the active working population. This impedes comparability between studies.

Second, results of prior research were restrained to single countries, some only applied to men, or to a specific group of employees. As a result, it is unclear to

what extent these findings can be generalized. For example, Damman, Henkens, and Kalmijn (2011) and Van Solinge and Henkens (2013) focussed on the Netherlands, Von Bonsdorff (2009) used data from Finland, Mein et al. (2000) studied the United Kingdom, and Hayward, Grady, Hardy, and Sommers (1989), Hayward, Friedman, and Chen (1998) made use of data stemming from the USA. Often due to data limitations, researchers restricted their analyses to men (Damman et al., 2011; Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998), employees of a limited number of organizations (Damman et al., 2011; Henkens, 1999; Mein et al., 2000), or civil servants (Mein et al., 2000). Despite their limitations, these studies offer valuable theoretical insights on mechanisms underlying older workers' labour market participation decisions. The short overview presented here makes clear, however, that studies based on a representative sample of the working population in a country are scarce. An exception is the paper by Schils (2008), who uses nationally representative data from three different types of welfare states, i.e. the United Kingdom, Germany and the Netherlands, to assess the impact of individual, human capital and job characteristics on early retirement.

Despite the diverse samples used, prior research consistently finds health and income to be the main predictors of retirement: higher economic resources clear the way for earlier retirement and a good health is related to later retirement (Von Bonsdorff, 2009; Damman et al., 2011; Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998; Henkens, 1999; Mein et al., 2000; Schils, 2008; Van Solinge & Henkens, 2010, 2013). Also the partner and family characteristics are increasingly recognized as important predictors of retirement behaviour: Spouses frequently (wish to) retire together (Blau, 1998; Coile, 2004) and financially dependent children are recognized to delay retirement (Damman et al., 2011).

Third, there are few studies that regard macro-level characteristics, such as welfare pension benefits, in relation to older persons' labour market participation (Blöndal & Scarpetta, 1999; Gruber & Wise, 1999; Van Oorschot & Jensen, 2009). Those studies generally showed that generous public pension benefits reduce older persons' labour market participation and increase early retirement. With respect to the data and methods used to attain these results, those studies are very divergent. Also, they are limited with regard to the characteristics measuring public pension generosity and eligibility. Gruber and Wise (1999) reported separate descriptive analyses on the relation between official (early) retirement age or pension plans and labour market participation in eight European countries, the US, Canada and Japan. Van Oorschot and Jensen (2009) results for early retirement were based on a review of the (early) pension systems in the Netherlands and Denmark, rather than empirical results. Blöndal and Scarpetta

(1999) analysed the labour supply of male older workers only, and did so in 15 countries by relying on macro-level data rather than individual-level data. Dorn and Sousa-Poza (2010) and Kim (2009) both investigated a multitude of countries but did not report significant relationships between measures for the public pension system and older persons' labour market participation.

Next to those characteristics of the welfare system, macro-economic circumstances are considered to relate to older persons' labour market participation. Prior research including macro-economic characteristics can be differentiated with regard to whether findings were reported between macro-level characteristics (Blöndal & Scarpetta, 1999; Kim, 2009) or were based on individual-level data (Dorn & Sousa-Poza, 2010; Fischer & Sousa-Poza, 2006). In those studies, a higher unemployment rate in a country and a lower GDP per capita were associated with a smaller likelihood to participate in the labour market (Blöndal & Scarpetta, 1999; Dorn & Sousa-Poza, 2010; Fischer & Sousa-Poza, 2006; Kim, 2009).

1.3 Meso-level explanations: workplace characteristics

As Beehr, Glazer, Nielson, and Farmer (2000) notice, the meso-level has for long not been considered in studies on older persons' labour market participation. In order to gain insight into prior studies on the workplace, i.e. the characteristics of the job itself as well as employer-provided policies and practices, two pertinent questions are addressed in the following. First, how exactly is the workplace taken into account in prior studies on older persons' labour market participation? Second, how are employers considered to shape older persons' workplace in prior research?

1.3.1 How is the workplace researched?

A few prior studies investigating older persons' labour market participation have accounted for the meso-level. They have done so in different ways, but, generally, different job characteristics are from the workplace. First, as discussed above, there is one branch of literature considering the workplace in combination with the micro-level or macro-level. In those studies, expectations on the relation between workplace characteristics and older persons' labour market participation were formulated based on micro-or macro-theoretical perspectives, such as the framework of push and pull-factors (Buchholz et al., 2006). In those studies, the workplace constitutes part of other explanations, rather than that it is specifically

put in focus.

Second, studies focussing on the workplace in particular use insights of the job turnover literature and rely on theoretical perspectives such as (work-role) withdrawal theory (Adams, Prescher, Beehr, & Lepisto, 2002; Hanisch & Hulin, 1991; Smith, Holtom, & Mitchell, 2011). In this literature, job turnover is regarded as a form of voluntary withdrawal from the job. When switching employers, withdrawal theory assumes that workers have to detach from their ‘work roles’, i.e. their job, organization and/or their career, and that this detachment is more difficult if commitment with the work roles is higher. This idea can be translated to retirement decision making, where retirement is regarded as a form of complete withdrawal from the labour market. Favourable workplace characteristics heighten workers’ commitment with their job, organization and/or their career, and are this way hypothesized to relate negatively to job turnover or retirement (intentions). To sum up, using withdrawal theoretical insights for retirement decision making offers the possibility to formulate expectations on workplace characteristics specifically.

Third, independent of the theoretical framework used, research linking workplace characteristics to retirement intentions and actual retirement has been very diverse. Authors have for example used various workplace characteristics as predictors of retirement, and also variation in the methods and data used is large. The earliest studies considering the workplace usually investigated the relevance of physical demands for older persons’ labour market participation, and also more recent studies related these positively to retirement (intentions) (Blekesaune & Solem, 2005; Geuskens, Oude Hengel, Koppes, & Ybema, 2012; Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998; Henkens, 1999; Van Solinge & Henkens, 2013). Recently, more studies investigate workplace characteristics. They often formulate their variables in terms of vocabulary stemming from the job demands-control framework (Karasek, 1979) but use very ambiguous wording. Job stress or pressure (Blekesaune & Solem, 2005; Van Solinge & Henkens, 2013), autonomy at the workplace (Beehr et al., 2000; Blekesaune & Solem, 2005; Boumans, De Jong, & Vanderlinden, 2008; Geuskens et al., 2012), skill variety (Beehr et al., 2000), job challenge or complexity (Henkens, 1999; Van Solinge & Henkens, 2013; Boumans et al., 2008; Hayward, Friedman, & Chen, 1998), or job involvement (Adams, Prescher, et al., 2002), are just exemplary for the multitude of variables that are hypothesized to relate to retirement (intentions). This complexity in the terminology and operationalization of workplace characteristics makes it infeasible to summarize prior findings.

This complexity is increased even further due to different data sources. For

example, some studies use data from single companies in the USA (Adams & Beehr, 1998; Beehr et al., 2000; Taylor & McFarlane Shore, 1995) or the US air force (Smith et al., 2011), while others use data that are assumed to be nationally representative for the USA (Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998; Shultz et al., 1998). Several other studies include single countries, e.g. Finland (Sutinen, Kivimäki, Elovainio, & Forma, 2005), Norway (Blekesaune & Solem, 2005), Denmark (Lund & Villadsen, 2005), Belgium (Boumans et al., 2008; Schreurs, Van Emmerik, De Cuyper, Notelaers, & De Witte, 2011; Schreurs, De Cuyper, Van Emmerik, Notelaers, & De Witte, 2011), the Netherlands (Geuskens et al., 2012; Henkens, 1999; Van Solinge & Henkens, 2013), or the United Kingdom (Gielen, 2009; Mein et al., 2000). Also a restriction to organizations (Boumans et al., 2008; Mein et al., 2000), or occupations (Sutinen et al., 2005) is visible. None of those studies investigates the workplace in a country comparative perspective, and few use nationally representative data.

1.3.2 How do employers shape the workplace?

As described in the previous paragraphs, prior studies have focussed on explaining micro-and macro-level theoretical mechanisms relating to older persons' labour market participation. In this literature, the meso-level is considered as given, rather than that the focus is on how it is shaped. The question, however, arises why workplaces differ with respect to the characteristics they comprise. How come that some older workers have more favourable workplace characteristics than others? As employers take the decisions in organizations (Gazier, 2001), I take a step back and focus on employers' investments in the workplace through policies or practices. By investing in favourable workplace characteristics, employers might enhance their workers' participation (Brooke & Taylor, 2005; Canduela et al., 2012; De Grip, Van Loo, & Sanders, 2004; Groot & Maassen van den Brink, 2000; Schilling & Larsen, 2011; De Vries, Gründemann, & Vuuren, 2001).

In prior research, two sorts of employer-provided investments are frequently distinguished: training or courses and, more general, human resources practices. While no age-related differentiation is made in the sort of the training or courses that employers provide, it is remarkable that younger workers feel more attracted by those offers, and that older workers' participation is rather low (Antikainen, 2001; Bishop, 1996; Canduela et al., 2012; Van Dalen, Henkens, Henderikse, & Schippers, 2006). In contrast, human resources practices frequently address the age of workers, e.g. as 'age-specific' or 'age-aware' human resources measures (Remery, Henkens, Schippers, & Ekamper, 2003; Schaeps & Klaassen, 1999). These human resources measures include, for instance, the provision of additional leave

days for older workers, the reduction of overtime hours, or the possibility to coach younger workers. When employers invest in measures like these, this might affect the extent to which workers experience the workplace characteristics as appealing.

As those workplace investments do not emerge naturally, I provide an outline of some theoretical explanations that can help to understand how employers take this investment decision. The common feature of these explanations is that they assume that employers are (bounded) rational and that they favour the option that maximizes the benefits of the organization (Kalleberg, Knoke, Marsden, & Spaeth, 1996). Most of the literature on investments in the workplace focusses on workers' age and provides arguments why employers are often reluctant to invest, specifically in their older workers. First, older workers are often regarded as being 'overpaid', because of the so-called seniority principle. It implies that older workers are paid more than their actual productivity (see e.g. Finkelstein & Burke, 1998; Lindley & Duell, 2006; Van Dalen, Henkens, & Schippers, 2010). This arguably weakens employers' incentives to invest in measures aimed at prolonging older workers' tenure.

Second, human capital theory explains that investments in older workers' human capital are relatively unprofitable, because the period in which employers can reap the benefits is rather short when retirement is to occur in the near future (Bassanini, Booth, Brunello, Paola, & Leuven, 2005; Becker, 1964; Canduela et al., 2012; Hedge, Borman, & Lammlein, 2006; Lindley & Duell, 2006). The accumulated benefits from human capital investments are, therefore, expected to be lower, which, in turn serves as a disincentive for employers to provide training to their older workers (Barrett & Connell, 2001; Felstead, Green, & Jewson, 2012; Taylor & Urwin, 2001).

Third, age stereotypes are known to undermine employers' willingness to invest in older workers (Posthuma & Campion, 2009). The literature on age stereotypes suggests that employers cannot evaluate the productivity of each single worker due to incomplete information. To adjust for this, they use their prior knowledge and general characteristics of workers, such as gender, age or ethnicity, as an estimate for productivity (Arrow, 1973; Phelps, 1972). Prior studies on employers' age stereotypes indicate that they generally regard older workers as being less productive or flexible, and having a lower acceptance of new technologies (Chui, Chan, Snape, & Redman, 2001; Henkens, 2005; Loretto, Duncan, & White, 2000; Remery et al., 2003). These age stereotypes are assumed to decrease employers' willingness to provide training for older workers, and, thus, might negatively affect their willingness to invest.

To sum up, the studies mentioned above contain valuable insights on mechanisms explaining employers' reluctance to invest in measures benefiting older workers. While this literature elaborates on the relevance of age for employer-provided investments in the workplace, theories to hypothesize about the determinants of employer investments are scarce. Rather, several explanatory variables are known to explain for example training decisions of employers (for a review, see Knoke & Kalleberg, 1994). For instance, employers operating in sectors in which labour markets are tight may be more inclined to invest in measures aimed at retaining older employees, regardless of lower benefits associated with investments in older workers (Conen, Henkens, & Schippers, 2011; Karpinska, Henkens, & Schippers, 2011; Lazazzara, Karpinska, & Henkens, 2013). Furthermore, the expectation is frequently formulated that (training) investments are more likely in larger organizations, for example due to lower training costs (Knoke & Kalleberg, 1994) or more formalized structures (Knoke & Kalleberg, 1994; Lazazzara et al., 2013). To explain variation in employers' investments in workplace characteristics, one must take factors such as these into account.

1.4 Research objectives and contributions

In order to address some of the major limitations of prior research, the meso-level, i.e. the workplace, is put central in this dissertation. The Job Demands-Resources (JD-R) model of Bakker and Demerouti (2007) offers the possibility to address the relevance of the workplace and allows investigating older persons' labour market participation. Originally, this model stems from the literature in personnel psychology and assumes that every occupation comprises its specific job demands and job resources. Bakker and Demerouti (2007) define job demands as '[...] aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain [...] costs' (p. 312). Workplaces with physically demanding tasks might for example bear higher job demands. But also a low control over one's job might be demanding for individual workers. In contrast, job resources are '[...] aspects of the job that are [...] (1) functional in achieving work goals; (2) reduce job demands and the associated [...] costs; (3) [or] stimulate personal growth, learning, and development.' (Bakker & Demerouti, 2007, p. 312). Usually, workplaces are considered to comprise job resources if they offer for example training possibilities or high autonomy, meaning that individuals can decide freely on e.g. their work tempo or work organization.

By specifically focussing on the workplace, this dissertation is innovative in several aspects. I contribute to the literature by investigating the workplace from

the perspective of workers and employers, considering not only the relation between the workplace and older persons' labour market participation, but also employers' behaviour regarding investments in the workplace. The application of an integrated approach is apparent in two regards. By using the Job-Demands Resources model of Bakker and Demerouti (2007), I sketch a theoretical framework that allows addressing the relevance of workplace characteristics in research on older persons' labour market participation. Job demands and job resources are characteristics of the workplace that can be argued to stimulate or restrain older workers' labour market participation. Individuals are considered to prolong their participation if they expect the involved benefits to be higher than the costs. The appeal of workplace characteristics might play an important role in defining the costs and benefits. The integrated approach is also valuable in order to assess employers' investments in workplace characteristics. Employers can decrease the job demands or increase the job resources through, for example, the provision of training or human resources measures. The implementation of the JD-R framework offers additional insights into investments in older workers. By investing in training, employers are arguably increasing job resources, while the provision of human resources measure can be regarded as a modification of, at the same time, the job demands and the job resources at the workplace. I contribute to the literature by addressing the two main research objectives of this dissertation with a common theoretical framework that puts the relevance of workplace characteristics central.

In this dissertation, I extend our knowledge on older persons' labour market participation by studying workplace characteristics as an explanation for individuals' participation. In the first part of this dissertation, I pose the following research question: *How do workplace characteristics relate to older persons' labour market participation?* As indicated above, most prior studies accounting for the workplace incorporate their hypotheses in theoretical frameworks originally used for micro-and macro-level predictions. The underlying mechanism relating workplace characteristics and older persons' labour market participation remains under-theorized in these studies. In line with a recent study of Van Solinge and Henkens (2013), I use ideas stemming from the Job Demands-Resources framework to address these gaps in Chapter 2 and Chapter 3.

In Chapter 4 and Chapter 5, I explicitly acknowledge that the workplace cannot be regarded as given, but is shaped by employers. Even though other authors assess that a favourable workplace contributes to a prolonged participation of older workers (Siegrist, Wahrendorf, Von dem Knesebeck, Jürges, & Börsch-Supan, 2007; Siegrist & Wahrendorf, 2010), the role employers have in determining the workplace remained under-assessed. Thus, I build on prior research

by investigating the relevance of employer-provided investments for workplace characteristics and pose an additional research question: *How can variation in employers' investments in workplace characteristics be explained?* As indicated above, employers' investments can be regarded as a modification of their workers' job demands and job resources. In studying employer-provided training and human resources measures in Chapter 4 and Chapter 5, respectively, I embed the second part of this dissertation in the recent scientific and public discussion about how investments of employers are shaped.

1.5 Research questions

The two research questions formulated above are studied in four chapters. In Chapter 2 and Chapter 3 of this dissertation, I aim to give answers to the first question, how workplace characteristics relate to older persons' labour market participation. In Chapter 4 and Chapter 5, I shed light on the relevance of employers for investments in older persons' workplace characteristics.

1.5.1 Workplace characteristics and older persons' labour market participation

Chapter 2: Hello pension, goodbye tension? The impact of work and institutions on older workers' labour market participation in Europe

In this chapter, I focus on workplace characteristics and macro characteristics in their relation to older persons' labour market participation across Europe. I pose the following research question: *How do workplace and national retirement-related characteristics relate to older persons' labour market participation?*

I address this question from the perspective of job demands and job resources. While older persons might perceive some workplace characteristics as job resources, other features increase the job demands. In this chapter, autonomy to determine one's own pace of work and work organization are argued to be job resources, while physically demanding work is regarded a job demand. In addition to prior literature, the relation between job demands and job resources for older persons' labour market participation is investigated from a comparative perspective. I study the role of workplace characteristics for 21 European countries. Prior research is frequently restricted to one or single countries, and a limited number of macro-level characteristics. In this chapter, I include a variety of macro-level characteristics that are relating to the countries' macro-economic context as well

as their pension benefit system. Thus, I sketch a more precise picture regarding the role of countries' retirement benefit system for older persons' labour market participation.

I make use of the European Social Survey (ESS) data. The ESS is a cross-national survey held in many European countries among a representative sample of the residential population above age 15 (see Billiet and Pleysier (2007) for more information on sampling and response). The questionnaire includes a fixed part covering topics such as individuals' beliefs or their values, and another part with specific topics, which varies between rounds. I make use of round 2 which was completed by most of the 26 participating countries in the year 2004 (Billiet & Pleysier, 2007). This round of data collection captures respondents' labour market participation and includes information on their workplace environment. The clear advantage of these data is the possibility to enrich them with institutional data. I link the individual information to country characteristics stemming from official statistics provided through Eurostat and the Organization for Economic Cooperation and Development (OECD). Moreover, I use information on each country's pension system, which was collected within the MULTILINKS project (Dykstra & Komter, 2012). The extensive MULTILINKS database includes information on countries' welfare system, for example the retirement regulations (Keck, Hessel, & Saraceno, 2009). This cross-national comparison of individuals' labour market participation enriched with information on the policy and economic context allows assessing the relation of workplace characteristics and rich institutional measures with older workers' labour market participation in 21 European countries.

Chapter 3: Hop or stop? Explaining turnover and retirement intentions of older workers in The Netherlands

To gain more insight into the question how workplace characteristics relate to older persons' labour market participation, I address the research question: *How do workplace characteristics relate to retirement and turnover intentions?* In this chapter, I build upon the prior investigation of Chapter 2 in two ways. First, I study workplace characteristics in relation to retirement as well as job turnover. Studies on job turnover have a tradition of including workplace characteristics as possible explanations for individuals' labour market decisions. However, as explained above, the relevance of workplace characteristics in studies on retirement is minor and more recent. Similarly to job turnover, retirement can be framed as a form of withdrawal from the job (Adams, Prescher, et al., 2002; Hanisch &

Hulin, 1991; Smith et al., 2011). In this chapter, I frame the intention to retire and the intention to switch job as two withdrawal intentions and investigate to which extent workplace characteristics affect these. By linking two fields that have so far mostly been regarded separately, I contribute to an ongoing discussion in the literature whether the same characteristics explain turnover and retirement (Hanisch & Hulin, 1991; Hanisch, 1995), or whether these two withdrawal intentions comprise qualitatively different labour market transitions (Adams & Beehr, 1998; Schmidt & Lee, 2008).

Second, I amplify the investigation of the role of the workplace. Not only workplace characteristics, but also on individuals' demands regarding the workplace might relate to labour market decisions. Whether individuals' demands or wishes are in accordance with the supplies of the workplace, are known under several names, such as the Person-Environment Fit or the needs-supplies fit (Kristof-Brown, Zimmerman, & Johnson, 2005; Piasentin & Chapman, 2006). I emphasize the connection between the individual and the workplace and include this idea into the job demands and job resources framework by phrasing matches and mismatches as resources and demands, respectively.

Comprehensive information on workplace characteristics and characteristics of older persons stems from the Study on Transitions in Employment, Ability and Motivation (STREAM). This panel survey was initiated in 2010 by the Netherlands Organisation for Applied Scientific Research (TNO). More than 15,000 45-64 year old individuals in the Netherlands were interviewed (see Ybema, Geuskens, Van den Heuvel, et al., 2014, for more information). The STREAM data include extensive information on individuals' characteristics and their workplace as well as their labour market behaviour. I made use of the first wave to extend insights of the preceding chapter regarding the impact of the match between individual characteristics and aspects of the workplace environment on older workers' job turnover intentions, as well as on their intentions to retire.

1.5.2 Employers' investments in workplace characteristics

In the fourth and fifth chapter, I turn towards employers and investigate how they shape the workplace, by decreasing job demands and increasing job resources. While individuals can invest in their own human capital, most of the training and skilling of employees is actually taking place through employer-provided investments in their workers (Barrett & Connell, 2001; Bassanini et al., 2005; Becker, 1964; Hansson, 2008; Forrier & Sels, 2003; Picchio & Van Ours, 2011). I investigate two sorts of investments in workplace characteristics; the provision of training

(Chapter 4) and age-aware human resource measures (Chapter 5). While training is clearly implemented to increase job resources, human resource measures might be used to decrease job demands, but also to enhance job resources. Intermediary factors relating to those employer-provided investments are considered as explaining part of the variation.

Chapter 4: Refraining from training: A vignette study on employers' willingness to provide training to their older workers

The provision of training is a topic that is widely discussed in the scientific and public literature. For example under the denominator of life-long learning, employer-provided training is considered to comprise pay-offs for society as it enhances the participation of older workers, and additionally might provide employers with a more productive workforce participation (Goldberg, 2000; Hancock, 2006; Schilling & Larsen, 2011). By addressing the research question *under which conditions employers are willing to invest in their older workers*, I contribute to the literature in two ways in the fourth chapter: I discuss the role of governments and individuals' motivation for employer-provided training. Moreover, rather than using survey data, I implement a vignette study to investigate employers' investments in training.

First, employers' investments are usually regarded as (bounded) rational actors whose aim is to increase the benefits of their organization (Kalleberg et al., 1996). To assess the alternative with the highest returns, they regard the costs and benefits (Gazier, 2001; Kalleberg et al., 1996). Many prior studies refer to this idea and investigate the characteristics that relate to the provision of employer training, e.g. the age of the worker, the costs of the training or the expected future returns (Bassanini et al., 2005; Bishop, 1996; Canduela et al., 2012; Knoke & Kalleberg, 1994; Picchio & Van Ours, 2011). I add two factors to the ongoing discussion about the provision of training: governmental reimbursements for training and workers' interest. In doing so, I argue that the policy context might affect employers' decisions, and that workers are not simply exposed to employers' decisions, but might affect the provision of a favourable workplace.

Second, investment in older workers is a highly debated topic, and the expectation that employers should provide training is often formulated. When asked directly whether they are willing to invest in their older workers, employers might therefore give socially desirable answers. To circumvent this social desirability bias, I implement a vignette study (factorial design) to investigate employers' behaviour (Alexander & Becker, 1978; Ganong & Coleman, 2006; Wallander, 2009). In vignette studies, respondents usually read a short description of a hypothetical

situation or person, and are in the following asked to answer question(s) regarding the vignette description. In this study, respondents read a short description of a hypothetical worker/training situation and are consecutively asked how willing they were to invest in workers' training. Using this data design contributes to prior literature in two ways. First, vignette studies provide a different methodological view on the widely studied topic of employer-provided training. Using a different method allows to compare prior survey results to a semi-experimental vignette study. And second, the vignette design is known to decrease the social desirability bias, because it provides respondents with a hypothetical context, rather than asking directly for their opinion. This is especially advantageous in our setting, because employers might be prone to simply affirm the question regarding employer-provided training in order to prevent an answer that is socially unaccepted.

Chapter 5: Nothing ventured, nothing gained! How and under which conditions employers provide employability-enhancing practices to their older workers

In addition to studying employers' training investments to enhance their workers' job resources, I assess human resources measures where the possibility to augment job resources and decrease job demands are combined. I aim at answering the question *which age-aware human resources measures employers employ, and under which conditions they do so*. By additionally studying human resources measures in the last chapter, I contribute to the discussion among researchers as well as policy makers regarding practices that stimulate older workers to prolong their labour market participation (De Grip et al., 2004; Groot & Maassen van den Brink, 2000; De Vries et al., 2001). As older workers are found to be reluctant to participate in training (e.g. Antikainen, 2001; Bishop, 1996; Canduela et al., 2012; Van Dalen, Henkens, Henderikse, & Schippers, 2006), and employer reluctant to invest in their older workers (e.g. Canduela et al., 2012; Chui et al., 2001; Henkens, 2005; Karpinska et al., 2011; Taylor & Walker, 1998; Van Dalen, Henkens, & Schippers, 2010; De Vries et al., 2001), prior research often subsumes possible practices directed towards older workers under the denominator 'age-aware' or 'age-conscious' human resource measures (Remery et al., 2003; Schaeps & Klaassen, 1999). Especially in the Netherlands, studying these human resources measures is relevant. First, prior results indicate that there is a distinction between human resources measures that are 'hard' or 'soft', or 'demand' or 'spare' older workers (Van Dalen, Henkens, Henderikse, & Schippers, 2006; Remery et al., 2003; Ybema, Geuskens, & Oude Hengel, 2009). Relating to this

discussion by framing human resources measure as investments in job demands and job resources connects well with the literature.

Furthermore, prior results date back some years. As discussions about human resources measure or life-long learning have recently been subject to policy and media attention, more up-to-date results can be a benefit to the discussions. To investigate the investments of employers in age-aware human resources measures, I conduct a representative Dutch corporate survey. Between April and June 2012, invitation letters to participate in this survey entitled “Towards a greying workforce? Human resource policies for older workers” were sent to 8,000 companies. I randomly selected these companies from the Dutch Trade Register [Dutch: *Kamer van Koophandel*], stratified according to company size. A bit less than 1,000 companies participated, providing an encompassing dataset on human resources measures for older workers in the Netherlands (for more information, see Chapter 5). These data are valuable to answer the research question, as they are specifically designed towards this topic and the Dutch context. Thus, they provide extensive information on age-aware human resources measure, and additionally include background knowledge on the organizational context and the economic circumstances the company is exposed to.

1.6 Structure of the book

The structure of the book follows the description of the four chapters above, i.e. Chapter 2 – Chapter 5. In Chapter 2 and Chapter 3 I aim at answering the question how workplace characteristics relate to older persons’ labour market participation. In the succeeding Chapter 4 and Chapter 5, I investigate how variation in employers’ investments in workplace characteristics can be explained. In Chapter 6, I summarize the main findings, and discuss them in light of recent policy debates. Furthermore, suggestions for further research are provided.

Chapter 2

Hello pension, goodbye tension?

The impact of work and institutions on older workers' labour market participation in Europe



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2.1 Introduction

After a peak in the 1970s, the labour participation of older workers decreased rapidly, mainly because of the economic crisis and a diminishing demand for labour. Besides that, retirement schemes expanded and the general belief took hold that everyone should be able to enjoy the ‘golden years’ of retirement (Van Dalen, Henkens, Henderikse, & Schippers, 2006). However, with the ageing of the population, one of the most pressing policy questions concerns retirement schemes in the near future (European Commission, 2009; Komp & Béland, 2012; Walker & Maltby, 2012; Wise, 2010). One policy response is reflected in the Stockholm target in which countries agreed to increase the labour market participation of older workers (55-64 years) to a level of 50 percent by 2010 (European Commission, 2001). After the target year 2010, some countries achieved the 50 percent target; however, despite the agreement among the EU countries, great differences between countries persist. While in 2010 the labour market participation of older workers was about 70 percent in Sweden and Norway, it was about or below 30 percent in for example Austria, Belgium or Poland (see Table 2.6, Eurostat (2013)).

Existing studies showed that individual, work, and institutional characteristics were related to the labour market participation of older workers (Blöndal & Scarpetta, 1999; European Commission, 2009; Liefbroer, 2009; OECD, 2011b). Regarding *individual characteristics*, it was found that early retirement is higher among employees with poor health (Von Bonsdorff, 2009; Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998; Mein et al., 2000; Schils, 2008) and among women (Blöndal & Scarpetta, 1999; European Commission, 2009; OECD, 2011b). Besides that, human capital played a role. Job tenure was associated with a higher probability of non-participation (Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998; Schils, 2008). Education effects, however, turned out to differ between countries. While education was associated with later retirement in the UK (Schils, 2008), the US (Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998), and Norway (Blekesaune & Solem, 2005), studies in other countries reported the opposite effect (Fischer & Sousa-Poza, 2006). Finally, family and partner play a role: individuals who had a partner and those with children appeared to retire earlier in some countries (Damman et al., 2011; Schils, 2008). Moreover, different strands of literature discussed that individual retirement decisions were often taken as a joint decision of spouses (see e.g. Blau, 1998; Coile, 2004) and that informal care obligations affected retirement planning (see e.g. Dentinger & Clarkberg, 2002). With regard to *work characteristics*, studies showed that physical demand (Blekesaune & Solem, 2005; Hayward, Grady,

et al., 1989; Hayward, Friedman, & Chen, 1998) and part-time work (Damman et al., 2010; Hayward, Friedman, & Chen, 1998) decreased labour market participation. Findings regarding compensation were not straightforward. While higher hourly wages were related to earlier retirement in the US (Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998) and UK (Schils, 2008), this association was the opposite in The Netherlands and Germany (Schils, 2008). Also, there was some evidence showing that wealth related to later retirement (Damman et al., 2010). Results regarding *institutional characteristics* showed that a higher unemployment rate in a country and a lower GDP per capita was associated with earlier retirement, while employment protection did not affect early retirement (Blöndal & Scarpetta, 1999; Fischer & Sousa-Poza, 2006; Kim, 2009).

The present study extends these prior investigations as follows. First, we aim at combining the results from previous work by using an integrated theoretical framework. The starting point of this model is the idea that individuals' decisions are (bounded) rational. This means, individual, work, and institutional characteristics might affect the utility (a benefit) or disutility (a cost) that individuals derive from participating in the labour market. By doing so, the analyses presented combine theoretical insights that explain individuals' labour market participation but have been treated separately to date. By including several work and institutional characteristics that have not been investigated before, the present study is wider in scope than earlier studies. In our theoretical model and the analyses, we include work characteristics, more specifically job resources, job demands, and work values; these were found to affect voluntary turnover but have not yet been used to explain the labour participation of older workers (Bakker & Demerouti, 2007; Beehr, 1986; Fasang, Geerdes, & Schömann, 2012; Forma, 2009; Hayward, Friedman, & Chen, 1998; Lambert, Hogan, & Barton, 2001; Mein et al., 2000; Shultz et al., 1998; Siegrist, Wahrendorf, et al., 2007; Siegrist & Wahrendorf, 2010; Smith et al., 2011; Van den Broeck, Van Ruysseveldt, Smulders, & De Witte, 2011; Wang & Shultz, 2010).

With regard to the institutional characteristics, this study provides two contributions. By including 21 European countries, the analyses are conducted on a broader range of countries than prior studies (Fischer & Sousa-Poza, 2006; Kim, 2009; Schils, 2008; Siegrist & Wahrendorf, 2010; Van Oorschot & Jensen, 2009), thus enabling to test more rigorously the link between macro level institutions and individual labour market behaviour using multilevel analysis. Moreover, instead of focusing on general country characteristics such as GDP per capita, specific arrangements affecting older workers' labour market participation are taken into account, namely the generosity of retirement schemes and the labour market situations in the countries.

The resulting hypotheses are tested using the second wave of the European Social Survey (ESS 2004). We complement these data with pension indicators that were developed within the MULTILINKS project (Keck et al., 2009) and data from Eurostat and the OECD with information on the labour market situation. The total dataset includes information on 15,045 individuals from 21 European countries.

2.2 Theoretical framework of labour market participation

To arrive at a theoretical framework for the labour market participation of older workers, we start with the basic idea of labour supply in which individuals weigh the costs and benefits of participating (Wang & Shultz, 2010). With regard to older workers, a central decision concerns the question whether one wants to stay in the labour market or withdraw from it through (early) retirement. In order to model the decision whether or not to participate by means of a rational choice (Coleman, 1990; Wang & Shultz, 2010), individual, work, and national characteristics are assumed to provide a certain (dis)utility for participation (see Figure 2.1). The basic assumption is that the participation of older workers depends on the balance of utility and disutility derived from work. As long as the benefits of participation outweigh the costs, older workers will choose to remain in the workforce. This means that utility leads to participation and disutility contributes to non-participation.

In the present analysis, work and institutional characteristics are included based on the (dis)utility they offer to individuals. As individual characteristics have been addressed in earlier research (Blöndal & Scarpetta, 1999; Von Bonsdorff, 2009; Damman et al., 2010; European Commission, 2009; Fischer & Sousa-Poza, 2006; Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998; Mein et al., 2000; OECD, 2011b; Schils, 2008), we will not formulate specific hypotheses about their association with participation, but take them into account as control variables. First, the literature identified several so-called push and pull factors. Push factors, like bad health and bad jobs, move people towards retirement and pull factors, like welfare state arrangements, are circumstances providing an incentive for non-participation (Blekesaune & Solem, 2005; Hofäcker & Pollnerová, 2006; OECD, 2006, 2011b; Van Oorschot & Jensen, 2009). In the model proposed here, we regard push and pull factors as a disutility from work.

Secondly, the Job Demands-Resources (JD-R) model of work also fits the (dis)utility framework (Bakker & Demerouti, 2007; Fasang et al., 2012). Job

demands refer to ‘physical, psychological, social, or organisational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs’ (Bakker & Demerouti, 2007, p. 312). Examples of job demands are work pressure and high physical efforts. Job resources in contrast are ‘physical, psychological, social, or organisational aspects of the job that are [...] (1) functional in achieving work goals; (2) reduce job demands and the associated [...] costs; (3) [or] stimulate personal growth, learning, and development.’ (Bakker & Demerouti, 2007, p. 312). Career opportunities and autonomy are examples for job resources. While job demands refer to work-related characteristics that involve costs, job resources raise the benefits of the job. This way, job demands reduce the supply of labour due to the costs they involve, while job resources increase the supply of labour due to the benefits they accompany.

Thirdly, part of the literature examines the relationship between intrinsic and extrinsic work values and labour market participation (Frey, 1997; Van den Broeck et al., 2011). These values can also be interpreted in terms of the utility that people derive from work, increasing their labour supply. This is based on the idea that individuals, who value certain aspects of their work more, derive a higher utility from work (Knoop, 1994; Van den Broeck et al., 2011). Regarding their decision whether or not to participate in the labour market, this means that they, due to the positive values, have higher incentives to remain in employment compared to those who do not intrinsically or extrinsically value their work.

2.2.1 Work-related characteristics

Job resources and individual resources can be regarded as a resource for older workers that increase the utility they derive from labour market participation. We regard autonomy in the workplace as a job resource and hypothesise that *older employees are more likely to participate in the labour market if they have more autonomy in their job* (H 1, autonomy hypothesis).

To a certain extent, job demands can contribute to the utility from work as a challenging job can be interesting for employees. Nevertheless, if the challenges are too high, they turn into disutility from work. One clear example of job demands is the physical demand that workers experience in their work. We hypothesise that *older employees are more likely to participate in the labour market if their job is less physically demanding* (H 2, physical demand hypothesis).

Intrinsic and extrinsic values (e.g. Frey, 1997; Ingelhard, 1990) can increase the utility that people derive from work (Knoop, 1994; Van den Broeck et al., 2011) and thus affect labour market participation. People who are motivated by

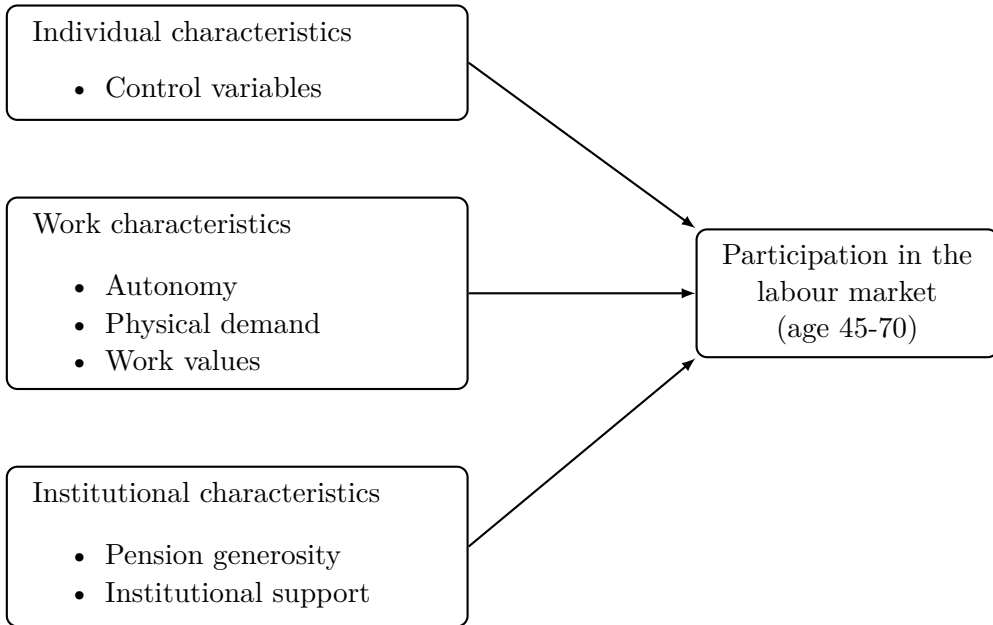


FIGURE 2.1: Individual, work and institutional factors relating to older workers' labour market participation.

intrinsic aspects of the job, such as having interesting work, find the content of the job and the possibilities for development important. Extrinsic values in contrast concern the importance of aspects such as receiving status or high earnings. It should be noted that intrinsic and extrinsic values do not have to contradict each other; employees can be motivated by both of them at the same time (Feather & O'Brien, 1986). Intrinsic values can be identified as personal resources (Van den Broeck et al., 2011), because they provide a utility to participate in the labour market by lowering levels of stress (Knoop, 1994). And, extrinsic values contribute to the utility from work as people will have little access to these aspects outside work. Our next hypothesis therefore reads that *older employees are more likely to participate in the labour market if their intrinsic or extrinsic work values are higher* (H 3, work values hypothesis).

2.2.2 Institutional characteristics

At the national level, there are different institutional characteristics that may affect individuals' (dis)utility derived from work. Here, we focus on two classes of these institutional differences between countries.

The disutility from work can be related to the level of ‘decommodification’ of the welfare state (Esping-Andersen, 1990), meaning that countries can be distinguished based on how important it is for a person to have work in order to have an income. In other words, decommodification is high if welfare state benefits are encompassing and available to a broad group of people. A high decommodification appears in most social-democratic types, like Sweden or Finland. On the contrary, liberal welfare states, such as the United Kingdom or the US, generally provide less encompassing welfare benefits that are available to fewer people. As pensioners are (at least partly) dependent on retirement benefits provided by the social benefit system of their country, the generosity of these benefits will promote differences between countries with regard to the participation rate of older workers. For example, the official retirement age, the mean retirement age or the minimum contribution period in a country can provide information on the ‘availability’ of retirement benefits. The countries’ net replacement rate or their minimum pension level gives insight into the coverage of the welfare state or its financial ‘generosity’. In more generous welfare states, benefits will be available more easily and retirement will be financially more attractive. Following this argumentation, we hypothesise that *older employees are more likely to participate in the labour market if the retirement benefits of the country are less generous (with respect to availability and coverage)* (H 4, pension generosity hypothesis).

Next to differences in the countries’ pension systems, the European countries have different types of labour markets, which as such provide varying utilities for individuals’ labour market participation. The labour market characteristics of a country are a mixture of formal and informal institutions, such as policies concerning labour market protection, the unemployment rate among older workers, and the greying of the population. These institutional characteristics can be regarded from both a demand and supply perspective. On the one hand, a higher unemployment rate in the country might reduce workers’ likelihood to supply labour. On the other hand, a higher unemployment rate might indicate that labour demand is lower. Additionally, these formal and informal norms may also reflect the public opinion about older workers. For example, if their employment position is protected, this may mean that more people are in favour of labour participation of older workers; and, in countries where more older workers participate, societal norms may also be more supportive. This way, the costs of workers’ labour participation are reduced. We therefore hypothesise that *older employees are more likely to participate in the labour market in countries with more formal and informal norms directed towards participation of older workers* (H 5, institutional support hypothesis).

2.3 Data and methods

2.3.1 Data

To test the hypotheses, we used the second round of the European Social Survey (ESS 2004). We decided to use the second round, because, firstly, these data included the necessary individual information, such as labour market participation and work characteristics, like individuals' motivation. And secondly, the 2004 data of the ESS allowed adding rich institutional level information from different sources. We added macro-level indicators that were established within the MULTILINKS project providing information about different welfare state characteristics, such as the official retirement age in a country for men and women and the net replacement rate for different career paths (Keck et al., 2009). Furthermore, we made use of country characteristics retrieved from the Eurostat and the OECD website. All country characteristics referred to 2004, the same year the ESS data were collected.

The second round of the ESS encompasses about 47,500 respondents from 25 European countries. Since country level data were not available for Switzerland, Iceland, Turkey, and the Ukraine, these countries were excluded. We furthermore restricted the analyses to older workers (aged 45 and 70). We chose 70 years as an upper limit, because even though official retirement age is 65 years in most European countries, people can participate beyond the official retirement age. Last, we chose to include individuals who have not been retired longer than ten years. As a result, our analyses refer to 15,045 respondents from the 21 countries Austria, Belgium, Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, Great Britain, Greece, Hungary, Ireland, Luxembourg, the Netherlands, Norway, Poland, Portugal, Sweden, Slovenia and Slovakia.

2.3.2 Operationalization

Dependent variable: labour market participation

The dependent variable labour market participation was generated using the variable asking the respondents about their main activity in the labour market. Those indicating to be 'in paid work (or away temporarily) (employee, self-employed, working for your family business)' or 'unemployed and actively looking for a job' were coded as participating and those not participating include the categories 'unemployed, wanting a job but not actively looking for a job', 'permanently sick or disabled', 'retired' or 'doing housework, looking after children or other persons'. This operationalization is usually used to distinguish the active (labour force)

population from the inactive population (Eurostat, 2013). As stated above, we only included respondents who were between 45 and 70 years of age. Furthermore, we excluded respondents who retired more than 10 years. We did this, because some work characteristics were asked for the last (or current) job. Respondents, who were already retired, thus provide information on their last job. By only including those who retired more recently, we aim at including information that is as reliable as possible. Robustness checks including respondents who retired 5 years ago or less are also discussed in the results section, but not reported due to space considerations.

Based on the European Social Survey data used in this paper, we depict in Figure 2.2 how participation of our sample (N=15,045) decreases with increasing age. We depict the participation rates for the same eight age categories that are also used in the explanatory analyses (compare Table 2.1). In general, this figure shows that labour market participation declines with increasing age of workers. The black solid line signifies the average participation for the 21 countries included in our analyses. Between age 45 and 49, there are more than 83 percent of the respondents participating in the labour market. This percentage is only 50 percent for those aged 58 to 60. In the oldest age group, only about 6 percent of the ESS respondents participate. Furthermore, we depict the participation in seven countries, namely Germany, France, Great Britain, the Netherlands, Poland, Portugal and Sweden, to show how great the variation is between countries. In Sweden (light grey, long dashed line), participation is highest of all countries in all age groups until age 65, while participation is generally lowest in Poland (light grey, dash dotted line). In our sample of the ESS data, the labour market participation of Polish respondents above the age of 64 years is zero. This reflects the very low average exit age from the labour force in Poland, which was 57.7 in 2004 (Eurostat, 2013) and to a lesser extent also the low official retirement age of women, which is 60 years (see Table 2.6). In Great Britain (see Figure 2.2; dark grey, dotted line), participation is highest for the oldest workers. When comparing for example participation for workers between 55-57 years, it becomes obvious that variation between countries is great: in Sweden more than 80 percent participate, while these are less than 40 percent in Poland.

Including the information whether individual workers participate at the labour market, does not consider the possibility that older workers reduce their participation, measured in work hours, before withdrawing from the labour market completely. Hence, studying participation at the extensive margin (participation) rather than at the intensive margin (working hours), cannot account for thoughts raised by research showing that jobs bridging between participation and retirement might become more important (Blau, 1994; Cahill, Giandrea, & Quinn,

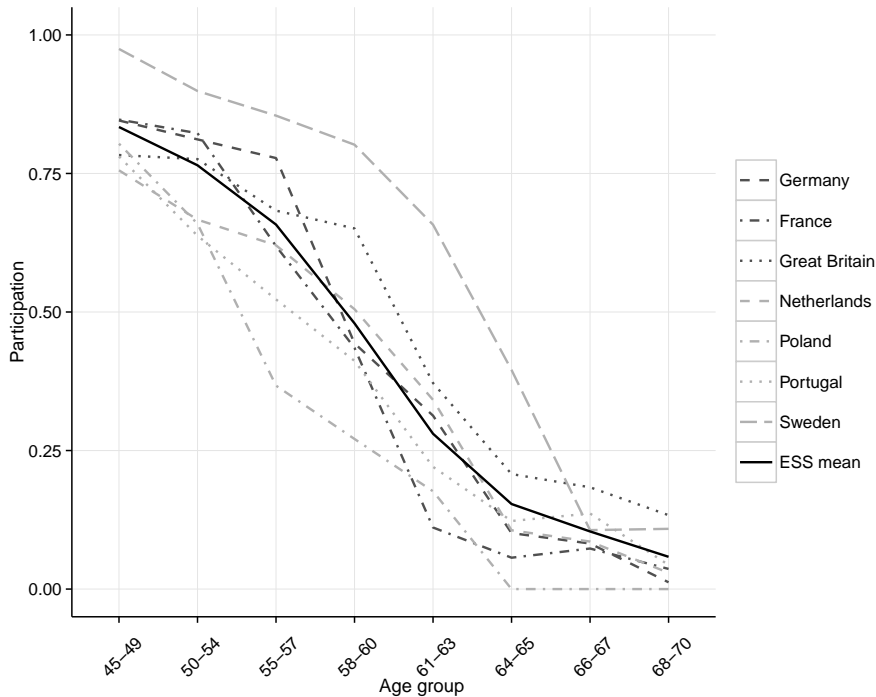


FIGURE 2.2: Labour market participation of workers aged 45–70 in seven European countries and the average ESS participation. ESS 2004, own analyses.

2006; Elder & Pavalko, 1993; Gielen, 2009; Hayward, Friedman, & Chen, 1998). We decide to study participation at the extensive margin, because assuming that work hours can be reduced as a means to withdraw from the labour market in a stepwise manner, disregards the fact that a continuous adaption of work hours is often dependent on norms regarding part-time employment. Older workers can adjust their working hours according to their wishes only in countries where part-time employment is offered as an option (to account for this we include part-time work in a country as a control variable, see below). Our study compares countries where part-time employment is widely considered as a means to reduce work hours (e.g. Germany, the Netherlands) to countries where part-time employment is much less as a form of participation (e.g. Slovakia, Hungary, Greece) (see Table 2.6). By studying participation rather than work hours, we therefore prevent a bias introduced by the divergent possibility of part-time employment.

Independent variables: individual level

Job resources and job demands were measured with the following variables. *Work organisation* measures the extent to which the respondents could decide how their work was organised and work pace is operationalized as the extent to which respondents could choose and change the pace of their work. These two variables were measured on a scale between 0 ('I had no influence') and 10 ('I had complete influence'). *Physical demand* was retrieved from the ISCO-88 codes. We recoded each 4-digit code to its respective 2-digit code; a higher value represents a higher physical demand of the job. Respondents who indicated to work in 'armed forces occupations' were coded to the mean 2-digit ISCO code.

Work values include extrinsic and intrinsic motivation. For *extrinsic motivation* we generated a sum scale, including three items asking respondents to indicate on a scale from 1 ('not important at all') to 5 ('very important') how important it was for them if they were choosing a job to have (a) a secure job; (b) a high income; and (c) good promotion opportunities. *Intrinsic motivation* was measured with the statement 'the job enables them to use own initiative' (1 = not important at all; 5 = very important).

Independent variables: national level

The availability and generosity of welfare state benefits is indicated with a number of variables (see Table 2.6). The *official retirement age* is the age a person may or must retire, without being subject to deductions from pensions. The official age at retirement is regarded separately for men and women. The range of the variable was recoded; the value zero refers to a retirement age of 65 years. Countries in which the retirement age is below 65 have values smaller than zero and countries with a higher retirement age have values greater than zero. *Mean retirement age* in a country was included to assess whether individuals in countries with a higher average retirement age participate longer. We use the *minimum contribution period* that provides information on how long individuals need to contribute to the social benefit system in order to be eligible for pension benefits. The *net replacement rate* (for a standard pensioner of 65 years who worked 40 years with average income) measures the height of the pension as a percentage of prior earnings; it is dependent on prior earnings, the composition of the household, or other household member's earnings (see e.g. Blöndal & Scarpetta, 1999; Keck et al., 2009; OECD, 2011b). The *minimum pension levels* measures the minimum pension provision for pensioners with a certain contribution period, who have pension claims that are below the minimum defined threshold. The *expenditures on old age* indicate the public expenditures on pensions as a percentage of the

GDP.

Regarding the labour market related characteristics, we operationalized the *employment protection legislation* as a measure for both the procedures and costs associated with the dismissal and hiring of workers. The *employment rate for older workers* referred to the labour market participation of workers between age 55 and 64. We also considered the *fraction of the old population*, this is the percentage of the population that is older than 65 in a country.

Control variables

In prior research, several individual characteristics were included in analyses when investigating retirement age or older workers' participation. We included these variables as control variables; descriptive statistics can be found in Table 2.4. We distinguished eight *age groups*. Gender was measured by a dummy variable referring to *male* respondents. *Education* was measured as the formal education in years; more than 20 years of education were recoded to the maximum value of 20 years. *Tenure* is the length of employment in the current (last) organization in years. *Health* is asked on a five-point scale ranging from 'very good' to 'very bad'. We take the two categories 'bad' and 'very bad' together (because of few cases), and distinguish three dummy variables: 'very good health', 'good', and 'fair health'. Having a 'bad/very bad health' constitutes the reference category. A bad health might have preceded non-participation, but it could also appear afterwards. According to OECD standards, *full-time* is a dummy variable indicating whether respondents work(ed) more than 30 hours per week in their current/last employment, this dummy takes value zero if they worked part-time. *Self-employment* (or working in a family business) is opposed to being employed in a firm. We included a dummy variable indicating whether respondents were ever *unemployed* and seeking for work for a period of more than 3 months, because unemployment can be an indication of a disrupted career that forces older workers to work longer at old age. The *industry* of the (last) employment was measured in six categories; 'Agriculture, Mining', 'Manufacturing', '(Electricity, gas and water) Supply, Construction, Trade' (reference category), 'Service', 'Public, Community' and 'Education, Health'. Last we controlled for whether respondents had a *partner* and whether they had *children* below 12 years living in the household. *Income* is calculated with the variables measuring monthly household income and the percentage of income the respondent contributes to it. Household income was asked in twelve categories and each category was recoded to the respective income in Euro. While the higher bound value was taken for the lowest category (150 Euro or less), the lower bound value was taken for the

highest category (10,000 Euro or more). For all other categories, the category mean was considered as the monthly household income. The household income as multiplied with the percentage the respondent contributes to it to retrieve individual monthly income. This measure was transferred to a logarithmic scale.

At the country level, prior research mostly included the GDP per capita and the Gini-coefficient to assess the relation with retirement age or participation. We therefore controlled in our analyses for *gross domestic product (GDP) per capita* in 1000 Euro because richer countries may on average have more opportunities to afford stopping to work at an earlier age than poorer countries. As a measure for *income inequality* (Gini) we included the Gini-coefficient. Furthermore, we control for the *incidence of part-time work* in a country, measured as the part-time workers as percentage of the total employment. We do this to control for the fact that individuals can reduce their working hours in order to retire in a gradual way, especially in countries where part-time work is common.

2.3.3 Methods

Imputation

For all variables that have missing values, we imputed the missing values with imputation by chain equations in Stata 11 (StataCorp LP, 2009). This means that all variables in the imputation model are used to predict all the other variables. In the imputation equations, we included all variables that are used in the later regressions to predict participation. Table 2.4 shows descriptive statistics for the sample without imputation and with imputation. Only for those variables that were imputed (i.e. missing observations, those where $N < 15,045$) we reported the mean and standard deviation for the imputed sample (right columns). From this table it is comprehensible which variables have been imputed (i.e., education, tenure, health, full-time, self-employed, the industry of employment, partner, children, income and the individual level independent variables) and that the mean of the imputed sample and the original sample hardly differ. We analysed the 11 imputed datasets together with the original dataset and report the average relative variance increase due to nonresponse (RVI) in the results, which indicates to what extent the imputed data files vary.

Data analysis

Given the hierarchical structure of our data, with individuals nested in countries, we specified two levels and apply a multilevel framework (e.g. Goldstein, 1999). The advantage of using a multilevel framework in our case was that hierarchical

models could take into account the layered (nested) structure of the data. Measuring errors were specified at each of the two levels. In this way, the error terms take into account that the individual observations within countries may be more alike than individual observations between countries. This means that individual participation behaviour in for example Sweden might be more comparable to other older workers in Sweden, than a worker's participation in Sweden is to a worker's participation in Germany. Because we study the participation of older workers, we ran logistic multilevel regression in Stata 11. Besides the threshold of being in retirement for a maximum of ten years, for which we report the results in the regression tables, we performed robustness checks for participation if the threshold is set at a 5-year retirement. We discuss these results if they differ from these main results with the 10-year retirement threshold. In general, our regression equation can be specified in the following way.

$$Y_{ij} = \gamma_{00} + X_{ij}\gamma_{ij} + Z_j\gamma_j + u_j + \varepsilon_{ij}$$

Where X_{ij} is the vector constituting all individual independent and individual control variables on the lower level, i.e. the individual level, and Z_j the vector including all institutional independent and institutional control variables on the higher level, i.e. the country level. The terms u_j and ε_{ij} signify the error terms on the higher and the lower level, respectively. This means that this model corrects for the fact that individuals might be more similar within countries than between countries. We do not include random slopes for coefficients, because we do not have explicit assumptions about how associations differ between countries. In the following analyses, we only included the institutional variables separately to the individual-level model. We did this because of two reasons. First, the institutional characteristics might be highly correlated and produce collinearity in the model (see Table 2.5 for correlations). Adding them separately prevented this problem. Second, by including several predictors on the country level, standard errors of higher level variables might be inflated and provide unreliable estimations (Gelman & Hill, 2007).

2.4 Results

Table 2.1 shows the multilevel analysis. We include the control variables (Table 2.1, Model 1) and then income (Table 2.1, Model 2). To this model, we add the individual work-related variables, both separately and in combination (Table 2.2,

Model 3). Because the coefficients as reported in Model 2 do not change substantially when including the work-related variables, we only report the coefficients of the work-related variables in Model 3. In Table 2.3 we include the country-level variables successively and separately to the model including all individual level control variables and work-related variables. We report odds ratios; odds ratios above one signify a positive relation with labour market participation, and odds ratios below one a negative relation.

Holding constant for all other variables in the model, Table 2.1 (Model 1) shows that individuals in older age groups are less likely to participate than those in younger age groups. Specifically, individuals above the age of 63 are less likely to participate than those between 61 and 63 years. The odds of participating in the age group 64-65 are for example more than 60% lower than the odds of participating at age 61-63. Individuals younger than 61, are, on the contrary, more likely to participate than those between age 61 and 63. Regarding the other control variables, we see that men participate significantly more than women, but this association disappears after including the interactions, and after including income. Education is related to participation in a decreasing u-shaped way. This indicates that in general the likelihood to participate decreases with increasing education; however, both lower and higher educated are more likely to participate compared to older workers with medium education. Tenure is positively related to participation. Older individuals who worked longer in the same organisation are more likely to participate, holding constant for their age. Furthermore, we assess that the odds of healthier older workers to participate are higher compared to those with 'very bad or bad' health. Respondents who work full-time have lower odds to participate compared to part-time workers. Additionally, the interaction between working full-time and being male appears to be marginally significant in Model 1, indicating that men who work full-time are more likely to participate. This relation is not significant when controlling for income (Table 2.1, Model 2). Furthermore, older workers who are self-employed have higher odds to participate than wage-earners. Having been unemployed for longer than three months is positively (and in Table 2.1, Model 2 significantly) related to participation. We find differences between the industries of employment. Older workers in 'Agriculture and mining' and 'Manufacturing' are less likely to participate than those working in 'Supply, construction and trade' (reference), while those in 'Education and health' are more likely to participate in the labour market. Last, having a partner is positively related to participation (Table 2.1, Model 2). This means that older people with a partner are more likely to participate in the labour market. Furthermore, as the interaction between having children and gender illustrates, older women with a child that is younger than 12 years in the household appear

TABLE 2.1: Odds ratios, multilevel logistic regression on participation (0/1), results for original sample and 11 imputed models (N= 15,045). Model 1+2

	Model 1		Model 2	
	OR	SE	OR	SE
<i>Age group (ref.: 61-63 years)</i>				
45-49	51.137***		52.095***	
50-54	24.559***		25.365***	
55-57	10.828***		10.473***	
58-60	3.672***		3.655***	
64-65	0.384***		0.400***	
66-67	0.210***		0.227***	
68-70	0.100***		0.114***	
Gender (Male=1)	1.308 ⁺		1.008	
Education (in years)	0.954		0.899**	
Education squared	1.007***		1.007***	
Tenure	1.080***		1.054***	
<i>Health (ref.: very bad, bad)</i>				
fair	4.488***		4.637***	
good	7.273***		7.360***	
very good	8.923***		8.842***	
Full-time employed (0/1)	0.719***		0.720***	
Gender * full-time	1.298 ⁺		1.181	
Self-employed (0/1)	2.165***		2.307***	
Ever unemployed > 3 months	1.068		1.240***	
<i>Industry (ref.: Supply, Construction, Trade)</i>				
Agriculture, mining	0.741**		0.770*	
Manufacturing	0.768**		0.740***	
Service	0.985		0.888	
Public, community	1.159 ⁺		1.075	
Education, Health	1.372***		1.174 ⁺	
Partner (0/1)	0.994		1.260***	
Child <12 yrs (0/1)	0.492***		0.529***	
Gender * child	4.949***		3.977***	
Income (log)			1.764***	
Variance country level (log)	-1.377	0.326	-0.844	0.322
σ_u	0.502	0.082	0.656	0.105
ρ (rho)	0.071	0.022	0.116	0.033
Observations	15,045		15,045	
Countries	21		21	
Average RVI	0.042		0.034	

Note: *** p<0.001, ** p<0.01, * p<0.05, ⁺ p<0.1

to be less likely to participate, while older men who have a child are more likely to participate. These outcomes are the same in our robustness checks with the 5-year retirement horizon and replicate the findings of earlier studies. Model 2 shows a positive and significant association between income and participation. This means that older individuals with a higher income are more likely to participate.

In Model 3 (Table 2.2) the work characteristics are included separately (first block) and combined (second block). This means that we first add each work-related characteristic separately to the control variables as reported in the previous Table (first block), and then add all work characteristics at once to the model (second block). Having autonomy in the work place (with respect to both work organisation and work pace) positively relates to the likelihood of participation. Because the variables are highly correlated, the impact of work pace is not significant if both variables are included. These results mainly confirm the autonomy hypothesis, stating that workers with more autonomy are more likely to participate. The relation between physical demand and participation is not significant when included separately. The coefficient is even positive if other work characteristics are taken into account (see second block). This does not support our hypothesis that workers with higher physical demands are more likely to retire. Furthermore, our results refute the work values hypothesis; they show that intrinsic motivation is negatively related to the likelihood to participate (second block). This indicates that workers with a higher intrinsic motivation generally report a lower participation in the labour market. Furthermore, extrinsic motivation is not found to be significantly related to participation, indicating that older workers' participation is independent of their extrinsic motivation.

In Table 2.3 the national characteristics are added separately to the model with all earlier discussed variables (Model 3). The three national level control variables are associated to the labour market participation of older workers. GDP per capita has a negative relation with labour market participation; income inequality has a marginally significant positive relation with labour market participation; and the percentage of part-time workers in a country is also positively (and marginally significantly) related to older workers' labour market participation.

In the next steps we investigate the relation of the institutional variables with the labour market participation of older workers as summarised in the pension generosity hypothesis. The official retirement age (for men and women) does not relate significantly to older workers' participation. The mean age at which people retire in a country is positively related to participation (this association is stronger if the five year retirement period is chosen). Holding constant for all

TABLE 2.2: Odds ratios, multilevel logistic regression on participation (0/1), results for original sample and 11 imputed models (N= 15,045). Model 3

	Model 3	
	OR	SE
<i>Work-related variables (separately)</i>		
Intrinsic motivation	0.952	
Extrinsic motivation	0.990	
Work organisation	1.034***	
Work pace	1.027***	
Physical demand	1.002	
<i>Work-related variables (combined)</i>		
Intrinsic motivation	0.924*	
Extrinsic motivation	1.030	
Work organisation	1.034**	
Work pace	1.010	
Physical demand	1.003*	
<i>Combined model</i>		
Variance country level (log)	-0.879	0.322
σ_u	0.644	0.104
ρ (rho)	0.112	0.032
Observations	15,045	
Countries	21	
Average RVI	0.0378	

Note: *** p<0.001, ** p<0.01, * p<0.05, + p<0.1

the individual characteristics, workers who live in countries with a higher mean actual retirement age are more likely to participate in the labour market. The model shows that the minimum contribution period is not significantly related to participation at the ten year time horizon for retirement, while it is negative and significant at the five year retirement period (not reported). And, the net replacement rate is negatively but not significantly related to the labour market participation of older workers at the ten year period, but it turns significant at the five year time horizon (not reported). The minimum pension level in a country appears to be negatively and significantly related to individual's labour market participation. The odds of older workers to participate, thus, decrease with an increasing net replacement rate and also if the minimum pension level is higher.

TABLE 2.3: Country level effects (holding constant for all variables as in Model 3)

	Control variables						Labour market characteristics					
	GDP per capita		Inequality (Gini)		Part-time workers as % of total employment ^a		Employment protection legislation ^b		Employment rate older workers (55+)		Percentage population older 65 yrs	
Odds Ratio	0.977**		1.055 ⁺		0.977 ⁺		0.946		0.998		0.981	
Variance entry level (log)	-1.169	0.325	-1.028	0.324	-0.985	0.331	-0.937	0.331	-0.879	0.322	-0.882	0.322
σ_u	0.557	0.091	0.598	0.097	0.611	0.101	0.626	0.103	0.644	0.104	0.643	0.104
ρ (rho)	0.086	0.026	0.098	0.029	0.102	0.030	0.106	0.031	0.112	0.032	0.112	0.032

	Availability and generosity welfare benefits													
	Retirement age women (ref: 65 yrs)		Retirement age men (ref: 65 yrs)		Mean retirement age		Min. contribution period		Net replacement rate ^c		Min. pension level ^c		Expenditures on old age (as % of GDP)	
Odds Ratio	0.990		0.976		1.152*		1.001		0.988		0.968*		0.912 ⁺	
Variance entry level (log)	-0.880	0.322	-0.883	0.322	-1.070	0.326	-0.879	0.322	-0.912	0.332	-1.035	0.332	-1.041	0.325
σ_u	0.644	0.104	0.643	0.104	0.586	0.096	0.644	0.104	0.634	0.105	0.596	0.099	0.594	0.097
ρ (rho)	0.112	0.032	0.112	0.032	0.094	0.028	0.112	0.032	0.109	0.032	0.097	0.029	0.097	0.028

Note: *** p<0.001, ** p<0.01, * p<0.05, ⁺ p<0.1

^a missing for Finland; ^b missing for Luxembourg; ^c missing for Norway.

Higher expenditures on old age are negatively related to participation (marginally significant), indicating that higher expenditures for older people decrease the odds for older workers to participate. In unison, these results provide some support for the pension generosity hypothesis, stating that in countries with more generosity the labour market participation of older workers is lower.

Finally, we included several indicators relating to the labour market situation. Employment protection legislation is not significantly related to older people's labour market participation. Also a higher employment rate of older workers in a country does not significantly relate to their labour market participation. Finally, the percentage of people older than 65 years in a country is not significantly related to participation. The outcomes are similar for both time horizons. The institutional support hypothesis can therefore not be supported.

2.5 Conclusion and discussion

As the average age of the population of European countries increases, the policy question what circumstances explain the labour participation of older workers becomes more and more relevant. Knowing more about the work and institutional characteristics encouraging and discouraging the willingness to work among the older age groups has the potential to provide means of supporting the labour market participation of these workers. The present article aimed at identifying such characteristics using a framework where individuals take (rational) decisions. The findings basically showed that while some of the work aspects increased the likelihood of labour market participation of older workers, the institutional characteristics mainly decreased their participation.

These findings have some practical implications. Most and for all, it means that both employers and governments can play a role in stimulating the labour participation of older workers. Employers can do this by offering attractive work places that provide autonomy to older workers. Here, we have focused on characteristics of the job such as discretion in the organisation of work. Nevertheless, employers can also use other human resource policies to be attractive for older workers. Such policies can for example include mentoring relationships, but also an interesting and stimulating workplace through e.g. learning and development might reduce older workers' intention to retire (Münderlein, Ybema, & Koster, 2013). As the results for the pension generosity showed, individual workers seem less prone to participate actively in the labour market if the monetary benefits from welfare are higher. This generally indicates that generous monetary welfare benefits alone do not keep people in the labour market. In order to increase older

workers' labour market participation, governments might decrease the benefits, especially those stimulating early retirement. Recent discussions move in that direction: multiple European countries consider decreasing pension benefits or making early retirement fiscally less attractive. Such policies change the balance between the utility and disutility that people derive from work and retirement. Restricting pension policies may be a viable means of keeping older workers in the workforce. There are, however, some potential downsides. For example, decreasing the generosity may mainly have an impact on the participation of those who earn less and it may lead to unintended effects on those remaining in the workforce, like increased levels of work stress and decreasing work satisfaction. Future studies may be directed at investigating whether such effects occur.

The analyses presented here showed that the factors related to the labour market participation of older workers could be framed in terms of costs and benefits and several of the previously found associations were replicated in this study. Nevertheless, some results of this study differ and some of the expected hypotheses were refuted. An explanation for missing associations between national level variables and older workers' participation may be the convergence of social policies within the European Union. For example, the official retirement age is increasingly similar due to EU level agreements. In 2004, the lowest official retirement age can be found in the Czech Republic, with 57 years for women and 60 years for men, and in France with 60 years for both men and women. The highest official retirement age is 67 years for both men and women in Norway (see also Table 2.6). Furthermore, out of the 21 countries included in our study, the official retirement age is 65 years for women in ten countries. For men, in two third of the countries the official retirement age is 65. This shows that generally the variation in the official retirement age is very small.

Some of the findings of the present study differed from earlier ones. In contrast with most other studies (Blekesaune & Solem, 2005; Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998; Schils, 2008), educational level was negatively associated with the labour market participation of older workers. A possible explanation for this difference concerns the number of countries included. Only the Fischer and Sousa-Poza (2006) study, which also included a larger sample of countries, reports a result comparable with ours. In additional analyses (results available upon request) we included a random slope for education; analyses showed that educational level varied significantly across countries. This suggests that the impact of education differs between these countries. This should be taken into account in future studies investigating the labour market participation of older workers as it points in the direction of institutional differences and effects.

Regarding the negative relation between full-time employment and participation, our finding differed from prior research. Hayward, Friedman, and Chen (1998) encountered that full-time working employees were less likely to retire than unemployed and Schils (2008) assessed that more working hours were related to a lower likelihood of (early) retirement. There may be two reasons for this difference. First, older workers may increasingly choose to work part-time instead of full-time as they get older. If older workers are increasingly participating part-time, part-time employment (rather than full-time employment) would be positively related to participation. This rationale is supported by the fact that part-time work in Europe is mainly relevant for older and younger employees (Eurostat, 2013). Recent research showed that older workers increasingly used part-time employment as a possibility to bridge work and retirement (Blau, 1994; Cahill et al., 2006; Elder & Pavalko, 1993; Hayward, Friedman, & Chen, 1998; Gielen, 2009). This way, labour supply of older workers generally increases, but only at the extensive margin, while labour supply decreases when considering the working hours, i.e. at the intensive margin (Gielen, 2009). Especially in the Netherlands, and to a lesser extent also in the UK or Germany, part-time work is an alternative to full-time employment. A second interpretation concerns the measurement of how many working hours are considered as full-time employment, which differs across these studies.

Besides the already made suggestions for future research, the present study can be extended in a number of directions. First, this study aimed at including work characteristics to explain differences in labour market participation of older workers. Due to data limitations, we were only able to include some of these characteristics. Including more work-related aspects, and in particular organisational policies, will increase our understanding even further. These work-related characteristics should therefore also be considered in future research. While we implicitly assumed that individual and work characteristics were similarly important for older workers independent of their age, it might be interesting for further research to develop theoretical arguments why some work characteristics play a greater role for the ‘younger older’ workers, when compared to the ‘older older’ workers. Related to that, future studies might consider two things. First, we use a measure for intrinsic and extrinsic motivation that is not taking into account whether employees can actually realize their motivations. It may be the case that employees for example find it very important to have an interesting job, but do not have this at their current workplace. In such a case, even though they have a high motivation, this misfit with what they want might lead to a lower work attachment (see e.g. Mündlerlein et al., 2013). Even though (intrinsic or extrinsic) motivation is generally measured with questions comparable to ours,

future research might take into account that motivations might or might not be realized. Second, further research might investigate the role of personal resources and for example extend on this by including other activities than work, like voluntary work and informal care. Third, our operationalization of the dependent variable labour market participation subjoined different forms of withdrawal from the labour market in the category of non-participation, such as e.g. disabled persons or retired individuals. In future research it might be interesting to make a distinction between these possible forms of withdrawal (Blekesaune & Solem, 2005). Finally, we investigated the effects of a number of institutional characteristics. One of the detriments of comparing countries is that one cannot provide an in-depth analysis of the welfare benefits or labour market policies in each of the countries. Future studies might, therefore, find it worthwhile including even more fine-grained indicators of countries' pension systems to investigate how this relates to the participation of older workers. In combination, this has the potential to combine different goals at different levels, namely the national (a sustainable pension systems), the organisational (have a satisfied and productive workforce), and the individual (having a challenging job).

Appendices

TABLE 2.4: Descriptive results for original sample and imputed variables.

	Range	Original sample			Imputed variables		
		Obs.	Mean	SD	Obs.	Mean	SD
Participation	0/1	15,045	0.55				
<i>Age group</i>							
45-49	0/1	15,045	0.23				
50-54	0/1	15,045	0.22				
55-57	0/1	15,045	0.13				
58-60	0/1	15,045	0.12				
61-63 (ref.)	0/1	15,045	0.10				
64-65	0/1	15,045	0.07				
66-67	0/1	15,045	0.06				
68-70	0/1	15,045	0.07				
Gender (Male=1)	0/1	15,045	0.47				
Education (in yrs)	0-20	14,878	11.43	3.87	15,045	11.43	3.87
Tenure	0-65	13,568	31.08	10.38	15,045	30.87	10.57
<i>Health</i>							
Bad/Very bad (ref.)	0/1	15,030	0.10		15,045	0.10	
Fair	0/1	15,030	0.33		15,045	0.33	
Good	0/1	15,030	0.41		15,045	0.41	
Very good	0/1	15,030	0.16		15,045	0.16	
Full-time employed	0/1	13,198	0.83		15,045	0.83	
Self-employed	0/1	14,278	0.19		15,045	0.19	
Ever unempl. >3 mnths	0/1	15,045	0.24				
<i>Industry</i>							
Agriculture, mining	0/1	13,900	0.07		15,045	0.08	
Manufacturing	0/1	13,900	0.20		15,045	0.21	
Supply, Construction, Trade (ref.)	0/1	13,900	0.19		15,045	0.19	
Service	0/1	13,900	0.20		15,045	0.20	
Public, community	0/1	13,900	0.13		15,045	0.13	
Education, Health	0/1	13,900	0.20		15,045	0.20	
Partner	0/1	15,001	0.75		15,045	0.75	
Child <12 yrs	0/1	15,028	0.08		15,045	0.08	
Income (log)	0-9.21	11,902	6.35	1.95	15,045	6.24	2.04
<i>Independent variables (individual level)</i>							
Intrinsic motivation	0-4	14,422	2.98	0.86	15,045	2.98	0.86
Extrinsic motivation	0-4	14,483	2.91	0.73	15,045	2.91	0.74
Work organisation	0-10	14,112	6.20	3.60	15,045	6.12	3.63
Work pace	0-10	14,071	5.79	3.68	15,045	5.72	3.70
Physical demand	10-93	14,062	50.26	25.48	15,045	50.91	25.52

TABLE 2.5: Correlations between macro characteristics (N=21).

	2	3	4	5	6	7	8	9	10	11	12	13
1 GPD per capita	-0.35	0.74	-0.16	0.49	0.14	0.46	0.47	-0.53	0.51	-0.05	0.40	-0.21
2 Inequality (Gini)	1	-0.24	0.10	0.09	0.02	-0.05	0.19	0.38	-0.38	0.09	0.32	-0.01
3 Part-time workers as % of total empl. ^a		1	-0.12	0.36	0.09	0.31	0.45	-0.52	0.34	-0.08	0.20	-0.24
4 Employment protection legislation ^b			1	-0.09	0.57	0.28	0.05	0.05	0.04	0.10	-0.03	0.60
5 Employment rate older workers (55+)				1	0.21	0.37	0.28	-0.56	0.21	-0.19	0.78	-0.49
6 Percentage population older 65					1	0.22	0.21	-0.04	-0.23	-0.05	0.30	0.52
7 Retirement age women						1	0.64	-0.33	0.26	0.28	0.58	-0.15
8 Retirement age men							1	0.07	0.22	0.05	0.40	-0.06
8 Min. contribution period								1	-0.17	0.07	-0.27	0.23
10 Min. pension level ^c									1	0.14	0.02	-0.15
11 Net replacement rate ^c										1	0.16	0.17
12 Mean retirement age											1	-0.43
13 Expenditures on old age (as % of GDP)												1

Note: ^a missing for Finland; ^b missing for Luxembourg; ^c missing for Norway.

TABLE 2.6: Country level variables.

	Control variables				Labour market characteristics		
	N (country)	GDP per capita	Inequality (Gini)	Part-time workers as % of total employment	Employment protection legislation	Employment rate older workers (55+)	Percentage population older 65 yrs
Austria	794	28.5	25.8	19.8	2.15	28.78	15.71
Belgium	622	27.9	26.1	21.4	2.50	29.98	17.18
Czech Republic	1,178	8.6	26.0	4.9	1.94	42.63	13.99
Germany	1,142	26.8	26.1	22.3	2.39	41.79	19.27
Denmark	587	36.5	23.9	22.2	1.90	60.31	14.98
Estonia	740	7.2	37.4	8.0	2.29	52.10	16.34
Spain	508	19.7	30.7	8.7	3.01	41.28	16.83
Finland	783	29.1	25.5	–	2.12	50.97	15.72
France	719	26.6	28.2	17.0	2.89	37.64	16.46
United Kingdom	629	29.6	34.6	25.7	1.10	56.17	15.99
Greece	895	16.8	33.0	4.6	2.81	39.42	17.98
Hungary	555	8.2	27.6	4.7	1.75	31.06	15.55
Ireland	940	36.7	31.5	16.8	1.32	49.59	11.12
Luxembourg	594	59.9	26.5	16.4	–	30.38	13.98
Netherlands	802	30.2	26.9	45.5	2.27	43.70	13.94
Norway	689	45.4	25.2	29.2	2.61	68.00	14.72
Poland	519	5.3	35.6	10.8	2.19	28.01	13.05
Portugal	742	14.2	37.8	11.3	3.36	50.28	16.91
Sweden	744	32.4	23.0	23.6	2.49	69.53	17.21
Slovenia	403	13.6	23.8	9.3	2.57	29.00	14.94
Slovakia	460	6.3	26.2	2.7	1.74	26.79	11.61
Total	15,045						

Country level variables.

	N (country)	Availability and generosity welfare benefits						Expenditures on old age (as % of GDP)
		Retirement age women (ref: 65 yrs)	Retirement age men (ref: 65 yrs)	Min. contribution period	Min. pension level	Net replacement rate	Mean retirement age	
Austria	794	-5	0	15.0	40.8	80	58.8	12.51
Belgium	622	-3	0	29.3	44.3	67	59.4	9.01
Czech Republic	1,178	-8	-5	15.0	34.0	79	60.0	7.32
Germany	1,142	0	0	5.0	16.9	63	61.3	11.48
Denmark	587	0	0	0.0	54.6	71	62.1	5.44
Estonia	740	-5	-2	15.0	18.0	41	62.3	5.33
Spain	508	0	0	15.0	25.9	97	62.2	8.13
Finland	783	0	0	0.0	26.2	63	60.5	8.44
France	719	-5	-5	0.3	33.8	80	59.0	12.30
United Kingdom	629	-5	0	10.5	27.5	82	62.1	5.57
Greece	895	0	0	17.3	34.1	105	62.7	11.71
Hungary	555	-3	-3	15.0	24.5	102	60.5	8.55
Ireland	940	0	0	9.8	38.5	78	62.8	3.38
Luxembourg	594	0	0	10.0	36.9	98	58.3	7.18
Netherlands	802	0	0	0.0	40.8	92	61.1	4.96
Norway	689	2	2	0.0	-	-	62.0	4.85
Poland	519	-5	0	22.5	28.3	78	57.7	11.36
Portugal	742	0	0	15.0	41.4	91	62.2	10.33
Sweden	744	0	0	0.0	40.7	71	62.8	7.58
Slovenia	403	-4	-2	10.0	33.2	63	56.2	9.88
Slovakia	460	-3	-3	15.0	33.9	82	58.5	6.18
Total	15,045							

Chapter 3

Hop or stop?

Explaining turnover and retirement intentions of older workers in The Netherlands



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3.1 Introduction

Researchers disagree whether turnover (intentions) and retirement (intentions) are similar or not. While some authors assume the same characteristics explain these intentions (Hanisch & Hulin, 1991; Hanisch, 1995), others argue that turnover and retirement comprise qualitatively different labour market transitions (Adams & Beehr, 1998; Schmidt & Lee, 2008). However, as retirement and turnover research developed apart from each other there has been very little cross fertilization between them. Given that older workers are generally less prone to switch employer, while younger workers cannot yet retire, it seems logical to distinguish these intentions (Louis, 1980; Schreurs, Van Emmerik, et al., 2011) and use different theoretical notions to explain them. This is also reflected in research, as on the one hand prior literature on (intended) retirement focuses on individual personal characteristics, such as health, income or education (Adams & Beehr, 1998; Griffeth, Hom, & Gaertner, 2000; Hanisch & Hulin, 1991; Kim & Feldman, 1998; Schmidt & Lee, 2008). Research on turnover (intentions) on the other hand mainly studies work characteristics, e.g. autonomy or physical demands, as possible antecedents (Hom, Caranikas-Waler, Prussia, & Griffeth, 1992; Lee & Mitchell, 1994; Mobley, Horner, & Hollingsworth, 1978; Mobley, Griffeth, Hand, & Meglino, 1979). By directly comparing turnover and retirement intentions, we are able to approach the question whether personal and work characteristics are related differently to these two intentions.

We extend prior research by considering the influence of work characteristics on both turnover and retirement intentions. Traditionally, studies of voluntary job turnover particularly focus on work characteristics, such as work quality (Hayward, Grady, et al., 1989, 1989). Also, there is much research linking job satisfaction, organizational or occupational commitment to turnover (intentions), quitting (intention) or absenteeism (Falkenburg & Schyns, 2007; Griffeth et al., 2000; Hom et al., 1992; Mobley, 1977; Mobley, Horner, & Hollingsworth, 1978; Mobley, Griffeth, et al., 1979; Podsakoff, LePine, & LePine, 2007). More recently, some researchers started to link work characteristics to the intention to retire (Adams & Beehr, 1998; Mein et al., 2000; Schmidt & Lee, 2008; Siegrist, Wahrendorf, et al., 2007) and the decision to retire (Beehr, 1986; Hayward, Friedman, & Chen, 1998; Wang & Shultz, 2010; Siegrist & Wahrendorf, 2010). We take personal resources into account that motivate individuals in combination with the job resources provided by organizations (Van den Broeck et al., 2011). Furthermore, we differentiate personal and job demands. In particular, we investigate to what extent the fit between individual and organizational characteristics affect turnover and retirement intentions.

We address our two research aims by developing a theoretical framework integrating the Job Demands-Resources model (Bakker & Demerouti, 2007) with literature on Person-Environment Fit (Kristof-Brown et al., 2005) into a rational actor model. Even though these theories originally stem from different fields, they have proven helpful to derive testable hypotheses for work withdrawal (Blekesaune & Solem, 2005; Schreurs, Van Emmerik, et al., 2011; Schreurs, De Cuyper, et al., 2011; Sutinen et al., 2005). In the resulting model, job demand and personal demands are regarded as costs and job resources and personal resources contribute to the benefits from work. Thus, the present study aims at offering three contributions to the existing literature. First, it provides an empirical comparison of turnover and retirement intentions. Second, it provides a theoretical framework integrating insights from different theories. And, finally, we examine a large heterogeneous set of data on older Dutch employees to test our hypotheses. The Study on Transitions in Employment, Ability and Motivation (STREAM) includes information on about 15,000 respondents in the Netherlands (Ybema, Geuskens, Van den Heuvel, et al., 2014). Respondents between the age of 45 and 64 were the target group in order to model transitions in the labour market for older workers, but also to assess health and work motivation of this group. While some of the prior studies include only one (organizational) sector (Andrews, Manthorpe, & Watson, 2005; Boumans et al., 2008; Sutinen et al., 2005), the STREAM data offers data from several sectors.

3.2 Turnover and retirement intentions

3.2.1 Distinguishing turnover and retirement intentions

On the one hand, switching the job and retiring refer to a similar employee decision, namely leaving the organization that they currently work for. This decision is addressed in withdrawal theory (Hanisch & Hulin, 1991; Smith et al., 2011) and work-role theory (Adams, Prescher, et al., 2002; Smith et al., 2011). The decision to retire, however, also involves the decision to end one's career. Work-role theory, thus states that retiring involves detaching from all work roles, i.e. the job, organization, and career (see e.g. Adams, Prescher, et al., 2002). In comparison, it is not likely that workers making a job-to-job transition will change their career completely; this means that they – compared to people who retire – ‘only’ have to detach from their job and possibly the organization, but not from all work-roles (Louis, 1980). What is more, while the likelihood of turnover decreases with age, the likelihood of retirement increases. Following this argument, it can be expected that turnover and retirement require different theoretical explanations.

Most studies either investigate turnover intentions or retirement intentions. Available research shows that personal characteristics, such as health and income, can push individuals towards retirement. Being unhealthy has arguably a stronger effect on retirement than on turnover as it limits workers' ability to stay in the workforce (Adams & Beehr, 1998; Griffeth et al., 2000; Hanisch & Hulin, 1991; Kim & Feldman, 1998; Schmidt & Lee, 2008). If work becomes too much of a burden as health declines, retirement may be regarded as a solution to withdraw from the labour market, but this does not hold for switching employers. Regarding income, it is often expected that people with higher income may find it attractive to retire, in particular if they can get relatively attractive pension benefits. For the turnover intention, income may play a less prominent role (Adams & Beehr, 1998; Kim & Feldman, 1998; Schmidt & Lee, 2008). In comparison to retirement, work characteristics seem to be more relevant for the explanation of turnover intentions, as indicated by literature on work quality, satisfaction or commitment (Falkenburg & Schyns, 2007; Griffeth et al., 2000; Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998; Hom et al., 1992; Lee & Mitchell, 1994; Mobley, Horner, & Hollingsworth, 1978; Mobley, Griffeth, et al., 1979; Podsakoff et al., 2007).

Few studies directly compare retirement and turnover intentions (Adams & Beehr, 1998; Hanisch & Hulin, 1991; Schmidt & Lee, 2008). Regarding personal characteristics, Schmidt and Lee (2008) find that health is negatively related to both the retirement and the turnover intention, indicating that a better health implies less withdrawal intentions. In contrast, Adams and Beehr (1998) do not report significant relationships between health and either of the withdrawal intention. Furthermore, with respect to work characteristics, two studies agree that retirement income satisfaction is not related to these two withdrawal intentions (Adams & Beehr, 1998; Schmidt & Lee, 2008). They do find that occupational commitment is negatively related to both intentions instead, meaning that more commitment decreases withdrawal intentions. Additionally, they assess that valuing their job is significantly related to workers' turnover and retirement intentions. Summing up, research comparing turnover and retirement intentions is scarce and the little available evidence is mixed. Most studies presume that personal characteristics are more related to retirement intentions, while work characteristics are more relevant for individuals' turnover considerations. Little evidence is found that personal or work characteristics play an equally important role for both withdrawal intentions. In the following, we use insights from theoretical frameworks to discuss both similarities and differences between turnover and retirement intentions.

3.2.2 Similarities and differences between turnover and retirement

As elaborated above, it is often assumed that work characteristics add more to the explanation of turnover intentions and personal characteristics more to the explanation of retirement intentions. Due to the increasing interest in the role of work characteristics for retirement decisions, we will in the following use literature and theories from different fields to derive expectations on the relation between work characteristics and both turnover and retirement intentions. Sometimes this might lead to different expectations for turnover and retirement intentions, while some characteristics might also be related similarly to the two withdrawal intentions. Comparably to the turnover model of Mobley (1977), we assume that workers are rational actors who weigh the costs and benefits of their actions. After assessing the resources and demands and the associated higher pay-offs, individuals decide in favour of the alternative with the higher returns to take their labour market decisions (Hom et al., 1992; Lee & Mitchell, 1994; Mobley, Horner, & Hollingsworth, 1978; Mobley, Griffeth, et al., 1979).

Personal resources

Work-related individual motivators are a part of individuals' resources and may affect work withdrawal (Knoop, 1994; Van den Broeck et al., 2011). Workers' individual motivators provide information about the aspects of work they find most important. Usually, two types of motivators (or 'values') are distinguished, namely intrinsic motivators and extrinsic motivators (Frey, 1997). Workers valuing intrinsic aspects of work are said to be motivated by work itself or the possibilities to learn on the job. Workers valuing extrinsic job aspects are motivated by the incentives that accompany work, such as receiving status or a high income. Having these motivators is not an either-or situation, because it is possible that workers are motivated by intrinsic and extrinsic aspects of the job at the same time (Feather & O'Brien, 1986).

As individual motivators as a personal resource might increase the value of work, withdrawal from work through retirement is less likely among workers who are highly motivated by intrinsic or extrinsic aspects of work. Workers who enjoy their work and derive motivation from it will be less inclined to retire. Regarding the intention to switch employers, the opposite might however be possible. Workers with high intrinsic or extrinsic motivation might also be those who aim at advancing their knowledge, increasing their skills or gathering new experiences at a different organization or a different workplace. Workers' motivation might also be interpreted as a good work attitude or curiosity for something new. Worker

with high personal resources, i.e. their motivation, might thus be related to a greater intention to switch employer for advancement. Based on this distinction between the intention to retire and switch employer, we derive separate hypotheses regarding personal resources: *Individual intrinsic and extrinsic motivators will be positively related to the intention to switch employer* (H 1a). *Individual intrinsic and extrinsic motivators will be negatively related to the intention to retire* (H 1b).

Job demands and job resources

Next to these personal resources, every job consists of job demands and job resources. The Job Demand-Control model (Karasek, 1979) is rooted in the literature about stress and ill-health and explains that job demands refer to ‘physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs.’ (Bakker & Demerouti, 2007, p.312). Examples of such aspects are work pressure or a high physical demand. Job resources are the counterpart of job demands. These are ‘physical, psychological, social, or organizational aspects of the job that are [...] (1) functional in achieving work goals; (2) reduce job demands and the associated [...] costs; (3) [or] stimulate personal growth, learning, and development.’ (Bakker & Demerouti, 2007, p.312). Examples of job resources are career opportunities, autonomy, or job control. While job demands involve higher costs of working, job resources encompass higher benefits.

In this study, we investigate physical demands as part of job demands. Physical demand may be among the reasons for older workers to consider retiring, because this way, workers can withdraw from a demanding job (Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998). Prior research shows that high job demands, e.g. physical demand, lack of decision authority, insecurity, conflicts at the workplace or a lack of social support increase the chance of early retirement (Blekesaune & Solem, 2005; Boumans et al., 2008; Lund & Villadsen, 2005; Schreurs, Van Emmerik, et al., 2011; Schreurs, De Cuyper, et al., 2011; Sutinen et al., 2005) or work as antecedents of ill-health or stressors (Podsakoff et al., 2007; Schreurs, Van Emmerik, et al., 2011; Schreurs, De Cuyper, et al., 2011; Van den Broeck et al., 2011). The physical demands of work are often more inherent to the type of occupation than the employer. Thus, when making a job-to-job transition, the physical demand of the job will less likely change. Based on the assumption that individuals can withdraw from job demands through retirement, rather than by switching employer, we hypothesize that *physical demands*

will be positively related to the intention to retire (H 2).

Job resources counterbalance job demands and are therefore regarded as a benefit from work. Higher job resources increase the value of work and thereby decrease the chance for early retirement (Boumans et al., 2008; Schreurs, Van Emmerik, et al., 2011; Sutinen et al., 2005) or ill-health and stressors (Van den Broeck et al., 2011). We regard autonomy, i.e. people's discretion in the workplace, as a possible job resource. People who have more autonomy benefit from being able to independently make decisions in their work, which decreases the costs of work. Moreover, the workplace might offer specific resources, so-called organizational motivators or environmental supplies (Kristof-Brown et al., 2005; Piasentin & Chapman, 2006). Again, these supplies or motivators of the organization might be related to intrinsic or extrinsic values. If the organization supplies work-related situations which workers find beneficial, workers will derive higher benefits from their work. These job resources, the autonomy and intrinsic and extrinsic organizational motivators will decrease workers' withdrawal intentions. We therefore hypothesize that *job resources will be negatively related to the intention to switch employer* (H 3a) and *job resources will be negatively related to the intention to retire* (H 3b).

Personal demands

Not only might individual (intrinsic and extrinsic) motivators function as a personal resource, they can also fit or misfit with the organization the employee is working in. If individual motivators are not aligned with people's jobs, this might contribute to the demands workers experience in their job. This is, because they are faced with a non-motivating or undesirable work situation. If organizational motivators are however in accordance with one's own expectancies, workers might benefit from this. In the Person-Environment Fit (P-E fit) literature (Kristof-Brown et al., 2005) this fit (or misfit) is referred to as the supply-value fit, while others call the same concept needs-supplies fit (Piasentin & Chapman, 2006). It assesses whether environmental supplies, such as work characteristics supplied by the organization, fit the individuals' demands, such as their motivators or needs (see also Van den Broeck et al., 2011). If there is a mismatch between individual motivators and organizational motivators, this can be regarded as a personal demand, indicating that employees do not receive what they want. Also in literature about (job) satisfaction this is considered; different authors state that satisfaction is defined by the difference between what people want and what they have (Locke, 1969; Michalos, 1985; Wu, 2008). If the gap between wanting and having is greater, the individuals' satisfaction is lower. Employees, whose motivations

are not fulfilled by in their current organization, have such a gap between ‘want’ and ‘have’, or, stated differently, a supply-value misfit. A misfit between individual and organizational motivators is assumed to increase the personal demands and thus the costs of the work. Withdrawing from this job by switching employer or retiring might therefore become a valuable alternative. In line with this, we hypothesize that *a misfit between individual and organizational motivators will be positively related to the intention to switch employer* (H 4a) and that *a misfit between individual and organizational motivators will be positively related to the intention to retire* (H 4b).

3.3 Data and methods

To test our hypotheses empirically, we make use of the STREAM data (Study on Transitions in Employment, Ability and Motivation) (Ybema, Geuskens, Van den Heuvel, et al., 2014). This longitudinal survey conducted by TNO will include four waves. Questionnaires are filled out online, using the internet panel of Intomart GfK. Approximately 25.000 respondents were invited to participate in the study based on their age and work status. The overall response rate in the study was 71 per cent (N=15.118). This resulted in a stratified sample of 12,055 employees, 1,029 self-employed persons, and 2,034 non-working persons, approximately similarly distributed across four age groups, i.e. 45-49, 50-54, 55-59, and 60-64 years of age. We make use of the first wave, which was collected in fall 2010 (see Table 3.1 and Table 3.3 for descriptive results).

We restrict our current study to employees only (N=12,055). We exclude self-employed and inactive respondents from the analyses (N= 3,063), because these two groups may differ from employees on important variables. Self-employed, compared to employees, can for example influence job demands and resources to a greater extent.

3.3.1 Operationalization

The dependent variable intention to retire is operationalized by asking the respondent “do you plan to stop working within the following 12 months?”. The intention to switch employer is operationalized with the question “do you plan to switch employer within the following 12 months?”. For both variables respondents could provide answers on a scale from 1 to 5; 1 means ‘certainly not’, 2 ‘probably not’, 3 ‘perhaps’, 4 ‘probably yes’, 5 ‘yes, certainly’. We recode the variable to categories zero to four, with a higher value referring to higher intentions.

Generally, the turnover intention is on average highest in the youngest age

group (45-49 years). All other age groups (50-54 years, 55-59 years, and 60-64 years) have significantly lower turnover intentions as compared to the youngest group (see Figure 3.1). The retirement intention, in contrast, is lowest in the youngest age group, and highest in the age group closest to retirement. Again, all age groups have a significantly higher average retirement intention compared to the youngest age group of workers between 45-49 years.

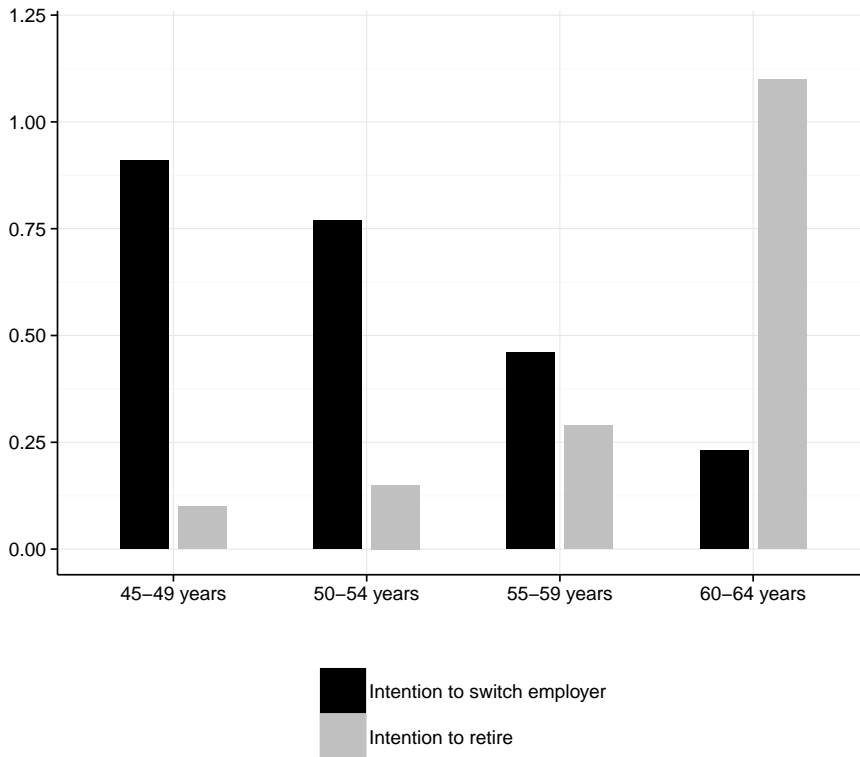


FIGURE 3.1: Turnover and retirement intentions of older workers
(N total=10,849)

As we are interested in comparing the intention to switch employer and the intention to retire, we exclude respondents who indicated that they were thinking about switching employer and at the same time were considering to retire within the following twelve months (N=212). This decision is guided by two reasons: First, individuals who intend to retire and intend to switch employer within the following twelve months are indifferent about which transition to intend. Second, we are not interested in studying workers who seek ‘any way’ to withdraw from

the labour market (i.e. those who are indifferent), but want to compare the intention of turnover with the intention of retirement.

3.3.2 Independent variables

We report the mean, standard deviation, range and, if appropriate, the Cronbach's Alpha of all independent variables in Table 3.1. We operationalize job demands as physical demand. *Physical demand* is measured by five items asking respondents whether they 'always', 'often', 'sometimes', 'hardly ever' or '(nearly) never' (a) have to use lot of physical power like lifting, pushing, pulling, carrying in their work, (b) use machineries generating rocking or shaking, (c) have to work in a displeasing position, (d) have to work a lot standing, (e) have to work a lot kneeling or crouching. The five items were included into a mean scale (range 0-4) with higher values indicating a greater/ more frequent physical demand (Cronbach's Alpha = 0.85).

Personal resources, i.e. individuals' motivators are measured for intrinsic and extrinsic aspects. To operationalize individual intrinsic and extrinsic motivators, respondents indicated on a four-point scale whether they found the following aspects of their work 'not very important', 'somewhat important', 'rather important', or 'very important'. *Individual intrinsic motivators* (InIM) are measured by three items asking how important respondents find (a) having interesting work, (b) having possibilities for learning and development, and (c) working independently (Cronbach's Alpha= 0.66). *Individual extrinsic motivators* (InEM) include five items that ask how important the respondents find (a) being valued, (b) having a good salary, and (c) having good job security, (d) having a good atmosphere at work and (e) having a good supervisor (Cronbach's Alpha = 0.69). As items of InIM and InEM belong to the same item battery, we conducted a principal components factor analysis to ascertain that these two dimensions are discernible. The factor analysis supports our theoretical idea. Only the item 'being valued' has high factor loadings on both InIM and InEM. Due to theoretical reasoning, we add this item to InEM and generate mean scales of these two dimensions of work values (range 0-3).

Job resources are measured by autonomy as well as organizational motivators. Autonomy is operationalized by four items for which respondents could indicate whether they ('always' / 'often' / 'sometimes' / 'hardly ever' / '(nearly) never') have autonomy in their work. The items ask whether respondents can decide themselves (a) how to execute their work, (b) the order of their tasks, (c) the work speed, or (d) whether they can think about work-related solutions themselves. Again, items were recoded such that a higher value indicates greater autonomy

(range 0-4) and included into a mean scale (Cronbach's Alpha = 0.82). The organizational intrinsic and extrinsic motivators are operationalized by the same items as the InIM and InEM scales, but are asking the respondents specifically whether they realize specific things in their current organization. *Organizational intrinsic motivators* (OrIM) are measured by asking the workers whether they (a) have interesting work, (b) have possibilities for learning and development, and (c) can work independently, at their current employer. *Organizational extrinsic motivators* (OrEM) are operationalized by the five items asking the workers whether (a) being valued, (b) having a good salary, (c) having good job security, (d) having a good atmosphere at work and (e) having a good supervisor are realized at their current employer. For the three organizational intrinsic motivators, and the five organizational extrinsic motivators respondents indicated whether the respective aspect of their work is 'not at all', 'a bit', 'rather strong', or 'very much' apparent in their current job. We sum the three OrIM items (Cronbach's Alpha = 0.68) and the five OrEM items (Cronbach's Alpha = 0.75) to two mean scales (range 0-3).

The misfit between individual and organizational motivators is operationalized in the following way: For each intrinsic and extrinsic item, respondents were asked whether they found it important to have for example learning and development possibilities (i.e. their individual motivator: InIM, InEM) and to which extent this learning possibility was existent at their current employer (i.e. organizational motivator: OrIM, OrEM). These variables indicate either the 'want' or the 'have' and we can, according to satisfaction research or supply-value fit (needs-supplies fit) literature, use them to define the have-want discrepancy (Michalos, 1985; Wu, 2008). For each pair of items, the individual motivator (InIM, InEM) minus the organizational motivator (OrIM, OrEM) indicates whether or not a misfit exists. If respondents report high individual motivators ('want'), but these are not realized in their organization ('have'), they have a positive mismatch; they have no mismatch if what individual motivators are also realized in the organization or if their organization provides motivators that they did not indicate to be motivated by. According to Michalos (1985), those people who have more than they expected are less dissatisfied than those who have less than they wanted. Therefore, we decide that negative values – those who realize ('have') more than they are motivated by ('want') – cannot be obtained; these people are regarded as having no mismatch. After calculating the mismatch, we sum the intrinsic (Cronbach's Alpha = 0.61) and extrinsic items (Cronbach's Alpha = 0.74), the *intrinsic and extrinsic mismatch in individual-organizational motivators*.

In Table 3.1 we report the descriptive results for the dependent variables, the intention to retire and the intention to switch job, and the independent variables.

TABLE 3.1: Descriptive results for (in-)dependent variables (N= 10,849)

	Mean	SD	Range	Cronbach's Alpha
<i>Intentions</i>				
Retirement intention	0.37	0.85	0 - 4	
Turnover intention	0.61	0.91	0 - 4	
<i>Personal resources</i>				
Individual intrinsic motivators	2.25	0.54	0 - 3	0.68
Individual extrinsic motivators	2.42	0.47	0 - 3	0.75
<i>Job demand</i>				
Physical demand	0.78	0.88	0 - 4	0.85
<i>Job resources</i>				
Autonomy	2.90	0.76	0 - 4	0.82
Organizational intrinsic motivators	1.85	0.60	0 - 3	0.66
Organizational extrinsic motivators	1.78	0.59	0 - 3	0.69
<i>Personal demands</i>				
Mismatch individual - organizational motivators (intrinsic)	0.50	0.51	0 - 3	0.62
Mismatch individual - organizational motivators (extrinsic)	0.79	0.59	0 - 3	0.74

Generally, the picture is as follows: individuals report on average rather high personal resources and job resources. As such, for example the mean reported individual intrinsic motivation is 2.25 on a scale ranging from zero to three. The standard deviation of 0.54 indicates that there is not too much variation between individuals, because 68 per cent of all workers in our sample report an intrinsic motivation of between 1.71 ($\mu - SD = 2.25 - 0.54$) and 2.79 ($\mu + SD = 2.25 + 0.54$). Compared to high resources, individuals on average report rather low job demands and personal demands. For example the average physical demand in a job is 0.78 in our sample, which is low considering that it is measured on a scale from zero to four.

Additionally to this descriptive information, we report the correlations between the independent variables in Table 3.2. As all variables measure work-related characteristics, the correlations are rather large. We for example find a high positive and significant correlation between individuals' intrinsic motivators and their extrinsic motivators, indicating that worker who are more intrinsically

motivated are generally also more extrinsically motivated ($r = 0.367$). We also see that individual intrinsic and organizational intrinsic motivators are positively related ($r = 0.440$). Negative correlations are for example found between the mismatch between individual and organizational extrinsic motivators and organizational extrinsic motivators ($r = -0.794$). This means that workers who perceive a higher mismatch are generally less motivated by organizational characteristics.

3.3.3 Control variables

As it is known from previous research that individuals' personal characteristics affect work withdrawal, we include the following variables as control variables into our model. In Table 3.3 we again report the mean, standard deviation and range of these variables. To provide some insight into our sample, we also include relevant information of this table in the text below. *Gender* is a dummy variable indicating male respondents (57% men). The respondents' *age* is the age at the time point of the interview and ranges from 45 to 64. The mean age in the sample is about 54 years. The variable asking for respondents' *health* is measured on a five point scale, ranging from zero ('bad') to four ('excellent'), with higher values referring to a better health. The mean health of 2.3 indicates that respondents rate their health on average 'good' or better. *Education* is measured by two dummy variables discerning 'low' and 'middle' from 'high' (reference) education. Low education (26% of the respondents) applies if respondents did not finish school, finished primary school, or attained a degree from lower vocational training. Middle education (39% of the respondents) refers to those who finished secondary schooling such as advanced vocational training. Respondents with higher education (the remaining 35% of the respondents) are those who have a degree from advanced technical college or hold a university degree. The *income* of respondent's household was assessed by asking on a five point scale how the financial situation of the household was like. Higher values indicate that the household's income is more sufficient, the mean in the sample is about 2.5, indicating that more people regard their income as being sufficient. The *type of the employment* contract discerns workers with a permanent contract (reference category, 92% of respondents) from those with a temporary contract or leased employees (8% of respondents). 31 per cent of the respondents work in *part-time employment* (less than 30 hours a week), while 69 per cent have a full-time contract (30 hours or more, reference category).

TABLE 3.2: Correlations of independent variables (N=10,849)

	1	2	3	4	5	6	7
1 Individual intrinsic motivators	1						
2 Individual extrinsic motivators	0.367*	1					
3 Physical demand	-0.117*	0.119*	1				
4 Autonomy	0.210*	-0.008	-0.201*	1			
5 Organizational intrinsic motivators	0.440*	0.112*	-0.162*	0.332*	1		
6 Organizational extrinsic motivators	0.201*	0.128*	-0.147*	0.210*	0.606*	1	
7 Mismatch individual - organizational motivators (intrinsic)	0.373*	0.205*	0.099*	-0.164*	-0.616*	-0.439*	1
8 Mismatch individual - organizational motivators (extrinsic)	0.064	0.407*	0.199*	0.204*	-0.461*	-0.794*	0.536*

Note: * p<0.05

The *tenure* in the current position is measured in years; the mean tenure is 11 years. 28 per cent of the workers supervise other employees; this is measured with the dummy variable *supervisor*. Last, we include a variable indicating the employees' *industry of employment*. This variable contains 14 categories, of which 13 are included as dummies in the analyses. The category being employed in industry is the reference category.

TABLE 3.3: Descriptive results for control variables (N= 10,849)

	Mean	SD	Range
<i>Personal characteristics</i>			
Male	0.57		0 / 1
Age	54.09	5.44	45 - 64
Good health	2.30	0.86	0 - 4
<i>Education (ref.=high)</i>			
low	0.26		0 / 1
middle	0.39		0 / 1
Sufficient income	2.46	0.99	0 - 4
Temporary employment	0.08		0 / 1
Part-time employment	0.31		0 / 1
Tenure position	11.23	10.00	0 - 49
Supervisor	0.28		0 / 1
<i>Industry of employment (ref.=Industry)</i>			
Agriculture	0.01		0 / 1
Energy, Water	0.01		0 / 1
Construction	0.03		0 / 1
Transport and Communication	0.06		0 / 1
Commerce	0.07		0 / 1
Gastronomy	0.01		0 / 1
Financial services	0.04		0 / 1
Commercial services	0.07		0 / 1
Education	0.13		0 / 1
Health and social work	0.19		0 / 1
Public administration, government agency	0.13		0 / 1
Else, service sector	0.03		0 / 1
Else	0.12		0 / 1

3.3.4 Methods

Respondents answer whether they intend to switch employer or intend to retire on a five-point scale ranging from 'certainly not' to 'certainly yes'. The measurement level of these five possible categories is ordinal rather than interval or ratio,

because we do not know for sure whether for example the step from ‘certainly not’ to ‘probably not’ is as big as the one from ‘perhaps’ to ‘probably yes’. Therefore, we do not implement linear regression analyses but ordinal logistic regression. Ordinal logistic regression accounts for the fact that the steps between the different categories might not always be the same (Long, 1997). The output of an ordinal regression is comparable to that of a logistic regression with the only difference that it does not report a constant. Rather, in ordinal logistic regression several cut-points are calculated for the values where the different categories of the dependent variable are separated. The coefficients of the ordinal logistic regression can be interpreted in log-odds or odds ratios.

The results of the ordinal logistic regression are displayed in Table 3.4. We first estimate a model including only the control variables (Model 0, upper part of Table 3.4), both for the intention to switch employer (first three columns) and the intention to retire (latter three columns). For this first model, we report the four cut-points for the ordinal dependent variable, and the adjusted R-square in the last row.

3.4 Results

3.4.1 Personal characteristics (control variables)

We shortly discuss the coefficients of the individual (control) variables to provide an idea whether personal characteristics are related differently to the turnover and the retirement intention (see Table 3.4, Model 0). The reported associations between the personal (control) variables and the intention to switch employer and the intention to retire show that some personal characteristics are related in the same way to both withdrawal intentions. We find that men are more likely to intend to switch employer ($b=0.104$, $p<0.05$) and also more likely to intend to retire compared to women ($b= 0.259$, $p<0.001$). Furthermore, the better the health is the lower is the likelihood to intend to switch employer ($b= -0.131$, $p<0.001$) and also the intention to retire is smaller ($b= -0.388$, $p<0.001$). This might hint towards the idea that unhealthy workers seek to withdraw from the labour market, independent of whether this is by turnover or retirement. We also find that temporary employment is positively associated to both withdrawal intentions. This means that people in temporary employment are significantly more likely to intend to switch employers ($b= 0.857$, $p<0.001$) and also more likely to intend to retire ($b= 0.190$, $p<0.05$). For other variables, we find differences: being older ($b= -0.106$, $p<0.001$), having more income ($b= -0.145$, $p<0.001$), or having a longer tenure ($b= -0.026$, $p<0.001$) decreases the likelihood to intend

to switch employer. At the same time, older workers ($b= 0.174$, $p<0.001$), those with a higher income ($b= 0.105$, $p<0.001$), and those with a longer tenure ($b= 0.011$, $p<0.001$) are significantly more likely to intend to retire. For education we assess that workers with medium and low education are less likely to intend to switch employer compared to workers with high education. Regarding the adjusted R-squared, we see that personal characteristics serve as slightly better predictors for the intention to retire (adj. $R^2 = 0.11$) than they do for the intention to switch employer (adj. $R^2 = 0.08$). With some reservation we can say that this provides slight support for prior studies stating that the intention to retire is explained more by personal characteristics. Our results, however, also show many significant associations between the intention to switch employer and personal characteristics.

3.4.2 Interpretation of independent variables

Additional to the control variables that were included in Model 0, we include the independent variables in the following models (see lower part Table 3.4). As the coefficients of the control variables (Model 0) do not change tremendously, we do not report these again. We add the independent variables in separate models. This means, in Model 1 the measures for personal resources are added: individual intrinsic and extrinsic motivators; in Model 2, we include physical demand, which is our measure of job demands; in Model 3 autonomy, organizational intrinsic and extrinsic motivators (measures for job resources) are estimated, and in Model 4 our measures for personal demands, this is the mismatch between individual and organizational motivators (intrinsic and extrinsic) are inserted. Due to the high correlation between some independent variables (see Table 3.2), we always include independent variables (e.g. physical demand in Table 3.4, Model 2) but exclude this/these variable(s) before estimating the following model. For each of these models we additionally report the adjusted R-square to provide some measure for the model fit.

Personal resources

We expected that workers' (intrinsic and extrinsic) personal resources are positively related to the intention to switch employer (Hypothesis 1a). Our results show that workers with a higher individual intrinsic motivation (InIM) are more likely to intend to switch employer ($b= 0.263$, $p<0.001$). Regarding the extrinsic motivation (InEM), we do not find support for our assumption. Workers who were motivated by for example the pay and status of the job (InEM) appeared to be less likely to switch employer ($b= -0.369$, $p<0.001$). As already indicated in

prior research, extrinsic motivators might add less to employees' functioning than intrinsic motivators (Knoop, 1994). As suggested in Self-Determination Theory (Van den Broeck et al., 2011; Vansteenkiste et al., 2007) this might be because needs such as competence and relatedness are more likely to be fulfilled with intrinsic motivators. We can therefore not support our hypothesis. Regarding the intention to retire, we expected a negative association with the personal resources InIm and InEM (Hypothesis 1b). Our results show negative significant associations between individual intrinsic ($b = -0.112$, $p < 0.05$) or extrinsic motivators ($b = -0.367$, $p < 0.001$) and the intention to retire. This supports hypothesis H1b: workers who have higher individual motivators which they can use as resources, appear to have a lower likelihood to intend to retire.

Job demands and job resources

In Model 2 of Table 3.4, we do not find a significant association between physical demand and the intention to switch employer ($b = 0.040$, $p > 0.05$). As explained above, we assume that physical demand does not change by switching employer. However, we discussed that retiring might be a solution to withdraw from a physically demanding job. This idea is supported by our analyses showing that workers with a higher physical demand are significantly more likely to intend to retire ($b = 0.163$, $p < 0.001$). We can therefore support the hypothesis that physical demand is positively related to the intention to retire (Hypothesis 2). This finding is in line with prior research showing that people retire earlier from jobs with a high physical demand (Hayward, Grady, et al., 1989; Hayward, Friedman, & Chen, 1998).

In Model 3, we include the measures for job resources. We do not find a significant relation between autonomy and both the turnover ($b = 0.053$, $p > 0.05$) and retirement ($b = 0.034$, $p > 0.05$) intention. Considering the other job resources, the organizational intrinsic or extrinsic motivators, we find the expected relationship (Model 3). Both intrinsic ($b = -0.272$, $p < 0.001$) and extrinsic ($b = -1.146$, $p < 0.001$) organizational motivators are negatively related to the intention to switch employer. Also for the intention to retire, we assess negative associations for intrinsic ($b = -0.339$, $p < 0.001$) and extrinsic ($b = -0.348$, $p < 0.001$) organizational motivators. Generally, this indicates that workers who have higher organizational intrinsic or extrinsic motivators are less likely to intend to switch employer and also less likely to intend to retire. This confirms our Hypothesis 3a and 3b, because it indicates that workers with more resources in their work are less likely to withdraw from their job. Prior research investigating job resources

mostly used measures such as pleasure in their work, social support and job control (Boumans et al., 2008; Schreurs, Van Emmerik, et al., 2011; Sutinen et al., 2005).

Personal demands

Finally, we include the variables assessing the misfit between individual (intrinsic or extrinsic) motivators and organizational (intrinsic or extrinsic) motivators as measures for personal demands (Model 4). Results indicate that both having an individual-organization mismatch with respect to the intrinsic values ($b = 0.639$, $p < 0.001$) and with respect to the extrinsic values ($b = 0.692$, $p < 0.001$) is positively related to the intention to switch employer. This means that workers, whose motivators are not existent in their current organization, are more likely to intend to switch employer. These findings are in line with the expectations formulated based on the supply-value (mis)fit literature or the P-E fit literature and confirm Hypothesis 4a. Also for the intention to retire, our results show that having a mismatch between individual and organization with respect to intrinsic ($b = 0.225$, $p < 0.001$) or extrinsic values ($b = 0.160$, $p < 0.01$) is significantly and positively related to the intention to retire. Thus, we can also support Hypothesis 4b. Employees might regard a greater misfit between what they want and what they have as a personal demand that increases their likelihood to withdraw from work through turnover or retirement.

3.5 Conclusion and discussion

With an ageing workforce the question how to keep older workers motivated and committed is highly relevant. From the point of view of organizational and public policies, this requires to gain insights into the antecedents of turnover and retirement for this specific age group of employees (Dalessio, Silverman, & Schuck, 1986). The aim of the present study was to provide answers by comparing turnover and retirement intentions and by hypothesizing about possible associations with work-related characteristics. Furthermore, we constructed a rational actors-framework based on the Job Demands-Resources model and the Person-Environment fit literature. This allowed us to derive hypotheses about the relation of job demands, job resources, personal resources, and personal demands with the turnover and the retirement intentions.

TABLE 3.4: Results for ordinal logistic regression on the intention to switch employer (0-4) and the intention to retire (0-4) (N= 10,849)

	Intention to switch employer			Intention to retire		
	Coef.	SE	adj. R ²	Coef.	SE	adj. R ²
<i>Control variables (Model 0)¹</i>						
Men (ref.=women)	0.104*	(0.051)		0.259***	(0.063)	
Age	-0.106***	(0.004)		0.174***	(0.006)	
Health	-0.131***	(0.024)		-0.388***	(0.030)	
Education (ref.=high)						
low	-0.874***	(0.059)		-0.059	(0.071)	
middle	-0.510***	(0.048)		0.019	(0.062)	
Sufficient income	-0.145***	(0.021)		0.105***	(0.027)	
Temporary employment	0.857***	(0.072)		0.190*	(0.090)	
Part-time employment	-0.055	(0.055)		0.445***	(0.065)	
Tenure position	-0.026***	(0.002)		0.011***	(0.002)	
Supervisor	0.007	(0.047)		0.008	(0.059)	
Cut-point 1	-6.483***	(0.232)		10.598***	(0.323)	
Cut-point 2	-4.935***	(0.228)		12.102***	(0.329)	
Cut-point 3	-3.635***	(0.229)		12.604***	(0.332)	
Cut-point 4	-2.567***	(0.236)	0.078	13.172***	(0.335)	0.108
<i>Independent variables (separate models)²</i>						
<i>Personal resources (Model 1)</i>						
Individual intr. motivators	0.263***	(0.044)		-0.112*	(0.051)	
Individual extr. motivators	-0.369***	(0.048)	0.081	-0.367***	(0.057)	0.112
<i>Job demand (Model 2)</i>						
Physical demand	0.040	(0.026)	0.078	0.163***	(0.031)	0.109
<i>Job resources (Model 3)</i>						
Autonomy	0.053	(0.030)		0.034	(0.034)	
Organizational intr. motivators	-0.272***	(0.047)		-0.339***	(0.056)	
Organizational extr. motivators	-1.146***	(0.047)	0.129	-0.348***	(0.054)	0.119
<i>Personal demands (Model 4)</i>						
Mismatch individual - organizational motivators (intr.)	0.639***	(0.046)		0.225***	(0.056)	
Mismatch individual - organizational motivators (extr.)	0.692***	(0.042)	0.118	0.160**	(0.049)	0.111

Note: * p < 0.05, ** p < 0.01, *** p < 0.001

¹ We included industry of employment (14 separate categories) to the regression analyses. Coefficients not reported.

² We include the independent variables in separate models; these are Model 1 to Model 4.

Implications for study and practice

The results on the association of these work-related characteristics with turnover and retirement intentions provide interesting information for policy and human resource management, as they show that characteristics affect the two withdrawal intentions turnover and retirement differently. Employers or policy workers might want to differentiate pathways to integrate older workers into the labour market or increase or prolong their participation. This holds in particular for the factors that play out differently with regard to the two intentions that workers can have, namely intrinsic motivation and psychical demand. Influencing the intrinsic motivation of workers may be difficult for employers. Nevertheless, as the results show, knowing whether people within the organization are intrinsically motivated may be a good start. To prevent that workers who are intrinsically motivated move to another organizations, it is advised to develop human resource practices that create stronger commitments to the organization. Such practices for example consist of providing discretion and ways to utilize the skills of workers (Koster, 2011). Such a strategy aimed at retaining intrinsically motivated workers, however, does not apply to prevent the intention to retire, given that these workers are less likely to retire. Therefore, in that case, the challenge for human resource management is much more aimed at how to keep the current job intrinsically motivating. Coaching and mentoring may be means to establish that. As the intention to retire is related to the physical demand of the job, while this does not matter for turnover intentions, shows that extending the careers of older workers requires adaptations of the job in terms of how exhausting it is. Both employers and governments may play a role here by developing career paths that enable workers to move to less physically demanding work if this is necessary, which are backed up by institutions to ensure the rights of workers to do so.

Implications for careers theory and research

By investigating whether work-related characteristics can significantly add to the explanation of retirement intentions, we contribute to prior literature. We differentiate between job demands and job resources, and additionally include personal resources and personal demands to the field of Job Demands-Resource theory (Van den Broeck et al., 2011). Our analyses reveal that especially organizational motivators relate to a lower likelihood of withdrawal intentions; or, stated differently, they might increase older workers labour market participation. Moreover, if there is no mismatch between individual and organizational motivators, but individuals can realize what they find important at their organization, they are less likely to withdraw from work. These findings delineate ways for organizational

policies to increase older workers' attachment to the labour market and possibly also prolong their working life. More research might elaborate on the role of personal and job characteristics for the withdrawal intentions of older workers. Developing organizational measures that improve older workers' work quality and their satisfaction might be possible aims for further research.

Besides comparing the two work withdrawal intentions and the role of work characteristics, we contribute to the present literature by making use of representative data for employees between 45 and 64 years of age in the Netherlands. Research on work characteristics of older workers is still scarce. However, policy or organizational measures could be implemented in order to increase their labour market participation and delay their retirement. With the ageing of the population and an expected solidarity problem of the welfare state, policy measures to activate older workers are especially relevant.

Study limitations

Next to these contributions some limitations of this study have to be discussed. Studying the intention to switch employer and the intention to retire generally does not provide insight into whether people will actually make these transitions. This means, notifying that people with higher physical demand are for example more likely to intend to retire, does not mean that these people will actually retire earlier than others. However, Mobley (1977) assumes in his turnover model that intentions are the direct precursors for behaviour. Hanisch (1995) states that in 80 per cent of the cases an intention is actually translated into real behaviour. Falkenburg and Schyns (2007) go even further by arguing that actual transitions on the labour market might be biased by macro-economic characteristics, such as the unemployment rate. Thus, assessing the relation between work characteristics and the intended transition (instead of the transition itself), they reason, might provide a more accurate idea on the antecedents of turnover or retirement than the relation with real behaviour would. Whether intentions actually translate into behaviour could be solved by using longitudinal data. As the STREAM data does not yet include multiple waves, longitudinal analyses will only be possible in the future.

Furthermore, the cross-sectional character of this study does not allow interpreting the association between two variables as a causal relation. This also implies that we cannot assess whether changes in demands or resources would also translate again into changes in withdrawal intentions. It however appears in our research that job and personal demands and resources significantly relate to the intention to switch employer and the intention to retire. Studies using several

waves of this study will be able to assess whether this association persists over time.

We operationalize the intention to retire with the question “do you plan to stop working within the following 12 months?”. This question does not directly ask respondents about their intention to retire, but rather their intention to stop working. For two reasons we are confident that we actually assess the intention to retire. First, we clearly see that ‘planning to stop working’ is highest for the oldest age category (Figure 3.1). If respondents would interpret that question as a general ‘withdrawal’ from the labour market, this should more equally be the case for all age groups. Second, framing the question as ‘stopping to work’ might be a more appropriate way of phrasing this question. This is, because workers have different ways to retire. They might choose to take early retirement benefits, retire with disability benefits, or retire at the official age for retirement. These different ways to retire clearly represent older workers’ wish to ‘stop working’ through a form of ‘retirement’.

A last limitation of our study is that, compared to prior research, we cannot include measures of work attitudes, such as organizational commitment or job satisfaction in our analyses. It has often been found that these characteristics are related to more absenteeism or more retirement (intentions) (Falkenburg & Schyns, 2007; Griffeth et al., 2000; Hom et al., 1992; Mobley, 1977; Mobley, Horner, & Hollingsworth, 1978; Mobley, Griffeth, et al., 1979; Podsakoff et al., 2007). As the available data does not provide information comparable to the one used in prior research, we cannot compare to other researchers’ results in this respect.

Future research might want to build upon the differentiation between retirement and turnover intention and investigate similarities and differences more deeply. This will provide insight into older workers’ labour market participation, their transitions, and possible incentives to keep them employed longer. Also the study of work-related characteristics for retirement might provide possibilities for researchers and policy makers to develop strategies to increase older workers’ work satisfaction and this way prolong their working life.

Chapter 4

Refraining from training: A vignette study on employers' willingness to provide training to their older workers

This chapter is co-authored by Ferry Koster. A slightly different version of this paper is currently under review in an international peer-reviewed journal.

4.1 Introduction

Two societal trends increase the attention that is drawn to the human resource management of older workers. First, the ageing of the workforce may ask for organizational measures that increase older workers' labour market participation or their productivity. In that regard, life-long learning or age-aware human resource policies are frequently discussed (Brooke & Taylor, 2005; Canduela et al., 2012; Schilling & Larsen, 2011). Second, many countries decided to change their public pension policies by increasing the official retirement age (European Commission, 2001, 2009). In these countries, people will, as a result, have to stay in employment until a higher age. A stronger emphasis on older workers' employability, in terms of investments in their training and skilling, is often handled as a possible solution to enable the attachment of older workers to the labour market (Groot & Maassen van den Brink, 2000; Picchio & Van Ours, 2011; De Vries et al., 2001).

Clearly, individuals themselves can invest in their human capital, usually by attending school, university or vocational training before entering the labour market (Becker, 1964; Cohen, 1990; Forrier & Sels, 2003; Liu, Courtenay, & Valentine, 2011; Mincer, 1962). This general education can be complemented with courses that are followed on own account (Liu et al., 2011). Besides this individual responsibility, after entering the labour market, workers receive the largest part of their training and skills through their organization, mostly in the form of specific skills to perform better on the job (Barrett & Connell, 2001; Bassanini et al., 2005; Becker, 1964; Hansson, 2008; Forrier & Sels, 2003; Picchio & Van Ours, 2011). The investment decision is then shifted from the individual to the employer. The provision of training by employers can be regarded as an investment in workers' resources helping to perform their job, and eventually even prolonging their participation in the labour market. Employers' investment decisions are the subject of this study, where we focus on *employers' willingness to provide training, and study this explicitly for their older workers*.

By doing so, this study offers several contributions to the literature. First, many policy changes in the past few years have focussed on older workers, because they are seen as a 'reserve army' in times of labour shortages (O'Brien, 2010). While studies concerning investments in older workers' human capital tend to focus on whether and which training older workers demand, we investigate under which conditions employers supply training to older workers. By emphasizing the role of employers, we add to the literature providing information on the characteristics that relate to employer-provided training (Bassanini et al., 2005; Bishop, 1996; Canduela et al., 2012; Knoke & Kalleberg, 1994; Picchio & Van Ours, 2011).

Second, employers aim to increase the benefits of the organization (Gazier, 2001; Kalleberg et al., 1996) and, as described in human capital theory (Becker, 1964), they consider the costs and benefits that are related with training. We add to the literature by taking two additional factors into account that do not directly follow from human capital theory, i.e. governmental reimbursements and workers' interest. Governments might reimburse (part of) employers' training costs to underline the importance of investments related with the recent policy discussion around life-long learning and its pay-offs both for society (longer participation) and employers (higher productivity) (Goldberg, 2000; Hancock, 2006; Schilling & Larsen, 2011). Furthermore, we contribute to the literature by taking into account that workers' motivation or interest might be a crucial contributor to employers' willingness to provide training (Greenhalgh & Mavrotas, 1994; Karpinska, 2013).

Third, the current study offers a methodological contribution as it is based on a vignette study, a semi-experiment. Doing so, we add to prior studies in this field relying on survey data or qualitative studies. For the research question posed here, vignette studies are particularly suited because they turn out to reduce the bias stemming from social desirability (Alexander & Becker, 1978; Wallander, 2009). This is an important advantage over surveys: As the role of training for older workers' labour market participation is a highly debated topic, respondents, i.e. employers, might provide socially desirable answers when asked directly whether they provide training for their older workers. Moreover, when asking the respondent about their willingness to pay for the training of a certain person, they may not take the direct and indirect costs into consideration. In a vignette study, these costs are directly stated in the description and cannot be ignored by the respondent (Alexander & Becker, 1978). Therefore, this methodology may provide a more accurate picture of employers' willingness to provide training compared to a standard survey.

4.2 Employer-provided training

4.2.1 State of the art

Prior research on training investments in (older) workers can be subdivided in studies on workers' investments in their own training (see e.g. Arulampalam, Booth, & Bryan, 2004) and, what is the focus here, those studies that research characteristics that affect employers' training investments. Regarding employer-provided training it appears that job characteristics, such as holding a full-time

job or being employed in a cognitively intensive job, are related to more employer-provided training (Bishop, 1996; Picchio & Van Ours, 2011). Moreover, firm characteristics play a role. Prior research found that employers of larger organizations generally provide more training (Bishop, 1996; Knoke & Kalleberg, 1994) and that the investment in workers' training depends on the sector (Bassanini et al., 2005; Bishop, 1996; Knoke & Kalleberg, 1994; Picchio & Van Ours, 2011). Finally, worker characteristics seem to affect employers in their considerations whether to invest in workers' training. Some studies report that men receive more employer-provided training (Bishop, 1996), however, other results point out that there is no effect of gender (Picchio & Van Ours, 2011). Higher educated workers generally receive more training (Bassanini et al., 2005; Canduela et al., 2012), and also those where employers expect low rates of turnover (Bishop, 1996). Furthermore, employers are reported to provide less training with increasing age of the workers (Bassanini et al., 2005; Picchio & Van Ours, 2011).

Not only have the characteristics that relate to employer-provided training, but also the outcomes of training investments been investigated, mostly by economists. Groot and Maassen van den Brink (2000) for example assess that firm-provided training increases employability, but has no relation with wages. Other researchers report a positive relationship with wages (Bartel, 1994) and productivity (Barrett & Connell, 2001; Bartel, 1994).

A different strand of literature explicitly focuses on age-related stereotypes as an explanation for employers' low provision of training (Chui et al., 2001; Van Dalen, Henkens, & Schippers, 2010; Karpinska et al., 2011; Posthuma & Campion, 2009; Taylor & Walker, 1994, 1998; De Vries et al., 2001; Weller, 2007). Employers are reported to find older workers for example less flexible or less prone to learn new skills. Furthermore, older workers' are stereotyped to have a disadvantage in hard skills, illustrated for example by the opinion that older workers are less productive (Van Dalen, Henkens, & Schippers, 2010). As training investments are thought to pay off less for workers with a lower productivity, this stereotype is often used as an explanation for why employers are reluctant to offer training for their older workers.

4.2.2 Context: Older workers and training in the Netherlands

This study is conducted in the Netherlands, a country that is in many aspects comparable to other European countries. First, the official retirement age in the Netherlands is 65 for both men and women, but people retire on average many years earlier. The mean retirement age is 63.3 years for men and 62 years for women in 2011 (OECD, 2011a). Additionally, by having more than every second

55 to 64-year old person in employment, the Netherlands slightly outperform the average of the EU-27 countries. In 2011, the Dutch labour market participation of older workers is comparable to Denmark, Germany, Finland and the United Kingdom, but lags behind countries like Switzerland, Sweden, Norway or Iceland. Third, it is often claimed that in order to prolong the working life, a greater participation in training and life-long learning is required (Goldberg, 2000; Hancock, 2006; Schilling & Larsen, 2011). In most European countries, the participation in training for workers between 55 and 64 years of age is below five per cent (Eurostat, 2013). Also in the Netherlands, this percentage is just about seven per cent. Exceptions to these low percentages are the Scandinavian countries and the United Kingdom (see also Bassanini et al., 2005; OECD, 2006). Unfortunately, good comparable data on employer-provided training in Europe is scarce. Bassanini et al. (2005) sketch a picture of employer-provided training, where they order the European countries comparable to the above described participation in life-long learning. Training provision by employers is high in Scandinavian countries, and low in Southern Europe (Bassanini et al., 2005). However, this report relies on information provided by workers, and does thus neither inform us about the actual employer-provided training, nor about the reasons that employers have to invest in training.

4.2.3 Hypotheses on employers' willingness to provide training

Employers can be regarded as actors that aim at increasing the benefits of their organization (Kalleberg et al., 1996). This means that they weigh the costs and the benefits of the alternatives and choose the one with the highest returns (Gazier, 2001; Kalleberg et al., 1996). Some of the costs (and benefits) employers consider when making training decisions are discussed within human capital theory (Becker, 1964; Mincer, 1962). Human capital theory distinguishes between general and specific human capital. Investments in general human capital increases workers' overall productivity, hence, in the case that workers move to another organization, not only the firm that provided the investment reaps the benefits. For employers, an investment in their workers' general human capital may thus not be valuable. In our study, we focus on the provision of the second form of human capital, i.e. specific human capital. Specific human capital is often employer-provided, because it raises the productivity of the workers within the firm (Becker, 1964). Thus, employers benefit from this training and have an interest in providing it. Employers take their decision whether to invest in workers' specific human capital after assessing for example the direct and indirect costs of the training and workers' age.

Employers are less likely to provide specific human capital to their older workers. First, the period in which employers can reap the benefits resulting from training investments in older workers is rather short, because older workers retire in the near future (Bassanini et al., 2005; Becker, 1964; Canduela et al., 2012; Hedge et al., 2006; Lindley & Duell, 2006). This means, employers' (accumulated) benefits from training are lower. Second, the ability to acquire new skills is often assumed to diminish with age and skills of older workers might become obsolete (Brooke & Taylor, 2005; OECD, 2006). With declining cognitive capacities, it might take older workers longer to learn new skills. The payback from investment is, therefore, expected to be lower and training less beneficial. When employers take their training decisions, they will perceive the lower returns related with older workers as a disincentive for training provisions (Barrett & Connell, 2001; Felstead et al., 2012; Taylor & Urwin, 2001). Following these arguments, we hypothesize that *employers' willingness to provide training decreases with an increasing age of the worker* (H 1).

Next to the workers' age, employers consider the costs of the training. Training involves direct costs, such as the course fee, and indirect costs, for example the length of the training. In line with human capital arguments, it is less likely that employers invest in their workers' training if the costs are higher, because the benefits of the training might be discounted in the future (Davies & Elias, 2004). If the benefits of the training decrease over time, higher training costs are a disincentive for the training provision. We therefore expect that *employers' willingness to provide training decreases with increasing costs of the training* (H 2) and *with a longer duration of training* (H 3).

Besides these expectations following directly from human capital theory, some additional factors might affect employers' decisions. We discuss the importance of governmental reimbursements and workers' interest for employer-provided training. Moreover, we complement the costs hypothesis by two additional expectations.

While employers usually provide training to increase their workers' productivity, governments might regard training (i.e. life-long learning) as a measure to keep older workers in the labour market (Goldberg, 2000; Hancock, 2006; Schilling & Larsen, 2011). This involves that governments might reimburse part of the costs of firm-provided training. Governmental reimbursements affect employers' decisions in two ways. First, compensations by the government might act as a normative incentive for employers to offer training. Reimbursements underline that employers and governments have a shared interest, and hence trigger employers to make investments. Second, the monetary endorsements offered by

governments reduce the direct training costs for employers. This way, employers do not bear the costs of training alone. We therefore expect that *employers' willingness to provide training is higher if the government reimburses part of the costs* (H 4).

Employers' training decisions might also be affected by workers' interest to receive training. Workers, who specifically indicate their interest to participate in training might have a higher motivation in their work, be more willing to invest in their firm-specific capital, and as such to have a higher level of productivity. Prior research shows that workers with better work characteristics retire later (Blekesaune & Solem, 2005; Siegrist & Wahrendorf, 2010) and that work motivation is important for satisfaction (Knoop, 1994; Van den Broeck et al., 2011) or workers' commitment to the organization (Mathieu & Zajac, 1990). For employers, interest in receiving training for example signals higher productivity or more bonding with the organization (Karpinska, 2013). Following these arguments, employers might expect that the pay-offs from training are higher for motivated workers. Moreover, employers might want to reward motivated workers (Mathieu & Zajac, 1990) by providing training. Thus, we hypothesize that *employers' willingness to provide training is higher if workers specifically indicate their interest in training* (H 5).

Last, we make two supplements to the hypothesis that higher costs of training are related to a lower willingness of employers to provide training (H2). First, training costs might be more important if they are related to older workers. As discussed above, employers are less likely to make investments if training costs are high. Additionally, they provide less training for older workers, because the time frame to pay off the costs is shorter. With high training costs, a short pay-off period for older workers might provide an additional disincentive for employers' investments. We therefore hypothesize that *employers' willingness to provide training decreases with increasing costs, especially with an increasing age of the workers* (H 2a). Even when training costs are high, employers might provide training if workers state their interest to receive training, because interest might signal commitment to the organization. We therefore hypothesize that *employers' willingness to provide training decreases with increasing costs, but this association is diminished if workers show interest in training* (H 2b).

4.3 Data and methods

To investigate which factors are associated with employers' willingness to invest in the training of their older workers we implemented a vignette study. A vignette

study (or factorial design) is a method frequently used to study human behaviour (Alexander & Becker, 1978; Ganong & Coleman, 2006; Wallander, 2009). In a vignette study, respondents, in our case employers, read a short description of a hypothetical situation or person. The researcher can randomly vary the characteristics included in the description of the vignette. In our study, respondents were provided with two descriptions of a worker/training situation and then asked how willing they were to offer training.

4.3.1 Respondents

The vignette study was part of a larger corporate survey conducted in the Netherlands between April and June 2012. Due to the generally very low response rate in corporate studies, we sampled 8,000 organizations with 10 or more employees. The questionnaires were sent to the department of human resources (HR) to ensure that it was completed by a person familiar with the human resource practices of the organization. In total, 983 respondents participated in our survey. More than one third of the respondents held the position of Chief executive officer of the HR department and about one out of five respondents were owner of the company. Furthermore, about the same number of questionnaires was filled in by a staff member of the HR department and one in ten times by a board member or the director. In the following we refer to the respondents as ‘employers’, because they can be considered to be involved in personnel decisions and be acquainted with the human resource policies and practices. Our response rate of 12.3 per cent (N= 983) is lower than in individual surveys, but it is comparable to other corporate studies conducted in the USA and Europe (Kalleberg et al., 1996; Van Dalen, Henkens, Henderikse, & Schippers, 2006). Respondents had two possibilities to complete the questionnaire: They could use the paper questionnaire we sent with the first post mail, or fill in an online questionnaire. We gave those respondents who completed the online version (N= 477) two additional questions; they encompassed the two vignettes.

4.3.2 Study design

Before presenting the vignette (see Figure 4.1 for an example vignette), the respondents read the instruction: “It is often noticed that training is important for the employability of workers. Below you find two descriptions of workers. Could you indicate for each of these persons whether you would offer them training?”.

Our independent variables are given by the description of the hypothetical worker/training situation (see Table 4.2). It included the *age* of the fictitious worker (7 possibilities between 44 and 63 years) and the *cost* of the training. 500

TABLE 4.1: Example of one vignette provided to Dutch employers

<i>Version 7, vignette 1</i>											
<p>It is often noticed that training is important for the employability of workers. Below you find two descriptions of workers. Could you indicate for each of these persons whether you would offer them training?</p> <p>Mr. Bakker is aged 57. He indicates that he would like to participate in some training to increase his work-related skills. The training that applies to him costs 1500 Euro and has a duration of five consecutive working days. If he successfully completes the training, part of the training costs will be reimbursed by the government.</p> <p>Would you offer training to this person?</p>											
very unlikely										very likely	
0	1	2	3	4	5	6	7	8	9	10	

Euro are regarded as ‘low’ costs, 1500 as ‘medium’ costs and 3000 Euro as ‘high’ costs. Moreover, we provided information on the *length* of the training, which was either five consecutive working days (‘short’) or for four months, one day a week (‘long’). Then, we distinguished whether the worker showed *interest* in receiving training or whether this was not mentioned in the vignette. And last, whether the *government* would reimburse part to the training costs or, again, whether this was not mentioned. This means, in total there are 168 (7 x 3 x 2 x 2 x 2) unique possible combinations of characteristics (seven for age; three for costs; etc). While in a factorial design all possible combinations of characteristics would be used, a vignette study regards a selection of the possible combinations as sufficient (Wallander, 2009). This means, instead of formulating vignettes for all 168 possible combinations, we selected 60 different vignettes that allocated to 30 pairs. By choosing the 60 vignettes, we took care that each possible characteristic was included about the same number of times in the vignettes. In the online questionnaires, vignettes were randomly attributed to employers.

After reading the hypothetical description of the worker and training, we assessed respondents’ *willingness to provide training* with the following question: “Would you offer training to this person?” Employers indicated with values reaching from zero (‘very unlikely’) to 10 (‘very likely’) how willing they were to offer training to the worker described in the vignette. This scale is used as the dependent variable.

TABLE 4.2: Characteristics of the worker and training included in the vignette study

Variable	Categories	Operationalization
Worker's age	44 years	0
	49 years	5
	53 years	9
	55 years	11
	57 years	13
	60 years	16
	63 years	19
Training cost	1500 Euro, medium costs	1
	3000 Euro, high costs	2
	500 Euro, low costs (ref.)	0
Duration of training	16 days, long duration	1
	5 days, short duration (ref.)	0
Governmental reimbursement	Governmental reimbursement	1
	No information provided (ref.)	0
Worker's interest	Interested in training	1
	No information provided (ref.)	0

4.3.3 Method

In vignette studies, the level of analysis is the vignette, and not the respondent (Ganong & Coleman, 2006). Each respondent ($N=477$) provided answers to two vignettes, which means that our sample size is $N=954$. The dependent variable willingness to provide training is measured on an 11-point scale, and allows us to implement Ordinary Least Squares (OLS) linear regression models. The four regression models are presented in Table 4.3. We report all results by holding constant the other variables in the respective model. In the first model, we estimate the three variables directly related to human capital theory (workers' age, training costs and duration), and include the additional factors, the information on the governmental reimbursements and interest of the worker in Model 2. Last, we estimated one model for each interaction term (Model 3 and 4).

TABLE 4.3: OLS linear regression analysis of employers' willingness to provide training (N=954)

	Model 1	Model 2	Model 3	Model 4
Worker's age	-0.097*** (0.012)	-0.092*** (0.012)	-0.075** -0.022	-0.092*** (0.012)
<i>Training costs (low=ref.)</i>				
Medium	-0.660*** (0.182)	-0.663*** (0.181)	-0.449 (0.355)	-0.724** (0.234)
High	-0.761*** (0.190)	-0.934*** (0.197)	-0.606 (0.394)	-1.033*** (0.287)
Length of training (1=long)	-0.403** (0.152)	-0.441** (0.153)	-0.442** (0.154)	-0.420** (0.161)
Governmental reimbursement (1=yes)		-0.032 (0.152)	-0.033 (0.152)	-0.019 (0.160)
Worker's interest (1=yes)		0.521** (0.157)	0.529** (0.158)	0.391 (0.291)
<i>Interactions</i>				
Medium costs * worker's age			-0.021 (0.029)	
High costs * worker's age			-0.031 (0.032)	
Medium costs * worker's interest				0.169 (0.408)
High costs * worker's interest				0.208 (0.401)
Constant	8.312*** (0.189)	8.117*** (0.221)	7.936*** (0.295)	8.150*** (0.230)
Adjusted R-squared	0.09	0.098	0.097	0.097

Note: Standard errors in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.4 Results

In Model 1 of Table 4.3 we find that workers' age is significantly and negatively related to employers' willingness to provide training. Employers are less willing to provide training with increasing age of the worker. Their willingness is lower if the costs of the training are medium (1500 Euro) or high (3000 Euro), compared to low (500 Euro). Also for the length of the training we find a negative coefficient. Employers are less willing to provide training that takes several months ('long'), compared to when it has a short duration of five days. The results for age (H 1), costs (H 2) and length of training (H 3) support our expectations derived from

human capital theory.

In Model 2 of Table 4.3, we additionally include information on whether the government would reimburse part of the costs and on the worker's interest. We do not assess a significant association between governmental reimbursements and employers' willingness to provide training. Hypothesis 5 can therefore not be supported. Regarding the worker's interest in training we find a positive association with employers' willingness to provide training. This finding provides support for H 4, stating that employers are more willing to train interested workers.

In Model 3 and 4, we include the interaction terms. We assumed that costs might play an especially important role if the training investment is made for older workers (H 2a). Our analyses do not reveal a significant interaction between training costs and workers' age. This hypothesis can therefore not be supported. In Hypothesis 2b we expected that the costs of training investment were less important for employers' willingness to train if workers specifically stated their interest. Based on our results, we cannot confirm this hypothesis either.

4.5 Conclusion and discussion

This article set out to investigate which factors relate to employers' willingness to provide training to their older workers. The provision of training might be regarded as an investment in older workers' job resources. From a Job Demands-Resources framework (Bakker & Demerouti, 2007), job resources are regarded to be favourable workplace characteristics that might prolong older persons' labour market participation. In this regard, employer-provided training is interesting from a social scientific perspective, because in ageing societies, policy makers aim at prolonging working careers.

In contrast to prior research, we investigated the provision of training through employers with a vignette study. For two reasons, this is an appropriate method for our research question. First, the current debate about life-long learning and training provision for older workers is well-known among employers. Therefore, employers might be constrained to admit when actually hesitating to invest in their older workers. They might rather give the socially desirable answer that they would provide training. The bias generated by socially desirable answers is reduced due to the design in vignette studies (Alexander & Becker, 1978; Wallander, 2009). Second, when asked directly about training investments, employers might not consider or underestimate the costs associated with training. They do not do this intentionally, but rather because it is hard to assess both direct and indirect training costs. As a result, they could overestimate their willingness to

provide training. In vignette studies the costs can be framed directly and, thus, cannot be ignored by the respondent (Alexander & Becker, 1978).

Based on this specific study design, we discuss our results, give insights for practice, and make suggestions for future research. In our analyses, we found support for the expectations that employers are less willing to provide training for older workers. Theoretically, it might be explained by a human capital framework, which implies that the time-frame to pay off the investment is not large enough for older workers. Besides this argument, age-related stereotypes might provide a rationale for employers' lower willingness to train older workers. Negative stereotypes towards older workers are often used to explain why employers are reluctant to provide training (Canduela et al., 2012; Chui et al., 2001; Karpinska et al., 2011; Posthuma & Campion, 2009; Taylor & Walker, 1994, 1998; Van Dalen, Henkens, & Schippers, 2010; De Vries et al., 2001; Weller, 2007). Our definition of 'older workers' also entails a possible drawback. Neither in our study nor in prior research, is a clear age limit defined that explains when older workers are regarded as such. Between studies, different standards are used that range from 'those older than 45 years', over 'those aged 50 and more', to 'those above age 55'. In our vignette, we included workers between 44 and 63 years. We might thus be investigating whether employer-provided training differs between 'older workers' – e.g. age 44 to 54 – and 'even older workers' – those aged 55 and older. On the one hand, these differences in the definition of older workers might affect our results, because we are only comparing 'older workers' to 'even older workers'. We neglect that those workers aged 44 to 54 years might already have a reduced chance to receive training compared to their younger colleagues. On the other hand, our results might provide even more support for our hypotheses, because we underestimate older workers' disadvantage in receiving training by comparing it to colleagues at age 44, if workers in their 30ies have an even higher chance to get training.

The results of our vignette study show that employers are less willing to offer training when the costs are higher or the training has a longer duration. This clearly provides evidence for the idea that employers are rational actors in the sense that they take into account the direct and indirect costs of investments. Only few prior studies consider the direct or indirect costs of training for the training decisions of employers. Loretto and White (2006) find in their qualitative study that employers mention the costs of training in their deliberations. In contrast to Loretto and White (2006) and our findings, a recent vignette study by Karpinska (2013) reports that the costs of training are unrelated to the likelihood that employers recommend taking the training. Regarding the length of training, Greenhalgh and Mavrotas (1994) report that employers more often provide

training if it is for a short period. Thus, our findings derived from human capital theory are partly in line with prior research results.

We extended the human capital framework with two additional expectations. We included reimbursements by governments as a factor affecting employer-provided training. If governments reimburse part of the training costs, this provides normative and monetary incentives for employers to offer training. The hypothesis, that governmental reimbursements increase employers' willingness to provide training, was not supported in this study. Prior research on governmental contributions is scarce. Bishop (1996) notes that governmentally subsidized on-the-job trainings are very rare. A possible explanation for our finding may be that our vignette condition was not formulated explicitly enough. In the vignette it said that the government would 'reimburse part of the costs' and was restricted 'if the training is completed successfully'. Employers might have regarded the governmental reimbursements as a monetary incentive to offer training if we had defined the contribution more precisely, for example in per cent of the training costs or by including a precise amount. However, following the argument that the normative value of governmental contributions affects employers, the precise amount should not matter. Whether governmental reimbursements support employer-provided training and whether normative or monetary factors play a role can be of interest for further research. Nevertheless, we cannot disregard that subsidies from the government might only marginally or not affect employer-provided training. Even though this is disappointing from the perspective of social policy, it provides valuable information because it warns against immoderate expectations regarding policies like governmental reimbursements. Furthermore, it shows that governments need to think about their strategies to support employers' human resource management practices. Again, what is effective and under which circumstances requires further research.

Furthermore, we investigated workers' interest in training in relation to their employers' willingness to train. Our expectation, which stated that employers are more willing to provide training if workers state their interest, was supported. The idea that workers' motivation or interest is associated with employers' decision is also confirmed in prior research. Greenhalgh and Mavrotas (1994) find that motivation or ambition positively relates to employer-arranged or employer-funded training and also to the likelihood that workers receive employer-based training for more than three days. Also Karpinska (2013) assesses a positive relation between work attitudes and the chance that employers provide training. Our finding can be interpreted in multiple ways. Above we argued that employers would be more willing to provide training if workers stated their training interest explicitly, because this indicates motivation, commitment to the organization or

productivity (Mathieu & Zajac, 1990; Karpinska, 2013). Training can then be used to reward workers. This also connects with social exchange theory (Cropanzano & Mitchell, 2005), which points towards the importance of social relations and reciprocity between individuals. If the workers show interest, the employers might reciprocate, for example through the provision of training. This finding is of importance for workers, because it makes clear that they can influence their employers' decisions. By specifically stating their interest, they increase their chances to receive employer-provided training. While earlier accounts of the decision to invest in older workers focused mostly on the employer, our outcome clearly shows that taking into account both sides of the relation provides additional insights into how decisions come about. It also seems to suggest that employers do not simply provide training to everyone, but are selective. Even though training policies might apply to every worker in a firm, employers might still make a difference by putting policies into practice under specific circumstances.

We could not support for the expectations on interactions (H2a, H2b). We did not find that employers were even less unwilling to provide training if high costs were made for even older workers. We should consider this finding in relation to the restriction that only workers above age 44 were included in our study. As discussed above, we only included 'older' and 'even older' workers in the description of the vignette. Employers' willingness to provide training is thus dependent on the training costs, but is not different for workers of age 44 compared to age 61, for example. Whether costs are differently evaluated by employers for 'younger' and 'older' workers might be interesting for further research. We also could not support the argument that workers' specifically stated interest in training led employers to disregard the costs of the investment.

While this study shows that the provision of training for older workers decreases with their age and that employers do weigh costs and benefits, it also provides evidence that these aspects do not entirely cover this investment decision. Taking into account the exchange relationship between workers and employers emphasizes that training (and more widely employability or sustainability of older workers), may be regarded as a shared responsibility of workers and employers. As the ageing of the workforce continues and as the pension age increases further, this shared responsibility may become even more relevant in the near future.

Chapter 5

**Nothing ventured, nothing gained!
How and under which conditions employers
provide employability-enhancing practices
to their older workers**



This chapter is co-authored by Ferry Koster and Joop Schippers. A slightly different version of this paper is accepted for publication at the International Journal of Human Resource Management.

5.1 Introduction

‘Employability’ is a well-known buzzword in the literature on human resource management. The term is used for different purposes: it can refer to individuals’ work adaptability (Fugate, Kinicki, & Ashforth, 2004), but often it denotes the policies or practices that enhance workers’ skills and knowledge by investing in training (De Grip et al., 2004; Hall, 2002). Since employability may refer to both workers’ employability and the employability-enhancing policies or practices, it is necessary to be explicit about the meaning attached to the term. In the context of an ageing population, several actors regard employability investments as a possible measure to enhance older workers’ labour market participation (De Grip et al., 2004; De Vries et al., 2001; Groot & Maassen van den Brink, 2000). However, much emphasis has until now been put on individuals and the employability they possess, rather than considering how organizations can actively stimulate or generate workers’ employability through the supply of employability-enhancing practices (De Grip, Van Loo, & Sanders, 1999; Gazier, 1999, 2001; Fugate et al., 2004). This article, therefore, specifically focuses on employers’ role for employability investments by answering the research question *which practices do employers use to enhance their older workers’ employability and under which conditions are these practices adopted*.

Posing this question is important for several reasons. First, knowledge about which employability-enhancing practices are valuable for older workers is limited. A reason for this is that there seems to be little agreement among researchers as well as policy makers regarding which practices stimulate older workers’ employability. Often, it is assumed that by participating in formal training and courses, workers remain deployable within and across organizations (De Vries et al., 2001; Groot & Maassen van den Brink, 2000; Picchio & Van Ours, 2011). However, research shows that older workers report a low participation in these ‘general’ forms of employability-enhancing practices (Antikainen, 2001; Bishop, 1996; Canduela et al., 2012; Van Dalen, Henkens, Henderikse, & Schippers, 2006). Different authors argue that increasing workers’ employability through training or the participation in courses might be aimed towards younger workers, while older workers have different needs in order to sustain their employability and work capacity (Hedge et al., 2006; Tamkin & Hillage, 1999). Prior research, therefore, often considers ‘age-aware’ or ‘age-conscious’ human resource (HR) practices as employability-enhancing investments specifically directed towards older workers (Remery et al., 2003; Schaepe & Klaassen, 1999). It is clear that stimulating and ensuring workers’ employability has positive impacts for older workers’ labour

market participation. Higher work capability is found to increase the active participation of older workers in the labour force or to delay their retirement (Siegrist, Wahrendorf, et al., 2007; Siegrist & Wahrendorf, 2010). Also switching to less demanding jobs or reducing working hours appears to enhance labour participation (Hurd & McGarry, 1993). An enunciate difficulty is, however, that job redesign to enable and ensure these working conditions is hardly ever put into practice by employers and organizations (Conen et al., 2011; Hedge et al., 2006; Taylor & Walker, 1998). Hence, by answering the research question we provide new insights and guidance for researchers and practitioners alike with respect to practices that enhance older workers' employability.

Second, one of the reasons for the hesitant implementation of employability practices is that it is largely unclear who is responsible for this investment. On the one hand, individuals themselves can decide to engage in training or skilling to increase their employability (De Vries et al., 2001; Groot & Maassen van den Brink, 2000). On the other hand, however, those individuals who are active on the labour market receive the largest part of employability-enhancing investments through their employers in order to perform better on the job (Forrier & Sels, 2003). These investments are aimed at supporting workers' 'job match' or 'firm internal' employability rather than their 'external employability' (Sanders & De Grip, 2004). This means, employer-provided employability-enhancing practices pay back for the firm, rather than that they make switching organizations more likely. Especially when employability-enhancement for older workers takes the form of age-aware HR practices rather than (formal) training, employers have a crucial role as the 'decision makers' (Gazier, 2001). We, therefore, shift the focus to employers and organizations, as employers decide to which extent employability-enhancing investments are made and who benefits from them (De Grip et al., 1999). By doing so, we generate knowledge about employers' role in the provision of employability-enhancing practices that can be used to formulate policy advice.

Third, in the literature there is an elaborate discussion about factors relating to employer-provided employability. Several theoretical arguments hold that the returns from employability-enhancing practices are expected to be lower for older workers compared to their younger colleagues. This decreases the benefits for employers to provide these practices and make these investments. In line with this argument, prior research shows that employers are reluctant to invest in their older personnel's employability (Canduela et al., 2012; Chui et al., 2001; De Vries et al., 2001; Henkens, 2005; Karpinska et al., 2011; Taylor & Walker, 1998; Van Dalen, Henkens, & Schippers, 2010). Despite this general reluctance, there are several explanations under which employability-enhancing investments

take place. We discuss employers' rational decisions (Becker, 1964; De Vries et al., 2001; Knoke & Kalleberg, 1994), but also possible symbolic reasons to provide employability-enhancing practices (Schein, 1985; Zacher & Gielnik, 2012). Arranged according to arguments against and in favour of the provision of employability practices, we formulate expectations on the relation between investments in employability-enhancing practices and the share of older workers in an organization, the organization's size, the existent capital in the organization and how older workers are perceived within an organization. Furthermore, we argue that the labour market dependency of organizations might influence the investment in older workers' employability. By using theoretical arguments from different literatures, we provide an encompassing picture of employers' investment decisions, the role of organizational characteristics and the labour market. As knowledge on these is scarce, new insights will advance the discussion on employer-provided employability practices.

To investigate the above stated research questions, we make use of an encompassing dataset that we collected in spring 2012 among a random sample of Dutch employers from organizations with more than ten employees. In the questionnaire we asked for organizations' employability-enhancing practices regarding older workers. It also included questions about scarcity on the labour market and possible human resource measures when facing an ageing workforce. Our analyses rely on 860 Dutch organizations and can thus provide an extensive picture of employability investment in the Netherlands.

5.2 Employers' considerations regarding the provision of employability practices

To theorize about employers' decisions whether or not to provide employability-enhancing practices and hence invest in their older personnel, we assume that employers are (bounded) rational, in the sense that they pursue 'goal-oriented' behaviour. This means that employers, rather than being fully rational and act upon complete information, take actions that they believe to increase the benefits of the organization (Kalleberg et al., 1996). We consider two conditions affecting employers' decisions, namely (1) characteristics of the organization, and (2) characteristics of the labour market.

5.2.1 Underinvestment in employability-enhancing practices

Older workers are often regarded as being 'overpaid', meaning that they are paid more than their actual productivity (see e.g. Finkelstein & Burke, 1998; Lindley

& Duell, 2006; Van Dalen, Henkens, & Schippers, 2010). From the view of neo-classical economics, it is assumed that earnings and productivity of a worker are directly related to each other. As this is however hardly ever observed in reality, Thurow (1975) introduced what became known as the ‘seniority principle’. This term summarizes the finding that in the first career phase, the productivity of workers is often higher than their earnings, while in the second phase, earnings exceed productivity. Thus, while workers are generally underpaid in the first stage, they are overpaid in the second stage of their career. This long-term relation between productivity and earnings enhances workers’ loyalty to the firm and makes it beneficial for employers to invest in their workers during the first part of the career. However, as wages increase with seniority, the costs older workers entail for employers become disproportionately high if retirement is delayed (Lazear, 1979). Thus, according to this theoretical framework, seniority wages reflect a burden for employers, and, additionally, investments in older workers are unprofitable for two reasons. First, if costs associated with older workers would additionally increase if investments in workers’ employability were made in the second phase of their career. Second, older workers will leave the organization rather soon for retirement. This means, the period in which investments for older workers compared to younger workers pay off may be expected to be shorter (Hedge et al., 2006; Lindley & Duell, 2006).

Age-stereotypes offer another argument to explain why employers might hesitate to provide employability-enhancing practices for their older personnel (for an encompassing review of the literature on age stereotypes, see e.g. Posthuma & Campion, 2009). Literature on stereotyping states that due to missing information, employers cannot evaluate the productivity of each single worker. Thus, employers use their prior knowledge and general characteristics of workers, such as gender, age or type of work, as an estimate for productivity (Arrow, 1973; Phelps, 1972). Prior studies on employers’ views indicate that they generally regard older workers as being less productive or flexible, and having a lower acceptance of new technologies (Chui et al., 2001; Henkens, 2005; Loretto, Duncan, & White, 2000; Remery et al., 2003). This involves that employers assign a low willingness to gather training to older workers and, thus, also provide fewer investments.

The seniority wages of older workers, the short pay-off period and also the stereotypes held by employers, increase the costs that employers associate with older workers. These individual-level arguments can be translated into organizational-level hypotheses. Employers, who are active in organizations with a larger share of older workers, will experience higher costs when providing employability-enhancing practices. Thus, employers might decide to refrain from investing in their workers’ employability. We therefore expect that *the higher the share of*

older employees, the lower is the provision of employability-enhancing practices (H1: age hypothesis).

5.2.2 Investment in employability-enhancing practices

Next to the reasons underlining why investments are not taking place, there is much literature providing arguments in favour of the provision of employability-enhancing practices through employers.

From the ‘marginal costs’ argument we know that the costs of investments do not increase linearly with, for example, the number of workers for whom the investment is made (Becker, 1964; Brown, Hamilton, & Medoff, 1990; Knoke & Kalleberg, 1994). The relative costs of providing employability-enhancing practices for an additional worker would, thus, be lower for organizations where this investment is made for a greater share of workers. Stated differently, the costs for employability practices decrease at the margin, because the investment for one additional worker is cheaper if the measure is already implemented for a hundred employees compared to if it is only implemented for ten. Hence, the costs of the investment in workers’ employability marginally decrease with the size of the organization. Also other arguments would propose that investment (in formal training) is more likely in large organizations; think e.g. of the more extensive internal labour markets of large organizations or the different setting in which large organizations are active (Knoke & Ishio, 1994; Knoke & Kalleberg, 1994). We, therefore, frame the following hypothesis: *the larger the organization (in terms of the number of employees), the higher is the provision of employability-enhancing practices* (H2: organizational size hypothesis).

From the marginal costs argument a second hypothesis is deductible. As the marginal costs for investments decrease if the investment is made more often (Becker, 1964; Brown et al., 1990; Knoke & Kalleberg, 1994), this allows a specification in our study: Not only do costs of providing employability-enhancing practices decrease in larger organization, but especially if a greater share of employees is in need of these. Since especially older workers have a need to receive employability-enhancing practices, the costs of providing these practices are relatively seen lower in one organization compared to a same-sized organization employing a lower share of older workers. We, therefore, hypothesize that *organizational size moderates the association between the share of older workers and the provision of employability-enhancing practices, such that the association is more positive for larger organizations* (H3: age-size interaction hypothesis).

Human capital theory assumes that workers with a higher educational level or a longer tenure in the firm learn faster and with higher returns (Becker, 1964;

Heckman, 1999; Mincer, 1962). This argument, often subsumed under the headline that ‘learning begets learning’ or ‘skills beget skills’, can also be translated into a rationale how organizational characteristics might affect the provision of employability-enhancing practices. For organizations that have the ‘capital’ of an on average higher educated workforce or one with a longer tenure, the provision of employability practices will be less costly and result in greater pay-offs. The human capital hypothesis, therefore, states that *the higher the existent human capital is in an organization, the higher is the provision of employability-enhancing practices* (H4: existent human capital hypothesis).

Last, organizations might differently evaluate the idea whether older workers should be retained or whether older workers can provide benefits for the organization. On the one hand, there is much research showing that older workers are stereotyped (often by employers) as being less able, less productive or less motivated than their younger colleagues (Chui et al., 2001; Henkens, 2005; Loretto, Duncan, & White, 2000; McCann & Giles, 2002; Remery et al., 2003). On the other hand, prior studies indicate that older workers’ job performance increases with age (Cuddy & Fiske, 2002; McCann & Giles, 2002; Waldman & Avolio, 1986). Hence, the question that arises is not only whether older workers are stereotyped positively or negatively, but rather whether there is a shared attitude or perception of older workers within an organization. This idea is explicated by the organizational culture theory of Schein (1990), which argues that organizations might share a specific view or perception, manifested in a ‘culture’. In the case that workers internalize their leaders’ (e.g. employers’) views, this leads to the establishment of an organizational culture (Schein, 1985; Zacher & Gielnik, 2012). In organizations where the perception of older workers is more positive, this might provide the basis for the implementation of employability-enhancing practices. We expect that *the more positive the perception of older workers is, the higher is the provision of employability-enhancing practices* (H5: perception hypothesis).

Besides organizational characteristics that are related to employers’ decisions whether or not to provide employability-enhancing practices, the labour market in which organizations operate in will play a role. One such characteristic of the labour market is competition between organizations for the ‘best’ workers. In case of scarcity in labour supply, employers will experience more difficulties in filling vacancies, which might increase the competition between organizations. When organizations are facing scarcity, employers could increase the labour force participation of the existing workforce, take internal measures that enhance the organization’s productivity, or restrict the number of workers who leave their organization (De Grip et al., 2004; De Vries et al., 2001). Following insights from

the literature on strategic management, organizations might want to use HR policies in order to attract or bind workers, to show that they ‘care’, and at the same time enhance their advantage over other organizations (De Vries et al., 2001; Knoke & Kalleberg, 1994; Lado & Wilson, 1994). Thus, employers might provide employability-enhancing practices for their older workers in order to sustain work capability and keep their workforce attached to the organization. Our competition hypothesis reads that *the higher the competition is on the labour market, the higher is the provision of employability-enhancing practices* (H6: labour market competition hypothesis).

5.3 Data and methods

5.3.1 Data

Data collection

To investigate the above stated research question, we make use of an encompassing dataset on Dutch employers that was collected as part of a larger project about social security in the Netherlands. For the questionnaire entitled “Towards a greying workforce? Human resource policies for older workers” a random sample was drawn from the Dutch Trade Register [Dutch: *Kamer van Koophandel*]. Due to the generally very low response rate in corporate studies (Henkens, Remery, & Schippers, 2008; Kalleberg et al., 1996; Van Dalen, Henkens, Henderikse, & Schippers, 2006), we sampled 8,000 organizations. Only organizations that are subscribed to have more than ten employees were selected and the sample was stratified according to the size of the organization. Even though we applied the restriction of ten employees, our sample might include smaller organizations if workers were laid-off recently. To secure that enough large firms would participate in the questionnaire, they were oversampled (we applied base weights to correct for the oversampling, see below). The data collection took place between April and June 2012. After sending the questionnaires and cover letters by post mail, two reminders in postcard format were sent after three and six weeks. Respondents had two possibilities to fill in the questionnaire. They could either fill in the paper questionnaire they received with the first post mail, or they could complete an online questionnaire. Both versions included the same questions. In total, 983 respondents participated in the survey. The raw response rate (12.3 per cent) is as expected lower than in individual surveys. Our response rate is comparable to other corporate studies in Europe and the U.S., where it is mostly ranging between five and ten per cent and is at most 20-30% (Henkens et al., 2008; Kalleberg et al., 1996; Van Dalen, Henkens, Henderikse, & Schippers, 2006).

Participants

The questionnaires were addressed to the ‘Human Resource Department’ of the organization. Each organization received one questionnaire with a distinct identification number (printed on the paper questionnaire and necessary to login for the online questionnaire) in order to avoid multiple answers from the same organization. Within the Human Resource (HR) department, generally any person might have completed the questionnaire. Information on the respondents’ position show that more than one third (37%) of the respondents are ‘Chief executive officer of the HR department’, about every fifth respondent was the owner of the company (18%), or a staff member of the HR department (around 17%). Furthermore, about 10% of the respondents were Member of the Board or of the Directors. The remaining questionnaires were completed by managers or staff members. In the following, we will refer to respondents as ‘employers’, even though, strictly speaking, this might not be the case. By doing so, we clearly follow other researchers who call their respondents in corporate surveys ‘employers’ or ‘managers’ (De Vries et al., 2001; Henkens, 2005; Henkens et al., 2008; Karpinska et al., 2011; Remery et al., 2003; Van Dalen, Henkens, Henderikse, & Schippers, 2006; Van Dalen, Henkens, & Schippers, 2010).

Representativeness

In order to make our sample as representative as possible for the Dutch organizations, we implement sampling weights and post-stratification weights. First, we use sampling weights to correct for the over-sampling of large organizations. Sampling weights are defined as the inverse of the probability of selecting a unit (Kalton, 1983). As the mean of the weights should be one (Kalton, 1983), we correct for this by applying weights of about 0.5 (instead of one) for those organizations that had a chance equal to one to be in our sample. All organizations that had a reduced chance to be in the sample, get sampling weights of above 1. Second, we implement post-stratification weights. These weights are calculated based on the size and the sector of the organizations in order to correct for the fact that organizations with a specific size-sector combination were more or less likely to respond than others. This way, we make our random sample of organizations more comparable to the complete population of Dutch organizations. We differentiate nine organizational size bands (10-19 employees, 20-49, 50-99, 100-149, 150-199, 200-249, 250-499, 500-999, 1000+ employees) and seven sectors according to the Dutch standard organizational classification [Dutch: *SBI08 – Standaard Bedrijfsindeling*]. For each of the resulting 36 categories we calculate a post-stratification weight indicating how likely an organization of that size-sector

combination was to be in the sample. The product of the sampling weight and the post-stratification weight provide the individual weight for each organization.

5.3.2 Operationalization

Employability-enhancing practices

Similarly to prior research on employability-enhancing practices directed towards older workers (Remery et al., 2003; Schaeps & Klaassen, 1999) we identify fifteen *employability-enhancing practices* that might be used in order to retain older employees' employability and work capacity. The items comprise practices such as 'continue working in combination with part-time retirement', 'exempt older workers from working overtime' or 'take ergonomic measures'. For each of the 15 items there are three answer categories. We ask employers (1) whether this employability-enhancing practice 'is already implemented', (2) whether it 'is/will be considered', (3) or whether it 'will not be considered' (see Table 5.1). The three answer categories are recoded to a binary variable in such a way that value 1 refers to organizations that either 'already implemented' or 'consider/will consider' the measure; value 0 refers to organizations that 'will not consider' the measure.

Before summarizing these 15 items in one scale, we assess whether these 15 employability-enhancing practices measure the same concept by applying factor analysis. Some Dutch authors and policy actors differentiate between practices that relieve older workers and those where investment takes place (Remery et al., 2003; Van Dalen, Henkens, Henderikse, & Schippers, 2006; Ybema, Geuskens, & Oude Hengel, 2009). We use factor analysis with polychoric correlations, because the recoded items are binary. With polychoric correlations, we take into account that variables might group together just due to their coding. The results of the factor analysis indicate that there is one primary factor with an eigenvalue of 5.80; the eigenvalue of the second is just above one (1.07). All items have factor loadings above 0.43.

As the factor analysis revealed one concept, we summarize the 15 binary items in a sum scale. This means that one point is added to the scale for each employability practice that an organization implements or considers. No points are added to the scale if an organization does not consider implementing the practice. This results in a scale ranging from zero to 15, with higher values indicating that more employability-enhancing practices are implemented/considered by the organization. The descriptive results are provided in Table 5.2.

TABLE 5.1: Fifteen organizational measures for age-conscious personnel policy

	<i>Already imple- mented</i>	<i>Is/will be imple- mented</i>	<i>Will not be consid- ered</i>
Continue working in combination with part-time retirement	27.9	45.9	26.2
Exempt older workers from working overtime	27.7	36.2	36.1
Develop educational trajectories for older workers	12.8	36.9	50.3
Offer expanded leave/vacation opportunities for older workers	42.9	25.3	31.8
Alleviate older workers' tasks	32.8	45.4	21.8
Conduct personal interviews specifically focusing on the last career stage	18.4	52.6	29.0
Adjust working hours	26.6	42.7	30.6
Facilitate long-term care breaks	17.7	38.1	44.2
Demote position and wage (demotion)	7.7	44.8	47.6
Take lengthy career breaks (e.g. sabbatical leave)	8.8	29.1	62.1
Take ergonomic measures	44.7	40.3	15.0
Establish age limits for irregular work/ shift work	20.0	27.5	52.5
Employ older workers to coach younger colleagues	31.5	49.7	18.8
Encourage working in mixed-age teams	27.5	39.1	33.3
Move to less burdensome position within the organization	24.2	50.4	25.4

Independent variables

The *age of employees* in the organization is operationalized by having the respondents indicate how many per cent of the organization's workforce is older than 50 years. The *size of organization* is measured with the variable asking for the number of employees the organization has at the beginning of 2012. We took the natural logarithm of the organization's size in order to lessen the influence of very large organizations. We measure *existent human capital* with the average educational level and the average tenure in the organization. The average educational level is operationalized by a variable asking the employers "What is the

TABLE 5.2: Descriptive statistics

	Obs. ^a	Mean	SD	Range
Employability-enhancing practices	860	9.06	4.46	0 - 15
Percentage older workers ^b	845	1.15	15.96	-22.07 - 77.94
Size organization (log) ^b	843	0.13	1.60	-4.09 - 6.99
Average educational level	828	1.84	0.54	1 - 3
<i>Average tenure</i>				
0 - 5 years (ref.)	852	0.13		0 / 1
5 - 10 years	852	0.34		0 / 1
10 - 15 years	852	0.33		0 / 1
More than 15 years	852	0.20		0 / 1
Perception older workers ^b	799	-0.01	0.49	-1.82 - 1.61
<i>Competition through scarcity expected</i>				
No scarcity (ref.)	835	0.44		0 / 1
Some positions	835	0.46		0 / 1
Many positions	835	0.11		0 / 1
Collective labour agreement	851	0.73		0 / 1
<i>Sector of organization</i>				
Agriculture and industry (ref.)	849	0.35		0 / 1
Trade and catering	849	0.19		0 / 1
Transport, information and communication	849	0.10		0 / 1
Financial and business services	849	0.17		0 / 1
Government and care	849	0.10		0 / 1
Culture, recreation, else	849	0.10		0 / 1

^a For all variables with missing observations, values are imputed by ICE.

^b Variables are centered on their mean.

composition of the personnel according to educational level?”. Employers could indicate the percentage of lower educated (Dutch correspondent degrees: MAVO, VMBO, LBO, LO), medium educated (Dutch correspondent degrees: HAVO, VWO, MBO), and the percentage of higher educated workers (Dutch correspondent degrees: HBO, WO). We recoded the variable in such a way that we applied weights to the three educational levels (low=1, medium=2, high=3) and summed the percentage of lower, medium and higher educated workers. This way, our average educational level in the organization ranges from 1 (100 percent low educated) to 3 (100 percent higher educated) employees. To assess the average tenure in the organization we asked “How long on average are workers employed in your firm”. The answer categories were 1 ‘0 – 5 years’ (reference category), 2 ‘5 – 10 years’, 3 ‘10 – 15 years’, and 4 ‘more than 15 years’.

To assess the *perception of older employees* within the organization, we make use of the item-battery that asked “In your opinion, what are the consequences for your organization if the average age of the personnel increases?”. Seven of these items, including statements such as ‘knowledge increases’, ‘experience rises’, ‘productivity increases’ or ‘mobility of the personnel enhances’, refer to a positive perception of older employees. Employers could evaluate these items on a scale from 1 ‘very unlikely’ to 5 ‘very likely’. We conduct factor analyses (after polychoric correlations) to assess whether these items can be regarded as one scale. As the items can be summarized in one concept with an eigenvalue of 2.64, we compute a scale based on the mean of the seven items. The resulting scale ranges from 1 to 5, with higher values referring to more positive perceptions (Cronbach’s Alpha=0.75).

Last, we asked to which extent the organization is dependent on the labour market. Employers can perceive that there is competition on the market due to scarcity in labour supply. *Competition* is operationalized by two dummy variables where employers could indicate whether they anticipate ‘scarcity in some positions’, or ‘scarcity in many positions’ for the future, both opposed to expecting ‘no scarcity in labour supply’ (reference category).

In our analyses, we control for whether the organization applies a collective labour agreement (yes = 1) and six different industry sectors. The latter are included as five dummy variables in the analyses, with the reference category being agriculture and industry. The dummy variables for the sector are: trade and catering; transport, information and communication; financial and business services; government and care; culture, recreation, else.

5.3.3 Methods

To which extent the employability-enhancing practices are implemented by organizations is measured with a continuous variable. We therefore employ Ordinary Least Squares linear regressions. We include all variables in the regression analysis (Model 1) and additionally run a regression model for the interaction between the age of employees in the organization and the size of the organization (Model 2).

860 respondents provided answers on the dependent variable. As about 16% of these 860 organizations would be deleted due to the listwise deletion in the regression analyses, we imputed missing values on the independent variables by Imputation using Chain Equation (ICE). With this iterative multivariate (imputation)

regression method all variables used in the prediction model for employability-enhancing practices are also included in the imputation model. We run 25 imputations (StataCorp LP, 2009) and report the variation between the imputed models (average RVI) below the models.

5.4 Results

5.4.1 Descriptive picture: The implementation of employability-enhancing practices

To assess to which extent employability-enhancing practices are used by employers to sustain their older workers' employability, we list the practices that were included in our questionnaire, together with the information in how far organizations use these as an employability investment in their older workers. Figure 5.1 shows that around 80 percent of the organizations use employability-enhancing practices such as 'taking ergonomic measures', 'employing older workers to coach younger colleagues', or 'alleviating older workers' tasks' in their agenda. In contrast, instruments such as 'developing educational trajectories for older workers', 'establishing age limits for irregular work/shift work' or 'taking lengthy career breaks' are discussed in less than 50 percent of the organizations.

This shows that employers especially implement, or consider implementing, practices that are not expensive (e.g. taking ergonomic measures, using older workers for coaching) or those that are state regulated or discussed in collective agreements (e.g. continue working in combination with part-time retirement, offering expanded leave/vacation opportunities). Those employability practices that are most expensive for the organization (e.g. taking lengthy career breaks, develop educational trajectories) are hardly ever considered to enhance the employability of older workers. This dichotomy in employability-enhancing practices resembles findings of other studies: Van Dalen, Henkens, Henderikse, and Schippers (2006) argue that in the Netherlands especially 'politically correct' rather than 'hard' measures are taken (p.29). Also Remery et al. (2003) and Ybema, Geuskens, and Oude Hengel (2009) assess that mostly practices that 'spare' older workers or are part of collective agreements are implemented, while those that would involve actual training and investments in older workers are very infrequently considered. In the following we assess under which conditions employers invest in employability-enhancing practices.

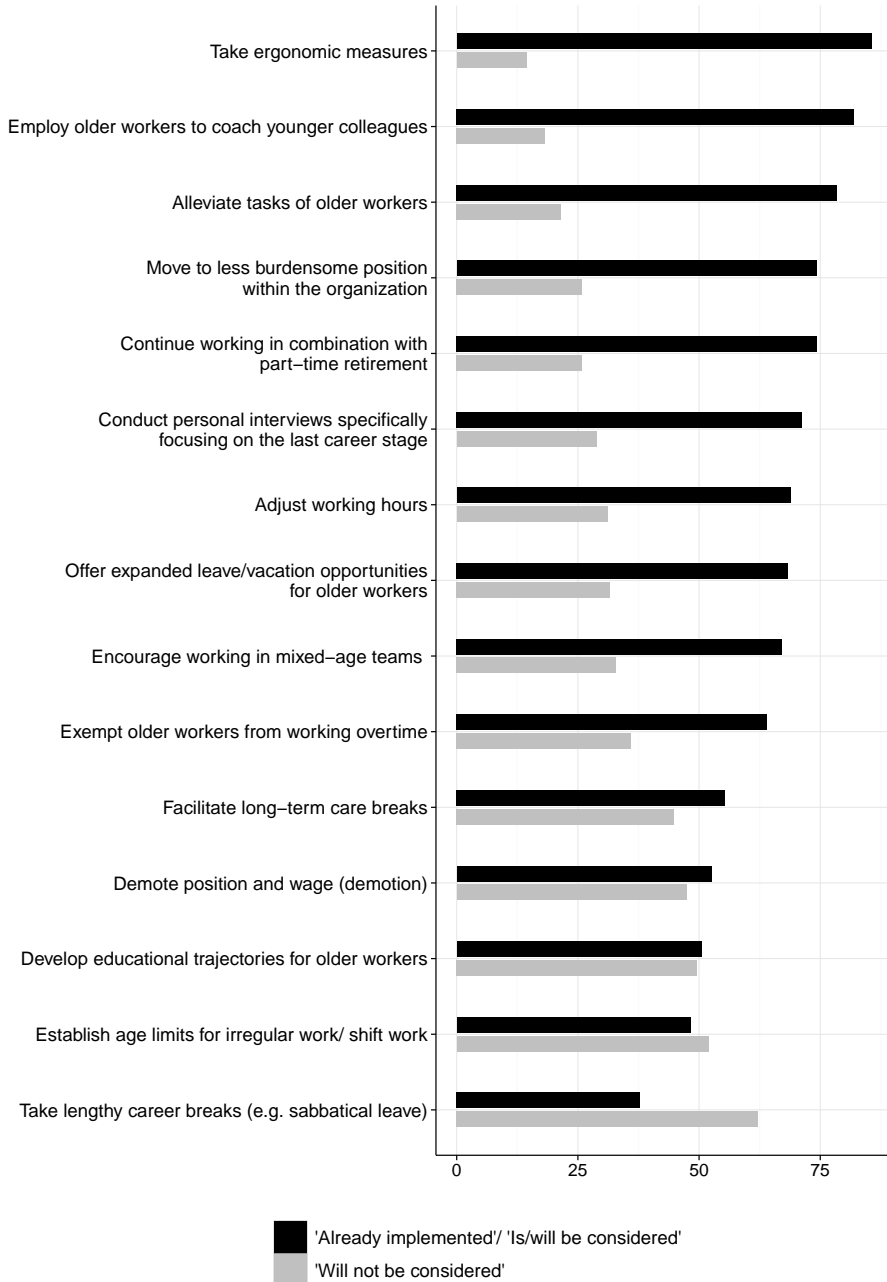


FIGURE 5.1: Employability-enhancing practices ordered by share of organizations who implemented/considered the practice.

5.4.2 Explanatory analyses: Under which conditions do employers invest?

In Model 1 (Table 5.3) we include all variables, except for the interaction between the size of the organization and the percentage of older workers. In line with the argument that investment is less likely if the costs are higher, we expected that a higher share of older workers in the organization is related to a lower investment in employability-enhancing practices. We do not find a significant association between the organization's share of older workers and the investment in employability-enhancing practices. Our age-hypothesis (H1) can, therefore, not be supported. Organizational size was expected to be positively related to the provision of employability-enhancing practices (H2). We find support for our rationale: the larger the organizations are, the more employability practices are on employers' agenda. In Model 2 of Table 5.3, we included the interaction effect between the percentage of older workers and the size of the organization (H3). We do not find support for our expectation that investment is taking especially place in organizations where a high number of older workers are combined with larger organizations.

We test the existent human capital hypothesis (H4) by considering the average educational level in the organization and the average tenure. If more capital is available in an organization, we assumed to find more investment in employability-enhancing measures. A higher educational level is not significantly related to the provision of employability-enhancing practices. However, the analyses reveal that the average tenure in the organization is positively related to employability. This means, especially in organizations where the mean tenure of workers is between five and 15 years, employers provide more employability practices compared to organizations where the tenure is below five years. This effect of tenure comes on top of the effect of the share of older workers (age). Regarding the existing human capital hypothesis (H4), we conclude that if an organization has a higher level of existent human capital, then employers also implement more employability practices.

Regarding the perception hypothesis (H5), we test whether a more positive perception of older workers is related to the provision of more employability practices. Our results show that employers invest more in the employability of their older workers the better they perceive older workers. These results support our hypothesis (H5).

Last, we investigate whether the organization's dependency on the labour market, in terms of competition through scarcity in labour supply (H6), relates to their investment in employability practices. Organizations' investments appear

TABLE 5.3: Regression results for implementation of employability-enhancing practices

	Model 1		Model 2	
	Coef.	SE	Coef.	SE
Independent variables				
Percentage older workers	0.016	0.015	0.027	0.017
Size organization (log)	0.444**	0.154	0.425**	0.153
Percentage older workers * size organization (log)			0.013	0.009
Average educational level	0.574	0.454	0.585	0.451
<i>Average tenure (ref: 0 - 5 yrs)</i>				
5 - 10 years	1.829**	0.643	1.807**	0.640
10 - 15 years	1.702*	0.700	1.652*	0.708
More than 15 years	0.906	0.816	0.893	0.822
Perception older workers	1.405**	0.416	1.438**	0.414
<i>Competition through scarcity expected (ref: no)</i>				
Some positions	2.274***	0.484	2.246***	0.481
Many positions	2.524***	0.670	2.474***	0.669
Control variables				
Collective labour agreement	0.317	0.483	0.318	0.475
<i>Sector of organization (ref: agriculture and industry)</i>				
Trade and catering	-0.489	0.515	-0.432	0.520
Transport, information and communication	-1.489*	0.705	-1.499*	0.698
Financial and business services	-0.463	0.648	-0.432	0.640
Government and care	0.166	0.670	0.135	0.688
Culture, recreation, else	-1.079	0.758	-1.026	0.755
Constant	5.590***	1.190	5.582***	1.186
Observations	860		860	
Imputations	25		25	
Average RVI	0.079		0.086	

Note: * p < 0.05, ** p < 0.01, *** p < 0.001

to be dependent on the labour market in terms of competition for scarce workers. Our results show that employers implement more employability-enhancing practices if they expect that the organization has to deal with a scarcity to fill some or many positions. This finding supports our theoretical expectations.

Regarding the control variables we assess the following: whether organizations apply a collective labour agreement does not seem to matter for the implementation of employability-enhancing practices. Also the sector of the organization does hardly seem to play a role. Only organizations operating in ‘Transport, Information and Communication’ seem to implement fewer employability practices compared to those in ‘Agriculture or Industry’.

5.5 Conclusion and discussion

In this article set out to investigate the extent and conditions under which employers provide employability-enhancing practices specifically focussing on older workers. Studying employability practices directed towards older workers rather than assessing the role of ‘general’ employability practices is relevant in the context of an ageing population and workforce. We embedded our expectations in a context where the costs of investing in employability-enhancing practices played a role but employers took decisions dependent on organizational and labour market characteristics and formulated hypotheses both for underinvestment and investment in employability practices. Empirically, we made use of a large company data set with information on 860 Dutch organizations to test our expectations. These encompassing data allow drawing general conclusions about Dutch organizations and are comparable to other Dutch datasets (Henkens, 2005; Henkens et al., 2008).

Our findings can be summarized as follows. First, regarding the implementation of employability-enhancing practices, we find that especially those practices that are the most feasible, very easy to implement and least expensive are on organizations’ employability agenda. Such measures include alleviating older workers’ tasks, taking ergonomic measures, or using older workers for coaching. Measures that are supported through occupational pension schemes or formulated in collective labour agreements, such as part-time retirement, additional leave days for older workers or adjusting their working hours, are also considered by employers. This clearly shows that employers are generally not averse to implement practices that help older workers sustain their employability. However, exactly those employability-enhancing practices that are increasingly important in the changing economy, where older workers will need to participate longer, are rarely

implemented or considered. Expensive measures, those that allow workers to detach from the organization for a longer period, or involve organizational restructuring are not even considered by employers. Examples for these practices are: developing educational trajectories for older workers, facilitating long-term care breaks and career breaks (sabbatical leave). These descriptive results are in line with prior research assessing that rather ‘politically correct’ or collectively agreed upon than ‘hard’ measures are used (Remery et al., 2003; Van Dalen, Henkens, Henderikse, & Schippers, 2006). Furthermore, we replicate research noting that employability practices can be subdivided into practices that relieve older workers’ tasks or ‘spare’ them, and those where investment in workers’ employability takes place (Van Dalen, Henkens, Henderikse, & Schippers, 2006; Ybema, Geuskens, & Oude Hengel, 2009). This differentiation translates to the distinction made by the Job Demands-Resources model of Bakker and Demerouti (2007). In this framework, measures that ‘spare’ older workers can be regarded as decreasing their job demands, while ‘investment’ measures can be expected to increase older workers’ job resources. In an ageing population, it will become important for both public and organizational policy to increase the attention on practices that allow older workers to make considerable changes in their career paths. Even though this might involve that jobs are re-designed (Conen et al., 2011; Hedge et al., 2006; Taylor & Walker, 1998), older workers’ participation on the labour market might be prolonged as a result.

In the second part we investigated under which conditions employers implement employability-enhancing practices directed towards older workers. We find that employers in larger organizations invest more in employability practices. This is in line with our theoretical explanation that the marginal costs of an investment, such as the provision of employability practices, decreases if it is made for a larger number of workers. This finding might also be explained by the internal labour markets larger organizations have. If employers intend to recruit their own workers, the incentive to invest in workers is higher.

The hypothesis that more employability-enhancing practices are provided in organizations with a higher share of older workers is not supported (H1). This is surprising, because the practices we studied are explicitly directed towards older workers. Further research is advised to study whether the number of older workers increases the provision of employability practices. We also investigate employers’ perceptions towards older workers. In organizations where older workers are perceived more positively, the provision of employability-enhancing practices is higher. Theoretically, this finding can be explained by organizational culture theory that supposes that specific perceptions are shared among the members of an organization (Schein, 1985; Zacher & Gielnik, 2012). This means that even

employers that might not have daily contact with older workers share the positive perception of these. The established organizational culture might thus increase investments in older workers' employability. We also included an interaction between the perceptions towards older workers and the percentage of older workers in the organization (results not reported). A higher fraction of older workers in an organization combined with positive perceptions does, however, not appear to play a significant role for the implementation of employability practices.

Last, our analyses reveal that the labour market dependency of the organization plays a role. Especially in organizations where employers expect a scarcity in labour supply for the future, more investment in employability practices takes place. This can be interpreted in several ways. Either, employers invest in their older workers to keep them capable and employable for a longer time, or employers invest in them in order to increase the attractiveness of the organization. This might pay off in two ways; it might detain workers from leaving for a different organization (De Grip et al., 2004; De Vries et al., 2001) and, in general, attract new employees (De Vries et al., 2001; Lado & Wilson, 1994; Knoke & Kalleberg, 1994). Employers might, thus, use employability-enhancing practices as a tool for competitive advantage.

There are several limitations of our article of which we address the most important in the following. First, as it is common with company surveys, the response rate of our study is low. Studies investigating organizations usually have to deal with high non-response (Henkens et al., 2008; Kalleberg et al., 1996; Van Dalen, Henkens, Henderikse, & Schippers, 2006); one reason is that respondents can often not be personally addressed because it is not exactly known who fulfils which position in the organization. Furthermore, and relevant in our case, we did not have telephone numbers or email addresses of the organizations, which made it impossible to approach respondents that way. Anticipating a predictably low response rate and in order to guarantee a large enough sample of Dutch organizations, we sampled 8,000 organizations. Even though the non-response is high, we are confident that our analyses relying on 860 organizations reflect the Dutch organizational landscape. This is even more the case because we applied sampling and stratification weights.

Second, the employers participating in our survey are a rather heterogeneous group. As discussed in the description of our respondents, more than one third of the respondents fulfilled the position of 'Chief executive officer of the HR department', and about one fifth of the respondents were the owner of the company, and another fifth a staff member of the HR department. This exemplifies that whom we call 'employer' in this study is not exclusively 'employer' in the strict sense.

However, by making this decision in wording, we follow the example of many prior studies (De Vries et al., 2001; Henkens, 2005; Henkens et al., 2008; Karpinska et al., 2011; Remery et al., 2003; Van Dalen, Henkens, Henderikse, & Schippers, 2006; Van Dalen, Henkens, & Schippers, 2010). Therefore, we are confident that our respondents are taking human resource decisions or are involved in these.

Third, our study has a cross-sectional design and, thus, we only know which employability practices employers considered to implement in the period the data were collected. These considerations (intentions) do not necessarily reflect their actual behaviour. In this light, organizations might easily indicate to consider specific employability practices as a way of providing a ‘socially desirable’ answer. It, however, becomes clear that social desirability bias is probably limited because a substantive fraction of employability-enhancing practices are not even considered by organizations (compare Figure 5.1). For further research it would be interesting to repeat the data collection to assess which of the practices, that were initially considered, are implemented in the following.

To conclude, our study shows that both organizational and labour market characteristics affect employers’ decisions whether to provide employability-enhancing practices for their older workers. It appears that for example especially larger organizations invest in their older workers’ employability. Policy measures might be discussed as a possible means to increase the incentives for smaller firms to invest in their workers. Financial subsidies might trigger smaller organizations to provide employability-enhancing practices. The expansion of employability practices is especially relevant in the context of an ageing population and ageing workforce. Under these circumstances, a higher labour market participation of older workers and their delayed retirement is becoming ever more important. Additionally, the type of employability-enhancing practices should be addressed more frequently in policy debates. As there is no ‘one size fits all’ employability practice, employer-provided practices that increase older workers’ employability should consider the requirements of older workers as compared to their younger colleagues, but leave room for individual wishes.

Chapter 6

Conclusion and discussion

6.1 Background of the study

As workers become older and approach retirement age, they might re-consider their participation in the labour market more frequently and ask themselves “Should I stay or should I go?”. In answering this question, older workers make a multitude of deliberations related to for example their health, private life or the welfare state’s provision of pension benefits. Moreover, older workers are embedded in an organization accommodating certain workplace characteristics. In this dissertation, I considered the workplace as crucial in shaping older persons’ decision regarding their labour market participation. The two questions guiding the dissertation were: (1) how is the workplace related to older persons’ labour market participation, and (2) how can variation in employers’ investments regarding the workplace of their older workers be explained. To address these questions, I conceptualized the workplace in terms of job demands and job resources, a distinction derived from the Job Demands-Resources model of Bakker and Demerouti (2007). Originally, this model was implemented to theorize about the relation between the job demands and job resources at the workplace and individuals’ perceived work stress, job satisfaction, or burn-out (Bakker & Demerouti, 2007; Boumans et al., 2008; Karasek, 1979; Schreurs, Van Emmerik, et al., 2011; Sutinen et al., 2005; Van den Broeck et al., 2011). In this dissertation, I used ideas stemming from the Job Demands-Resources model to investigate the relevance of workplace characteristics for older persons’ labour market participation. By applying this model, I contribute to prior research in two ways.

First, job demands and job resources provide a framework for explaining variation in older persons’ retirement decisions. I use job demands as an illustration of disadvantageous workplace characteristics and job resources as indicator for positive characteristics of the workplace. Generally, the underlying expectation is that negative workplace characteristics decrease or shorten labour market participation, while positive workplace characteristics increase or prolong older persons’ participation in the labour market. For example, higher job demands at the workplace, because of physically demanding work, imply higher costs of participating in the labour market. Job resources, such as high autonomy at the workplace, in contrast, comprise benefits that might prolong labour market participation. Workplace characteristics are, thus, arguably an important antecedent of older persons’ labour market participation and their decision to retire.

Second, rather than treating the workplace as given, I acknowledge that employers can manipulate features of the workplace by investing in the job demands and job resources of their workers. The provision of training and human resources

measures can for example increase the job resources of older workers, or help decrease their job demands. By investing in workplace characteristics, employers can lower job demands and increase older workers' job resources.

The notion that job demands can be disadvantageous for individuals' dedication to their work, while job resources might enhance their devotion, was recently applied to older workers' labour market participation and retirement decisions (see Chapter 2 and Chapter 3, Van Solinge & Henkens, 2013). These employer-provided investments in the workplace might, thus, be considered relevant also for older workers' labour market participation.

In summary, the approach of framing workplace characteristics in terms of the Job Demands-Resources model gave me the possibility to consider two topics conjointly that have primarily been studied separately: older workers' retirement decisions and employers' investment behaviour. By assessing older workers' labour market participation from two angles, namely their workplace characteristics and their employers' investments, I embed two distinct topics in one single theoretical framework. I add to the literature by explicating that while workplace characteristics relate to older persons' labour market participation, the relation is not independent of employers who might shape and adapt the workplace.

6.2 Summary of main research findings

6.2.1 Workplace characteristics and older persons' labour market participation

The first research question, studied in Chapter 2 and Chapter 3, addressed how workplace characteristics are related to the labour market participation of older persons. Increasing and prolonging older persons' participation in the labour market is regarded as a possible solution to population ageing in Western countries and the expected unsustainability of welfare state provided pension benefits (European Commission, 2009). In this context, many prior studies assessed the relevance of macro-level (e.g. Blöndal & Scarpetta, 1999; Dorn & Sousa-Poza, 2010; Fischer & Sousa-Poza, 2006; Gruber & Wise, 1999; Kim, 2009; Van Oorschot & Jensen, 2009) and micro-level characteristics (e.g. Von Bonsdorff, 2009; Damman et al., 2011; Hayward, Grady, et al., 1989; Henkens, 1999; Mein et al., 2000; Schils, 2008; Van Solinge & Henkens, 2010) for the prolongation of individuals' working life. Especially the roles of the pension system and individuals' health and income have received scholarly attention. The meso-level, i.e. workplace characteristics, has only recently been included in studies on retirement or older persons' labour market participation. Remarkably, workplace characteristics have been regarded

as an explanation for job turnover (Hom et al., 1992; Lee & Mitchell, 1994; Mobley, Horner, & Hollingsworth, 1978; Mobley, Griffeth, et al., 1979), and even though similar mechanisms relate to retirement, the workplace has only lately been considered relevant for retirement or older persons' labour market participation.

The objective of Chapter 2 was to investigate the relevance of workplace characteristics as determinants of older persons' labour market participation in several European countries. Next to meso-level attributes of the workplace, I considered micro-level and macro-level characteristics, offering an integrated view on individuals' retirement decisions from three levels. In Chapter 3, I extended this knowledge by comparing the relevance of workplace characteristics for two possibilities of labour market withdrawal: turnover intentions and retirement intentions. In comparison to prior research, I studied a multitude of workplace characteristics in relation to retirement, and additionally demarcated it from and compared it to job turnover.

The ideas based on job demands and job resources translated into several hypotheses that I tested in Chapter 2 and Chapter 3. I expected that positive workplace characteristics, i.e. job resources, were positively related to labour market participation, while negative workplace characteristics, i.e. job demands, related negatively to older persons' labour market participation. More specifically, autonomy or intrinsic and extrinsic work values were expected to relate positively to older persons' labour market participation, this is, negatively to retirement intentions. Furthermore, physical demand or the perceived misfit between what individuals value and what the workplace provides, was hypothesized to relate negatively to labour market participation, and positively to retirement intentions. In Chapter 2, I extended these meso-level predictions with expectations about the institutional context. I assumed that in countries where the pension benefits were more generous and individuals were more easily eligible for benefits, older persons' participation would be lower. Furthermore, the macro-economic environment, such as the unemployment rate in a country or the employment protection, was included in the analyses on older persons' labour market participation.

Data

To test these hypotheses, I made use of two distinct datasets. In Chapter 2, I used the European Social Survey (ESS) from the year 2004 (round 2) to study the labour market participation of older persons, aged 45 to 70. The ESS is a cross-national survey held in many European countries since 2002 and is conducted on a bi-annual basis among a representative sample of the residential population

above age 15 (see Billiet & Pleysier, 2007). In round 2, 26 European countries participated in the survey. One clear advantage of these data is the possibility to enrich them with country-level data. I linked the individual information with country characteristics retrieved from official statistics provided by Eurostat and the Organization for Economic Cooperation and Development (OECD). Moreover, I added information on each country's pension system, which was collected within the MULTILINKS project (Dykstra & Komter, 2012). This project resulted in an extensive database providing information on countries' welfare system, and amongst others the retirement regulations (Keck et al., 2009). Due to some restrictions in the availability of information, I based my analyses on the ESS data of 21 European countries. This allowed me to simultaneously assess the impact of micro, macro and meso-level characteristics on older persons' labour market participation in a country comparative perspective.

For the empirical analyses in Chapter 3, I used the Study on Transitions in Employment, Ability and Motivation (STREAM), a panel survey collected by the Netherlands Organisation for Applied Scientific Research (TNO). The STREAM panel was initiated in 2010 and included 45-64 year old individuals in the Netherlands: about 12,000 employees, 1,000 self-employed persons, and 2,000 non-working persons (see for more information Ybema, Geuskens, Van den Heuvel, et al., 2014). The STREAM data include extensive information on older workers' workplace environment, labour market behaviour and intentions, but also on individual characteristics, such as their motivation to work, values or socio-demographic factors. Due to the combination of individual and workplace information, wave 1 of the STREAM data was exceptionally well suited to study the relevance of the workplace and the compatibility between workplace characteristics and individuals' preferences for older workers' job turnover intentions, as well as for their intentions to retire. The extensive information included in the STREAM data enabled me to extend the insights gained in the preceding chapter regarding the relevance of workplace characteristics for older persons' labour market participation.

Results

I summarize the results of Chapter 2 and Chapter 3 regarding the impact of workplace characteristics on older persons' labour market participation with respect to job demands and job resources. As expected, I found that physical demands were associated with a lower participation of older persons in the labour market (Chapter 2) and an increased intention to retire (Chapter 3). In contrast, job resources were positively related to older persons' labour market participation.

The finding, for example, that autonomy in the workplace was positively related to older persons' labour market participation (Chapter 2), is consistent with the expectation that job resources are beneficial for individuals' labour market participation. In the study on Dutch older workers (Chapter 3), findings showed that resources, such as being intrinsically motivated or perceiving a fit between one's personal wishes and the organizational provision of favourable workplace characteristics, made older workers less likely to intend to retire. Taken together, these results clearly indicate that older persons with more favourable workplace characteristics were less inclined to withdraw early from the labour market.

In addition to the analyses on workplace characteristics, I investigated the relationship between the countries' pension benefit system as well as macro-economic environment and older persons' labour market participation. Generally, the results based on 21 European countries showed that in countries where pension benefits were more generous and more easily available the labour market participation of older persons was lower. However, many measures of the countries' pension benefit system, and macro-economic environment, did not relate significantly to older persons' labour market participation. I could only partially confirm my hypotheses that encompassing pension benefits provided older persons with possibilities to withdraw from the labour market, by substituting large parts of their income.

The findings presented in Chapter 2 and Chapter 3 supported the general expectation that job demands increased the costs associated with labour market participation, while job resources decreased the costs. This provides employers the possibility to invest in workplace characteristics that prolong their workers' participation.

6.2.2 Employers' investments in workplace characteristics

In the second part of my dissertation, I investigated how variation in employers' investments in their older workers' workplace characteristics can be explained. Hence, the two chapters succeeding the first part of the dissertation focussed on employers' considerations regarding the provision of a favourable workplace. Even though employers are the main decision makers regarding investments in the workplace (Gazier, 2001), employers' behaviour has hardly been considered in relation to investments in older persons' workplace characteristics. In Chapter 4 and Chapter 5, I investigated two kinds of employer-provided investments: granting training to older workers and the implementation of age-aware human resources measures, respectively. In terms of the Job Demands-Resources framework, employer-provided training can be regarded as an investment in a person's

job resources. The implementation of age-aware human resources measures, in contrast, can work in two ways; it might increase worker's job resources, but possibly also decrease workers' job demands. Most prior research on employer-provided training or the implementation of human resources measures discusses workers' age as the main impediment against employers' investments (Becker, 1964; Bassanini et al., 2005; Canduela et al., 2012; Chui et al., 2001; Hedge et al., 2006; Henkens, 2005; Lindley & Duell, 2006; Van Dalen, Henkens, & Schippers, 2010; Taylor & Walker, 1998; De Vries et al., 2001). However, several factors, that have thus far remained under-explored, might mitigate the obstacles employers perceive. I studied how employers decide whether or not to invest in their older worker. I chose for an approach in which I accounted for contextual factors, such as the economic or organizational context in which those decisions are taken.

I formulated several hypotheses. First, I expected employers to be less willing to make investments with an increasing age of the worker (Chapter 4). On the aggregated level, I hypothesized that in organizations with a greater share of older workers, employers were less likely to invest (Chapter 5). I arrived at this hypothesis via two theoretical explanations. First, age-related stereotypes would entail that employers regard older workers to be less productive. Second, the cost and benefit reasoning suggests that the period in which employers can reap the benefits of investments is shorter the older the workers are. Both arguments imply that employers are reluctant to invest in their older workers, because they expect lower benefits from investments in training or human resources measures.

Next to the age of the workers, the costs of an investment in older workers were expected to be relevant for employers' decisions. I formulated the hypothesis that employers were less willing to invest in their worker if the training costs were higher (Chapter 4). As argued in human capital theory, this is, because the benefits of the training might be discounted in the future (Davies & Elias, 2004).

Moreover, employers' perception of older workers might be argued to relate to employers' investments. Age-related stereotypes that are shared within an organization might be manifested as an organizational culture, affecting the investment decisions of employers. A more positive perception of older workers in an organization was, hence, suggested to relate to higher investments in older workers (Chapter 5). I investigated the notion that employers might reward their older workers as a form of reciprocal behaviour or social exchange. When older workers for example explicitly indicated their interest in receiving training, employers might perceive this as a sign of productivity and bonding with the organization.

As a possible way of rewarding their older workers, I expected employers to be more willing to invest in their interested workers (Chapter 4).

The literature points towards the relevance of a number of intermediary factors, such as the policy and economic context in which employers take their decision. First, I took the policy context into account by assessing how governmental subsidies affect employers' willingness to invest in older workers' training (Chapter 4). I also hypothesized that investments are more likely in larger organizations, because the marginal costs of providing training for an additional worker are lower (Chapter 5). Second, the economic context might affect employers' decisions. Given scarcity in the labour market, for example, organizations would have to compete more fiercely for the 'best' workers. To recruit such workers, they might use training as a measure to increase the attractiveness of the organization. I expected that competition for workers related positively to employer-provided investments (Chapter 5).

Data

To test these hypotheses, I collected two distinct, but interrelated, datasets on employers' human resources measures in the Netherlands. Due to the known low response rate in corporate surveys, I randomly selected as many as 8,000 companies from the Dutch Trade Register [Dutch: *Kamer van Koophandel*], stratified according to company size. This large sample guaranteed keeping a satisfactory number of respondents for the analyses. These companies received invitation letters between April and June 2012 to participate in our survey entitled "Towards a greying workforce? Human resource policies for older workers". The response rate of 12.3 percent provided me with 983 completed questionnaires (for more information, see Chapter 5), offering an encompassing dataset to study human resources measures for older workers in the Netherlands. These unique survey data included information on employers' practices and considerations regarding investments in their older workers. For the analyses in Chapter 5, I made use of these extensive, and up-to-date, data on employers' human resources measures and the organizational context in which the investment decision is taken.

The respondents of the survey had the option of filling in a paper questionnaire, or, alternatively, participating online. Those who chose the online version of the questionnaire (about 50 percent of the respondents) received two additional questions. This addition included a semi-experiment, i.e. the vignettes used in Chapter 4. A vignette is a description of a hypothetical situation and/or person (Alexander & Becker, 1978; Ganong & Coleman, 2006; Wallander, 2009), which the respondent has to evaluate by answering one or several questions (for more

information, see Chapter 4). For each respondent, I included two vignettes in which worker/training characteristics were described and randomly varied. In total, each of the 477 respondents filled in two vignettes, yielding 954 vignettes for analyses. Using vignette studies for the analysis of employer-provided human resources investments is advantageous because vignettes are thought to reduce social desirability bias (Karpinska, 2013). As investments in older workers are a highly debated topic and the expectation that employers should provide training is often formulated, employers might be prone to give socially desirable answers. In vignette studies, respondents are unaware of the manipulation of the worker/-training characteristics. Thus, using vignette studies to assess employers' willingness to invest in their older workers is expected to diminish the bias involved with social desirability.

Results

The results regarding employers' investments aimed at increasing job resources and reducing job demands showed the following. In Chapter 4, based on the vignette study, I found that employers were quite willing to provide training for a hypothetical older worker. However, the associated expected costs clearly seemed to affect its implementation. Employers were less willing to invest when workers were older, when the training costs were higher or the training period was longer. Additionally, my results suggested that workers can affect their employers' decisions by stating their interest in receiving training explicitly. Employers were more willing to provide training for interested workers; this underlines the idea of a social exchange relationship between workers and employers. Employers seemed to reward older workers' interest through the provision of training.

In Chapter 5, a focus on employers' investments in age-aware human resources (HR) measures is complementary to the results on training. Employers were more likely to provide age-aware HR measures, especially if these were more easily implementable and inexpensive. Measures that would imply organizational restructuring were frequently not considered by employers. This finding is in conflict with policy standpoints that regard restructuring jobs and offering new employment possibilities as a necessary step in prolonging older workers' labour market participation. Concerning the question which conditions enhance investments of employers, the analyses showed that with increasing size of the organization, more age-aware measures were provided by employers. This finding is consistent with the marginal costs argument, namely that the relative costs of HR measures are lower with every additional worker. Furthermore, I found that the economic context played a role. If employers perceived scarcity in labour supply, and thus

needed to compete more fiercely for the ‘best’ workers, they implemented more age-aware HR measures. Apparently, employers use such measures to enhance the attractiveness of their organization. Moreover, a more positive perception of older workers related positively to investments of employers in age-aware HR measures.

6.3 Discussion

6.3.1 Contributions to the literature

In this dissertation, I contributed to prior research on older workers’ labour market participation in several ways. I distinguish between contributions that brought about theoretical advancement, and those that relate to methodological approaches.

First, in prior studies, the underlying mechanisms linking the workplace to older persons’ labour market participation remained under-theorized. I proposed a framework in which workplace characteristics, which I framed in terms of job demands and job resources, explained variation in older persons’ labour market participation. My main argument was that job resources involve benefits that might increase labour market participation, while job demands comprise costs which may decrease participation in the labour market. The link between demands and resources with costs and benefits, respectively, related well with prior research on older persons’ labour market decisions. For example, in sociology, expectations about costs and benefits of labour market participation have been formulated in terms of factors that push older people out of the labour market or pull them into retirement (Buchholz et al., 2006; Ebbinghaus, 2006; Hofäcker & Unt, 2013; Van Oorschot & Jensen, 2009). In economics, the notion that individuals have an equilibrium between income and leisure, and that modifications of the equilibrium affect their labour market participation, is established. There, the concept of costs and benefits is used implicitly to make predictions about older persons’ labour market participation. By using job resources and job demands to derive hypotheses about older persons’ labour market participation, I make the relevance of costs and benefits for workplace characteristics explicit.

Prior studies explained employers’ reluctance to make investments in favourable workplace characteristics with the lower benefits that are accompanied with an increasing age of a worker. In line with the traditional theoretical arguments of (age) stereotyping or the evaluation of costs and benefits, I found in this dissertation that older workers were less likely to receive employer-provided training.

Additionally, I could assess that mitigating factors, such as the interest of workers in training, the perception of older workers in an organization or the size of an organization, contributed to the explanation of why employers were reluctant to invest in their older workers. By considering attributes mitigating employers' low willingness to provide training or implement age-aware human resources measures, I, thus, furthered the theoretical understanding regarding investments in the workplace and its relation to older persons' labour market participation.

Next to conceptual advancements, this dissertation improved explanations of older workers' labour market participation through methodological advancements. First, I provided a more comprehensive picture of older workers' labour market participation in Europe by including many countries and characteristics of the micro-level, the macro-level and the meso-level simultaneously. The large-scale comparative dataset of the European Social Survey used in Chapter 2 enabled the assessment of the relevance of workplace characteristics in combination with individual characteristics and attributes of the welfare state. Previously, studies had investigated the workplace in relation to older persons' labour market participation for single or a few countries only, limiting the assessment of the relevance of country level characteristics for older persons' labour market participation. By studying a multitude of more than 20 European countries, I built on insights on welfare state pension arrangements and macro-economic conditions relevant for older persons' labour market participation.

Second, I collected rich and encompassing information to assess the human resources measures for older workers in the Netherlands. These data yield a twofold advantage. First, by collecting new data, I provide extensive and timely knowledge on age-aware human resources measures in the Netherlands. This is especially valuable because human resources measures for older workers and life-long learning have recently been high on the policy agenda. Additionally, I obtain background information on the company's organizational context and the economic circumstances the company is exposed to. This allowed me to assess how firms operating under different circumstances varied their human resources measures directed towards older persons. Second, prior research on human resources measures for older workers in the Netherlands have indicated that employers rather invest in measures that reduce older persons' demands in their workplace (so-called spare-measures [Dutch: *ontziemaatregelen*]) than to invest in their skills and knowledge to support their work capacity (so-called development-measures [Dutch: *ontwikkelmaatregelen*]) (Van Dalen, Henkens, Henderikse, & Schippers, 2006; Remery et al., 2003; Ybema, Geuskens, & Oude Hengel, 2009). My analyses on the newly collected data among Dutch employers showed that this previously assessed distinction generally applied. The distinction of job demands

and job resources I used in the theoretical framework, allowed me to conclude that employers rather decrease their workers' job demands through the provision of spare-measures, than to increase their job resources through the implementation of development-measures.

Third, I implemented a vignette design to investigate the conditions under which employer-provided training occurred. The application of a different method allowed comparing my results based on a semi-experimental vignette study to prior results based on survey studies, thereby extending the validity of worker and training characteristics for employers' provision of human resources measures. Another advantage of using a vignette design related to the difficulty of assessing employers' willingness to invest in their ageing workforce in a societal context where this topic is widely discussed. Employers might be prone to simply affirm the question about their provision of training in order to prevent giving an answer that is socially unacceptable. I used a vignette design because the hypothetical depiction of the decisions' context and situation is known to decrease the social desirability bias (Karpinska, 2013), an issue that is especially pertinent when topics are studied that are widely discussed in the media and where tolerance for differing opinions is low. Employer-provided training is a case in point: the public opinion regards investments in older workers necessary.

Last, in this dissertation, I accounted for and investigated two actors involved in older persons' labour market participation. On the one hand, a prolonged labour market participation is dependent on older persons' characteristics and their workplace. On the other hand, employers are the decision makers regarding the adaption of workplace characteristics and the provision of human resources measures. The two-actor focus is in line with the theoretical notion that prolonging individuals' labour market participation by decreasing job demands and increasing job resources is a shared responsibility of workers and employers. By focusing on both actors in this dissertation, I offer a more inclusive framework.

6.3.2 Policy implications

Based on the results of this dissertation, I propose some implications this study has for policy. Most of those suggestions emphasize that a great part of the responsibility rests upon employers. This is not surprising, because the focus of this dissertation was on the workplace. Additionally, employers are generally in a more powerful position compared to workers. Even though not making this explicit in each of the following suggestions, I am aware of the fact that we can expect a greater commitment of larger organizations, compared to smaller organizations, simply because the former generally have the necessary instances like

human resources departments.

First, to enhance older persons' labour market participation and their intrinsic motivation, measures regarding workers' development should be implemented. Chapter 2 and Chapter 3 showed that job demands and job resources matter for older persons' retirement decisions. The importance of investments in older persons' work potential is increasingly recognized in the Dutch context. This is, for example, reflected in the abolishment of some so-called 'spare measures' [Dutch: *ontziemaatregelen*] in recent collective labour agreements. Ever more often, discussions regarding older persons' participation center around development measures [Dutch: *ontwikkelmaatregelen*]. Using older workers to coach their younger colleagues is one developmental measure that is frequently discussed because it is expected to have several positive consequences: It directly relieves older workers from physically heavy work or work tasks that are in other respects experienced burdensome. Moreover, using older workers to coach their younger colleagues stimulates the transfer of knowledge and experience in the organization as a whole. This is also underlined in a recent report of the Scientific Council for Government Policy (WRR) (Wetenschappelijke Raad voor het Regeringsbeleid, 2013). Rather than accumulating knowledge, the circulation between workers and the transmission from one worker to the other can be used as a tool to acquire new knowledge and increase human capital. Last, coaching improves the way older workers are acknowledged in the organization.

Second, the discussion regarding who is responsible for investments in older workers is relevant. On the one hand, one might argue that workers are in charge of their own employability. Particularly highly-educated workers already see the necessity to invest in their skills, because they frequently benefit from these skills in another organization as well. Lower-educated persons and immobile (older) workers, in contrast, tend not to invest in their employability, especially if newly accomplished skills are mainly beneficial for the specific organization. On the other hand, due to the ageing of the working population, the accumulation of human capital is endangered if there is no investment taking place in older workers as well. This should provide an incentive for employers or governments to invest in older workers. However, the increasing flexibility and mobility on the labour market constitutes a hindrance to investments in human capital (Arulampalam et al., 2004; Fouarge, De Grip, Smits, & De Vries, 2012). If workers switch their job more frequently, employers cannot be assured that investments in their workers' skills actually pay off for their organization. As a result, fewer employers might invest in their workers. To avoid a potential shortage of human capital of the workforce, governments, sectors or regions can be discussed as appropriate parties responsible for investments in older workers.

Drawing on the finding in Chapter 4, governmental subsidies to reduce the costs of training do not appear to stimulate employers to invest in their workers. Employers frequently experience the procedures they have to go through to make use of those subsidies as an obstacle and find governmental subsidies ineffective (Van Dalen, Henkens, Henderikse, & Schippers, 2006). Therefore, a solution might be to deploy intermediary actors that adopt the acquisition and regulation of subsidies to use in the organization.

Third, the responsibility regarding workers' skilling and development seems to be progressively shifted from employers towards workers. This, however, implies that workers communicate their interest and motivation, and that employers are informed about their workers' needs. In Chapter 4, I assessed that employers were more willing to provide training to workers who showed interest in developing their skills. This finding is in line with prior studies noticing that employers tend to reward their workers (Karpinska, 2013) and indicates that workers explicitly have to state their needs. Ideally, agreements regarding training and development take place in (annual) performance appraisals, a meeting where the development of employees is assessed and planned. The Netherlands Employers Work Survey (WEA) shows that only in about 9% of all organizations, performance appraisals take place between supervisors or managers and older workers in order to sustain their employability (Oeij, De Vroome, Kraan, Goudswaard, & Van den Bossche, 2012). Moreover, there is a big difference between organizations: in larger organizations those meetings take place far more often, compared to smaller ones. Making use of those meetings is a means to sustain personal contact between employers and workers and to get to know each other's preferences, ideas or plans. Personal contact is valuable in another respect as well. As findings of Chapter 3 show, workplace characteristics that match workers' preferences enhance older persons' labour market participation. Employers who are well-informed about their workers' preferences can achieve such a match by offering tailor-made workplaces.

6.4 Suggestions for further research

In this dissertation, I studied the possible role of workplace characteristics in prolonging older persons' labour market participation. In the following I discuss a few shortcomings of this dissertation and give recommendations for future research.

In Chapter 2 and Chapter 3, I found that several workplace characteristics were related to a longer (intended) participation in the labour market. Based on

the theoretical literature I formulated the expectation that older persons would postpone retirement if they had a more favourable workplace. This expectation was generally supported in Chapter 2 and Chapter 3. While I based my analyses on retrospective information regarding the workplace in Chapter 2, I included older persons' current workplace characteristics as a predictor for intended retirement in my analyses in Chapter 3. Together, these chapters underline the idea that a more favourable workplace decreases older persons' retirement intentions, and, ultimately, their (early) withdrawal from the labour market. Unfortunately, I could not verify whether this link is causal. My findings do not allow to conclude that changes in older persons' workplace would prolong their participation. Future research investigating the link between a favourable workplace and older persons' labour market participation might focus on identifying a causal relationship. For example, by implementing measures to improve workplace characteristics gradually in an organization, i.e. not in all departments simultaneously, one could assess how these differences in workplace characteristics across departments relates to changes in older persons' (intended) labour market participation. This would provide stronger insights on the effects of the implemented measures.

A limitation of Chapter 2 and Chapter 3 is that I operationalized individuals' workplace characteristics, i.e. their job resources and job demands, based on the subjective information respondents provided themselves. Workplace characteristics can, however, also be regarded as characteristics at the organizational level, which are assumed to be identical for individuals employed in the same organization or in a similar position. This implies that future research could contribute to answering the question how workplace characteristics relate to older persons' labour market participation by making use of organizational-level data. Organizationally provided information would provide a more objective assessment of their employees' workplace characteristics. Moreover, individual worker data could be enriched with the information at the organizational level, allowing establishing a theoretical connection with the Person-Environment Fit literature (see Chapter 3, Piasentin & Chapman, 2006; Kristof-Brown et al., 2005). While I assessed the idea that the fit/match (or misfit/mismatch) between the person and the organization affects individuals' withdrawal behaviour through individually provided data, future research could investigate this theoretical notion directly with organizational data.

In Chapter 4 and Chapter 5 respectively, I studied two measures that can be argued to increase older workers' labour market participation: training and age-aware human resources measures. Both are frequently discussed as employers-provided investments in their (older) workers' employability. With the ageing of the population, more or different measures might become relevant. It is, for

example, arguable that individuals' health should be studied as a part of their employability. Preserving (or enhancing) individuals' health has positive outcomes for the individual workers themselves, but also for the government or the society in general, because healthcare costs are lower for healthy workers. Future research might, therefore, investigate workers' health next to training or age-aware human resources measures as part of an assessment of their employability.

In Chapter 2 and Chapter 3 I investigated how the workplace related to older workers' labour market participation and in Chapter 4 and Chapter 5 I addressed how variation in employers' investments in older workers' workplace could be explained. When regarding these chapters in conjunction, the two research questions I addressed might be linked chronologically: through employers' investments, the workplace is changed, which in turn could affect older persons' labour market participation. Future research, using longitudinal data including organizational and individual information, might contribute to the literature by assessing whether this chronological ordering is at play.

Chapter 7

Samenvatting (Dutch summary)

7.1 Taakeisen en hulpbronnen

Naarmate werknemers ouder worden en de pensioengerechtigde leeftijd naderen kunnen ze hun participatie op de arbeidsmarkt heroverwegen en zich afvragen: “zal ik blijven of zal ik gaan?”. Om deze vraag te beantwoorden maken oudere werknemers veel afwegingen die bijvoorbeeld betrekking hebben op hun gezondheid, privéleven of pensioensituatie. Bovendien zijn oudere werknemers onderdeel van een organisatie met een specifieke werkomgeving. De wijze waarop de werkomgeving de overwegingen van oudere werknemers beïnvloedt staat in dit proefschrift centraal. Het proefschrift richt zich op het beantwoorden van de volgende twee onderzoeksvragen: (1) *hoe is de werkomgeving gerelateerd aan de arbeidsparticipatie van oudere personen?* En (2) *hoe valt de variatie in investeringen van werkgevers met betrekking tot de werkomgeving te verklaren?*

Om deze onderzoeksvragen te beantwoorden, differentieer ik taakeisen (‘job demands’) en hulpbronnen (‘job resources’) van de werkomgeving. Dit onderscheid heb ik ontleend aan de Job Demands-Resources (JD-R) theorie van Bakker en Demerouti (2007). Oorspronkelijk werd deze theorie gebruikt om te verklaren hoe werkkenmerken werkstress, arbeidstevredenheid of burn-out beïnvloeden (Bakker & Demerouti, 2007; Boumans e.a., 2008; Karasek, 1979; Schreurs, Van Emmerik e.a., 2011; Sutinen e.a., 2005; Van den Broeck e.a., 2011). Het Job Demands-Resources model kan echter ook gebruikt worden om te onderzoeken in hoeverre kenmerken van de werkomgeving relevant zijn voor de arbeidsparticipatie van ouderen. Door dit model toe te passen op de arbeidsparticipatie van ouderen, levert dit proefschrift op twee manieren een bijdrage aan de wetenschappelijke literatuur.

Ten eerste heb ik het onderscheid tussen taakeisen en hulpbronnen als kader gebruikt om variatie in de pensioenbeslissingen van oudere werknemers te verklaren. Ik beschouw taakeisen als nadelige kenmerken en hulpbronnen als positieve kenmerken van de werkomgeving. De verwachting is dat negatieve kenmerken van de werkomgeving aan een afname of verkorting van de arbeidsmarktparticipatie bijdragen, terwijl positieve kenmerken van de werkomgeving de arbeidsparticipatie verhogen of verlengen. Bij meer taakeisen, bijvoorbeeld door het verrichten van fysiek belastende taken, zijn de kosten voor arbeidsparticipatie hoger. Daarentegen houden hulpbronnen, zoals een hoge mate van autonomie binnen de werkomgeving, in dat de kosten voor arbeidsmarktparticipatie worden verlaagd.

Ten tweede beschouw ik de werkomgeving niet simpelweg als gegeven. Ik onderken dat werkgevers de kenmerken van de werkomgeving kunnen veranderen door te investeren in de taakeisen of hulpbronnen van hun werknemers. Bijvoorbeeld, door oudere werknemers te voorzien van scholingsmogelijkheden en door

gerichte personele beleidsmaatregelen te treffen, kunnen werkgevers ervoor zorgen dat oudere werknemers over meer hulpbronnen beschikken of de taakeisen worden verkleind.

De aanpak waarin ik werkomgevingskenmerken opvat in termen van het Job Demands-Resources model (zie ook Van Solinge & Henkens, 2013) biedt mij de mogelijkheid twee onderwerpen die tot dusver apart zijn onderzocht, samen te bestuderen: pensioenbeslissingen van ouderen en het investeringsgedrag van werkgevers. Ik lever een bijdrage aan de wetenschappelijke literatuur door duidelijk te maken dat de relatie tussen werkomgevingskenmerken en de arbeidsparticipatie van ouderen niet los kan worden gezien van de manier waarop werkgevers de werkomgeving inrichten en veranderen.

7.2 Samenvatting van resultaten

7.2.1 Kenmerken van de werkomgeving en de arbeidsparticipatie van ouderen

In hoofdstuk 2 en hoofdstuk 3 heb ik onderzocht hoe kenmerken van de werkomgeving gerelateerd zijn aan de arbeidsparticipatie van ouderen. De rol die enerzijds pensioenvoorzieningen en anderzijds de gezondheid en het inkomen van ouderen hierbij spelen is al eerder onderzocht (bijvoorbeeld Blöndal & Scarpetta, 1999; Damman e.a., 2011; Dorn & Sousa-Poza, 2010; Gruber & Wise, 1999; Kim, 2009; Van Oorschot & Jensen, 2009; Van Solinge & Henkens, 2010). Echter, pas recent is in onderzoek naar pensionering en de arbeidsparticipatie van ouderen aandacht voor het mesoniveau, dat wil zeggen kenmerken van de werkomgeving. Dit is opvallend, omdat kenmerken van de werkomgeving al langer als verklaring zijn gebruikt voor participatievraagstukken, maar dan vooral waar het gaat om baanverandering (Hom e.a., 1992; Lee & Mitchell, 1994; Mobley, Horner & Hollingsworth, 1978; Mobley, Griffeth e.a., 1979). Ik bouw voort op deze studies en onderzoek of kenmerken van de werkomgeving op een vergelijkbare wijze verband houden met pensionering als met baanverandering. De doelstelling van hoofdstuk 2 was dan ook kenmerken van de werkomgeving als determinanten voor de arbeidsparticipatie van ouderen in meerdere Europese landen te onderzoeken. Naast mesokenmerken van de werkomgeving, heb ik in dit hoofdstuk micro- en macrokenmerken meegenomen, om zo een volledig beeld te kunnen schetsen van determinanten van de individuele beslissing al dan niet met pensioen te gaan. In hoofdstuk 3 heb ik nader onderzocht of kenmerken van de werkomgeving een vergelijkbare relatie hebben met de twee vormen van arbeidsuittreding: de intentie

om van baan te veranderen en de intentie om met pensioen te gaan. In vergelijking tot eerder onderzoek heb ik in dit hoofdstuk niet alleen veel kenmerken van de werkomgeving onderzocht in relatie tot pensionering, maar tegelijkertijd pensionering afgezet tegen en vergeleken met baanverandering.

Om mijn onderzoeksvraag te beantwoorden heb ik in deze twee hoofdstukken twee verschillende databronnen gebruikt. In hoofdstuk 2 heb ik mijn analyses gebaseerd op data van de European Social Survey 2004 (ESS, ronde 2). Hierbij heb ik me beperkt tot de oudere beroepsbevolking en hun arbeidsparticipatie onder de loep genomen. Deze data heb ik aangevuld met indicatoren op landniveau van Eurostat en de Organisatie voor Economische Samenwerking en Ontwikkeling (OESO). Daarnaast heb ik informatie over pensioenuitkeringen die binnen het MULTILINKS project (Dykstra & Komter, 2012) zijn verzameld, toegevoegd. Uiteindelijk zijn de resultaten gebaseerd op 21 Europese landen, waarvoor ik informatie heb op micro-, macro- en mesoniveau.

In hoofdstuk 3 heb ik gebruik mogen maken van de eerste golf van de data die zijn verzameld binnen het STREAM-project ('Study on Transitions in Employment, Ability and Motivation'). Sinds 2010 verzamelt de Nederlandse Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek (TNO) deze paneldata. Het STREAM-panel is een steekproef van werknemers, zelfstandigen en niet-werkenden in Nederland tussen de 45 en 64 jaar (zie Ybema, Geuskens, Van den Heuvel e.a., 2014). Deze data zijn uitermate geschikt voor mijn onderzoek, omdat uitgebreide informatie beschikbaar is over zowel de werkomgevingskenmerken als ook de mate dat werkomgevingskenmerken aansluiten bij individuele voorkeuren.

Uit de resultaten van hoofdstuk 2 en hoofdstuk 3 blijkt het volgende: fysiek belastend werk is gerelateerd aan een lagere participatie van ouderen op de arbeidsmarkt (hoofdstuk 2) en een hogere pensioenintentie (hoofdstuk 3). Hulpbronnen daarentegen zijn positief gerelateerd aan de arbeidsparticipatie van ouderen. De uitkomst dat autonomie op het werk positief is gerelateerd aan de arbeidsparticipatie van ouderen (hoofdstuk 2) is consistent met de verwachting dat hulpbronnen voordelig zijn voor hun arbeidsparticipatie. In hoofdstuk 3 bleek bovendien dat hulpbronnen, zoals het hebben van intrinsieke motivatie of het ervaren van een fit tussen individuele voorkeuren en kenmerken van de werkomgeving, de pensioenintentie verlaagt. Over het geheel genomen zijn deze resultaten in lijn met de verwachting dat taakeisen de kosten die verbonden zijn met de arbeidsparticipatie van ouderen verhogen, terwijl hulpbronnen de opbrengsten verhogen.

7.2.2 Investerings van werkgever in de werkomgeving

Omdat verwacht kan worden dat investeringsgedrag van werkgevers invloed heeft op de werkomgeving van oudere werknemers, beoog ik in het tweede gedeelte van mijn proefschrift investeringen van werkgevers te verklaren. De volgende twee hoofdstukken gaan in op de vraag welke overwegingen werkgevers maken om voor een aantrekkelijke werkomgeving te zorgen. In hoofdstuk 4 en hoofdstuk 5 lever ik een bijdrage aan de wetenschappelijke literatuur door twee soorten werkgeversinvesteringen, respectievelijk het bieden van scholing aan oudere werknemers en het (in)voeren van leeftijdsbewust personeelsbeleid, nader te onderzoeken. In termen van het Job Demands-Resources raamwerk kan scholing, aangeboden door de werkgever, gezien worden als een investering in de hulpbronnen van een werknemer. Leeftijdsbewust personeelsbeleid kan daarnaast op twee manieren van belang zijn: het kan bijdragen aan de hulpbronnen van werknemers, maar het kan ook de taakeisen van werknemers verlagen. In eerder onderzoek over scholing (aangeboden door de werkgever) of de implementatie van personeelsbeleid werd de leeftijd van werknemers als grootste belemmering voor investeringen van werkgevers genoemd (Becker, 1964; Bassanini e.a., 2005; Canduela e.a., 2012; Chui e.a., 2001; Hedge e.a., 2006; Henkens, 2005; Lindley & Duell, 2006; Van Dalen, Henkens & Schippers, 2010; Taylor & Walker, 1998; De Vries e.a., 2001). Omdat het denkbaar is dat bepaalde factoren ertoe kunnen bijdragen dat werkgevers een hogere leeftijd van werknemers als minder belemmerend zien, heb ik hiermee rekening gehouden.

Voor het beantwoorden van tweede onderzoeksvraag maak ik gebruik van twee databronnen die ik door middel van een bedrijfsenquête in Nederland heb verzameld. In hoofdstuk 5 heb ik gebruikgemaakt van het vragenlijstonderzoek ‘Op weg naar een vergrijzde arbeidsmarkt? Personeelsbeleid voor oudere werknemers’ (N=983) dat is gehouden onder een gestratificeerde steekproef van Nederlandse bedrijven (voor meer informatie, zie hoofdstuk 5). Het vignettenexperiment, dat onderdeel vormde van de online versie van deze vragenlijst, vormt de basis voor data-analyses in hoofdstuk 4 (N=954). Een vignet is een beschrijving van een hypothetische situatie en/of persoon (Alexander & Becker, 1978; Ganong & Coleman, 2006; Wallander, 2009) die de respondent moet beoordelen door het beantwoorden van één of meerdere vragen (voor meer informatie, zie hoofdstuk 4).

Hoofdstuk 4, gebaseerd op de vignetstudie, toont aan dat werkgevers, over het algemeen, geneigd zijn om scholing aan te bieden aan werknemers. De bereidheid is echter afhankelijk van onder andere de kosten die gerelateerd zijn aan de scholing. Naarmate werknemers ouder zijn en als de scholingskosten hoger

zijn of de trainingsperiode langer, zijn werkgevers minder geneigd te investeren. Bovendien is de bereidheid van werkgevers om scholing aan te bieden hoger als werknemers aangeven interesse te hebben in scholing.

In hoofdstuk 5 heb ik me, als aanvulling aan de resultaten over scholingsinvesteringen, gericht op een andere werkgeversinvestering, namelijk leeftijdsbewust personeelsbeleid. De resultaten tonen aan dat werkgevers geneigd zijn te kiezen voor maatregelen die gemakkelijk te implementeren zijn en die weinig kosten met zich meebrengen. Maatregelen waarvoor drastische organisatorische veranderingen nodig zijn worden vaak niet door werkgevers overwogen. Daarnaast heb ik gevonden dat de economische context een rol speelt. Uit de analyses blijkt dat werkgevers die arbeidsmarktschaarste ervaren en daarom sterker moeten concurreren om de ‘beste’ werknemers, meer maatregelen voor leeftijdsbewust personeelsbeleid implementeren. Ook blijkt een positieve perceptie van oudere werknemers positief gerelateerd te zijn aan investeringen in maatregelen door werkgevers.

7.3 Discussie en conclusie

7.3.1 Bijdrage aan eerder onderzoek

Dit proefschrift levert op meerdere manieren een bijdrage aan eerder onderzoek. In het vervolg wil ik enkele kort benoemen (zie voor een uitgebreidere bespreking hoofdstuk 6).

In eerder onderzoek zijn de mechanismen, die de relatie tussen de werkomgeving en de arbeidsparticipatie van ouderen verklaren, onderbelicht gebleven. Ik heb voorgesteld een theoretisch raamwerk toe te passen waarin kenmerken van de werkomgeving, opgevat in termen van taakeisen (‘job demands’) en hulpbronnen (‘job resources’), de arbeidsparticipatie van ouderen kunnen verklaren. Daarbij maakt het onderscheid tussen hulpbronnen en taakeisen de kosten en baten voor werkomgevingskenmerken duidelijk en expliciet.

Bovendien heb ik een completer beeld geschetst van het arbeidsparticipatiegedrag van ouderen in Europa door kenmerken op het micro-, macro- en mesoniveau tegelijkertijd te onderzoeken. De landenvergelijkende data van de European Social Survey die ik in hoofdstuk 2 gebruikte, maken het mogelijk het belang van kenmerken van de werkomgeving in combinatie met individuele en kenmerken van de verzorgingsstaat te onderzoeken. Eerder onderzoek heeft de werkomgeving in relatie tot de arbeidsparticipatie van ouderen slechts voor één of enkele landen bestudeerd, waardoor landenkenmerken niet werden meegenomen. Doordat ik meer dan 20 Europese landen heb bestudeerd, kan ik inzicht geven in de

wijze waarop verzorgingsstaatarrangementen en macro-economische kenmerken relevant zijn voor de arbeidsparticipatie van ouderen.

Ik heb omvangrijke informatie verzameld om personeelsbeleid gericht op oudere werknemers in Nederland te onderzoeken. Deze data hebben twee voordelen. Ten eerste kan ik met deze data een omvattend en actueel overzicht geven over leeftijdsbewust personeelsbeleid in Nederland. Dit is vooral belangrijk omdat personeelsbeleid voor oudere werknemers en levenslang leren hoog op de beleidsagenda staan. Ten tweede heeft eerder onderzoek naar personeelsbeleid gericht op oudere werknemers in Nederland aangetoond dat werkgevers vaker in maatregelen investeren die de kosten die oudere werknemers in hun werkomgeving ervaren verlagen (zogenoemde ontziemaatregelen) dan in maatregelen die kennis en vaardigheden die werkcapaciteit van oudere werknemers verhogen (zogenoemde ontwikkelmaatregelen) (Van Dalen, Henkens, Henderikse & Schippers, 2006; Remery e.a., 2003; Ybema, Geuskens & Oude Hengel, 2009). Het onderscheid tussen taakeisen en hulpbronnen dat ik in mijn theoretisch raamwerk heb gebruikt heeft mij tot de conclusie gebracht dat werkgevers eerder de taakeisen verlagen door het implementeren van ontziemaatregelen, dan dat zij de hulpbronnen verhogen en ontwikkelmaatregelen aanbieden.

Ten slotte heb ik rekening gehouden met twee actoren die te maken hebben met de arbeidsparticipatie van ouderen. Enerzijds is de arbeidsparticipatie van ouderen afhankelijk van de werknemers zelf en hun werkomgeving. Anderzijds zijn werkgevers de beslissers als het gaat om de aanpassing van kenmerken van de werkomgeving en het aanbieden van gericht personeelsbeleid. De focus op twee actoren binnen één theoretisch raamwerk komt overeen met de theoretische gedachte dat de verlenging van de arbeidsparticipatie een gedeelde verantwoordelijkheid is van werknemers en werkgevers.

7.3.2 Beleidsimplicaties

Uit dit proefschrift vloeien enkele beleidsaanbevelingen voort. Omdat in mijn onderzoek de werkomgeving centraal stond, hebben deze aanbevelingen vooral betrekking op de rol die werkgevers en, in mindere mate, de overheid spelen. Echter ben ik me er wel van bewust dat ook werknemers hun eigen arbeidsparticipatie kunnen verhogen. Maar werkgevers hebben, vergeleken met werknemers, over het algemeen een machtiger positie. De aanbevelingen voor werkgevers die ik hier doe, zullen eenvoudiger te implementeren zijn in grotere organisaties dan in kleinere organisaties. Grotere organisaties beschikken immers in grotere mate over de benodigde voorzieningen, zoals een afdeling personeelszaken.

Zo zouden maatregelen met betrekking tot de ontwikkeling van werknemers

moeten worden geïmplementeerd om de arbeidsparticipatie van ouderen en hun intrinsieke motivatie te verhogen. In hoofdstuk 2 en hoofdstuk 3 heb ik aangetoond dat taakeisen en hulpbronnen van invloed zijn op de pensioenbeslissingen van oudere. In de Nederlandse context wordt het belang van investeringen voor het potentieel van oudere werknemers steeds meer erkend. Dit wordt bijvoorbeeld weerspiegeld in recente collectieve arbeidsovereenkomsten, waar de afschaffing van enige zogenoemde ‘ontziemaatregelen’ is vastgelegd. De huidige beleidsdiscussie is meer toegespitst op ‘ontwikkelmaatregelen’. Het inzetten van oudere werknemers voor het coachen van hun jongere collega’s wordt vaak gezien als een ontwikkelmaatregel met vele voordelen. Een dergelijke maatregel verlicht de werkbelasting van oudere werknemers en helpt daarnaast om kennis- en ervaringsoverdracht binnen de organisatie te stimuleren. In een recent verschenen rapport van de Wetenschappelijke Raad voor het Regeringsbeleid (WRR) (Wetenschappelijke Raad voor het Regeringsbeleid, 2013) wordt hierop ook de nadruk gelegd: in plaats van het individueel vergaren van kennis door het volgen van externe cursussen, kan kenniscirculatie tussen werknemers, dat wil zeggen kennisoverdracht van werknemer tot werknemer, gebruikt worden om het menselijk kapitaal binnen een organisatie te verhogen. Tot slot kan de waardering voor oudere werknemers in de organisatie worden vergroot door hen in te zetten bij coaching.

De discussie over wie verantwoordelijk is voor investeringen in oudere werknemers is relevant. Enerzijds zou men kunnen betogen dat werknemers verantwoordelijk zijn voor hun eigen inzetbaarheid. Vooral hoogopgeleide werknemers onderkennen het belang om in hun vaardigheden te investeren, omdat ze van deze vaardigheden ook in een andere organisatie kunnen profiteren. Lager opgeleide personen en immobiele (oudere) werknemers zijn daarentegen minder geneigd in hun inzetbaarheid te investeren. Anderzijds, gezien de vergrijzing van de arbeidsmarkt, wordt de accumulatie van menselijk kapitaal belemmerd als er niet ook in oudere werknemers wordt geïnvesteerd. Dit zou een prikkel voor werkgevers en de overheid moeten zijn om in oudere werknemers te investeren. Echter, de oplopende flexibiliteit en mobiliteit op de arbeidsmarkt vormen barrières voor investeringen in menselijk kapitaal (Arulampalam e.a., 2004; Fouarge e.a., 2012). Als werknemers vaker van baan veranderen, weten werkgevers niet meer met zekerheid of de investeringen in de vaardigheden van hun werknemers ook daadwerkelijk voordelen zullen opleveren voor hun organisatie. Om een potentieel tekort aan menselijk kapitaal in de beroepsbevolking te voorkomen moeten de overheid, sectoren of regio’s in de discussie wie verantwoordelijke partijen zijn om te investeren in werknemers worden betrokken.

De bevindingen in hoofdstuk 4 wijzen erop dat overheidssubsidies die gericht zijn op een verlaging van de scholingskosten werkgevers niet stimuleren om in

hun werknemers te investeren. Werkgevers geven aan dat ze de procedures die ze moeten volgen om gebruik te maken van subsidies als een hinder en overheids-subsidies als ineffectief ervaren (Van Dalen, Henkens, Henderikse & Schippers, 2006). Wil men werkgevers daadwerkelijk met behulp van subsidies prikkelen om in oudere werknemers te investeren, dan zouden aanvraagprocedures voor subsidies vergemakkelijkt kunnen worden of erover nagedacht kunnen worden om tussenpersonen in te zetten om de acquisitie van subsidies over te nemen.

Tot slot onderstreept mijn onderzoek het belang van communicatie tussen werkgever en werknemer. In hoofdstuk 4 toon ik aan dat de interesse en de motivatie die werknemers hebben om scholing te volgen een belangrijke rol spelen. Dit houdt echter wel in dat werknemers hun interesse en motivatie omtrent scholing moeten communiceren en dat werkgevers geïnformeerd moeten zijn over de behoeftes van hun werknemers. Dit kan zo geïnterpreteerd worden dat de verantwoordelijkheid wat betreft de ontwikkeling en scholing van werknemers lijkt te verschuiven van de werkgever naar de werknemer. Bovendien laat deze bevinding de interpretatie toe, en dat komt overeen met eerder onderzoek, dat werkgevers ertoe neigen hun werknemers te belonen (Karpinska, 2013), bijvoorbeeld voor hun motivatie. Dit impliceert dat werknemers hun interesses en behoeftes op het gebied van scholing expliciet moeten verwoorden. Idealiter vinden afspraken met betrekking tot scholing en ontwikkeling plaats in (jaarlijkse) functioneringsgesprekken. De Werkgevers Enquête Arbeid (WEA) toont aan dat dergelijke gesprekken in slechts ongeveer 9% van alle organisaties plaatsvinden (Oeij e.a., 2012). Bovendien is er een groot verschil tussen organisaties: in grotere organisaties vinden dit soort bijeenkomsten veel vaker plaats dan in kleinere. Functioneringsgesprekken kunnen gebruikt worden om persoonlijk contact tussen werkgever en werknemer op peil te houden en om elkaars voorkeuren, ideeën of plannen te leren kennen. Persoonlijk contact tussen werknemer en werkgever is ook op een andere manier belangrijk. Zoals de bevindingen in hoofdstuk 3 aantonen kunnen kenmerken van de werkomgeving die overeenkomen met de voorkeuren van werknemers bijdragen aan een langere arbeidsparticipatie. Werkgevers die de voorkeuren van hun werknemers goed kennen, zullen gemakkelijker een overeenstemming tussen de werkomgeving en de voorkeuren van werknemers kunnen bewerkstelligen.

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Curriculum Vitae

Maria Fleischmann (Nürnberg, Germany in 1985) obtained her Master's degree in June 2010 with distinction (cum laude) from the international programme Sociology and Social Research (SaSR) at Utrecht University. In September 2010, Maria started working as a PhD candidate at the Department of Sociology at Erasmus University Rotterdam conducting research on the labour market participation of older persons. This research was partly funded by Stichting Instituut Gak (SZ2025). Maria participated in several international projects. In the Neujobs project, financed through the 7th framework programme of the European Commission, she investigated possible developments of European labour markets. She is also actively involved in the DetREU project, which aims to provide more insight in the determinants of retirement in Europe and the USA. Maria collaborated with researchers at the Netherlands Organisation for Applied Scientific Research (TNO) and the Munich Center for Economics of Ageing (MEA), where she spent three months as a visiting scholar. This stay was partly funded by Erasmus Trustfonds. As of September 2014, Maria is employed as a post-doctoral researcher on the NWO-TOP project 'Sustaining Employability' at the Department of Sociology at Erasmus University Rotterdam. Additionally, she is conducting research about employability at De Burcht, the scientific institute of the Dutch labour unions.

In answering the question "Should I stay or should I go?", older workers make a multitude of deliberations. Until now, little is known about the relevance of the workplace for older workers' labour market participation. How do favourable workplace characteristics help to sustain the labour market participation of older workers? Do employers invest in the workplace of their older workers? Which (human resource) measures do they use? In this book, these questions are studied from a perspective of job demands and job resources in the Netherlands and Europe.