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## CHAPTER 4

# Individual and organisational predictors influencing ageing workers' employability

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An important way to improve ageing workers' employability is through participation in formal and informal human resource development (HRD) activities. However, older workers remain underrepresented in most forms of training and development, and company policies are hardly directed at improving older workers' employability through learning and development initiatives. Personal motivation and ability to learn reflect employees' accountability for investments in their own development. Organisations need to promote competence development of employees, by means of, for example, a supportive and stimulating learning climate, supervisor support, and good social relationship between employees and their supervisors. Two studies were recently carried out to identify which individual and organisational factors affect employability of an ageing workforce. The most important findings are presented here. Based on these findings, recommendations are made to stimulate companies to develop and implement strategies to improve ageing workers' employability.

## 4.1. Introduction

Against increasing competition, redundancies, business closures and mergers and an increasing degree of uncertainty, organisations must be able to adapt to fluctuations in demand and changes in their environment to ensure organisational viability (Valverde et al., 2000). They, therefore, require a highly employable workforce that not only performs well in its current job, but that is also able to take over new tasks and functions within, or outside the organisation in case one has to leave one's current employer. In this respect, the changing demographic composition of the world population is an important issue. Countries are facing unprecedented demographic changes. In the

European Union for instance, the number of youngsters is decreasing, while the number of people aged 60, and over, is at the same time rising roughly twice the rate observed until a few years ago (European Commission, 2010). These demographic changes imply an ageing working population and necessitate companies to rely increasingly on older workers' competences and efforts. Companies are in need of growing participation of senior people, and are forced to retain their older workers longer, to make use of their rich expertise, and to prevent skills shortages in critical domains.

Results from a broad scan on 'age and work', initiated by the Dutch labour union FNV <sup>(23)</sup> in 2006, revealed that, in many companies, age-related policies to prevent older workers from early retirement are absent (Klomp, 2010). Other studies confirm there is a serious lack of strategic responses to the ageing workforce (Armstrong-Stassen and Schlosser, 2008; Kooij, 2010). Based on a survey among over 28 000 employers in 25 countries, the Manpower report of 2007 concluded that one key reason for this is simply that employers do not understand how to do so effectively (Armstrong-Stassen and Ursel, 2009). The Manpower study found that a growing proportion of the older worker population may be quite willing and able to continue working for years to come, if workers are engaged and encouraged to do so (Manpower, 2007). It is thus important to find out in what ways work organisations could positively affect employability of their ageing workforce and support longer working lives. Therefore, the main research question addressed in this chapter is what factors affect employability of an ageing workforce.

## 4.2. Understanding employability

Thijssen (1997) distinguished three types of employability definitions:

- (a) according to the core definition, employability encompasses all individual possibilities to be successful in a diversity of jobs in a given labour market situation;
- (b) the broader definition covers not only actual employability but also individual capacities to improve and use employability;
- (c) in the all-embracing definition, contextual factors and effectuation conditions are added as well. Effectuation conditions are context-bound factors that help or hamper a worker's employability, such as training provided by the firm and human resources policies in place. In this all-

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<sup>(23)</sup> Federation Dutch labour movement; *Federatie Nederlandse Vakbeweging* (FNV).

embracing definition, employability encompasses all individual and contextual conditions that determine a worker's current and future position on the labour market (Thijssen, 1997).

Consistent with the broader definition of employability, Van der Heijde and Van der Heijden (2006) defined employability as 'the continuous fulfilling, acquiring or creating of work through the optimal use of competences' (p. 453). Based on various authors, Van der Heijden et al. (2009) added that employability can be referred to as the ability to engage in a permanent process of acquisition and fulfilment of employment within or outside the current organisation, today and in the future. Consequently, organisations require employees who not only have the occupational expertise to perform well in their current job, but also possess a set of more general competences to fulfil different tasks and functions within and outside the organisation in case their employment is no longer required.

In this competence-based approach, the concept of employability comprises five dimensions, in which occupational expertise is complemented with four more general competences, anticipation and optimisation, personal flexibility, corporate sense, and balance (see Van der Heijde and Van der Heijden, 2006; Van der Heijden et al., 2009, for elaborate explanations of the different dimensions).

### 4.3. Factors affecting employability

Considering the competence-based approach to employability, it could be stated that development of employees' competences appears to be an important aspect of employability. The more competences individuals develop and the better they can work in different situations, the higher their employability is. Employees are (partly) responsible for investments in their own human capital, and for their job security, learning, and future career development (Van der Heijden et al., 2009).

Personal motivation and ability to learn are important (De Grip et al., 2004; Van der Heijde and Van der Heijden, 2006). Motivation to learn, defined as the desire to engage in training and development activities to acquire new knowledge and skills, to learn training content, and to embrace the training experience (Köroğlu, 2008), seems to be a fundamental precondition to fulfil the need for a partly self-controlled kind of ongoing learning. Learning motivation triggers employees to be enthusiastic about learning, and to engage in developmental activities (Noe and Wilk, 1993). It directs them to really learn

the content and stimulates them to make use of newly acquired knowledge (Lange, 2010). Learning motivation is significantly positive related to employees' feelings about learning and the learning itself (Liao and Tai, 2006).

Employees' ability to learn depends on the capacities they have. According to Heckman 'early learning begets later learning' (2000, p. 5). Abilities are created in various learning situations and these abilities in turn foster further learning; more able people acquire more skills and more skilled people become more able. By following Heckman's reasoning it could be hypothesised that highly educated workers have a greater possibility to participate in training and development (Oosterbeek, 1998). The more extensive employees' basic knowledge is, the easier they will learn new competences and improve their employability. Training history provides a picture of what activities individual workers have undertaken in the past to maintain or improve their employability (Bloch and Bates, 1995). It will also give insights into their capability to undertake new learning and development to become more employable.

Next to employees' accountability for investments in their own development, and in line with the all-embracing definition of employability, organisations need to promote employees' competence development and thus improve their employability (Thijssen, 2000). Even environments play a crucial role in motivating and producing educational success (Heckman, 2000). Employees' learning environments, or learning climates, should provide opportunities to enlarge their professional expertise by developing new knowledge and competences. There is increased awareness that much valuable learning happens on-the-job, in groups, or through conversations (Marsick and Watkins, 2003). Tasks should be varied and to some degree unpredictable and employees should be enabled to explore them freely without heavy pressure to achieve an immediate goal. Employees can develop their competences and acquire new skills through, for example, job rotation and guided career development, aimed at further development of their knowledge and skills (Forrier and Sels, 2003). Job rotation is a – temporary – change of tasks or jobs within an organisation or between organisations to upgrade competences of those already employed (Madsen, 1999). Career guidance from the organisation can encourage employees to undertake activities that improve their employability.

Supervisor support is another important factor given the added value of high quality interaction between employees and their supervisors (Verbruggen et al., 2008). This interaction, or fruitful exchange relationship, is positively associated with a worker's employability (Van der Heijden et al., 2009). But

individuals' social exchange relationship with their supervisors, referred to as leader-member exchange (LMX) (Liden et al., 1997), has not been frequently studied in the context of HRD. LMX theory proposes that superiors do not use a general leadership style for all their subordinates, but rather develop individual exchange relationships with each of them. High quality exchange relations were found to have a positive effect on turnover, commitment, performance and many other variables of organisational interest (Liden et al., 1997). Support for training and development is also expected to depend on the quality of the leader-member exchange relationship (Collinset al., 2009; Rousseau, 1995). According to relational demography theory (Riordan and Shore, 1997; Tsui and O'Reilly, 1989), an increased degree of similarity between subordinate and supervisor, with regard to one or more demographic characteristics, leads to an increased level of interpersonal attraction and, in turn, to a relationship of higher quality. With regard to differences in age, this relation is moderated by existing social and organisational norms. Dissimilar dyads where the supervisor is younger than the subordinate, or the other way around, tend to yield less favourable relational outcomes than similar dyads. Meanwhile, dyads with older supervisors and younger subordinates mostly result in more favourable outcomes compared to the opposite age distribution (Tsui et al. 1995). These findings are also in line with career timetable theory (Lawrence, 1988) which states that objective norms exist where employees should be at a given point in their careers. Subordinates' ages, relative to the age of their supervisors, contains important information about their pace of promotion relative to existing norms.

#### 4.4. Ageing employees

An important way to improve employability is through participation in human resource development (HRD) activities (Van der Heijden et al., 2009). Within this domain, a general distinction between formal and informal forms of learning can be made. The prototype of a formal HRD activity is a planned and structured activity in an external location in which some sort of certificate or diploma is attained. Informal learning takes place in the work context, as a by-product of another activity, without involvement of the organisation and without an identifiable learning outcome (Malcolm et al., 2003). In older publications, formal and informal learning were considered two distinct categories. In more recent studies, however, researchers agree that informal and formal learning should not be seen as two distinctive categories, but rather

as two sides of a continuum on which learning activities are situated (e.g. Malcolm et al., 2003; Billett, 2001; Boekaerts and Minnaert, 1999). This implies that employees do not participate in purely 'formal' or 'informal' learning, but rather in one or more activities that differ from one another with regard to their degree of formality (Horstink, 2008). And according to Van der Heijden et al. (2009), participation in a mix of formal and more informal HRD activities can improve employability.

However, employees differ in their involvement in HRD activities. Funk (2004) noticed that investments in labour market-relevant qualifications continuously decrease as retirement approaches, and company policies are hardly directed at improving older workers' employability through training and development initiatives (see also De Lange et al., 2005). The level of participation in these activities differs considerably between age groups (Horstink, 2008; Shore et al., 2003; Forrier and Sels, 2003). Older workers remain underrepresented in most forms of training and development (Klomp, 2010; Wognum and Bos-Horstink, 2010), although a faster decline in older workers' participation is visible for more formal HRD activities compared to more informal ones.

Although some literature shows no age differences with respect to motivation to learn (De Lange et al., 2005), many studies report a negative link between age and learning motivation (Colquitt et al., 2000; Lange, 2010). Various studies also showed that older people prefer other learning activities compared to their younger colleagues. Older people do not prefer formal learning. Development by means of 'learning by doing', on-the-job learning and coaching seems more appropriate for their career development (Rhebergen and Wognum, 1997). It also appears that content of learning plays a clear role in older workers learning preferences. Wognum et al. (2006) found that older pharmacist's assistants prefer workplace learning for acquiring communication and interactive skills, but want to learn, for example, computer skills, by attending courses.

Older employees, as well as their younger colleagues, could take advantage of a work environment that supports and stimulates their learning and development (De Lange et al., 2005). A healthy learning climate within organisations seems to be an important organisational factor for improving older and younger workers' employability (Van der Heijden et al., 2009).

According to Oosterbeek (1998), employees' age appears to be an important factor regarding ability to learn, because the potential benefits of training vary directly in line with age. Skills acquired early on make later learning easier, as Heckman (2000) stated. However, competence

development is still important for low and higher educated mature workers as abilities are not fixed and can be altered; schooling produces ability while ability creates a demand for schooling (Heckman, 2000).

The study of Collins et al. (2009) is relevant when bearing in mind employees' individual social exchange relationship with their supervisor (LMX), and the ageing workforce. They found that older workers expect less from their younger supervisors than younger workers. Older employees with younger supervisors will probably show more severe participation deficits in training and development activities than their peers with same-aged supervisors. Since participation in these activities can be regarded as a necessary means to improve employability, it can be expected that older employees with younger supervisors will have the most serious shortcomings in employability (Sopranos, 1999).

#### 4.5. Two studies on factors affecting ageing workers' employability

Based on the above theory, Breukers (2010) and Wittpoth (2011), master students at the University of Twente (NL), recently carried out two studies to identify factors that could affect ageing workers' employability. Both students selected a large industrial company in the Netherlands facing an ageing workforce. The average age in Breukers' study was 47.2 years, and 40 years in the Wittpoth study. Breukers collected data by means of a paper and pencil questionnaire among a stratified random sample of 298 employees and obtained a 76% response rate. Wittpoth gathered data using a paper and pencil questionnaire among 332 employees and achieved a response rate of nearly 40%.

Breukers focused on predictors that affect employability with emphasis on personal factors, motivation and ability to learn, and organisational factors, namely learning climate, job rotation, and supervisor support. She hypothesised that both individual factors are positively related to employability, with age having a negative moderating effect on the relationship between motivation and ability to learn, on the one hand, and employability, on the other. She also hypothesised that discerned organisational factors are positively related to employability. Regarding age, she expected a positive moderating effect on the relationship between job rotation and learning climate, and all five dimensions of employability, but a negative moderating effect in case supervisor support was the predictor variable.

Wittpoth specifically focused on the dyad between supervisors and subordinates possibly affecting workers' competence development and, subsequently, their employability. Based on relational demography theory, he assumed that the quality of LMX differs with age as a demographic characteristic. With social and organisational norms and career timetable theory in mind, he hypothesised that older workers with younger supervisors differ from other kinds of dyads on size and formality of their HRD portfolio, and on their employability.

In both studies, the concept of employability was assessed with Van der Heijde and Van der Heijden's (2006) 'employability instrument' which has proved to have sound psychometric qualities (see also Van der Heijden et al., 2009). The instrument includes five scales measuring:

- (a) occupational expertise (15 items);
- (b) anticipation and optimisation (8 items);
- (c) personal flexibility (8 items);
- (d) corporate sense (7 items);
- (e) balance (9 items).

To collect data on the concepts of motivation to learn, learning climate, and supervisor support, Breukers used previously validated scales; motivation to learn was measured by five items based on Nijman (2004); the learning organisation questionnaire developed by Marsick and Watkins (2003) was used to assess learning climate, while supervisor support was measured by means of 10 items from the learning climate questionnaire of Mikkelsen and Gronhaug (1999) concerning management relations and style. Ability to learn was measured by asking for the number of years in which additional training and courses were attended after completing initial education. Because job rotation is not intended as promotion, but as an opportunity to learn new tasks and thus develop new competences, this concept was measured by asking for changes in jobs within and between subsidiaries and without increase in salary. Cronbach's alpha of these scales ranged from 0.80 to 0.93, confirming their reliability.

To gather data on participation in formal/informal HRD activities, Wittpoth also used scales that had already proved their reliability. Both size and average formality of respondents' HRD portfolio were assessed by means of the formality scale developed by Horstink (2008). The number of training activities an employee participated in, out of seven HRD activities identified by Wognum and Bartlett (2002), was used to determine the size of the HRD portfolio. The formality of HRD portfolio was identified by calculating the mean average formality of all activities in which the employee participated.

Cronbach's alpha per activity varied from 0.72 (for the HRD activity external course) to 0.45 (for new task or function), with an alpha of 0.34 for networking, which was probably due to a low percentage of respondents that had experienced this learning activity.

#### 4.5.1. Main research findings Breukers

##### *Means and standard deviation for the variables under study*

Of the five dimensions of employability, occupational expertise (M=4.77; SD=0.51) and balance (M=4.37; SD=0.60) have a higher mean score, whereas anticipation and optimisation (M=3.93; SD=0.70) and corporate sense (M=4.01; SD=0.85) have a somewhat lower mean score, on a six-point scale running from, for instance, 1=not at all to 6=totally agree. The personal factor 'motivation to learn' was measured on a five-point scale running from 1=totally disagree to 5=totally agree and was scored with a mean score of 4.06 (SD=0.63). Learning climate was measured on a six-point scale from 1=never to 6=always and was scored with a mean score of 3.58 (SD=0.72), whereas support by supervisor obtained a high mean value (M=3.99; SD=0.68), which was measured on a five-point scale from 1=never true to 5=always true.

##### *Differences between age groups for the variables under study*

Because it is important to identify possible differences between age groups, respondents were divided into three age groups, young employees up to 40 years, middle-aged workers from 40 to 55 years, and older workers aged 55 years and older. This division is based on the Social and Cultural Planning Office's (SCP) classification (Horstink, 2008), although the SCP classified young employees up to 35 years. Breukers decided to classify young employees in the age group up to 40 years due to a low percentage of young employees within the company under study. Statistical analyses were done to determine possible and significant differences between the discerned age groups and main results are presented below.

First, significant differences between young (N=44), middle-aged (N=127) and older employees (N=54) were found for the variable 'education': younger employees were significantly better educated than their older colleagues. No significant differences were found between middle-aged and older employees. Significant differences were found between younger employees (N=20), middle-aged employees (N=55) and older employees (N=22) for 'motivation to learn'; younger employees (M=4.43) did not significantly differ from middle-aged employees (M=4.08), but they did significantly differ from their older

counterparts (M=3.69) and appeared to be better motivated to learn than older employees. Middle-aged employees were found to be significantly more motivated to learn than their older colleagues. For job rotation without salary increase the results show that older employees (N=53, M=2.6) significantly differed from their younger (N=43, M=1.3) and middle-aged colleagues (N=125, M=1.7) in this respect.

#### *Impact on employability*

To identify factors that have an impact on the dimensions of employability, a multiple regression analysis was performed with one dimension of employability as dependent variable in each analysis. In step one, the control variables education, tenure of employment and tenure in current function were inserted. In step two, the variables motivation to learn, ability to learn, learning climate, job rotation without salary increase and support by supervisor were added. The main results are:

- (a) impact of personal factors: first it was tested whether a positive relationship existed between motivation to learn and each dimension of employability. Motivation to learn was found to explain a significant amount of variance in occupational expertise, anticipation and optimisation, personal flexibility, and balance. Ability to learn appeared to explain a significant amount of variance in corporate sense;
- (b) impact of organisational factors: regression analysis showed that job rotation without salary increase had a significant negative relationship with personal flexibility. This indicated that employees who often rotate jobs without a salary increase did not adapt easily to changes in the organisation. Learning climate proved to have a positive relationship with three of the five employability dimensions, anticipation and optimisation, corporate sense, and balance. Supervisor support was not found to have a significant impact on any employability dimensions.

#### *Age as a moderating variable*

It was hypothesised that the impact of personal and organisational factors differed for employees depending upon their age category. Multiple hierarchical regression analyses were performed to understand better the predictive validity of the distinguished factors. In step one of the analyses, the specific factor (for example, motivation to learn) was inserted. Age was added in step two, and in step three the interaction term 'factor \* age' was inserted. This procedure was performed for each personal and organisational factor in relation to each dimension of employability.

It was first assumed that the relationship between motivation to learn and employability was stronger for younger employees than for older ones. After adding age in the analyses, no significant outcome appeared for any dimension of employability, except for personal flexibility. When the interaction term was inserted, age appeared to contribute significantly to personal flexibility, although in a negative sense. After adding the interaction term, 'motivation to learn \* age' a significant negative outcome appeared for personal flexibility. This indicates that age negatively influenced the relation between motivation to learn and personal flexibility; age was only a moderating variable for the dimension personal flexibility in this respect.

It was then assumed that the relationship between ability to learn and employability was more positive for younger employees than for older ones. The variable age did explain a significant proportion of the total variance in anticipation and optimisation and in personal flexibility. This indicates that the older the employee, the lower the score on anticipation and optimisation and personal flexibility. After adding the interaction term, no significant outcomes appeared for any dimension of employability, except for anticipation and optimisation. Also significant results for age on these dimensions disappeared. This indicates that age negatively influenced the relation between ability to learn and anticipation and optimisation. This implies that age only serves as a moderating variable for the relationship between ability to learn and the dimension anticipation and optimisation.

It was also assumed that the relationship between job rotation without salary increase and employability was more positive for older employees than for younger ones. The variable age explained a significant proportion of the total variance in anticipation and optimisation and in personal flexibility. After adding the interaction term, no significant outcomes appeared for any dimension of employability. This indicates that age was not a moderating variable on the relation of job rotation without salary increase and all five dimensions of employability.

The relationship between learning climate and employability was supposed to be more positive for older workers than for their younger colleagues. The variable age explained a significant proportion of the total variance in anticipation and optimisation. No interaction effect for any of the five dimensions of employability could be found.

It was also assumed that the relationship between supervisor support and employability was more positive for younger employees than for their older colleagues. The variable age appeared to explain a significant amount of variance in anticipation and optimisation. This indicates that age negatively

influenced dimension anticipation and optimisation. Again, no interaction effect for any of the five dimensions of employability could be found.

#### 4.5.2. Main research findings Wittpoth

##### *Means and standard deviation for the variables under study*

On average, employees scored relatively high on all five subscales of employability, which were occupational expertise ( $M=4.71$ ,  $SD=0.51$ ), anticipation and optimisation ( $M=3.98$ ,  $SD=0.69$ ), personal flexibility ( $M=4.13$ ,  $SD=0.63$ ), corporate sense ( $M=4.20$ ,  $SD=0.81$ ) and balance ( $M=4.23$ ,  $SD=0.56$ ). All items were measured on a six-point scale running from, for instance, 1=not at all to 6=totally agree.

Concerning respondents' participation in HRD, 101 of 130 respondents appeared to have participated in one or more HRD activities within the past year. In total, 270 HRD activities were reported. On average, of the active ones, employees participated in 2.57 activities ( $SD=1.49$ ), 50% participated in an external course or training and 50% received informal feedback from a colleague or supervisor. About one third (32.3%) took part in training on the job, 29.2% engaged in learning a new task or function and 20.8% received formal feedback from a mentor or coach. Twenty percent reported to have learned through self-study and 5.4% learned by means of networking with people outside the organisation. The group of employees who did not participate in any HRD activity within the past year had a significantly longer tenure, and was significantly older than the group of employees that did. HRD activities were experienced as more formal than informal ( $M=3.04$ ,  $SD=0.77$ ), measured on a five-point scale running from 1=most informal to 5=most formal. A one-sample t-test showed that the HRD activity 'external course or training' was perceived significantly more formal than average formality, while training on the job did not differ from average formality. HRD activities 'mentor or coach, informal feedback and self-study' were significantly less formal than the mean. HRD activity 'networking' did not significantly differ from the mean, which can be attributed to the small number of employees who participated in this activity.

##### *Differences between age groups for the variables under study*

Respondents were divided into two age groups, young employees up to and including 40 years, and older workers over 40 years of age. This categorisation is in line with earlier research on both employability and age-related HRD (Maurer et al., 2003; Thijssen, 1996; Boerlijst et al., 1993). In Wittpoth's sample, 52.5% of respondents, who indicated their year of birth, could be

classified as younger (40 years and below, N=64). To find out whether this group differed significantly from the group of older employees (over 40 years, N=58), statistical analyses were performed and the main results are presented below.

Groups differed significantly with regard to the size of their HRD portfolio: older employees participated in a significantly smaller number of HRD activities than their younger colleagues. While younger employees, on average, participated in 2.9 HRD activities in the past year, their older colleagues only participated in 2.1 activities. Older employees participated significantly less often in HRD activities 'training on the job, and mentor or coach'. The difference with regard to self-study was found to be close to significance. No significant differences were found pertaining to other HRD activities.

Further, both groups were compared on their perception of formality. No significant differences were found in the mean formality of the HRD portfolio between the groups. However, the group of older employees perceived the activity 'external course or training' less formal than the group of younger employees. No differences in the formality perception for other HRD activities were found.

Although no differences between employability and age were found, multivariate analysis was used to determine whether age groups differed with regard to any employability dimensions. No differences were found between the group of older and younger employees for any of the employability dimensions.

#### *Impact on employability*

Wittpoth specifically focused on the dyad between supervisors and subordinates possibly affecting workers' competence development, and subsequently, their employability. It was assumed that employees with an HRD portfolio with a medium degree of formality would perceive their employability as higher than employees with portfolios with either a relatively low or high degree of formality. As said before, descriptive statistics showed that the mean formality was 3.04. Based on calculation of the estimated marginal means, portfolios with a formality lower than 2.89 were defined as having a low degree of formality (N=37) and portfolios higher than 3.19 were defined as having a high degree of formality (N=41). Portfolios with a value between 2.89 and 3.19 were defined as having an average formality (N=23). In a one-way analysis of variance, the employability subscales were used as dependent variables, and formality (low, medium, high) was defined as the independent one. No

significant differences were found between employees with HRD portfolios of low, medium and high formality, and any of the employability dimensions.

It was also supposed that employees with a larger HRD portfolio perceived themselves as significantly more employable than employees with a smaller one. On average, employees participated in 2.57 activities (SD=1.49). HRD portfolios that comprised three or more activities were classified as large while HRD portfolios with two or less were defined as small. Based on this classification, 82 employees (63%) belonged to the group with small HRD portfolios and 48 employees belonged to the group with a large HRD portfolio. Univariate analyses showed no significant differences between employees with large or small HRD portfolios with regard to any employability dimensions.

#### *Age as a moderating variable*

It was further hypothesised that the HRD portfolio of older workers with younger supervisors was significantly smaller and less formal than the HRD portfolio of older workers with same-aged supervisors. The group of older employees with a younger supervisor constituted 3.1% of the whole sample. The group of older employees with older supervisors was 35.4%. Of the remaining group of respondents, 12.3% could not be categorised as a dyad since they had removed the tracking code needed to determine the age of the supervisor and/or had failed to indicate their own age, 3.8% were younger employees with a young supervisor, and 45.4% were younger employees with older supervisors. However, no differences were found between the dyads. Also no significant differences concerning the formality of HRD portfolios were found between any of the groups. A Bonferroni pairwise comparison showed that there is no significant difference in formality between older workers with older and younger employees.

## 4.6. Conclusion and discussion

Findings of the two studies point to the importance of various factors which affect employability of ageing workers. These could help companies to develop and implement relevant strategies. Based on Breukers' findings, it can be concluded that focusing on measures to improve older workers' motivation and ability to learn would be an important step towards a higher employable workforce. Regarding organisational factors, we, unexpectedly, found that job rotation without salary increase appears to be negatively related to one dimension of employability, personal flexibility. This could be because

respondents that are rotated are not flexible. However, above average mean scores for the employability dimensions were also found. This signals that employees in the studied companies perceived themselves as employable. The unexpected result regarding job rotation might as well be caused by imposed job rotation, due to reorganisation in the studied company. In cases of job rotation, employees must understand the value of it, while the tasks to be performed should have sufficient potential for learning. The latter is an important condition for integrating learning and work (Ellström, 2001), which especially holds for older workers who prefer to learn and develop by means of new tasks and projects (Horstink, 2008). Learning potential of tasks can be improved by increasing task complexity, variety and control. To do so, organisations are advised to consider introducing systematic job rotation programmes (Rump, 2008), or other forms of job enrichment or enlargement. However, work-based learning should not be considered an automatic process that can be triggered by arranging a workplace that offers good objective working conditions with high potential for learning; employees also require the capacity to identify and capitalise on existing opportunities to learn (Ellström, 1994; Frese and Zapf, 1994; Hackmann, 1969, cited in Ellström, 2001). Among these 'subjective' factors self-efficacy and motivation play an important role.

With regard to low self-efficacy, organisations should take precautions to ensure that older employees especially succeed in training and courses (Colquitt et al., 2000). This goal can be achieved by taking care that employees have the prerequisite knowledge and skills necessary to succeed by means of preparatory resources and/or to build training tasks from simple to complex to help build confidence and minimise early failure (Sterns and Doverspike, 1989). Since self-efficacy can also be improved by observing others, similar to oneself, successfully engaging in learning and development experiences, successful older learners should be made visible and their success stories should be communicated. Also, materials for training and development that depict individuals 'modelling' correct behaviour should include older 'models' next to younger ones (Maurer, 2001). In addition, employees' self-efficacy can be improved by direct persuasion, for instance in carefully designed career guidance and development activities. Therefore, support and encouragement to participate in learning and development activities should be provided to all employees by supervisors and the organisation as a whole. To do so, a learning climate should be created in which older employees feel appreciated. Breukers found that people who experience a better learning climate scored higher on employability dimensions, anticipation and optimisation and corporate sense, namely they

anticipated more proactively future changes and were better able to work together in different workgroups.

Kooij's (2010) study is, to some extent, in line with the aforementioned findings regarding learning climate and job rotation. Many older workers in her study indicated that they no longer wished to attend training courses, but that they felt appreciated and recognised when given a choice to do so. She found that older workers' most important motives to continue to work were related to the job. And the job or the work itself can be influenced by, for example, job redesign, or lateral job movement. In line with Armstrong-Stassen and Ursel (2009), older workers appeared to prefer organisations that explicitly value older workers and signal this through human resources practices that reflect their needs and desires (Kooij, 2010, p. 171).

Contrary to our expectations, supervisor support was not found to have an impact on any of the employability dimensions. One possible reason could be the way this concept was measured in Breukers' study. But another even more important explanation may be found in the unexpected result concerning the social exchange relation of employees and their supervisors (LMX). Wittpoth found that dyads with younger supervisors and older subordinates did not have smaller-sized HRD portfolios than other dyads, although employees' participation in HRD activities declined with age. The influence of the supervisor in Wittpoth's sample was rather limited. The organisation reported that participation in more formal HRD activities was decided by means of a training and development plan developed by the organisation on which direct supervisors did not have much influence. With regard to their influence on more informal activities, several points have to be considered: according to Gordon and Arvey (2004), an increase in relevant information about, and experience with subordinates, leads to a decrease in age-related stereotyping. Given that functions on the work floor are narrow, and tenure in the sample was quite high, it can be supposed that supervisors have sufficient knowledge about the performance of their subordinates, and therefore do not have to fall back on stereotypes. Besides, other factors than those related to supervisors' demographic factors, such as age, could be important. Future research could elaborate on factors that moderate or mediate the relation between age differences, relational quality and participation in HRD activities. An interesting issue is in how far a violation of the career timetable is actually perceived in the dyad. Other interesting factors are the learning potential of the workplace, or the influence the supervisor has on allocation of training and development activities to employees in the organisation. Kooij (2010) for example, found different perspectives of employees and line

managers concerning companies' human resource practices.

Wittpoth's study confirms earlier findings that participation in learning and development activities declines as age increases. Since participation in HRD activities is an important means to improve employees' capability to learn (Heckman, 2000) and their employability (Van der Heijden et al., 2009), steps have to be taken to stimulate older workers to reengage in a process of continuous learning and development to avoid negative consequences for employees and the organisation alike. To achieve this, companies have to become aware of older workers' learning preferences. Implementing training and development practices targeting older workers, tailored to their needs, as well as providing interesting and challenging job assignments are important for development of older workers (Armstrong-Stassen and Ursel, 2009). Although exceptions exist (Wognum et al., 2006), it can be stated that older workers generally need other learning activities than merely formal ones (see also Lange, 2010). According to Rhebergen and Wognum (1997), activities such as learning by doing, learning on the job, and individual coaching are far more relevant for older employees' career development than more formal HRD activities. Investments in age-appropriate HRD activities that integrate learning into the workplace are thus important. Yet another reason to do so is that the conditions that promote learning at work are also instrumental in reducing stress and promoting healthier working conditions (Karasek and Theorell, 1990; cited in Ellström, 2001). This is confirmed by the finding of Wittpoth that employees that learned a new task or function scored higher on the employability dimension of balance.

Based on Wittpoth's study, it can be concluded that the size or formality of the HRD portfolio did not have an impact on employability dimensions, and no differences between age groups were found. This could partly be caused by respondents' characteristics or by their job level. Another factor that makes a leniency effect likely is participants' apparent fear of negative consequences. Although anonymity of the responses was stressed numerous times to reduce this bias, about 6% of respondents removed the tracking code put on the survey to identify the age of the supervisor. All these employees belonged to the group of older employees. Possible explanations can either be a general tendency of older workers to mistrust any form of change or fear to be made redundant. Perhaps, employees' fear of negative consequences was also influenced by the fact that the questionnaires were handed out by their supervisors.

Some methodological weaknesses of both studies have to be discussed. Ability to learn, for instance, is measured as additional education in number

of years. Initial education, for example completing secondary vocational education (MBO in Dutch), was not included in this variable. In further research, this could be included, because a higher level of initial education might imply greater learning ability (Oosterbeek, 1998).

Outcomes of both studies have to be interpreted somewhat cautiously. The studies were cross-sectional. Results could have been influenced by the situation at this specific point in time. Employees in Breukers' study had just heard that the company had to reorganise when the survey was administered. This might have had an impact on employees' responses to the questionnaire, for instance regarding employability questions. They may have feared that answers might be used to influence decisions or motives for any dismissal as part of the reorganisation. The moment of data collection by Wittpoth (December and January) can be expected to have lowered the response rate. Since both studies were conducted in a single organisation, results can not easily be generalised to other organisations.

## Abbreviation list

<b>HRD</b>	human resources development
<b>LMX</b>	leader-member exchange

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