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"Retirement at 67" – Findings on the Employment Situation of Older Female Workers

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Abstract: The Age Limit Adjustment Act, which was adopted in 2007, constitutes a climax in the developments of a paradigm shift in pension policy towards remaining at work for longer. This development entails profound changes and restrictions on benefits for assured persons. In future, many of the insurable employed will not receive a pension without incurring deductions until they reach the age of 67. Both employers and employees are faced with new challenges if they wish to avoid pension reductions in the event of an early retirement and consequently possible precarious incomes at old age. Especially women need particular support in this regard, given that in structural terms, they are in a weaker position on the labour market.

Against this background, a representative nationwide survey of 1,800 female workers born between 1947 and 1964 was commissioned by the New Quality of Work Initiative (INQA) and conducted by the Institute of Gerontology at the Technical University of Dortmund in cooperation with TNS Infratest in 2007. These cohorts are to be affected by the increase of the age limit from 2012 onwards. In addition to structural data, this survey studied the respondents' assessment of their current ability to work and to continue to work until reaching the standard age limit. Further, the survey explored specific working conditions and strains of work. The results show that more than 40 % of the female respondents are sceptical about the conditions of being able to continue their current work until reaching their statutory age limit. The only moderate to poor workability and the consequential danger of having to leave work result e.g. from work-related strains which accumulate in certain sectors and professional groups. The creation of appropriate jobs for older workers as well as the implementation of a staff policy in companies, which is sensitive to demographic developments and individual circumstances, can contribute to maintaining and nurturing the workability.

Keywords: Labour · Demographic Change · Female empolyees · Work conditions · Pension · Workability

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1 Introduction

The Age Limit Adjustment Act (Altersgrenzanpassungsgesetz), which was adopted by the German Federal Parliament on 9 March 2007, marked a major turn in German social policy. For a long time it had been regarded as a more desirable goal to shorten the working life, whereas the Age Limit Adjustment Act introduces a gradual increase in the retirement age from its current level of 65 to 67. The Federal Minister for Labour and Social Affairs at the time stated in the Federal Parliament: "Today's decisions are right. There is no reason for people in Germany to be afraid of this decision. On the contrary, our country needs the wealth of experience, the knowledge and the abilities of the older generation to maintain its prosperity in future" (*Deutscher Bundestag* 2007). Nonetheless, the possible consequences of this decision remain the subject of critical discussion.

The proponents of an extension of the statutory retirement age usually refer to the demographic changes in the country. These changes are said affect the fundability of the social security systems, in particular the contribution-based old-age pensions. A paradigm shift is required both in social policy and in companies' personnel policy. It is said that the "culture of early retirement" should be countered with a strategy of creating and enhancing skills in order to enable elderly people to remain at work for longer. Skills should be retained and constantly developed at old age so that they can remain available to the society as a whole as well as to industry in particular (*Sporket* 2010; *Schmähl* 2010).

The significant critical reservations generally relate to the aspects of employability on the one hand and the workability on the other. Both factors exert an influence on actual gainful employment until the statutory age limit is reached, and hence the risk of being affected by precarious financial circumstances at old age. Thus, there is a critical discussion about the degree to which the politically-motivated increase in supply meets the demand for older workers. Further, there is a public debate on the degree to which the age cohorts affected by the new arrangements are physically and mentally able to actually work longer (*DPW et al.* 2008; *Bäcker et al.* 2010; *Sporket* 2010).

These questions, however, can only be answered adequately if we have identified the factors on which the particular employment opportunities and the individual ability to work at old age depend. This essay wants to shed some light on these factors, in particular on the basis of the research results from the project entitled "Retirement at 67 – Prerequisites for the ability of older female workers to continue working".¹ Further, this article provides an insight into the employment situation of older female workers. Despite the existence of a legal basis for equal treatment of men and women, their employment situation remains characterised by structural disadvantages, and hence requires particular attention especially in view of a longer phase of gainful employment.

^I The project was carried out on behalf of the New Quality of Work Initiative (INQA) by the Institute for Gerontology at the Technical University of Dortmund in cooperation with TNS Infratest Sozialforschung in 2007.

2 The employment policy background of the retirement at 67

Demographic change which is characterised by enduring low birth-rates accompanied by increasing life expectancy, firstly leads to a shrinking population as a whole. Secondly, profound changes can be anticipated within the age structure of the population living in Germany which cannot be compensated by immigration even in the medium term (Statistisches Bundesamt 2009). Especially, the ageing of the population as a whole as well as the working-age people, poses a number of challenges on society, industry and policy-makers. Demographic change has a major impact on the social security systems in Germany, particularly on the old-age pension system. The imbalance between those paying pension contributions and those who are already pensioners has already led to difficulties in financing the statutory payas-you-go pensions insurance system in recent years. Further, the enduring trend towards an early retirement fostered by trade unions, policy-makers and companies as well as workers poses a burden not only on the pension system, but also – as a result of various opportunities for opting out of them - on other security systems. In order to alleviate the increasing pressure on the pension funds, a political rethink has taken place since the 1990s. Three central objectives can be identified in the legislation on pension policy (Bogedan/Rasner 2008; Schmähl 2006):

- to counter the trend towards early retirement;
- to slow down the expenditure development; and
- to partly privatise old-age pensions.

Until now, the climax of the rethink which has occurred within the statutory pensions insurance system is constituted by the "Act to Adjust the Standard Age Limit to Demographic Development and to Strengthen the Funding Base of Statutory Pensions Insurance", adopted in 2007. This law entails a large number of changes and restrictions on benefits for insured parties:

Essentially, the Act provides a gradual increase of the standard age limit from 65 to 67, starting in 2012. The process is to be completed by 2029. All birth cohorts from 1947 to 1963 are affected by the monthly increase in the standard age limit. Consequently, the 1964 cohort will be the first one to which "retirement at 67" applies.

In addition to increasing the standard age limit, the legislature also provides for increases in the qualifying ages of other old-age pensions (e.g. pensions for the seriously disabled from 63 to 65, starting with the 1952 cohort), the removal of opportunities for early retirement (e.g. for women, the unemployed and after old-age part-time working) and the introduction of further deductions for early retirement (*Deutsche Rentenversicherung Bund* 2008).

On the one hand, access to pensions for reductions in earning ability becomes more difficult (cf. on this amongst others *Brussig* 2010) and private and company oldage pension provision is strengthened. On the other hand, particularly older workers are increasingly expected to maintain and apply their workability until reaching the new standard age limits in order to avoid de facto pension reductions.

Nonetheless, the actual retirement age today is already far below the legal retirement age. In comparison to current labour market data, this is generally a positive development considering e.g. the increasing employment rates among the elderly. However, this does not apply to certain disadvantaged groups of employees on the labour market. For instance, among elderly employees, especially the unskilled workers, as well as older women and people with a migratory background, are affected by a less favourable position and by disadvantages on the labour market (Bäcker et al. 2010; Sporket 2010). Getting back to work after losing their jobs becomes an insurmountable obstacle for some of these groups of employees when they become older (Bundesagentur für Arbeit 2008). For several years, policy-makers (also at European level) have been trying to counter negative perceptions of old age in companies' personnel and management departments mostly with the aid of persuasive political measures. Numerous employment policy measures, particularly intended to create incentives for companies to recruit elderly people, have been introduced by policy-makers as an attempt to improve the employability of elderly people. These measures, however, largely target older workers who are already unemployed or have no work. They hardly help to keep the elderly in employment or to maintain their workability. Particularly older workers are not only especially affected by risks on the labour market, but are also increasingly subject to individual health-, skills- and employment-related risks.

3 Employment risks of older female employees

An individual's workability depends on the interaction between human resources on the one hand and the demands of work on the other hand (Oldenbourg/Ilmarinen 2010). Hence it constitutes a major condition for any individual's employability. Because of their structurally-weaker labour market situation, especially (older) women are subject to particular employment risks endangering their ability to work until retirement. One may presume that they accumulate gender-specific and age-typical risk factors. Throughout their working lives, women are confronted with less favourable opportunities for development and promotion stemming from specific sectoral and work organisation-related factors. Further, they are exposed to lower income and problems of reconciling employment and care for children and/or relatives in need of long-term care (Naegele/Reichert 1998; Statistisches Bundesamt 2010; Leve/Naegele/Sporket 2009). Furthermore, the increase in the frequency of part-time working arrangements, marginal employment as well as temporary employment is largely accounted for by women (Klammer/Tillmann 2001; Bogedan/ Rasner 2008). The insufficiently flexible arrangements under social and labour law constituted by these "new" types of employment also lead to more precarious protection against social risks, such as unemployment or pension poverty. Despite the constitutionally-entrenched principle of equal rights of men and women (Art. 3 para. 2 of the Basic law [GG]), the prohibition of discrimination in Art. 3 para. 3 of the Basic law and the Anti-Discrimination Act (Geleichbehandlungsgesetz – AGG), which has been in force since 2006, and which additionally sanctions discrimination on grounds of age, research indicates that older female workers face multiple disadvantages. In particular, companies as places in which the conditions for employment opportunities for the elderly are created (*Naegele* 1988) are still not at all adjusted for the needs of ageing staff.

3.1 Work-related health risks

Ageing, understood as the entirety of time-related changes of the organism over its lifecycle (*Siegrist/Dragano* 2007: 7) is accompanied by a change in performance which is not an automatic process. As a variable biological process, it is determined by a large number of external influences. From a health science point of view, these influences include both genetic propensities and individual health–related behaviour. Further, there are numerous environmental influencing factors, including the various conditions of the working environment. For this reason, it is difficult to speak of *the* typical older worker. Also ageing processes and the often related health restrictions vary greatly among social groups, industrial sectors and professional groups (*Siegrist/Dragano* 2007: 7).

Not only the individual health-related behaviour and biological processes, thus not only age, are responsible for the rise of the increased health risk. Also working conditions and strains to which workers are exposed and which accumulate over the working life have a significant impact (*Behrens* 2003). There is a verifiable link between the extent of the work-specific strain factors and the number of chronic diseases. The number of chronic diseases especially increases with age but also with the growing number of labour market strains. They can be found in particular in low-skilled groups of workers with large shares of heavy physical activity and little scope for individual choices and/or in those fields of work in which typical manual labour and/or production activities are carried out (*Naegele* 2005: 215) (cf. on this also *Oldenbourg/Ilmarinen* 2010; *Sporket* 2010).

The presumption that the shift in the focus of employment towards the service sector would have positive effects on the strains in the working world has not been confirmed. A representative survey on the topic "Strains and demands as well as work-related diseases" shows that the classical strains resulting from working environments and conditions, as well as physical work demands, also play a major role in the service sector (*Jansen/Müller* 2000). For instance, 85 % of women in the service sector work in so-called female employment with relatively little freedom to act and considerable physical and mental strains. Further fields of employment typical of women can also be found in office, health-care, social service, and cleaning jobs (*Clemens* 2006). This can be examplified by the working profile of a geriatric nurse, which is characterised by massive mental and physical strains and unfavourable working hours (*Frerichs et al.* 2004; *Berufsgenossenschaft für Gesundheitsdienst und Wohlfahrtspflege* 2007; *Naegele* 2007).

Older female workers are typically subject to a work-related health risk, which is reflected amongst other things in the figures on illness-related absenteeism. For instance, evaluations of data on inability to work show that the duration of inability to work increases from the age of 45. Whilst the average duration of inability to work

among 30- to 35-year-olds is only ten days per case, it increases continuously over all age groups until it peaks at 23 days per case in the age group of 60- to 65-yearolds (*BMAS* 2009). As to the duration of inability to work, no major differences are observed between the genders across the age groups (*BMAS* 2010).

This changes when cases of permanent inability to work are observed. They remain almost constant over the lifespan. Their distribution only shows increased values at the beginning and at the end of the working life (*Sporket* 2010; *BMAS* 2009). Among women until the age of 45, there is a slightly increased incidence of inability to work, which is caused by the multiple burdens of family work and gainful employment. A noticeable decline in the number of cases of inability to work can be observed in the age group of 60- to 65-year-olds, which according to *Baillargeon* is a result of the "healthy worker effect" (*Baillargeon* 2001). According to this, workers with health restrictions are found less frequently in this age group since, presumably, they have already left work due to their impairment.

Hence, older workers are by no means more frequently ill. However, their illnesses usually last longer than those of younger people. The increased duration of the inability to work at old age is closely linked to the increase of chronic-degenerative diseases among these cohorts. Work-related diseases such as diseases of the muscles and the skeleton, heart and circulatory diseases, as well as metabolic diseases, malicious tumours and multimorbidity are widely spread among these age groups. In addition to physical complaints at old age, mental disturbances also become increasingly significant. These forms of work-related disease are also dominant among women but with a slightly altered emphasis. For instance, psychological diseases occur more frequently among women, which is caused by their greater likelihood to work in low-status employment, e.g. in the service sector (*RKI* 2005; *Parent-Thirion et al.* 2007).

At this point, it can be summarised that, despite a reduction in risks at work, health risks remain and that these are primarily due to the particular course of gainful employment. Especially at old age, employees who are exposed to stressful working conditions for a long time have to expect negative consequences for their ability to work with regard to their health performance. In order to ensure that the workability can also be maintained in advanced age with longer exposure periods entailed by retirement at 67, and with restricted access to pensions for reduced ability to work; measures must be taken at company level which go beyond statutorily entrenched industrial safety and health protection. Thereby, gender-specific differences in the identification of protection factors in the promotion of resilience must be taken into account (*Fischer/Hüther* 2008). The risk potential of highly-demanding job requirements also depends on the availability of work-related and non-work-related supporting structures. These should additionally be considered when looking at potential opportunities to reduce the workload (*Lenhardt et al.* 2010).

3.2 Skill-related risks

In addition to the health risks emerging mostly from the employment- and activityspecific requirements of work, older workers remain subject to a skill-specific risk. The skills and qualifications of an individual are a major condition to actually perform a specific type of work (*Naegele* 2005; *Ilmarinen* 2005).

Frerichs and *Naegele* identify a variety of individual skill-related risks which in most cases accumulate to create employment and deployment problems for older workers:

- skill-related risks emerging from individual age-specific performance changes,
- intergenerational skill-related risks emerging, in statistical terms, from cohort effects, and
- risks of de-skilling or devaluation of existing skills becoming more significant, especially in regard to the ongoing globalisation and technicalisation.

Previously-acquired skills are often no longer sufficient to handle new challenges. Various surveys based on available further training data, however, show that older workers in general, and older women in particular, have fewer chances to improve their fundamental skills by participating in further training. This decrease is caused by a decline of in-company training with age. Only 33 % of the workers aged between 50 and 65 participate in further training, in contrast to 48 % of those under 50 years.² This shows a significant age-related decrease in participating in further training by a total of 15 % age points. If there is neither an enhancement of workers' skills nor a systematic adjustment of initial working skills to modified working skills, which are mostly technological knowledge requirements, older people are at risk of being supplanted by younger workers (*Frerichs/Naegele* 2001; *Sporket* 2010).

Whilst the phenomenon of deskilling through technological development largely affects men, the risks for today's older female workers lie firstly in the low level of initial skills. Women with a low level of education do not even take part in in-company further training half as frequently as men with the same level of education (BMBF 2010). The further training data show additional structural disadvantages for women which accumulate with age-specific skills risks: For instance, women with children participate less frequently in further training than men with children (Expertenkommission Finanzierung Lebenslangen Lernens 2004; Leber/Möller 2007). 80 % of long-term family care for the parents or a partner is also carried out by women. Often, this constitutes a risk for the ability to participate in the working life (Maly-Lukas 2003). The recourse to part-time employment is commonly used as an individual "problem-solving strategy", as is the case with child-rearing. Furthermore, it can be presumed that many of the affected women temporally give up gainful employment completely. Hence, to a certain degree, their work potential is unavailable to the labour market (cf. Naegele et al 2008). Such family-related interruptions in careers are identified as female deskilling risks. Just like the various burden effects caused by a lack of reconciliation solutions (Pietrzyk 2002; Scherger 2007), they should be seen as central factors of gender-specific risks for the ability to continue working.

² The data are based on the Adult Education Survey 2007 carried out by TNS Infratest.

Even where they have the same initial skills as men, women are mostly employed in lower-status positions or find themselves in lower-status, female-dominated, worse-paid jobs which also have a negative impact on women's participation in further training. The existing employment risks increase for such jobs because of unfavourable working conditions and the paucity of opportunities for skill-building (*Burchell et al.* 2007; *Morschhäuser* 2007; *Bellmann/Leber* 2003).

This framework hence leads to a further exacerbation of the problems described. What is more, studies on the basis of the Microcensus show alarmingly low further training rates, particularly among women who are not employed, which according to Allmendinger were as low as 6.3 % in 2006 (BMFSFJ 2009). These discrepancies lead to an exacerbation of the existing differences in the initial skills level³ between the genders, especially since measures, which could update or expand workers' knowledge, are taken up less frequently. Thus, the differences in participation in further training between the genders become even more obvious. In particular, in the case of in-company further training, women of all ages are at a disadvantage. This contrasts with the situation in external further training and general further training, where women's participation is generally higher than that of men. The comparison with general further training shows that the reasons for women's low level of participation in vocational further training do not stem from women's individual conduct as a whole. Rather, the reasons for this may lie in restricted access and in the management conduct of the companies (Leber/Möller 2007; Expertenkommission Finanzierung Lebenslangen Lernens 2004; BMBF 2010). The decision whether a person attends further training or not is therefore taken according to initial and vocational skills, gender, age and civil status, and hence consolidates the existing social differences. In the implementation of further training possibilities, special attention needs to be given to disadvantaged groups with cumulative participation risks.

Presuming that the requirements of the working world will continue to increase as a result of the globalisation of the markets, accelerated innovation dynamics, and the implementation of new forms of work and organisation (*IW* 2008; *BMFSFJ* 2010b), a number of corresponding fields of action can be distilled in connection with retirement at 67. As a result of the shrinking and ageing workforce, employees who are older on average will have to deal with technological and organisational innovations. In order to preserve the workability, it is necessary to counter age- and status-related further training practices in companies and to create incentives for them to provide further training for their workers at an early stage. This is how workers can be enabled to maintain opportunities on the labour market even in the event of unemployment. Due to ever shortening knowledge half-lives, new concepts such as the life-long learning approach play a major role when it comes to dealing with demographic change. Knowledge must be updated early and tailored to the needs of a changing working world throughout people's entire working lives in order for

³ Leber and Möller were unable to find a link between older workers' educational level and their participation in further training (2007). The individual's occupational skills and the professional status are rather decisive in older age groups.

them to participate in the working life at an old age (*Bosch* 2010). As the dependency on knowledge increases in all areas of life, both the efforts of enterprises' to provide further training as well as the efforts of workers themselves are indispensable in order to guarantee workability and employability until the age of retirement.

3.3 Risk of reconciliation

Due to the easier access to education and the consequently increased educational participation of the younger birth cohorts, the employment rates of women have constantly increased in recent years. Nevertheless, these figures do not at all indicate an equal labour market integration of the genders. For instance, the problem of reconciling gainful employment with family or long-term care is also typical for female working biographies, and includes subsequent risks for the late phase of the working life and for pension provision (*Naegele/Reichert* 1998; *Reichert* 2010). Women with children are less frequently employed than women without children, whilst the situation is reversed among men. Women's labour force participation increases with older children, but even among mothers aged 40, it continues to be far lower than among fathers of the same age with 67 % in contrast to 89 % (*Statistisches Bundesamt* 2010).

Moreover, the increase in women's labour force participation is partly characterised by an increase in part-time working (incl. marginal jobs). Women frequently reduce their working hours in order to better reconcile family work with their gainful employment. Although this allows them not to give up their employment, it nevertheless lowers their pension rights. In the Microcensus 2008, 85 % of the mothers stated that they were reducing their working hours for childcare, care for persons in need of long-term care or disabled persons. The fathers, in contrast, mostly reduced their working hours because of a lack of full-time jobs (*Statistisches Bundesamt* 2010). Women's lower labour participation and the high frequency of women working part-time can therefore be traced back to the difficulties encountered in adequately fulfilling both professional and family duties. Childcare largely remains the responsibility of women albeit the utilisation of professional care facilities has increased in recent years (*BMFSFJ* 2010a).

There is an additional family strain affecting women between 40 and 60. In 2007, more than two-thirds of all persons in need of long-term care (approx. 1.5 million) were being looked after in private households (*Statistisches Bundesamt* 2008a). In addition to ambulatory care services, mostly female relatives were providing the required care. An Allensbach survey from 2008 revealed that 12.7 % of working mothers took care of both their underage children and their parents in need of long-term care (*Institut für Demoskopie Allensbach* 2008). Traditional housekeeping, such as cleaning, cooking and shopping for food is also mainly carried out by women. Apparently, in the majority of households, nothing much has changed so far in the classical roles. To the contrary, it has often been passed on to the succeeding generations as girls are more frequently asked to do housekeeping than boys (*BMFSFJ* 2010a).

Women's disproportionate share of responsibilities in the family contrasts with the high demands of flexibility and availability in the working life. As atypical em-

ployment becomes more common, the demands on workers increase. More often, they need to work on the weekends and in alternating shifts. They have to travel further to work and go on business trips. At the same time, as there is an increase in fixed term contracts and temporary jobs, workers have to change their work location and adapt to new work processes at ever shorter periods (*BMFSFJ* 2010a). These increasing strains are even more severe if they are neither countered by adequate support like public or charitable long-term care and childcare services, nor by flexible working hours, nor a civic culture which encourages fathers to take on some of the family work .

Taking these aspects into account, it seems obvious that without any adequate support, single mothers are especially prone to risks regarding an incomplete working biography. Hence, they are unable to sufficiently secure their income at old age, since they have to take care of both gainful employment and family work (*Eichhorst/Thode* 2009). Furthermore, as a result of the postponed family formation caused by demographic changes, women often find themselves in situations in which childcare and care of relatives in need of long-term care coincide.

3.4 Risks associated with the organisation of work

As we have shown so far, skill-related risks and opportunities, reconciliation or health are by no means equally spread but also depend on structural contexts and opportunities. Therefore, different conditions of work organisation prevail in different sectors of the labour market, which influence the opportunities of older workers for development and health. In particular, sector-specific employment risks emerge for female workers. Older women work much more frequently in lower-status fields of employment. Jobs, which are typically carried out by women can mostly be found in the service sector, such as hotels and gastronomy, health-care and long-term care professions, as well as industrial cleaning jobs, and low-tech industries like the textile industry (*Stier/Spindler* 2006; *Klammer et al.* 2000).

Industrial sectors, which are specialised in standardised mass production and offer inflexible jobs, rely on manual labour. As a result of the large share of typical wear-and-tear jobs, they lead to considerable individual health risks (*Frerichs* 1998). A disproportionately high amount of piecework as well as night work and shift work are also found here, leading to further health risks. In particular, the experience of older workers is virtually not valued. Further training campaigns are also rare, since lower skills are sufficient for many jobs in these sectors. Therefore, further training appears to offer poor economic returns to the HR department. Furthermore, the use of human resources in these forms of organisation is usually temporary; often, activities cannot be carried out up to the age of retirement. The capacity of older workers is often restricted as a result of the strains involved in working under such conditions. As low-skilled workers can easily be substituted, they are frequently replaced by younger workers who have been subject to fewer such strains (*Lois* 2005).

As women are commonly working in the service sector, they are just as much affected by such work organisation-related risks as men. Depending on the work segment, service occupations also entail considerable physical and/or mental strain (*Frerichs* 1998; *Stiehr/Spindler* 2006). Work processes involving considerable physical strains specially occur in the typical female sectors of hotels, gastronomy, and building cleaning, as well as in the non-medical healthcare professions and long-term care professions. In addition, mental strains can arise from the low-status activities, which include close contact with customers and permanent confrontation with the extreme circumstances of persons in need of assistance and long-term care. Similar to work in manufacturing company, these kinds of work are characterised by shift work and night work. In particular, women usually prefer such working time models in order to combine gainful employment and family work. Thereby, solutions are preferred, which may entail extreme health and social risks, such as social isolation as a result of ongoing atypical working hours (*Sczesny* 2003).

Structural changes within the industrial sector are caused by technological and economic rationalisation and economic globalisation. These developments lead to the decrease of industrial mass production with inflexible working structures, which is replaced by diversified high-quality production based on knowledge and communication resources. There is a predominance of skill-related job hierarchies. Usually, external access to employment is only possible at the lower end. The need for additional skills is covered by an increasing supply of in-company further training. Under such conditions, there are closer ties between employers and employees and hence, there is a greater interest in long-term employment and participation in further training even at old age. Older women are especially disadvantaged because of their lower initial skills when they started working. This can be observed in the underrepresentation of older female managers in Germany. However, access also becomes more difficult for younger women since they are more likely to have discontinuous careers, for instance as a result of family-related interruptions (von *Alemann* 2007).

The changes in the world of work go hand-in-hand with the spread of new forms of work and management. Studies indicate a comprehensive increase in resultsoriented work systems (Klenner 2007; Ahlers 2010; Lenhardt et al. 2010; Apitzsch 2009). The steering of work results, which becomes more important in the light of the internationalisation of work, may partly entail considerable autonomy in determining working hours and places. However, it also requires a high degree of personal responsibility and the adaption of the individual lifestyle in order to meet customer and market requirements (Apitzsch 2009; Klenner 2007). So far, too little research has been done on the change of working conditions and the work-related burdens with regard to older workers. Nevertheless, multiple studies show a general increasing significance of mental illness related to new forms of work and management (Lenhardt et al. 2010). The ambivalent perception of the higher pressure to perform and to achieve objectives, as well as a lack of time resources, on the one hand, and the growing responsibility and self-regulation on the other, can easily lead to mental burdens and/or health risks. These occur, for example, if workers voluntarily extend their working hours, when they do not take breaks and avoid illnessrelated absence because of the high pressure to perform (Ahlers 2010). Such work organisational risks especially concern women who use such forms of employment

to reconcile of family and gainful employment. Moreover, *Apitzsch* refers to the farreaching implications, which the project orientated work may have for employees' scheme of life, particularly with regard to the lower employment, promotion and income security as well as the high demands in terms of flexibility (2009).

4 Concept and findings of the project "Retirement at 67 – Prerequisites for the ability of older female workers to continue working"

The project "Retirement at 67 – Prerequisites for the ability of older female workers to continue working" tackles the problems that have been described so far. The research aimed at offering an insight into the employment situation and specific risks of older female workers. Particular attention has been devoted, firstly, to the question how individual workers estimate their workability (cf. *Ilmarinen/Tempel* 2002) and, secondly, to the question how the respondents estimate their workability until reaching the new standard age limit.

To answer these questions, the Institute of Gerontology at the TU Dortmund carried out a national representative telephone survey in cooperation with TNS Infratest on behalf of the New Quality of Work Initiative (*Initiative Neue Qualität der Arbeit*) (INQA) in 2007.

4.1 The sampling procedure and the methodology

The population of the representative survey carried out in 2007 (*Naegele et al.* 2008) was exclusively constituted by women who will be the first to be affected by the increased statutory standard age limit from 2012 to 2029. At the time of the survey, all respondents were employees subject to mandatory social insurance at the time of the survey. These conditions are met by the 1947 to 1964 birth cohorts.⁴

The target population only pictures a small part of the total population, not least because fewer female employees subject to mandatory social insurance are found in the older age classes. For this reason, an address pool of TNS Infratest was used for taking the sample, which was generated in a representative omnibus telephone survey, the InfraScope survey. On the basis of the InfraScope sample, it was possible to take a representative (gross) sample in two steps. First, a representative sample was taken in accordance with the InfraScope information (screening).⁵ Subsequently, the respondents' belonging to the population was checked in a prior survey (*Naegele et al.* 2008).

Women who applied for old-age part-time working before 1 January 2007 and are not affected by the increase in the age limit were excluded from the survey.

⁵ The Mikrozensus 2005 and the employment statistics of the Federal Employment Agency 2006 were used as reference statistics.

In 2007, computer-assisted telephone interviews (CATI) were carried out for the survey. With a response rate of 34 %, 1,800 women could be interviewed whose characteristics corresponded to those of the population. The weighting of the relevant characteristics from the net sample guaranteed the adjustment to the structures in the population.⁶ The results of the survey permit representative conclusions regarding the employment situation of female employees subject to mandatory social insurance whose age today ranges from 46 to 63 (*Naegele et al.* 2008).⁷

4.2 The Work Ability Index

The Work Ability Index (WAI) was used in this survey in order to be able to access and assess the respondents' ability to work. The WAI comprises a questionnaire, which was validated over a period of eleven years by the Finnish Institute of Occupational Health (FIOH) in numerous multidisciplinary clinical longitudinal studies. The WAI is not only a suitable tool to record subjectively-assessed workability, but due to its concept is also well-suited to predict inability to work (*BAUA* 2008). The WAI consists of seven dimensions (*Tuomi et al.* 1998):

- (1) assessment of current workability in comparison to best workability ever achieved
- (2) assessment of workability in relation to demands of work
- (3) number of diseases currently diagnosed by a doctor⁸
- (4) estimated impairment of work performance as a result of the disease(s)
- (5) absenteeism in previous year
- (6) assessment of own workability in two years' time
- (7) estimated extent of available mental performance reserves

A point value can be attributed to each of these dimensions, which in total describes the ratio of current performance to the demands of work. It should be noted that the WAI is able to indicate a need for action, however, the underlying conditions leading to better or worse ability to work cannot be recorded using the WAI (*WAI Netzwerk* 2008).

⁶ The Mikrozensus 2005 and the employment statistics of the Federal Employment Agency were used as a data basis for the spread of the characteristics. Year of birth, Federal State, highest school qualification (no qualification/secondary general school/intermediate school leaving certificate/higher school-leaving certificate), extent of gainful employment (full-time/part-time) and occupational status (wage-earner/salaried employee) were included in the weighting.

⁷ The sample represents 4.913 million female workers, as of June 2006.

⁸ In the long version of the WAI, the number of illnesses currently diagnosed by a doctor is checked using a list of 51 possible illnesses. In this research, the list was not used , and the number of diagnosed illnesses was asked for directly.

4.3 Sample description

The responding women were, on average, aged 50. As anticipated, the number of female employees subject to mandatory social insurance continuously falls with age. Whereas 33 % of the 46-to-50 year-old women fall into this group, only 17 % were still employed at the age of 56 to 60. 59 % of the respondents are married and live with their spouses, whilst 21 % have been already divorced at least once; 5 % of female employees are widowed. Equivalent to civil status, 43 % of older women live in two-person households, 23 % in three-person households and 15 % alone. The average net monthly household income is approximately 2,500 Euros.

As mentioned before, older women have a comparatively low level of schooling and vocational training, largely due to cohort-specific differences. In this survey, the differences in education are smaller than initially presumed, since the population includes those persons who were able to benefit from the expansion in education since the mid-1960s. This picture is also reflected in the spread of the highest school qualification. Nearly 80 % of women in employment have graduated from a secondary general or intermediate school. Almost one woman in four aged between 43 and 60 has attained a qualification to enter technical school or university. By comparison, in 2007, 40 % of 20-to-30 year-olds have a comparable qualification (Statistisches Bundesamt 2008b). Regarding the highest educational qualification of older female employees, that is the level of formal vocational qualifications, it is noticeable that 58 % of all respondents - more than half - have graduated from vocational school, have done an apprenticeship or passed an apprentice's examination. 13 % state that they have successfully graduated from a specialist vocational school or a higher commercial college, whilst 9 % of the respondents do not have vocational training qualification. 10 % of female workers have graduated from university.

Characteristics of female employees subject to mandatory social insurance		
Age	50 (min. 43; max. 60)	
Civil status	married, living with spouse: 59 % married, separated: 4 % single: 11 % divorced: 21 % widowed: 5 %	
Highest school qualification	secondary general school: 39 % intermediate school leaving certificate/intermediate school (GDR: 10th grade of a polytechnic secondary school [POS]): 38 % (technical) higher school leaving certificate/technical school or university entrance qualification (GDR: further secondary school [EOS]): 23 %	

Tab. 1:	Description of	f the sample,	n=1800, 2007

Source: own calculations, 2007

4.4 Employment situations of older female workers

27 % of the pool of responding women consists of wage-earners and 73 % of salaried employees. The vocational status falls among wage-earners, whilst it increases among employees with age. The lion's share of female employees subject to mandatory social insurance is employed in small and medium-sized enterprises. Only 16 % work in large enterprises with more than 500 employees. The following sectors are dominant here: public service (23 %), industry and manufacturing (19 %), other private industry (17 %) and retail (16 %). The present study also confirms the segregation of the labour market. For instance, the respondents consider the share of women at their workplace to be, on average, as high as 85 %. The work climate towards older workers is furthermore generally perceived as being highly positive.

4.5 Work-related strains and the workability until retirement

In the survey, particular attention has been focused on the individual assessment of the respondents' workability. The workability, which is also referred to as the ability to cope with work, was measured by using the WAI. It is noticeable that the workability is generally considered positive among the responding age groups. Female workers have an average WAI of 41 points, corresponding to the category "good". In total, 82 % of female workers have a "good" or "very good" WAI value. However, this also means that 18 % have a mediocre or poor workability (cf. Fig. 1). Here, both age and the highest school qualification correlate only weakly with the WAI value.

A sector-specific analysis revealed more prominent values. 33 % of women employed in charitable organisations or public facilities have a mediocre or poor WAI value. Note that more than half of the employees in these sectors work in health or social care professions. The different job-specific strains become obvious when the strains of work are analysed: Approximately three quarters of women working in metallurgical occupations (71 %) and production (78 %) experience damaging environmental influences such as noise, chemicals, poor air or extreme temperatures. Further, 40 % of the cleaning staff is affected by these conditions. Pressure from superiors is particularly experienced by women in metallurgical occupations (44 %) but also by sales assistants (27 %). 15 % of sales assistants, 10 % of cleaners and 10 % of women working in characteristic production jobs suffer from condescending or undignified treatment by other people. One-sided strains and activities like constant sitting or standing as well as heavy work are generally widespread among nearly all work groups: More than half of the respondents are frequently or always subject to this form of strain.

A multivariate regression model was estimated in order to identify work strains, which in fact have a negative impact on the workability, and which consequently also have a negative effect on the possibility to continue to work until the statutory age limit. Work strains categorised as "heavy work/ one-sided strains", "damaging environmental influences", "time pressure and/or stress", "condescending treatment", "pressure from superiors", "pressure from colleagues", "performance competition with colleagues", and "confrontation with other people's problems" ap-



Fig. 1: Workability in accordance with the Work Ability Index (in percent)

pear to have a highly-significant influence on the WAI. If female workers are permanently exposed to such work strains, this has a negative impact on the WAI value (cf. Tab. 2). "High level of concentration" emerged as a positive predictor. This demand can largely be attributed to higher-status positions.

The relevance of this study is highlighted especially by the data on future gainful employment against the background of a successive increase in the standard age limit. 42 % of women assess the conditions for being able to exercise their current activity until the statutory retirement age as "negative" or "highly negative".⁹ According to the responding women health conditions that are required to work until reaching the standard age limit are mostly missing. 43% see their own health condi-

Source: own calculations, 2007

⁹ It should be noted here that the lion's share of respondents underestimate their personal retirement age, which means that they presume that they can retire earlier without any deductions. 74 percent of female workers share this misconception, and only one in eight correctly assess their retirement age.

 Tab. 2:
 The influence of work strains and demands on the Work Ability Index

Work strains/demands	В
Heavy work/one-sided strains	-1.712***
Damaging environmental influences	-1.406***
High level of concentration	1.187***
Minor errors, major damage	268
Time pressure and/or stress	-1.231***
Condescending treatment	-1.063***
Difficult decisions	.467**
Constant friendliness	.495**
Development of new ideas	315*
Pressure from superiors	-1.284***
Pressure from colleagues	-3.103***
Performance competition with colleagues	792***
Confrontation with other people's problems	514***

Linear regression. R²=0.159. ***. **. * represents p \leq 1/ 5/ 10 %.

Source: own calculations, 2007

tions as a major or somewhat major problem. The assessments tend to be positive with regard to the skills prerequisites. 41 % consider them as no problem at all; 20 % only anticipate minor problems in the future.

4.6 Participation of older female workers in further training

A large number of measures are conceivable and necessary in order to enhance the workability and to prepare for extended working lives. Almost half of the respondent female workers state that they had taken part in vocational further training in the past two years. Whereas 59 % – so far more than half – of the salaried employees have attended in-company further training in the past two years, only 17 % among wage-earners participated in such training. It is further shown within the status groups that participation in in-company further training increases with the level of skills. The highest value, which is found among the highly-skilled and senior salaried employees, is at 80 %. The participation rates are very low in the hotel and gastronomy sector, where only one in ten attended in-company further training in the past two years. In the two years before the survey, women working in the metallurgical sector (27 %) or the cleaning sector (6 %), as well as female sales assistants (31 %) also have hardly attended in-company further training. Furthermore, the participation rates fall clearly in the higher working age (56 to 60) – especially among women who started working with only low formal qualifications.

It is positive that more than 60 % of women state that they found it easier to perform their (current) activity after further training. Nearly 40 % stated an increas-

ing job security, and 37 % were given more responsibilities after completing the training. However, one in five participants did not experience any change. Privatelyorganised further training is also highly important for maintaining the workability. Thus, almost 40 % of the respondents stated that they had privately invested in vocational further training. In addition to work-related and private further training, almost half of the respondents take other measures to maintain their workability, which are mainly related to sports (62 %), healthy living (13 %) and a healthy diet (11 %).

4.7 Conditions for working until the age limit

Female workers consider it to be mostly their own responsibility to maintain their workability: 80 % state that it is their own responsibility to maintain and develop their workability. More than half of female workers further state that employers or company management are also responsible. It is noticeable that neither the workers' and staff councils, nor the trade unions are perceived to have considerable responsibility in this field, even though 60 % of the respondents work in a company with a workers' or a staff council.

Considerable personal responsibility goes together with explicit demands, especially concerning the working conditions and the organisation of work. When asked what is still required to enable employees to continue working until the new retirement age, more than 50 % of the female employees considered a reduction in the strains of work to be the most important prerequisite. A better reconciliation of



Fig. 2: Conditions for working until the age limit^{*} (in percent)

Source: own calculations, 2007



Fig. 3: Support by the employer^{*} (in percent)

work and private obligations as well as a greater recognition of their work performance were also deemed important (cf. Fig. 2).

The women were further interviewed with regard to their expectations towards the employers. In terms of their own workability, 68 % of female workers considered health-promotion measures in their enterprise or company to be efficient. As shown in Figure 3, the promotion of further training also corresponds with the wishes of older female workers. 66 % of the respondents would like to be informed about further training in the future. Almost as many respondents think that the leave of absence in order to attend further training contributes to their workability. 61 % of the respondents hope for greater challenges at work and/or more demanding work in order to maintain their ability to work.

4.8 New and old reconciliation-related problems

To be responsible for an average of 77 % of the housework is only one of many factors of the multiple strains faced by female employees at work and in their families. Almost 60 % of the respondents would like more flexible working hours in order to improve the reconciliation of private and work obligations. The high frequency of part-time working among women indicates that until now, these demands have only been met to an inadequate degree. Approximately 40 % of the responding female employees subject to mandatory social insurance were working part-time, whereas 3 % were in marginal employment or were working less than 15 hours per week. In

Source: own calculations, 2007

a work-orientated social security system, this leads to statutory pensions insurance expectancies, which hardly cover subsistence costs.

Approximately 50 % of the women state that family and/or personal obligations are the main reason for a reduced work volume. These obligations mostly include childcare, as well as long-term care of relatives. For instance, in addition to their gainful employment, nearly half of the women with children in their household care at least partly for at least one under-age child. With the youngest child's median age of 17, it could be presumed that care obligations of children in the surveyed age classes play a less prominent role than in the previous working years. On the contrary, one in ten respondents is affected by the "new" version of the reconciliation problem, namely the reconciliation of gainful employment and long-term care. 68 % of the affected women spend an average of 15 hours per week on taking care of a parent. These women have already been caring for the same person for an average of five years. The vast majority of 75 % do not receive any professional support.

Amongst others, risks resulting from reconciliation problems may be alleviated if employers enable their female workers to arrange flexible working conditions and working hours. Each individual's autonomy of choice plays a highly decisive role here. Only 18 % of the women, who are affected by the "new" reconciliation problem, had the opportunity to work from home. Only 33 % were able to spontaneously take time off to reduce overtime. In each case, nearly half of the women performing long-term care were able to briefly leave their workplace to make phone calls during work or/and make flexible working hours arrangements. The employer did not offer any of these possibilities for 24 % of the affected respondents. Considering that 30 % of the working women in the respective age classes assess the likelihood of having to accomplish (additional) long-term care in the coming five years as very high or fairly high, it becomes clear that there is a major need for action.

5 Conclusion and recommendations for action

The income oriented German pension system establishes and consolidates existing imbalances between social groups, which develop during people's working lives until old age. Only people who acquire sufficient expectancies in statutory pensions insurance during their working life have sufficient security at old age (*Bäcker et al.* 2010). Private and in-company old-age pension, which has become considerably more significant since the latest reform of the public pensions system focus mostly on income. Therefore, gainful employment can not only be seen as the most important mean for social recognition and for the creation of identity. Primarily, it secures the personal or family existence at old age.

Interruptions in careers, such as unemployment and/or child-rearing and family work, as well as having part-time jobs, largely lead to lower pension claims at old age and to an increasing employment risk. Especially female careers, which are frequently typified by discontinuity, mobility, variations and caesuras (*Stiehr/Spindler* 2006; *Leve et al.* 2009), carry an aggravated risk of poverty at old age.

Workability is considered to be a prerequisite for employability. Hence, it is a decisive factor for the possibility to remain at work until the age of 67. Individual physical and skills-related resources constitute the fundamental prerequisite for employment, and hence, for a sufficiently secure income at old age. If women shall be enabled to generally extend their working lives, numerous measures are necessary, which should particularly focus on the design of the working conditions. Therefore, especially companies are asked to cooperate and address this challenge. Negative effects on the ability to work for particular groups must be recognised at an early stage and ageing-friendly jobs must be created. Thus, the present analysis of promoting the workability of older female workers leads to the following recommendations for action:

- Measures to maintain and promote health, should focus especially on reducing health-endangering work-related strains. An effective intervention requires analyses of the demands and strains at work. There is a particular need to account for the mental strains of work that can be found in the service sector as well as in the production industries. These strains stem from growing performance pressure and rising productivity demands together with a shortage of staff.
- Gender-specific aspects should be taken into account when measures to reduce the strains of work are introduced in the work organisation in order to enhance the workers' resilience. Our results clearly show specific strains for women such as stress and pressure caused by the interaction with superiors, colleagues, customers, and clients. This indicates a need for health-promoting measures to supervise and strengthen the employees' self-responsibility, particularly in social work jobs and health-care professions. Furthermore, in these occupational groups and in the service sector, measures to promote team building and team development should be implemented to improve the working environment by strengthening social relationships at work.
- Working time policy should receive particular attention. The available data
 prove that respondents are highly sensitive to strains emanating from the
 place and duration of work. This signals a pressing demand for more real
 autonomy in organising working hours, including innovative forms of management of work organisation and work design.
- In future, companies should take the "new" reconciliation-related problems into account and establish support structures to maintain and promote especially the female employees' ability to work – particularly, when considering "two-fold strains". This includes advice and information for employees concerning long-term care for relatives as well as cooperation with social care services.

- This study further highlights a need for additional further training and skillbuilding measures. Further individual training measures can help today's older female workers to compensate their lack of skills due to the course of their working life. With regard to the ageing employees and especially with regard to the unskilled workers, the participation in further training measures must be facilitated from the start in order to increase the employability of groups, which are at particular risk.
- Future challenges of technological work organisational innovation must be addressed by age- and status-related further training practice in companies. Thus, incentives for companies must be created to provide further training and skill-building for their employees early in their working lives. As our results show, there is a high willingness among female workers to participate in further training measures. A considerable number of respondents also report employment-promoting effects of further training. Consequently, there will be a future need to establish more informal further training in fields of employment with a high proportion of women. For instance, measures like on-the-job training or rotation procedures could be implemented.
- Due to part-time working, as well as family phase-related interruptions, women are clearly disadvantaged when it comes to participating in vocational further training. However, they often gain certain skill profiles in private life through informal learning contexts which should be higher valued and included in company practice.
- As shown in this study, older female workers are quite aware of their employment situation and are willing to contribute to a reduction of potential risks and dangers. This major potential should be used to a greater degree than it has been in the past. However, there is often a lack of the required in-company and political contexts. When initiating and implementing corresponding measures at company level, the role of representative bodies is of great relevance and they should be made aware of the special employment situation faced by women.
- Generally, a culture of recognition and appreciation should be established in companies, which especially includes older female workers. Managers and workers' representatives should appropriately consider the specific situation of older female workers and their particular needs.

References

- Ahlers, Elke 2010: Arbeitsbedingungen von Beschäftigten in Betrieben mit ergebnisorientiert gesteuerten Arbeitsformen. In: WSI-Mitteilungen 63,7: 351-356.
- Apitzsch, Birgit 2009: Flexible Beschäftigung, neue Abhängigkeiten. Projektarbeitsmärkte und ihre Auswirkungen auf Lebensverläufe. Schriften aus dem Max-Planck-Institut für Gesellschaftsforschung 69. Frankfurt am Main: Campus-Verlag.
- *Bäcker, Gerhard et al.* 2010: Sozialpolitik und soziale Lage in Deutschland. Band 1: Grundlagen, Arbeit, Einkommen und Finanzierung. 5th edition. Wiesbaden: VS Verlag für Sozialwissenschaften.
- *Baillargeon, Jacques* 2001: Characteristics of the healthy worker effect. In: Occupational Medicine 16,2: 359-366.
- Behrens, Johann 2003: Fehlzeiten, Frühberentung: Länger erwerbstätig durch Personal und Organisationsentwicklung. In: Badura, Bernhard; Schnellschmidt, Hennert; Vetter, Christian (Eds.): Fehlzeiten-Report 2002. Zahlen, Fakten, Analysen aus allen Branchen der Wirtschaft. Demographischer Wandel: Herausforderung für die betriebliche Personal- und Gesundheitspolitik. Berlin: Springer: 15-136.
- *Bellmann, Lutz; Leber, Ute 2003*: Betriebliche Weiterbildung: Denn wer da hat, dem wird gegeben. In: IAB Materialien 1/2003: 15-16.
- Berufsgenossenschaft für Gesundheitsdienst und Wohlfahrtspflege 2007: Sieht die Pflege bald alt aus? BGW-Pflegereport 2007. Hamburg.
- *Bogedan, Claudia; Rasner Anika* 2008: Arbeitsmarkt x Rentenreform = Altersarmut? In: WSI Mitteilungen 61,3: 133-144.
- Bosch, Gerhard 2010: Lernen im Erwerbsverlauf Von der klassischen Jugendorientierung zu lebenslangem Lernen. In: Naegele, Gerhard (Eds.): Soziale Lebenslaufpolitik. Sozialpolitik und Sozialstaat. Wiesbaden: VS Verlag für Sozialwissenschaften: 352-370. [doi: 10.1007/978-3-531-92214-0 13].
- Brussig, Martin 2010: Künftig mehr Zugänge in Altersrenten absehbar Gegenwärtig kein Ausweichen in die Erwerbsminderungsrente zu beobachten. Inst. Arbeit und Qualifikation, Hans-Böckler-Stiftung. Duisburg, Düsseldorf: Altersübergangs-Report Nr. 2010-02. URL: http://www.iaq.uni-due.de/auem-report/2010/2010-02/auem2010-02. pdf, 14.08.10.
- *Bundesagentur für Arbeit* (Eds.) 2008: Arbeitsmarkt 2007. 56. Jahrgang. Sondernummer 2. Nürnberg.
- BMAS (Bundesministerium für Arbeit und Soziales) 2009: Sicherheit und Gesundheit bei der Arbeit 2007 – Unfallverhütungsbericht Arbeit. Bundesanstalt für Arbeitsschutz und Arbeitsmedizin. URL: http://www.baua.de/de/Publikationen/Fachbeitraege/ Suga-2007.pdf?__blob=, 22.11.10.
- BMAS (Bundesministerium für Arbeit und Soziales) 2010: Sicherheit und Gesundheit bei der Arbeit 2008 – Unfallverhütungsbericht Arbeit. Bundesanstalt für Arbeitsschutz und Arbeitsmedizin. URL: http://www.baua.de/de/Publikationen/Fachbeitraege/ Suga-2008.pdf?__blob=publicationFile&v=14, 15.10.10
- BAuA (Bundesanstalt für Arbeitsschutz und Arbeitsmedizin) (Eds.) 2008: Why WAI? Der Work Ability Index im Einsatz für Arbeitsfähigkeit und Prävention. Erfahrungsberichte aus der Praxis. URL: http://www.inqa.de/Inqa/Redaktion/Zentralredaktion/ PDF/Publikationen/why-wai,property=pdf,bereich=inqa,sprache=de,rwb=true.pdf, 02.08.2010.

- *BMBF (Bundesministerium für Bildung und Forschung)* (Eds.) 2010: Bildung in Deutschland 2010. Ein indikatorengestützter Bericht mit einer Analyse zu Perspektiven des Bildungswesens im demographischen Wandel. Bielefeld: Bertelsmann-Verlag.
- *BMFSFJ (Bundesministerium für Familie, Senioren, Frauen und Jugend)* (Eds.) 2009: Erwerbsverläufe und Weiterbildungsbeteiligung von Wiedereinsteigerinnen. Perspektive Wiedereinstig. Die Potentiale nicht erwerbstätiger Frauen für den Arbeitsmarkt. Berlin.
- *BMFSFJ (Bundesministerium für Familie, Senioren, Frauen und Jugend)* (Eds.) 2010a: Familienreport 2010 Leistungen, Wirkungen, Trends. Berlin.
- *BMFSFJ (Bundesministerium für Familie, Senioren, Frauen und Jugend)* (Eds.) 2010b: 6. Bundesaltenbericht. Altersbilder in der Gesellschaft. Berlin.
- *Burchell, Brendan et al.* 2007: Gender and Working Conditions in the European Union. Luxembourg.
- *Clemens, Wolfgang* 2006: Ältere Arbeitnehmerinnen in Deutschland. Erwerbsstrukturen und Zukunftsperspektiven. In: Zeitschrift für Gerontologie und Geriatrie 39,1: 41-47 [doi: 10.1007/s00391-0366-6].
- Deutscher Bundestag 2007: Stenographischer Bericht, 86. Sitzung, Berlin. URL: http://dip21.bundestag.de/dip21/btp/16/16086.pdf, 10.07.10.
- DPW (Deutscher Paritätischer Wohlfahrtsverband Gesamtverband e.V.) et al. (Eds.) 2008: Rente mit 67 – Die Voraussetzungen stimmen nicht. Erster Monitoring-Bericht des Netzwerks für eine gerechte Rente. URL: http://www.sozialpolitik-aktuell.de/tl_ files/sozialpolitik-aktuell/_Kontrovers/Rente67/Broschuere_Rente%20mit%2067.pdf, 09.05.10.
- *Deutsche Rentenversicherung Bund* (Eds.) 2008: Rente mit 67 was ändert sich für mich? 3rd edition. Berlin.
- *Eichhorst, Werner; Thode, Eric* 2009: Vereinbarkeit von Familie und Beruf: Wie konsistent sind die Reformen? IZA discussion paper 4294. Bonn. URL: http://ftp.iza.org/ dp4294.pdf, 17.08.10.
- *Expertenkommission Finanzierung Lebenslangen Lernens* Eds.) 2004: Finanzierung Lebenslangen Lernens: Der Weg in die Zukunft. Abschlussbericht der Expertenkommission Finanzierung Lebenslangen Lernens. Bielefeld.
- *Fischer, Joachim E.; Hüther, Gerald* 2008: Biologische Grundlagen der Genderdifferenz. In: *Badura, Bernhard; Schröder, Helmut; Vetter, Christian* 2008: Fehlzeitenreport 2007. Arbeit, Geschlecht und Gesundheit. Heidelberg: Springer: 21-33. [doi: 10.1007/978-3-540-72544-2_2].
- Frerichs, Frerich 1998: Älter werden im Betrieb. Wiesbaden: Westdeutscher Verlag.
- *Frerichs, Frerich et al.* 2004: Personalstrukturen, Arbeitsbedingungen und Arbeitszufriedenheit in der stationären Altenpflege. Düsseldorf: MGSFF.
- *Frerichs, Frerich; Naegele, Gerhard* 2001: Anhebung der Altersgrenzen und Arbeitsmarktpolitik. In: *Barkholdt, Corinna* (Eds.): Prekärer Übergang in den Ruhestand. Wiesbaden: Westdeutscher Verlag: 73-102.
- *Ilmarinen, Juhani* 2005: Towards a longer Worklife! Ageing and the quality of worklife in the European Union. Helsinki: Finnish Institute of Occupational Health.
- *Ilmarinen, Juhani; Tempel, Jürgen* 2002: Arbeitsfähigkeit 2010. Was können wir tun, damit Sie gesund bleiben? Hamburg: VSA.

- IW (Institut der deutschen Wirtschaft) (Eds.) 2008: Die Zukunft der Arbeit in Deutschland. Megatrends, Reformbedarf und Handlungsoptionen. Köln: Deutscher Instituts-Verlag.
- Institut für Demoskopie Allensbach 2008, IfD-Archiv Nr. 10023.
- Jansen, Rolf; Müller, Rainer 2000: Arbeitsbelastungen und Gesundheit älterer Arbeitnehmer im Dienstleistungsbereich. In: Zeitschrift für Gerontologie und Geriatrie 33,4: 256-261 [doi: 10.1007/s003910070043].
- Klammer, Ute; Tillmann, Katja 2001: Erwerbsbiographien als Mosaik Längsschnittergebnisse zur Zusammensetzung von Erwerbsbiographien und ihren Veränderungen, zum Einkommenserwerb im Lebensverlauf und den Folgen für die Absicherung im Alter. In: Ministerium für Arbeit und Soziales, Qualifikation und Technologie des Landes NRW (Eds.): Flexicurity: Soziale Sicherung und Flexibilisierung der Arbeitsund Lebensverhältnisse. Düsseldorf: 141-197. URL: http://www.sozialpolitik-aktuell. de/tl_files/sozialpolitik-aktuell/_Politikfelder/Sozialstaat/Dokumente/flexicurity.pdf, 20.08.10.
- Klammer, Ute et. al. 2000: WSI-FrauenDatenReport. Berlin.
- Klenner, Christina 2007: Gleichstellungspolitik vor alten und neuen Herausforderungen – Welchen Beitrag leistet die Familienpolitik? In: WSI Mitteilungen 60,10: 523-530.
- Leber, Ute; Möller, Iris 2007: Weiterbildungsbeteiligung ausgewählter Personengruppen. RatSWD working paper 12. Berlin. URL: http://www.ratswd.de/download/RatSWD RN 2007/RatSWD RN 08.pdf, 25.07.10.
- *Lenhardt, Uwe; Ertel, Michael; Morschhäuser, Martina* 2010: Psychische Arbeitsbelastungen in Deutschland: Schwerpunkte – Trends – betriebliche Umgangsweisen. In: WSI-Mitteilungen 7/2010: 335-341.
- Leve, Verena; Naegele, Gerhard; Sporket, Mirko 2009: "Die Rente mit 67" Beschäftigungspolitische Hintergründe und geschlechterspezifische Risiken bei alternden Arbeitnehmerinnen". In: Blätter-Mink, Birgit; Kramer, Caroline (Eds.): Doing Aging – Weibliche Perspektiven des Älterwerdens. Baden-Baden: Nomos: 169-185.
- Lois, Daniel 2005: Weiterbildungsbeteiligung älterer Erwerbstätiger. Die Messung im Mikrozensus und der Einfluss soziodemografischer Variabler. In: Beitrag zur 4. Nutzerkonferenz "Forschung mit dem Mikrozensus: Analysen zur Sozialstruktur und zum Arbeitsmarkt". Mannheim: ZUMA.
- Maly-Lukas, Nicole 2003: "...aber ich hab' es gern getan." Zur Pflegebereitschaft und Lebenssituation pflegender Töchter. In: Reichert, Monika; Maly-Lukas, Nicole; Schönknecht, Christiane (Eds.): Älter werdende und ältere Frauen heute. Zur Vielfalt ihrer Lebenssituationen. Wiesbaden: Westdeutscher Verlag: 97-121.
- *Morschhäuser, Martina* 2007: Berufsbegleitende Weiterbildung für Ältere. Zukunftsaufgabe für Betriebe, Beschäftigte und Gesellschaft. In: Soziale Sicherheit 4/2007: 141-148.
- *Naegele, Gerhard* 1988: Zur Zukunft älterer Arbeitnehmer Die Entscheidung für oder gegen die Alterserwerbsarbeit fällt in den Betrieben und ist dort zu beeinflussen. In: Soziale Sicherheit 6: 25-33.
- *Naegele, Gerhard* 2005: Nachhaltige Arbeits- und Erwerbsfähigkeit für ältere Arbeitnehmer. In: WSI Mitteilungen 58,4: 214-219.
- *Naegele, Gerhard* 2007: Demografischer Wandel und Arbeitswelt Reformbedarf unter besonderer Berücksichtigung der (Alten)Pflegeberufe. In: Theorie und Praxis der Sozialen Arbeit 6/2007: 4-12.

- Naegele, Gerhard et al. 2008: "Rente mit 67" Voraussetzung für die Weiterarbeitsfähigkeit älterer Arbeitnehmerinnen. FfG-Forschungsbericht. Dortmund. URL: http://www. inqa.de/Inqa/Redaktion/Zentralredaktion/PDF/2009-08-31-rente-mit-67,property=pdf ,bereich=inqa,sprache=de,rwb=true.pdf, 01.02.2011.
- *Naegele, Gerhard; Reichert, Monika* (Eds.) 1998: Die Vereinbarkeit von Erwerbstätigkeit und Pflege in nationaler und internationaler Perspektive. Dortmunder Beiträge zur angewandten Gerontologie 1: 2 Volumes. Hannover: Vincentz.
- *Oldenbourg, Rita; Ilmarinen, Juhani* 2010: Für eine lebenslaufbezogene Arbeitsfähigkeitspolitik. In: *Naegele, Gerhard* (Eds.): Soziale Lebenslaufpolitik. Sozialpolitik und Sozialstaat. Wiesbaden: VS Verlag für Sozialwissenschaften: 429-448. [doi: 10.1007/978-3-531-92214-0 16].
- Parent-Thirion, Agnès et al. 2007: Fourth European Working Conditions Survey. Luxembourg.
- *Pietrzyk, Ulrike* 2002: Brüche in der Berufsbiografie Chancen und Risiken für die Entwicklung beruflicher Kompetenz. Hamburg: Dr. Kovac.
- *Reichert, Monika* 2010: Pflege ein lebensbegleitendes Thema? In: *Naegele, Gerhard* (Eds.): Soziale Lebenslaufpolitik. Sozialpolitik und Sozialstaat. Wiesbaden: VS Verlag für Sozialwissenschaften: 309-332.
- RKI (Robert Koch Institut) 2005: Gesundheit im Alter. Gesundheitsberichterstattung des Bundes. Heft 10. URL: http://www.rki.de/cln_178/nn_199850/DE/Content/GBE/Gesundheitsberichterstattung/GBEDownloadsT/gesundheit_im_alter,templateld=raw ,property=publicationFile.pdf/gesundheit_im_alter.pdf, 20.08.10.
- Scherger, Simone 2007: Destandardisierung, Differenzierung, Individualisierung. Westdeutsche Lebensläufe im Wandel. Wiesbaden: VS Verlag für Sozialwissenschaften.
- *Schmähl, Winfried* 2006: Die neue deutsche Alterssicherungspolitik und die Gefahr steigender Altersarmut. In: Soziale Sicherheit 12: 397-402.
- *Schmähl, Winfried* 2010: Soziale Sicherung im Lebenslauf Finanzielle Aspekte in längerfristiger Perspektive am Beispiel der Alterssicherung in Deutschland. In: *Naegele, Gerhard* (Eds.): Soziale Lebenslaufpolitik. Sozialpolitik und Sozialstaat. Wiesbaden: VS Verlag für Sozialwissenschaften: 550-582.
- *Sczesny, Cordula* 2003: Arbeitszeitgestaltung zwischen arbeitswissenschaftlichen Erkenntnissen und individuellen Arbeitszeitpräferenzen. Am Beispiel der Dauernachtarbeit im Krankenhaus. Münster: LIT Verlag.
- Siegrist, Johannes; Dragano, Nico 2007: Rente mit 67 Probleme und Herausforderungen aus gesundheitswissenschaftlicher Sicht. Hans Böckler Stiftung. Arbeitspapier 147. Düsseldorf.
- Sporket, Mirko 2010: Organisationen im demographischen Wandel Alternsmanagement in der betrieblichen Praxis. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Statistisches Bundesamt 2008a: Pflegestatistik 2007 Pflege im Rahmen der Pflegeversicherung Deutschlandergebnisse. Wiesbaden.
- Statistisches Bundesamt 2008b: Bildungsstand der Bevölkerung. URL: https://www-ec. destatis.de/csp/shop/sfg/bpm.html.cms.cBroker.cls?cmspath=struktur,vollanzeige. csp&ID=1022474, 18.08.10.
- Statistisches Bundesamt 2009: Bevölkerung Deutschlands bis 2060. 12. koordinierte Bevölkerungsvorausberechnung. Berlin. URL: http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Presse/pk/2009/Bevoelkerung/pressebroschuere_bevoelkerungsentwicklung2009,property=file.pdf, 25.07.10.

- Statistisches Bundesamt 2010: Frauen und Männer in verschiedenen Lebensphasen. Wiesbaden: Statistisches Bundesamt. URL: http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Content/Publikationen/Fachveroeffentlichungen/ Bevoelkerung/FrauenMaenner,property=file.pdf, 11.08.10.
- Stiehr, Karin; Spindler, Mone 2006: Lebensbedingungen von Frauen 50 plus in Europa. Ergebnisse einer Sekundäranalyse in zwölf westeuropäischen Ländern. In: Zeitschrift für Gerontologie und Geriatrie 39,1: 5-12. [doi: 10.1007/s00391-006-0350-1].
- *Tuomi, Kaija et al.* 1998: Work Ability Index. 2nd revised edn. Helsinki: Finnish Institute of Occupational Health.

WAI Netzwerk 2008: http://www.arbeitsfähigkeit-uni-wuppertal.de, 20.08.10.

von Alemann, Annette 2007: Unterrepräsentanz ohne Ende? Geschlechterungleichheit bei Führungseliten der deutschen Wirtschaft. In: WSI Mitteilungen 9/2007: 487-493.

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