



# **Employability of older people: a scientific review, conclusions and recommendations**

## **WP 3, Activity 1**

Roland Kadefors





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Roland Kadefors, Ph.D.

Department of Work Science

University of Gothenburg

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UNIVERSITY OF GOTHENBURG

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## 1. What is it to be employable, and what is meant by employability?

Employability is one of the four pillars of the European Economic Area. It is to be understood as the capacity for people to be employed and relates to the adequacy of their skills but also to incentives and opportunities offered to individuals to seek employment. Employability refers both to the unemployed and to the needs of currently employed individuals to live up to further labour market needs. However, the concept “employability” does not have a universally accepted definition. It has mostly been used to describe an individual’s capacity to keep or obtain employment, from a social and psychological perspective (Garsten and Jacobsson 2004, Berntson 2008). Factors such as initiative, flexibility, and availability have been highlighted.

A set of dimensions constituting employability have been suggested by van der Heijde and van der Heijden (2005): occupational expertise, anticipation and optimization, personal flexibility, corporate sense, and balance. They define employability at the individual level as, “the continuously fulfilling, acquiring or creating of work through the optimal use of competences”. Berntson (2008) defined it as “an individual’s evaluation of his or her possibilities to find a new job of equal standing”. He found that perceived employability in a general population is positively related to and predicts self-efficacy (and not the other way around), and that it has effects on how a person relates to events. He concluded that employability is not primarily a self-evaluation, but that it depends on individual as well as situational factors. This observation agrees with research results indicating that the self-reported employability of the 40+ is positively related to promotions (van der Heijden et al. 2009).

Garsten and Jacobsson (2004) put forward that the discourse on employability is a consequence of the market orientation in society. This has put pressure on individuals to be adaptable to market needs and to life-long learning. The knowledge-based society of to-day also demands that individuals have to be both able and prepared to learn anew throughout their working life. Both the EU and the OECD focus on the individual and her characteristics and attitudinal changes beside changes in supporting systems and structures.

A majority of studies undertaken concern the continued employability of a person who has a job already, whereas relatively few investigations concern specifically the situation of the unemployed and their chance to re-enter and remain active in the workforce. Only little has been published on the specific dimension added by age in this context.

Employability is a key issue in the discussion of Best Agers’ possibilities to remain in or to enter working life. A person of the age of 50+, who is not employable for whatever reason, has only little chance to continue being employed. It is essential that the barriers hampering employment be understood, in order to identify ways to arrive at further employment of the 55+.

What are the problems that Best Agers meet when they wish to be able to stay employable throughout a working life? This question was highlighted in a project “Life Competence 50+”, that was carried out under the auspices of the European Social Fund in 2005-2007 (Holmer et al. 2010). It was found in this study that the following classes of hindrances could be identified:

- Health related factors
- Competence related factors
- Factors relating to rules and regulations
- Factors relating to attitudes

It was concluded that there are not only individual, but also situational factors that influence a person’s employability. In the following review, this notion is taken into account.

## 2. Health related barriers

### 2.1 Physical performance and ageing

The human being is affected by age and ageing in many ways, impairing the possibility of many individuals to continue working up to, or above, normal pension age. Physical capacity is a key issue in this regard. It includes anatomical and physiological factors such as aerobic capacity, muscle strength and flexibility of joints, neurological and psychological factors. Age related changes affect all these components of physical capacity in different ways. For instance, the prospects to sustain work tasks with high or even moderate physical demands decrease with age (e.g., Tracy and Enoka 2002), due to reduced muscle function and decreased aerobic capacity.

It was found in a study comprising employed and unemployed persons older than 50 years (Holmer et al. 2010), that health related barriers were important to many of the interviewees. In particular, problems in the musculoskeletal system (low back, shoulder/neck) were highlighted, not only by those having a base in jobs characterised by heavy physical loading, but also in white collar workers. Several persons reported problems with high work pace and with irregular work hours, particularly shift work. These health related barriers relate in part to effects of natural ageing, but also to ailments caused or aggravated by exposures in previous employments. The concept of work ability, characterising the ability of the individual to meet the demands presented at work, has been operationalised and researched by J. Ilmarinen and colleagues at the Finnish Institute for Occupational Health. They have found that musculoskeletal ailments are among the foremost factors impairing work ability in many occupational groups (Ilmarinen 2006).

## 2.2 Shift work and ageing

Many researchers have found that health deterioration with increasing age is more pronounced in shift workers than in day workers. Ageing people often show a reduced tolerance to shift and night work related to the weakening of the circadian system (regulating the daily biological rhythm), psychophysical conditions (physical fitness, sleep efficiency, intervening illnesses); social conditions; and working conditions (work load, specific task, stress and fatigue, human relations). In fact, older workers (already aged 45+) may develop intolerance to shift and night work, in particular due to chronic fatigue and sleep troubles (e.g. Koller 1983, Brugère 1997). Sleep troubles in particular seem to be more severe in ageing people in general and even more so in ageing shift workers.

Costa (2005) in a review, concluded that “managers, ergonomists and occupational health physicians should be aware of these aspects and should consider aging workers as more vulnerable subjects in relation to shift and night work, and protect them by arranging shift schedules according to ergonomic criteria and adopting specific supporting measures for aging workers.”

## 2.3 Coordination and ageing

Muscle coordination, the ability to perform fine movements, or to maintain pre-programmed abilities such as locomotion, is affected by ageing. Older subjects exhibit a looser temporal coupling of muscle synergies during postural responses and a temporal asynchrony in reaching tasks. However, coordination in walking appears to be well-maintained with age (Greene and Williams, 1996), although walking speed is reduced, particularly in the age range 65-74 years (Aromaa and Koskinen 2002).

Age differences exist in the ability to divide attention between two tasks (for a review, see Kramer and Madden, 2008). Generally, older adults tend to perform more poorly than younger adults when two tasks are combined. This pattern has been interpreted to mean that motor performance requires more cognitive resources in old age. In older adults there is greater variability between individuals, even though increased slowing, and decreased accuracy is found in comparison to younger adults. What is found are differential rather than general age-related changes (Krampe, 2002).

## 2.4 Psychology and ageing

Cognitive functions are affected by age. The process linking perception, learning and memory to knowledge structures encompasses the important dimensions of the cognitive area of study in the context of work science. Craik and Lockhart (1972) proposed that memory is just a by-product of the depth of processing of information and there is no clear distinction between short term memory and long term memory.

Why is there then a memory loss in higher age? According to the process perspective there is reduced memory capacity, reduced mental energy or speed. However, the relatively modest decline in certain types of memory functions can be explained by compensatory functions in the structures that are built up during our life course; we capitalize on our increased knowledge and techniques for memorizing.

There is a common distinction made with respect to cognition between the so-called crystallized and fluid intelligence (Horn and Hofer, 1992). The former refers to the psychological and physiological structures formed, and the latter to the executive processes trafficking these structures. Most studies indicate that the crystallized intelligence is stable or improves with age. Only few see their semantic or numeric ability deteriorate before age 70. However, the differences between individuals increase markedly after age 60. It seems that training is a major factor behind these changes (e.g. Schaie 1990).

Fluid intelligence manifests itself in situations involving spatial problems, the ability to draw correct and reasonable conclusions, to see and recognize patterns. There is a general view that these abilities decline with age. However, in some studies the age differences are fully mediated by the health and educational levels of the subjects. Studies that indicate changes tend to do so only in age groups over 60. Schaie (1990) found in his major follow up study that about 80% of the 53 year olds retained, or in some cases improved, their logical and spatial performance up to age 60. For the 74 year olds up to age 81, 70% showed unchanged fluid intelligence.

### **3. Competence related barriers**

#### **3.1 Lifelong learning**

Participation in lifelong learning activities can be assumed to contribute to the employability of the older worker. In 2006, an average of 9.6% of Europeans aged 25-64 participated in education and training activities over a period of four weeks (European Commission 2007). There was a pronounced discrepancy between age groups in this context. A majority of 25-34 year olds, regardless of their level of education, participated in lifelong learning activities, whereas the corresponding fraction in the age group 55-64 years was only about one fourth of this number.

The European Commission (Eur-lex 2006) stated that the circumstantial conditions often present the most serious barriers: lack of time due to work or family reasons; lack of awareness and motivation, as people do not see learning valued or rewarded enough and hence fail to perceive its benefits; lack of information on the supply of opportunities; and lack of financing. Other barriers hampering participation in life-long learning activities included according to the Commission lack of information, difficult entry requirements, high cost, and lacking learning support. But also cultural values attached to education have an impact, as well as the adult's self-esteem and self-confidence as a learner.

The EU statistics (Eurostat 2006) reveals that digital illiteracy is a particular problem for the older generation: 61% of European people over 55 years of age had never used a computer. When combining age groups with level of education, the differences are even clearer, as almost 80% of people over the age of 55 with a lower-level education had never used a computer.

The European Commission concluded that is important to invest in adult learning. The benefits include greater employability, increased productivity and better-quality employment. But it also means reduced expenditure in areas such as unemployment benefits, welfare

payments and early-retirement pensions. And: research in older adults indicates that those who engage in learning are healthier (EUR-lex 2006).

In the “Life Competence 50+” study, the most common aspect highlighted by all groups of interviewees with respect to competence related factors was a lack of updated technical abilities, particularly concerning operation of computers and lack of familiarity with currently used computer programs. There were in many cases a lack of opportunities given by the previous employers for competence updating. However, it was also recognised that many individuals were afraid of new technologies and were reluctant to take part in educational activities (Holmer et al. 2010). These findings agree with the scientific literature dealing with the concept of employability (e.g. Garsten and Jacobsson 2004), in particular with respect to problems identified in practical implementation of lifelong learning.

### **3.2 Age and productivity**

Many employers have a negative view with respect to the productivity of older employees. In the literature, the attitude of Swedish employers has been studied in a survey carried out in the context of the Swedish governmental study “Senior 2005”. Here, 53 % of the employers believed that older people have difficulties to learn new things, and a majority declared that they never employed people older than 50 years. It is interesting to contrast these negative attitudes to the fact that no general negative correlation has been established scientifically between productivity at work and age.

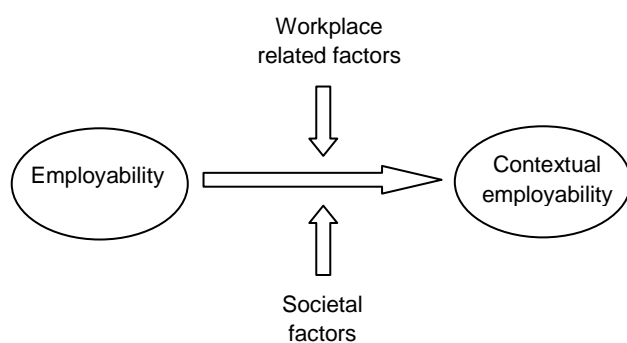
Indeed, the fact that there are age related physiological and cognitive changes, which affect all human beings, does not imply that there is a general relationship between age and productivity at work (e.g. Greller and Simpson 1999). Older workers may perform equally well, or better, than younger ones. Salthouse (1997) concluded that the loss of cognitive function, and a negative influence thereof on job performance, may be balanced by a positive relationship between age, experience, and job performance. It has been stated that older workers often show better performance than younger ones due to e.g., lower turnover, lower absenteeism, higher work satisfaction and higher commitment. In fact, different combinations of knowledge demands and information processing demands may entail positive, negative or no relationship at all with age (Warr 1994).

Longitudinal studies of work ability in relation to work demands have shown that even though there is a statistical decline with age above, say, the age of 50, this does not apply for all individuals. The variability in work ability increases with age, and the difference between individuals is often larger than the difference between age groups (Ilmarinen 2006, Goedhard and Goedhard 2005). These individual differences depend in part on factors such as physical training activities, and chronic diseases and disorders (Baumgartner et al. 1999, Nygård et al. 1991). This complex pattern explains why superficial studies often fail to identify relationship between age and performance (McEnvoy and Cacio, 1989).

## **4. The concept of contextual employability**

It is believed that there is a need for an expanded theoretical concept in order to take into account the full set of barriers met in practice. It is suggested that this concept be called “contextual employability”. The classical concept of “employability” relates to the

characteristics of the individual, whereas “contextual employability” reflects also obstacles that the individual has little possibility to influence. It is essential that the full set of factors be considered when we wish to understand why an older person may not be able to find or to secure employment.



Contextual employability: a conceptual figure.

#### 4.1 Workplace related factors: examples

We have seen that negative attitudes in the workplaces are considered a serious problem by many older persons. Other common workplace related factors include a lack of flexibility and willingness to adapt technical and organisational conditions to an older person. Such measures include implementation of adequate work environment precautions.

At the workplace, it is too late to start paying attention to age when a person reaches the age of 55. Rather, the organisation at the workplace should be such that all age groups are given adequate opportunities; this is the meaning of the concept of Age management, as explained by the European Age Management Network: “Age management promotes longer and better quality working life across the life-course in a way that is favourable for employers as well as individuals and society. This means that Age Management is not only a matter of the elderly work force, it is for everyone, e.g. transfer of knowledge affects both older and younger workers.”

#### 4.2 Society related factors: examples

With respect to rules and regulations and the legal framework, barriers may include limitations as to competence development: older unemployed persons are not always given the same opportunities as the younger ones. There may also be economical barriers, for instance, it may be more expensive for an employer to recruit an older person than a younger one due to heavier pension fund costs involved.

Barriers may also be related to the interpretation of rules and regulations by representatives of governmental authorities. There may even be among officials in the authorities, whom an older unemployed person meets, a perceived lack of interest to work on behalf of Best Agers in general.

At the society level, it is important to create a positive attitude towards the older workforce, and that this view is articulated in governmental action.

## 5. Conclusions

The employability of an older person is related to a set of more complex factors than is usually understood. Some of these are related to the individually oriented concept of employability but there is also a set of barriers which the individual cannot easily influence, in the workplaces and also in governmental authorities that people meet when they seek employment. Negative attitudes in the workplaces and in the society at large towards older workers affect the actual employability negatively.

There is ample evidence from this condensed review of scientific studies of ageing and work that even though we all are affected by physical and mental changes as we grow older, chances are that we can stay employable and retain our productivity at work for much longer time than is generally considered feasible. Main barriers hampering continued employability are in the areas of health and competence. However, the inter-individual differences with respect to work ability increase with age, which necessitates a more individualised approach than is mostly seen in workplaces and in the labour market at large.

A prerequisite for continued work ability is that the technical and organizational conditions at work comply with the resources of older workers.

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## Appendix A.

**A 17 Point Programme for Sustained Employability of Best Agers**

## For Best Agers themselves:

- Look for employers who have a good record with respect to work environment, competence development programmes, and a positive attitude to older employees.
- Take advantage of offers to join competence development programmes.
- Avoid as far as possible repetitive work, shift work, and physically strenuous work tasks. Listen to your own body.
- Try to establish a good relationship with your supervisors, so that they engage in your work and are aware of your accomplishments.
- Engage in your trade union and try to interest them to open discussions with the employer how to further principles of Age Management in the workplace.
- Engage in physical training in free time.
- Develop a CV that reflects the full range of knowledge that you possess, not only listing exams and jobs.

## For employers:

- Develop the work environment so as to make sure that all employees are given work tasks that comply with their capacity, taking into account individual characteristics such as age and sex.
- Implement principles of Age Management in the work organization, in consultation with the trade unions.
- Develop work career plans for all employees, involving competence development programmes.
- Develop mentoring programs where older employees can use time for knowledge transfer to younger ones.
- Develop stepwise and flexible pension options in order to retain some older employees and their knowledge for a longer time, rather than applying strict compulsory retirement based on age alone.
- Work with the organization, in particular middle management, in order to develop a positive attitude towards older employees. This means recognizing the competence of older employees and communicating that they are often able to achieve at least as good results as younger workmates, if they are given adequate working conditions.

## At the society level:

- Revoke all sorts of age discrimination in laws and regulations.
- Build safeguards against age discrimination in the operation of governmental agencies having an impact on ageing and work.
- Implement an ombudsman function for appeals from people who consider themselves victims of age discrimination.
- Be trendsetters. Involve older people in parliamentary work and other visible governmental operations.

