

Changing tracks  
Studies on life after early retirement in the Netherlands

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# Changing tracks

Studies on life after early retirement in the Netherlands

Stoppen met werken

Studies naar leven na vervroegd pensioen in Nederland

(met een samenvatting in het Nederlands)

Proefschrift

Ter verkrijging van de graad van doctor aan de Universiteit Utrecht op gezag van de rector magnificus prof. dr. W.H. Gispen, ingevolge het besluit van het college van promoties in het openbaar te verdedigen op donderdag 12 oktober 2006 des middags om 2.30 uur

door

Hanna van Solinge

geboren op 22 juni 1960 te Moordrecht

Promotor: Prof. dr. F. Tazelaar  
Co-promotor: Dr. C.J.I.M. Henkens

Dit proefschrift werd mede mogelijk gemaakt met financiële steun van de  
Nederlandse Organisatie voor Wetenschappelijk Onderzoek  
(NWO 410.12.016).

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## Voorwoord

Dat ik dit proefschrift op dit moment in mijn levensloop —op 46-jarig leeftijd— afrond, komt niet doordat ik niet eerder kansen heb gekregen. Kansen waren er genoeg, maar ik heb ze niet eerder gegrepen.

De eerste dertien jaar van mijn wetenschappelijke loopbaan heb ik mij breed kunnen ontwikkelen. Ik was betrokken bij een groot aantal zeer uiteenlopende onderzoeken en daar heb ik van genoten. Toen ik eind 2002 door mijn afdelingshoofd Kène Henkens werd gepolst voor een promotieproject over de gevolgen van pensionering voor gezondheid en welbevinden van ouderen, heb ik niet lang gearzeld. De suggestie van mijn collega Frans van Poppel dat het tijd werd om mijn leven als ‘wetenschappelijke dakloze’ op te geven heeft daarbij zeker een rol gespeeld.

Toen ik in 2003 startte met dit promotieproject was er sprake van een bijna naadloze overgang met mijn eerdere werkzaamheden. Een grootschalig onderzoek onder oudere werknemers —op verzoek van de Stichting Management Studies (SMS)— waaraan ik samen met Kène Henkens sinds 2001 had gewerkt was zojuist afgerond met de op een breed lezerspubliek gerichte publicatie ‘Het Eindspel’. De uitdaging van dit promotieproject lag voor mij vooral in de wetenschappelijke verdieping van het onderzoeksthema. Dat hiervoor andere vaardigheden en competenties vereist zijn, werd mij al snel duidelijk. Dat dit proefschrift is voltooid dank ik aan het onvoorwaardelijk vertrouwen van mijn begeleiders. Zij hebben mij uitgedaagd mijn grenzen te verleggen. In mijn promotor Frits Tazelaar waardeer ik vooral de brede kijk op wetenschap, zijn precisie en zijn vermogen om keer op keer interessante en kritische vragen te stellen. De meer pragmatische aanpak van mijn co-promotor Kène Henkens, die letterlijk altijd klaar stond voor overleg, zorgde ervoor dat de vaart er voortdurend in is gebleven. Aan de bijeenkomsten in Huize Tazelaar in Zeist denk ik met warme gevoelens terug. Hoewel er dikwijls harde noten werden gekraakt, vormden zij voor mij altijd een inspirerend moment van rust en bezinning in een doorgaans hectisch arbeidsleven. Frits en Kène, ik ben jullie veel dank verschuldigd voor alle tijd en aandacht.

Dit promotieproject maakt deel uit van het door Theo van Tilburg en Pearl Dykstra geïnitieerde NWO-onderzoeksprogramma ‘Diversity in Late Life’. Aan de basis van dit proefschrift liggen gegevens die in 1995 door Kène Henkens

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zijn verzameld bij een tweetal grote ondernemingen. Dat het mogelijk was om in 2001 een tweede onderzoeksrunde te organiseren is mede te danken aan de inspanningen van Barbera van Dijkum-de Jong en Ronald de Leij, bestuursleden van de Stichting Management Studies. Ik ben de Stichting Management Studies, de Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO), de deelnemende bedrijven en de vele respondenten dankbaar dat zij mij de mogelijkheid hebben geboden dit onderzoek uit te voeren.

Toen ik in 1990 bij het NIDI begon voelde ik me er direct welkom. Het NIDI vormde al die jaren voor mij een inspirerende en vertrouwde werkplek. Ik heb er onder de directeuren Gierveld, Van Imhoff en Willekens alle mogelijkheden en ruimte gekregen om mij te kunnen ontplooien en collega's ontmoet waar ik op kon bouwen. Ik realiseer me goed dat ik mijn 'eerste' directeur Professor Jenny Gierveld bij herhaling heb teleurgesteld door mijn gebrekkige belangstelling om te promoveren. Beste Jenny, het is er uiteindelijk toch van gekomen, en wel op een onderwerp dat je na aan het hart ligt.

Bij mijn NIDI-collega's klopte ik nooit tevergeefs aan voor raad of een luisterend oor. In het bijzonder wil ik hierbij mijn kamergenoten Harry van Dalen en Judith Soons bedanken voor de juiste mix van concentratie en ontspanning. Op deze plaats wil ik ook stilstaan bij het overlijden van collega en kamergenoot Evert van Imhoff in 2004. Hij wordt node gemist. Zonder volledig te zijn wil ik verder een aantal collega's bedanken voor hun directe of indirecte bijdrage aan dit proefschrift. In de eerste plaats de twee hoofden van de afdeling Sociale Demografie Aat Liefbroer en Kène Henkens. Verder collega promovenda Helga de Valk, onze parallel lopend proces heeft mij gestimuleerd om mijn planning ook daadwerkelijk te realiseren. Collega's Leon Vermeulen en Amriet Niranjana van de afdeling Ondersteuning leverden beide op hun eigen terrein waardevolle steun. Tonny Nieuwstraten en Jacqueline van der Helm hielpen bij de dataverzameling en zorgen voor de opmaak van dit proefschrift. De vertaling en het fatsoeneren van mijn Engelse teksten was in handen van ex NIDI-collega Willemien Kneppelhout.

Mijn vrienden en familie hebben dit project met grote belangstelling gevolgd. Dat mijn broer uit Korea bij de verdediging van dit 'proefboekje' aanwezig wil zijn ontroert me.

Mijn ouders wil ik bedanken omdat zij mij altijd hebben gestimuleerd om mijn talenten te benutten. Zij maakten het mij uiteindelijk mogelijk om na een paar

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jaren werkzaam te zijn geweest als lerares de overstap naar de universiteit te maken voor een tweede kans in het Wetenschappelijk Onderwijs.

Steun van je partner en gezin is onontbeerlijk bij het schrijven van een proefschrift. Pas toen iemand mij vroeg of mijn man er wel achterstond, realiseerde ik me dat het ook anders kon. Ik ben gezegend met een partner die volledig achter mij staat. Dit werd duidelijk toen bij aanvang van mijn promotieproject bekend werd dat zijn standplaats zou worden verplaatst van Delft naar Helmond. *Mijn* plannen hebben mede een rol gespeeld bij *zijn* beslissing om het bedrijf niet te volgen. Er volgde een onzekere periode van herbezinning en zoeken naar een nieuwe baan. Gelukkig is dit uiteindelijk goed uitgekapt. Niklaas, bedankt voor de ruimte die ik kreeg!

Het is mijn persoonlijke ervaring dat kansen zich meestal op precies het goede moment in het leven voordoen. Het feit dat ik toen ik begin 2003 startte met het promotieproject een gezin met twee opgroeiende kinderen had, betekende dat ik niet veel gelegenheid had om ook thuis te werken. Ik zie dit niet als een restrictie. Marte en Pim, doordat ik het leeuwendeel van mijn proefschrift in werktijd heb kunnen schrijven, hebben jullie er niet zo veel van gemerkt. De laatste maanden was dat anders en brachten jullie mij kopjes thee en chocola. Een heerlijke verwenning. Toch blijft het lastig, zo'n moeder met ambitie.

Met mijn onderzoek naar ouderen op de drempel van arbeid en pensioen heb ik een duidelijke inhoudelijke focus gekozen die zijn vervolg kent in mijn aanstelling als post-doc bij het door NWO gehonoreerde VIDI-onderzoek "The process of retirement" van Kène Henkens. Ik zie er naar uit samen met hem dit onderzoeksterrein verder te ontwikkelen.



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## 1. Background and research questions

### 1.1. Introduction

This study examines the experiences of older adults in their transition from work to retirement in the Netherlands. Nowadays, retirement after a working life is taken for granted. From a historical perspective, however, retirement is a relatively new phenomenon and its meaning has drastically changed over the past 50 years. It was not until 1957, with the introduction of the Old Age Pensions Act (AOW), that everyone in the Netherlands was entitled to a basic state pension upon reaching the age of 65. Initially, however, the state pension barely covered the costs of living. And since few older persons at the time had supplementary pension income, many elderly households had no choice but to supplement their state pension with a social security benefit or by working (Smolenaars, 2000). Up until the 1960s retirement was considered as a threat rather than an opportunity for older adults. Many physicians regarded retirement as a hazardous transition. Their concern was based on the idea that retired people faced “dire emptiness” and related adjustment problems (Bijsterveld, 1995). Fifty years on, in 2005, attitudes towards retirement have changed drastically. Society has discovered that there is life beyond retirement. The idea that people can enjoy the Good Life in early retirement without any financial worries also known as the ‘Zwitserlevengevoel’<sup>1</sup>, has been commercially promoted in the Netherlands. Early retirement is the norm. In recent decades very few older workers have continued working until retirement age, and paid employment after the age of 65 has become even more exceptional (OECD, 2005). The financial situation of retired people has improved greatly over the past decades. No more than two percent of the over-65s live off a pension amounting to less than 60 percent of their last earned income, compared with as many as 60 percent in 1987 (SER, 2000). In the media and commercials, early retirement is depicted as an attractive and tempting option, which every worker will opt for if at all financially feasible. This representation suggests that retirement is a transition that can be made smoothly and that the adjustment is quick and easy. Little is known, however, about the actual process of adjusting to retirement in the Netherlands. Most existing research conducted in the Netherlands and elsewhere focuses on the implications of retirement for specific

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<sup>1</sup> The life insurance company Swiss Life has used the slogan of the ‘Zwitserlevengevoel’ for 20 years now.

aspects, such as people's social contacts (Van Tilburg, 1992; Bossé, Aldwin, Levenson, Spiro III and Mroczek, 1993; 2003), their physical and mental health (e.g. Ekerdt, Baden, Bossé and Dibbs, 1983; Drentea, 2002; Lindeboom, Portrait and Van den Berg, 2002; Mein, Martikainen, Hemingway, Stansfeld and Marmot, 2003), and marital relationships (Szinovacz, 2000; Szinovacz and Schaffer, 2000). Findings of foreign studies cannot be simply transposed to the Dutch situation. The financial circumstances of early retirement, for example, are far less favourable in the United States and in the United Kingdom than they are in the Netherlands, and contrary to the situation in the United States, retirement in the Netherlands usually means the definitive departure from the labour market.

This study seeks to provide more insight into adjustment to retirement by older workers and their partners in the Netherlands. The central question is how employees and their partners experience retirement in terms of it being a voluntary or involuntary transition, why adjustment to retirement is much more difficult and has more negative implications (in terms of health and well-being) in some cases than in others, and which factors play a dominant part in this respect. To answer these questions, multi actor panel data were collected about just under 800 older workers. In cases where there was a spouse present in the household, the spouse was interviewed independently.<sup>2</sup>

The retirement arena is in a state of flux. This study seeks to shed more light on how changes in legislation can affect —either positively or negatively— the well-being and health of older adults. We expect that, due to the changes in pension legislation, companies and organizations will face more varied and more unpredictable retirement behaviour. An understanding of the relationship between well-being, health and retirement could offer some direction on how to manage retirement processes.

At the same time, this study may improve our understanding of how work and the loss of one's work affect successful aging, and offer more insight into the circumstances under which retirement jeopardizes the well-being and health of older workers and/or their spouses.

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<sup>2</sup> The majority of couples were married. Non-married couples constituted three percent of the sample. In the remaining of this book, the terms 'spouse' and 'partner' will be used interchangeably.

This study is related to other research conducted by the Netherlands Interdisciplinary Demographic Institute (NIDI). In the first place, it is embedded in the Aging & Labour Market research program, which examines the issue of an aging labour market seen from the perspective of society at large and from that of individual organizations as well as from the perspective of the older workers themselves and the households of which they form a part. Micro-level research on decision-making processes about labour market behaviour has shown that the labour market preferences and behaviour of older workers and their partners are socially embedded. In the pre-retirement phase, partners and supervisors are important forces in the retirement decision-making process (Henkens, 1998). The study presented here elaborates on this latter line of research and focuses specifically on the post-retirement phase, that is to say, adaptation to retirement. This study is also linked to other NIDI research that focuses on life course transitions—such as family formation and dissolution, and childbearing—and their effects on well-being (e.g. Fischer, 2004; Soons, 2005), and to research that focuses on living conditions and well-being in old age and on the role of family ties (e.g. De Jong Gierveld, 2004b; Dykstra and De Jong Gierveld, 2004).

This study on retirement should be seen against the background of demographic trends in the Netherlands as well as developments in labour participation and retirement, in particular early retirement. These issues will be addressed in section 1.2. I will discuss the most important lines of research with regard to the study of the retirement transition (section 1.3). In section 1.4, I will try to integrate the insights provided by the various disciplinary perspectives in my conceptual models explaining adjustment to retirement and the impact of retirement on well-being and health. The data will be discussed in section 1.5. At the end of this introductory chapter, I will present a brief outline of this book and the research questions addressed in the various chapters.

## **1.2. Aging, the labour market, retirement and early retirement**

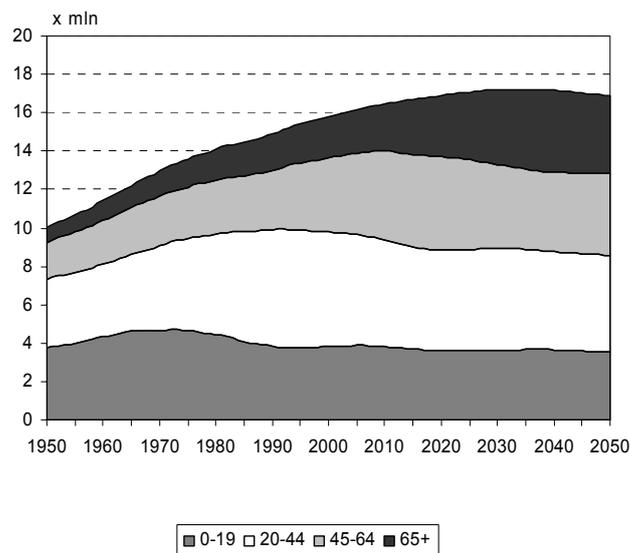
### *1.2.1. Demographic developments*

In the coming years the Netherlands, like every other country in Europe, will inevitably face an aging population. The aging process, which set in in the late 1960s and was caused primarily by a declining number of children per family, is giving rise to major changes in the composition of the population. The share of young people (0-19 years), which stood at 37 percent in 1950, has dropped to 25 percent now, and will continue to decline to an expected minimum of 21 percent

around 2030. The strongest aging wave is yet to come, however. *Figure 1.1* shows the development of the population up to 2050. Total population numbers are expected to continue to rise somewhat in the years ahead. Whereas the number of elderly is set to grow rapidly, the working age population (20-64 years) will stabilize. Now at 10 million, the group of people of working age will increase slightly to around 10.3 million in 2011, after which a gradual decline will set in.

Due to the strongly improved living conditions of the past century, an increasing number of people live to reach the retirement age of 65 years. No more than half the birth generation of 1885 (48 percent of the men and 51 percent of the women) celebrated their 65<sup>th</sup> birthday in 1950. For the generation of 1935, who reached retirement age in 2000, this had risen to 75 percent (Van Dalen, Van Poppel and Van Solinge, 2006). Life expectancy after age 65 has increased as well. Whereas the average 65-year-old man in 1950 had another 14.4 years to live, and the average 65-year-old woman another 15.7 years, the remaining life expectancy for 65-year-old men had risen to 16.3 years in 2000 and that for women to 19.8 years (Van Poppel, Deerenburg, Wolleswinkel-van den Bosch and Ekamper, 2005).

*Figure 1.1. Population of the Netherlands by age, 1950-2050*



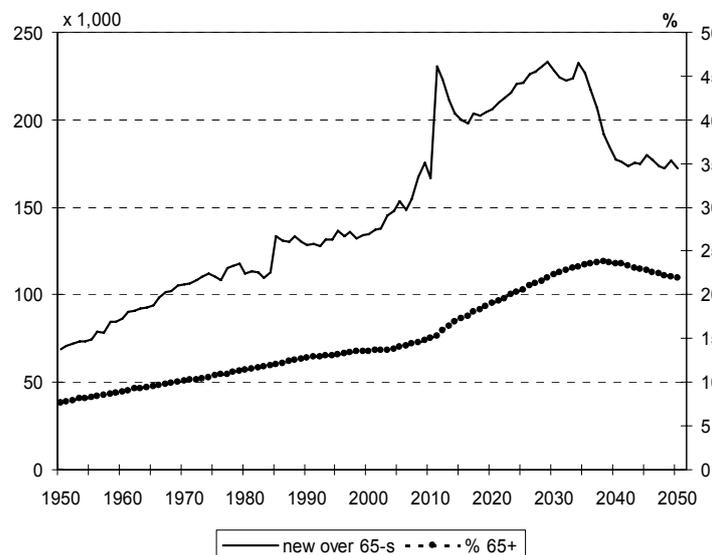
Source: CBS Statline.

The percentage of over-65s in the population is growing as a result of a combination of a rising number of elderly and a declining number of young people. This percentage, now 14, has doubled since 1950 and is expected to continue to increase to a maximum of 24 percent around 2040, when the number of over-65s in the Netherlands will exceed four million. A record number of people will reach retirement age in 2011, the year in which the post-war baby boom of 1946 will celebrate their 65<sup>th</sup> birthday.

### 1.2.2. Developments in the labour market

Many changes have taken place in labour participation in the past decade. We see different trends for men and women. *Figure 1.3a* shows the age-specific labour participation<sup>3</sup> of men in the past century. We see a sharp decline among the oldest and youngest age groups. Whereas young people are entering the labour market later in life because of extended schooling, the age at which people leave the labour market has declined. The situation seems to have changed since the mid-1990s, however (*table 1.1*). After a steady decline in the

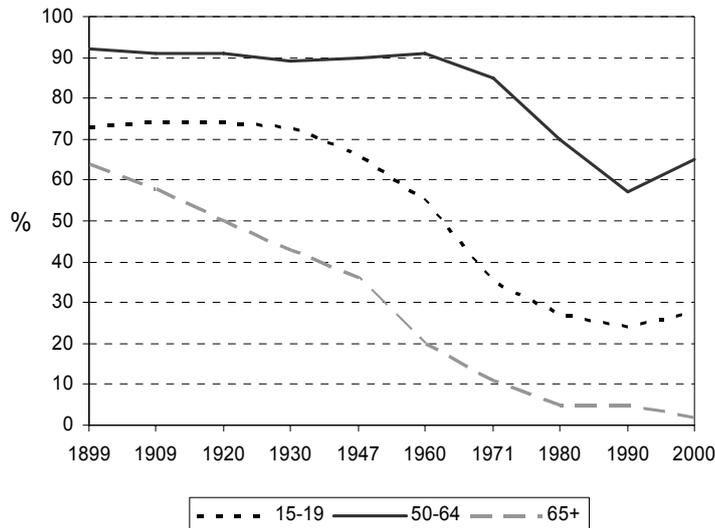
*Figure 1.2. Number of the new over-65s and percentage of over -65s in the population, 1950-2050*



Source: CBS Statline.

<sup>3</sup> Labour participation=Net labour force participation: the active labour force as a percentage of the working-age population.

Figure 1.3a. Developments in the age-specific labour participation of men in the past century



Source: CBS Statline.

labour participation of the 50-64 year age group, which lasted several decades, there has been a slight upturn in recent years. At the same time, we have seen a rise in the labour force participation<sup>4</sup> of the over-65s for the first time in a hundred years. The trend towards an ever younger age at retirement seems to have come to an end. As a result of a number of developments, including changes in early retirement arrangements (Corpeleijn, 2005; Siermann and Dirven, 2005), the average age at retirement has risen slightly in the past few years.

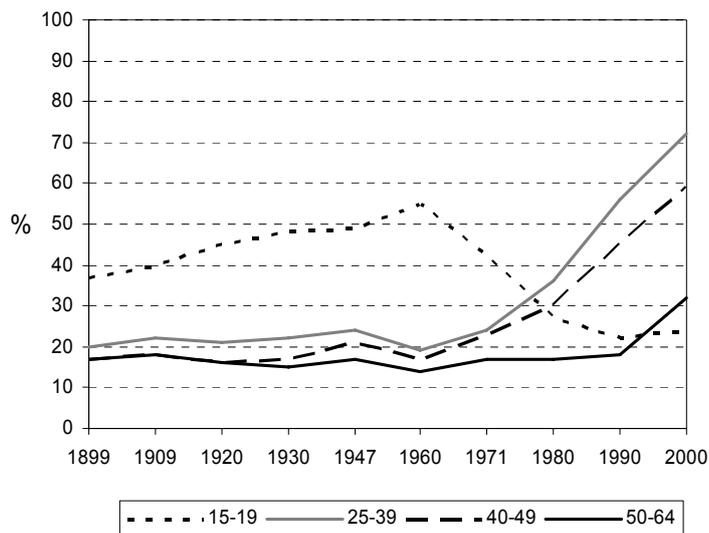
The time spent in the labour market by men has dropped sharply as a result of the developments described above and despite the most recent trends in labour participation. Combined with the increased life expectancy, this has resulted in a substantial decrease in the time of life spent in the labour market. Liefbroer and Henkens (1999) calculated that whereas men born between 1903 and 1908 spent three quarters of their lives in the labour market, those born around 1935 spent no more than 58 percent of their lives in employment.

<sup>4</sup> Labour force participation=Gross labour force participation: this rate includes the employed and unemployed labour force.

Trends in the labour participation of women have been very different (*figure 1.3b*). Women, too, have increasingly entered the labour market later in their lives in the past 50 years. More so than in the past, however, the younger cohorts of women continued working after the birth of their first child (Van Solinge and Fokkema, 2000). The labour participation of women with small children has increased sharply over the past decade: from one in every five 30 to 34-year-old women in 1975 to two in every three in 1995 (Steenhof and De Jong, 2001).

Female labour participation is on the rise among almost all age categories. Developments in the 50-plus age category are remarkable, however. Whereas men in this age group withdrew from the labour market in large numbers, we saw a rise in employment among women of the same age. The sharpest rise in labour force participation took place in the 50 to 54 age group: from 21 percent in 1971 to 49 percent in 2000 (table 1.1).

*Figure 1.3b. Developments in the age-specific labour participation of women in the past century*



Source: CBS Statline.

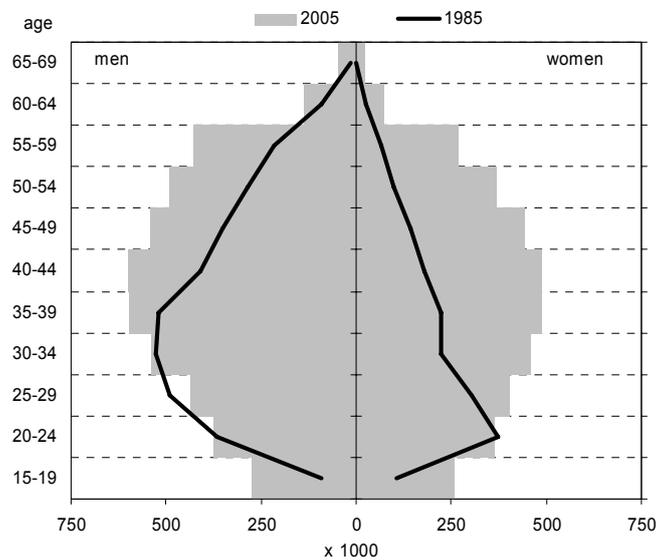
*Table 1.1. Labour force participation (%) in the Netherlands by sex and age, 1971-2005*

Sex	Age	1971	1975	1981	1985	1990	1995	2000	2005
Men	50-54	93	89	85	83	85	86	88	91
	55-59	87	80	72	67	66	60	70	79
	60-64	74	65	43	30	23	20	27	34
Women	50-54	21	23	26	29	39	48	58	69
	55-59	18	18	18	19	25	29	39	50
	60-64	12	11	8	7	9	8	12	18

Source: Ekamper (2006) based on statistics compiled by Statistics Netherlands, CBS (1971-1981) and Eurostat (1985-2005).

Population aging and trends in labour participation affect the composition of the active labour force. The size of the younger generations who become available for the labour market is shrinking and the labour force itself is aging due to the declining number of births since the end of the 1960s. *Figure 1.4* shows changes in the age structure of the active labour force in recent decades.

*Figure 1.4. The active labour force in the Netherlands by sex and age in 1985-2005*



Source: CBS Statline

### 1.2.3. Retirement and early retirement trends

Retirement—that is to say the institutionalized withdrawal from the labour force—is a relatively new phenomenon. In the Netherlands, state pensions for the over-65s (AOW) were introduced less than 50 years ago. Until their introduction in 1957 age alone was not sufficient reason to retire. Those who were old and healthy simply continued working (Putman, Stavenuiter and Smolenaars, 1999). A labour force survey held in 1889 showed that 64 percent of the male population aged over 65 still worked. By way of comparison: in 2000 labour participation among men in the same age category was no more than two percent. In the past, people who were old and disabled and were therefore no longer able to work did have a problem. Old age was often synonymous with poverty. Even as early as in the 19<sup>th</sup> century, however, there were some employers who set up funds for their employees as a buffer in the event of accident or illness. A small number of sectors even had pension schemes, such as the civil service from 1846, as well as a few individual companies, including Van Marken (since 1871) and Calvé (since 1890) in the city of Delft. The benefits were generally too low, however, to cover the cost of living. The call for collective schemes grew louder in the last few decades of the 19<sup>th</sup> century, and this triggered a discussion about the role of the state in introducing social security legislation (Smolenaars, 1999; 2000). The introduction of disability legislation (*Invaliditeits Wet*) in 1913 was a major step forwards in terms of social security. This law covered financial risks in the event of disability but only for people in paid employment; it was an employee insurance scheme. Wage earners were entitled to a ‘disability’ benefit upon reaching the age of 70 years. These old-age pensions were paid by the state.<sup>5</sup> The pension benefit did not fully cover the cost of living<sup>6</sup>, but was designed to supplement income from paid labour. The law was extended and improved after 1919, when people were entitled to a pension upon reaching the age of 65. It then became a compulsory insurance and contributions were paid by employers in the form of insurance stamps affixed to cards each week. After 50 years of employment, this would give employees an old-age pension of at most six guilders (€ 2.72) a week. For the sake of comparison we note that in 1920 an

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<sup>5</sup> The age limit of 70 years was chosen for financial reasons; a lower age limit would have been too expensive. This age limit was later lowered, at the initiation of the Socialists and Social-Democrats, because very few labourers reached this retirement age (Smolenaars, 2005). Based on the life tables, we can estimate that about one quarter of men and women born in 1840 lived to reach the age of 70 (Van Poppel *et al.*, 2005).

<sup>6</sup> Unmarried people were entitled to a pension of two guilders (€ 0.91) a week; married couples were entitled to three guilders (€ 1.36) a week.

average net weekly wage of an industrial labourer was 29 guilders (€ 13.18) a week (Van der Spek, 1976).

A commission was set up during the Second World War to prepare a new social security system based on the British model. The commission was in favour of a compulsory insurance — that is to say, an insurance that would also cover non-working people against the consequences of old age. A temporary pensions act, the so-called Noodwet Drees, was enforced in 1947 in anticipation of more permanent legislation (which was later to become the Old Age Pensions Act, AOW). Under this ‘Noodwet’, breadwinners aged 65 and older below a given income level were entitled to a state pension.

The Old Age Pensions Act (AOW) came into force in 1957. Under the AOW, every resident of the Netherlands was entitled to a basic pension upon reaching the age of 65. The age criterion of 65 years was in line with the age limit of the disability legislation. People were not obliged to stop working; the benefits were provided on the basis of a pay-as-you-go system. Whereas the AOW was designed as a basic pension, it soon became clear that the elderly could not live off the pension alone. As a result, as many as 20 percent of men over the age of 65 were still active in the labour market in 1960. The pension benefit was raised to the subsistence level in 1965. In 1985 the right to a state pension was individualized, giving also married women the right to an AOW-benefit (Smolenaars, 2000).

More often than not, workers did not remain working till the official retirement age of 65 years. Many older workers withdrew from the labour market prematurely due to personal circumstances (e.g. poor health) or external circumstances, such as business close downs (see also figure 1.3a). Until the mid-1970s, the time span between early retirement and the moment at which people were entitled to a state pension was generally tided over with the aid of disability or unemployment benefits, which served as *de facto* early retirement schemes. When the Dutch economy slipped into a recession following the 1973 oil crisis, unemployment rose rapidly, in particular among young people. The trade unions came up with the idea of improving the employment opportunities of young people by stimulating the early retirement of older workers. The idea was that this would serve two objectives: voluntary early retirement would allow older workers, who were no longer able to meet the changing requirements of their jobs, to make way for young job seekers. The first experiments with voluntary early retirement (VUT) were carried out in 1976 in the education

sector and construction industry. Soon after the experiments had begun, it became clear that the early retirement arrangements could not be reversed easily, since expectations had been raised. During subsequent collective bargaining negotiations early retirement schemes were included as a standard term of employment by almost all branches of industry (Van Koningsveld and Van Ginneken, 1988). The first schemes offered 63- and 64-year-olds the possibility of leaving the work force before actual retirement age. About one quarter of the eligible employees seized the opportunity to retire early (Huizinga, 1977). This percentage has increased steadily over the years, however, and the age at which people are able to withdraw from the labour force has dropped. In the 1990s, more than 300 different early retirement schemes existed in the Netherlands (SZW, 1995). These schemes were characterized by quite favourable financial conditions and relatively little variation between companies and organizations, both in the public and in the private sectors (Van Dalen and Henkens, 2002). Most Dutch firms used a fixed early retirement age (usually around 60), after which the employees were able to leave the labour force. Replacement rates were generally around 80 percent of the gross wage. Early retirement benefits bridged the period between the cessation of work and entitlement to a state and supplementary pension. Payment of pension contributions and other social insurance contributions continued during the early-retirement period, leaving the pension to which retirees were entitled at age 65 largely unaffected. The system was based on pay-as-you-go financing.

From the mid 1990s, most existing early retirement (VUT) schemes were changed into flexible early retirement (FER) arrangements because the system was becoming unaffordable due to the high participation rate combined with the financing method. At the same time, the trend towards ever earlier retirement inevitably had to be reversed in order to ensure a sufficient supply of labour in the future. The FER system was collective, and participation compulsory. Pension entitlements were earned on an individual basis, however. Early retirement benefits were directly related to the individual employee's employment history and the contributions paid. The shorter the 'pension career', the lower the early retirement benefits. The FER system was based on a standard early retirement age (usually around 62, which is 1-2 years later than in the VUT schemes) but offered employees flexibility in choosing their own age at which they wished to retire and —through additional savings— the level of benefits to be received. Employees with a complete pension history (based on 40 years of contribution) who left the labour force at this standard early retirement age received between 70 and 80 percent of their gross wages. Shorter or broken

histories implied lower benefits. Employees were further entitled to stop earlier or later than this standard early retirement age, in which case the benefits were lower or higher respectively. These changes led to higher labour participation among 50 to 64-year-olds and a slight increase in the average age at retirement (Corpeleijn, 2005; Siermann and Dirven, 2005).

The Dutch government recently announced that its plans to further discourage early retirement would be one of the priorities for policy in the coming decades. From 1 January 2006, the possibilities of retiring before the age of 65 have been greatly reduced for employees born after 1 January 1950. Pension schemes are no longer allowed to include a bridging pension and pension rights have to be based on a retirement age of 65 years. Tax deductibility of pre-pension arrangements was also abolished with effect from 1 January 2006. These changes mark the end of collective pre-pension schemes, which have been replaced by a life course savings scheme (*Levensloopregeling*), a scheme under which people can save part of their salary to finance a period of unpaid leave in the future or to retire early (SZW, 2006). It is not yet clear exactly how this new scheme will work out in practice. This will depend in part on the specific terms set down in the various collective labour agreements. Participation in the scheme is an individual decision. We already know now that the costs of retiring early will be considerably higher for individual employees. Early retirement has thus become an option for which each employee has become individually responsible. The degree to which people are able to realize their preferences for early retirement will depend on the choices they made earlier in their lives and the financial leeway they have later in life.

In summary, we can say that the basis for early retirement arrangements has changed considerably as a result of successive changes in legislation. The collective, inflexible but generous early retirement schemes (VUT) in the Netherlands have made way for individual arrangements under which employees voluntarily save money or time for (special) leave or for early retirement. The rise and fall of early retirement is not unique to the Netherlands; similar developments are taking place across Europe (cf. Maltby, De Vroom, Mirabile and Overbye, 2004).

### **1.3. Research on retirement and early retirement as a life event**

Retirement is one of the major life transitions in late adult life and has a long history of scientific investigation. The impact of retirement and early retirement

has been studied from a variety of scientific disciplines, such as sociology, psychology and epidemiology. Most retirement studies follow general research traditions in studies of life events, such as stress research, the role theoretical approach, psychological adjustment theories, and the life course perspective. In this section, I will briefly describe these four research traditions and their significance for retirement research.

### *1.3.1. The stress approach*

Characteristic of the stress approach is that life changes or events are viewed as being inherently stressful and having similar effects on all who experience them. Early studies conceptualized life events in terms of the amount of readjustment or change that the events were likely to entail (see for example: Holmes and Rahe, 1967). Over time, a more complex view of stress and its consequences evolved (George, 1993). Later scholars have argued that the consequences of life events depend on the nature of the events —e.g. in terms of desirability and controllability— (Thoits, 1983), and growing attention has been paid to individual differences in vulnerability to stress (Lazarus and Folkman, 1984). Retirement research within the stress tradition concentrates on the outcomes of the transition process. The emphasis is on the prediction of illness, rather than on the explanation of the mechanism or conditions by which the transition affects physical or mental health (George, 1993). The central question is whether or not retirement affects health (e.g. Barron, Strein and Suchman, 1952; Vallery-Masson, Poitrenaud, Burnat and Lion, 1981). Models are straightforward and usually concentrate on socio-demographic background variables and key resources (e.g. age, gender, marital status, income). This approach is still common in epidemiological studies into the impact of retirement on health or health behaviour (e.g. Gallo, Bradley, Siegel and Kasl, 2000; 2001; Mein *et al.*, 2003). Research results suggest that retirement does not categorically harm or benefit health (see for an overview: Minkler, 1981; Kasl and Jones, 2000).

### *1.3.2. The role theoretical approach*

The role theoretical approach posits that human behaviour is guided by expectations held both by the individual and by other people. The expectations correspond to different roles individuals perform or enact in their daily lives. Throughout the life course, people enter and exit social roles; viz. they become parents, retirees, or widows. Role entry and exit are, by definition, transitions (George, 1993). Roles exert a strong influence on individual identity. Role theory purports that leaving a role that is vital to an individual's self-identity puts a risk on their well-being. In the older literature, role transitions were considered

role losses and viewed as life crises accompanied by decrements in individual and social functioning (see for an overview: Ferraro, 2001). Later studies led to more of a 'contingency perspective' on the consequences of role transitions. Individuals were assumed to vary in the extent to which they are committed to or identify with their different roles (Drentea, 2002).

Much of the retirement research is based on the role theoretical approach. The older studies carried out in the 1950s and 1960s viewed retirement as a form of role loss creating a challenge to personal adjustment. Retirement was regarded as a 'crisis', often leading to an atrophy of social relations and a decline in health (Ferraro, 2001). This deterministic view of retirement as a universally stressful life event was renounced in the 1980s. Since then, there is growing recognition of heterogeneity in the retirement transition. In contrast to the older literature, where the main focus was on negative outcomes, more recent research acknowledges that retirement may also, or predominantly have beneficial effects on health and well-being, and that the outcomes may vary among individuals. Models emphasize the importance of resources, such as income, education and social relationships (e.g. Beck, 1982; George, Fillenbaum and Palmore, 1984; Martin Matthews and Brown, 1987) as well as commitment to work and work role attachment (Drentea, 2002).

### *1.3.3. Psychological approach to life transitions and adjustment*

Psychological oriented research on life transitions concentrates on adjustment, or coping reactions to life changes, and how adjustment may vary over time. Coping refers to the specific efforts, both behavioural and psychological, that people make to master, tolerate, reduce or minimize stressful events. Folkman and Lazarus (1980) have distinguished two general coping strategies: whereas problem-solving strategies are efforts to do something active to alleviate stressful circumstances, emotion-focused coping strategies involve efforts to regulate the emotional consequences of stressful or potentially stressful events. A central assumption guiding psychological stage models of change is that the impact of life transitions may vary within the individual over time, and that adjustment may reflect specific patterns of change. Following a loss, individuals have to go through several stages, moving from distress to adaptation to recovery (e.g. Kübler-Ross, 1969; Bowlby, 1980; Williams, 1999). Stage models have long dominated the psychological literature on the responses to life changes or loss (Wortman, Cohen Silver and Kessler, 1993). Stage models are very popular among practitioners and the broader public and have also been applied to responses to the loss of employment. Atchley (1976) proposed a five-

stage model for retirement adaptation: honeymoon, disenchantment, re-orientation, stability and termination. The problem with these stage models, however, is that they usually fail to define number, sequence, content and length of phases or stages, so that no verifiable hypotheses can be derived (see: Fryer, 1985 for an evaluation of this literature).

The amount of psychological research on retirement adaptation is relatively limited. Existing research focuses on the adjustment process (e.g. Richardson and Kilty, 1991; Thérault, 1994; Gall, Evans and Howard, 1997) and psychological outcomes of retirement, such as self-esteem (Reitzes, Mutran and Fernandez, 1996b) and psychological well-being (Kim, 2000). The role of personality characteristics or psychological resources as factors influencing adjustment to retirement and early retirement has been discussed by several authors (e.g. Reis and Pushkar Gold, 1993; Taylor and Cook, 1995), but the number of empirical studies that include psychological determinants of retirement adjustment is limited (e.g. Robbins, Lee and Wan, 1994; Gall *et al.*, 1997). Some older retirement studies (Ekerdt, Bossé and Levkoff, 1985; Richardson and Kilty, 1991), have provided some support for a honeymoon phase, that is, an initial euphoric reaction to retirement, followed by some decline in well-being. Other studies failed to sustain this pattern and reveal that there is considerable variability in the specific kind of emotions experienced, as well as in their sequence and intensity (e.g. Savishinsky, 2000; Price, 2003; Nuttman-Shwartz, 2004).

#### *1.3.4. Life course perspective*

The life course has become a prominent framework for the examination of the dynamics, heterogeneity and outcomes of life events. Transitions, and the trajectories in which they are embedded, are key concepts in life course research (Elder and Johnson, 2003). Transitions refer to status passages that mark socially significant points of change in people's lives. Trajectories are made up of various transitions. They provide a long-term view of specific dimensions of an individual's life over time, such as work, marriage and parenthood. Characteristic of the life course approach is that life transitions are viewed in relation to earlier life circumstances and transitions in other life domains (George, 1993). The life course approach emphasizes that life transitions are contextually embedded (Elder and Johnson, 2003). The consequences of life transitions are assumed to vary according to their timing in the individual's or the family's life, as well as in relation to social and age norms. Life transitions take place in the context of ongoing social relations, and are shaped by these

relationships. This notion of interlinked lives, or social embeddedness (cf. Hagestad, 1990; Elder and Johnson, 2003) is another key principle of the life course perspective. Psychological predispositions have received little attention to date. The recognition of the importance of human agency in how life transitions are experienced is relatively new (Elder and Johnson, 2003). Examples of research employing a life course perspective include studies of the influence of early or midlife events on later life outcomes, as well as studies on the timing and sequence of key events such as marriage and retirement.

Much of the more recent research on the impact of retirement is grounded in a life course perspective (Moen, 1996; Szinovacz, 2003). Retirement studies from a life course perspective emphasize the contextual embeddedness of the retirement transition as well as the interdependency of lives and life spheres. Quick and Moen (1998) investigated the effect of gender, employment history and transition characteristics on retirement satisfaction. Other examples are studies that focus on the synchronization of work and retirement within couples (Henretta, O'Rand and Chan, 1993b) and its effect on marital quality or well-being (Ekerdt and Vinick, 1991; Moen, Kim and Hofmeister, 2001; Szinovacz and Davey, 2004).

#### **1.4. Theoretical considerations**

From a theoretical point of view it is hard to compare the perspectives as described in the previous section. They stem from various scientific disciplines, and some of them are typically rather robust; others more complex. Based on the literature, we can state that they are complementary rather than contradictory. They focus on different aspects of the retirement process from a different angle. These perspectives merely act as a general framework and offer few concrete hypotheses as to how and why retirement affects well-being and health. An elaborate general theory in this field is lacking and it is *not* the primary ambition of this study to fill this gap. The objective of this study is to advance the existing literature on the impact of retirement by integrating insights provided by the various scientific disciplines into a single conceptual model. The three major characteristics are:

1. A broader view of the structural retirement context (including not only health and finances, but also information about leisure, work and the family);

2. Acknowledgement that the retirement experience may be dependent on attitudes and behaviour of relevant others in the social network (social interdependency);
3. Acknowledgement that the retirement experience may be dependent on the individual's subjective evaluation and psychological resources as well. These three elements will be elaborated on below.

*The structural context* – This study adopts the life course notion of contextual embeddedness. Contextual embeddedness of the retirement transition implies that the experience of retirement will be contingent on the specific circumstances in which retirement occurs. The following domains of life are distinguished: family, work, finances, health and leisure. This is a broader view of the retirement context than usually employed in retirement studies where this context is generally shaped by key resources such as health and income, occasionally complemented with job characteristics.

*Social interdependency* – A key tenet in the life course perspective is that life transitions are socially embedded, and that lives are interlinked (cf. Hagestad, 1990; Moen *et al.*, 2001; Elder and Johnson, 2003). Social embeddedness of the retirement transition implies that the retirement process is shaped by social relationships within the family and with colleagues and supervisors. Retirement is largely experienced through changes in these relationships. Social embeddedness has been variously acknowledged in retirement studies, e.g. by including spousal or marital relationship characteristics in the models (Haug, Belgrave and Jones, 1992; Henretta, O'Rand and Chan, 1993a; Smith and Moen, 1998; Szinovacz and DeViney, 2000). In this study, we assume social interdependence between actors (see also: Henkens, 1999; Pienta and Hayward, 2002; Davey and Szinovacz, 2004). Spousal attitudes and behaviour are considered important factors in the adjustment process. In addition, we suppose that relationships at work, that is the attitudes of co-workers and supervisors, will affect the workers' subjective experience of the retirement transition.

*Psychological determinants* – Life course scholars envisage the life course as a product of social structure and human agency. Individuals are not passive products of their environment, they are assumed to construct their own life course through the choices and actions they take within the opportunities and constraints of history and social circumstances (Settersten, 2003). Psychological factors are assumed to play a role in the way older workers deal with retirement. Psychological resources may determine whether people take advantage of the

material and social resources available to them (Taylor and Cook, 1995). We assume that self-efficacy<sup>7</sup>, which can be considered a psychological account of agency (Elder, 1994; Elder and Johnson, 2003), will affect adjustment to retirement as well as the impact of retirement in terms of well-being and health. Further, people do not only respond to the ‘objective’ features of a situation. Under equal conditions, the interpretation and evaluation of life circumstances may vary across individuals. Given the retirement context, individuals may anticipate the retirement transition differently. This may be true for two older workers within different households as well as for partners within the same household. Pre-retirement expectations of the consequences of retirement are assumed to have consequences for adjustment to retirement as well as retirement satisfaction.

A structured approach was used in building the model as well as in the analyses. We started with a relatively robust and simple model with an emphasis on the structural context of retirement. In subsequent steps the model was extended and developed into a more complex model in which social interdependence and psychological determinants were also included. This step-by-step approach puts on view how robust the explanation can be and how complex it should be (Lindenberg, 1992).

## **1.5. Method**

### *1.5.1. Research design*

The research question and approach opted for have implications for the research design. To start with, in order to answer our research question on the determinants of difficult adjustment and dissatisfaction with retirement a longitudinal approach is required. Cross-sectional designs normally cannot disentangle causation vs. selection interpretations (Kasl and Jones, 2000). This study is based on longitudinal data on retirement behaviour in the Netherlands.

Second, consistent with the broad view of the retirement context, data collection was not restricted to key resources such as health and income, but also included information about characteristics such as marital relationship, job, leisure and social networks. Additionally, information was gathered on transition characteristics, in particular the extent to which retirement was voluntary.

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<sup>7</sup> Self-efficacy refers to the individual’s self-perceptions of the ability to cope with change in general (Sherer *et al.*, 1982).

A third implication is that the assumed social interdependency implies that interviewing only one of the actors, namely the older workers, will not suffice. We argue that a multi-actor design is the best way to acknowledge the mutual influences of spouses in the retirement process. For this study both members of the couple were questioned.

Fourth, in addition to structural characteristics of the retirement context, for both the older workers and their partners information was gathered on psychological characteristics, such as their subjective evaluation of retirement.

#### *1.5.2. Data*

This study on the impact of retirement is based on multi-actor panel data about 778 older employees (m/f) and their partners (if present). The first wave of this longitudinal study on retirement behaviour was carried out in the spring of 1995 (see: Henkens, 1998). In two large Dutch multinational companies, Unilever BV<sup>8</sup> and VendexKBB<sup>9</sup>, data were collected in collaboration with the HRM departments of the companies involved. The research design and questionnaires were developed by the NIDI researcher. The companies provided the sample, as well as financial economic background information (such as salary and replacement rates). The mailing was carried out by the companies, under the supervision of the researchers. Employees aged 55 and over working in the different operating companies of these multinationals received an envelope with the firm's logo, including a questionnaire for themselves and a separate questionnaire for their (married or unmarried) partners, if present. The questionnaires were accompanied by a letter of introduction from the researcher as well as a letter of recommendation from the CEO. Completed questionnaires had to be returned in a postage-free envelope to NIDI. In the questionnaires, the older workers and partners were asked about their preferences and plans regarding retirement; information was also gathered about their job, health, financial situation, and their expectations about retirement (for further details, see: Henkens, 1998). The data gathering method may explain in part the relatively high response. After having sent two reminders, a response rate of 78 percent was reached. The response rate of the spouses was particularly high; 97

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<sup>8</sup> Unilever is an international industrial organization active in the field of nutrition, hygiene and personal care. Unilever Nederland has approximately 5,000 employees working for about 30 operating companies and the company's international research lab.

<sup>9</sup> VendexKBB is the main non-food retail trade company in the Netherlands. VendexKBB operates twelve formats with a total of approximately 40 thousand employees.

percent of the partners of the workers who participated, returned the questionnaire.

In the spring of 2001, a follow-up study was conducted. The data collection formed part of a large-scale study into early retirement intentions and behaviour carried out on behalf of the Stichting Management Studies in The Hague (Henkens and Van Solinge, 2003). For the follow up, we approached participants of the first wave. There was some attrition due to company takeovers and mortality. A total of 1,058 questionnaires were sent off. The successful data gathering method used in the first wave in 1995 was again used in this part of the study. After two reminders, a response rate of 75 percent (workers) was realized. The 793 questionnaires returned showed that only four people had *not* made the transition into retirement in between the two waves of the study.<sup>10</sup> Because of their small numbers, the non-retirees have been excluded from the analysis. Complete information was gathered about a total of 778 people who had recently withdrawn from the labour force. The response rate among the partners of the older workers was 95 percent. Complete information was available for 559 couples who experienced the transition into retirement together.<sup>11</sup>

Collecting data in only a few large enterprises instead of several small ones has advantages as well as disadvantages. A major advantage is that higher response rates may be reached because of the organization's commitment to the data collection. A letter of recommendation from the CEO, as well as information about the study disseminated through channels such as the company newsletter may increase the involvement of employees. A high response is more likely to cover the full range of individual differences across respondents than a relatively low response. A second advantage is that information on a number of financial-economic (such as salaries and benefits) and other background characteristics can be obtained directly for the entire sample from the payroll administration. Moreover, financial information in particular tends to be difficult to obtain from mail questionnaires. Small companies with only a few workers in their (late) fifties are presumably less likely to provide this type of information for privacy reasons. A third, pragmatic reason is that it is much easier to coordinate data collection in a small number of large organizations than in a large number of small organizations.

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<sup>10</sup> In both companies, the standard early retirement age for these cohorts was 60.

<sup>11</sup> This sub-sample has been used in the studies presented in chapters 2 and 3.

Collecting data in only a few companies also has disadvantages, however. A first drawback is that the opportunity to study differences between industrial sectors and the impact of organizational and occupational characteristics on the dependent variables is limited. Moreover, the impact of regional differences in the labour market cannot be studied. Second, the fact that the older workers were sampled through their employers may imply that the observations are not independent. As a result, the sample may contain a source of non-independence that complicates statistical analysis. In order to control for the design effect, we adjusted for clustering at the company level as well as at the branch level, using robust regression. It is clear that, in view of the data selection strategy, the sample is not representative of all older workers in the age bracket studied. This holds in particular for the descriptive results of the study. The sample, however, contains substantial variation in terms of important variables, such as gender, educational level, job category and health. As a result, the explanatory mechanisms described in this book—that is, the conditions under which retirement results in difficult adjustment or negative outcomes—are assumed to be representative, at least for the population working in large companies.

## 1.6. Outline of the book

Chapters 2 to 5 present the results of the study. These chapters are written as separate articles. Two articles (chapters 2 and 4) have been published; the other chapters have been submitted for publication. Presenting the results in the form of separate articles has the advantage that each chapter can be read independently of each other. A disadvantage, however, is that part of the chapters will overlap. Overlap is particularly strong between chapters 2 and 3, since a number of conclusions presented in chapter 2 served as input for chapter 3.

Chapter 2 deals with *adjustment* to retirement by both members of a couple. In contrast to common practise in the retirement literature, where adjustment is assessed indirectly via outcome measures, such as life satisfaction or well-being, adjustment is here assessed in a more direct way. Adjustment is captured on the basis of the worker's and partner's own evaluation of the difficulties they had in adjusting to retirement. The first question addressed is how we can explain that some individuals adjust more easily than others. We pose that retirement is a couple affair. Both members of a couple have to adjust to the retirement of one of them, and partners may influence each other in the process of adjusting to retirement. The role of the partner is explicitly taken into account in a multi-

actor model. Both partners within the couple are treated as central actors, each influencing each other. The second question concerns the extent to which partners influence each other in the process of adjusting to retirement.

In chapter 3 the primary focus is on couples' *satisfaction* with retirement. This article builds on the results of chapter 2, and explores whether adjustment to and satisfaction with retirement are similar concepts, as has been implied in many studies. In applying basically the same conceptual models (cf. chapter 2) to both concepts, we investigate whether there are differences in the determinants that contribute to an explanation of adjustment to and satisfaction with retirement, and to what extent difficulties in the retirement transition influence satisfaction. As in chapter 2, we focus explicitly on the role of the partner. We examine the extent to which spouses influence each other in the post-retirement stage. To what extent do spousal and marital relationship characteristics influence satisfaction with retirement? Do adjustment problems experienced by one of the spouses influence the other's satisfaction with retirement?

Chapter 4 deals with *health* in retirement. The main question addressed in this chapter is whether and under which conditions individuals experience health changes in retirement. In order to understand health as a multi-faceted concept, three different health measures are used, namely medical consumption, severity of health problems and self-rated health. Findings may differ for the health aspects distinguished. The conceptual model seeks to combine insights from the prevailing lines of research into the effects of life transitions on health. A model emphasizing transition characteristics was elaborated on stepwise by incorporating other characteristics of the retirement context, viz. job characteristics and the individual's access to resources. In a last step, the individual's appraisal of the retirement transition was incorporated in the model explaining health change in retirement.

Chapter 5 elaborates further on involuntary retirement. This chapter deals with the question under what conditions retirees perceive their retirement as forced rather than voluntary. These perceptions and their determinants are deemed to be meaningful in understanding negative retirement outcomes. The retiree's view of the situation, how he/she regards it, may have more impact than the 'objective reality' (in terms of degree of choice). We assume that differences in how retirement is perceived stem from differences in the older workers' retirement context—which is shaped by situational constraints and opportunities, timing and social embeddedness—, their preferences for retirement, and their

perceptions of control. Social embeddedness refers to the influence of network members in the retirement process. Another type of social network member is introduced, other than the partner, namely co-workers and the supervisor.

Chapter 6 evaluates the answers to the specific research questions obtained in this study in light of the general problem definition, and discusses the scientific and societal relevance of the findings, as well as the strengths and weaknesses of the study, and some suggestions for future research.



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## 2. Couples' adjustment to retirement: A multi-actor panel study<sup>12</sup>

### 2.1. Introduction

Most older workers approach retirement as a member of a couple. The transition from work to retirement brings about several changes for the retiring individual as well as his/her partner, requiring adjustment for both. In this article we investigate adjustment to retirement by both members of a couple. Much research has been done in recent decades on adjustment to retirement, using different measures, including retirement satisfaction (Quick and Moen, 1998), life satisfaction (Atchley and Miller, 1983), depression (Reitzes, Mutran and Fernandez, 1996a), well-being (Richardson and Kilty, 1991), and other subjective evaluations of the retirement experience (Belgrave and Haug, 1995). A common element in these studies is that they concentrate on outcomes. The underlying assumption is that the outcome measures are valid indicators of the difficulties retirees experience in making the transition to retirement (Braithwaite and Gibson, 1987). This is not necessarily the case. First, low levels of well-being may have been present in pre-retirement years, or may be caused by circumstances other than the retirement transition. Second, outcomes cannot be considered simply a function of the ease of adjustment. The fact that an outcome is positive does not necessarily imply that adjustment was easy. A positive outcome may be the end of a painful process (Henkens, Sprengers and Tazelaar, 1996). In this article, we will focus on adjustment to retirement in a more direct way. Our conceptualization is based on the worker's and partner's own evaluation of the difficulties they had in adjusting to retirement.

Past research concentrates heavily on the impact of resources on adjustment to retirement (Braithwaite and Gibson, 1987). More recently, traditional predictors of adjustment (health and wealth) have been supplemented by characteristics of the work role as well as information on the transition itself (Richardson and Kilty, 1991; Kim and Moen, 2002). Psychological determinants are usually neglected in models of retirement adjustment. Taylor and Cook (1995) however, argue that the ability to develop new roles and activities after retirement may be viewed as a psychological predisposition that varies among individuals, and

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<sup>12</sup> This chapter has been published earlier as Van Solinge, H. and K. Henkens (2005), Couples' adjustment to retirement: A multi-actor panel study. *Journal of Gerontology: Social Sciences*, 60B, S11-S20. Reprinted with permission from the Gerontological Society of America.

psychological resources may determine whether people take advantage of the material and social resources available to them. We follow their suggestion by explicitly including psychological determinants in our model of adjustment to retirement.

A growing literature recognizes that decision making on retirement takes place in the context of the family (Henretta *et al.*, 1993b; Smith and Moen, 1998; Henkens, 1999; Szinovacz and DeViney, 2000; Pienta and Hayward, 2002; Smith and Moen, 2004). In contrast to research on adjustment to events in other domains of life—such as long-term illness and disability (e.g. Northouse, Dorris and Charron-Moore, 1995)—studies on adjustment to retirement have largely adopted an individualistic approach. In the 1970s and 1980s, some research was carried out exclusively on wives' reactions to their husbands' retirement (e.g. Hill and Dorfman, 1982). There are very few studies that incorporate data from both members of a couple. In this article we study how both members of a couple adjust to the retirement of one of the partners. The first question addressed is how we can explain that some individuals adjust more easily than others. The second question concerns the extent to which partners influence each other in the process of adjusting to retirement.

This article is based on multi-actor panel data from 559 older employees working in Dutch industry and trade and their partners. Couples were interviewed in 1995 in the pre-retirement phase and again in 2001 when all employees had made the transition into retirement. Contrary to the situation in the United States, in the Netherlands retirement is defined as the end of paid employment.

## **2.2. Conceptual model**

We assume that adjustment is influenced by the context in which the transition is made, individual psychological factors, as well as the other spouse's adjustment to the retirement transition. The *context* is shaped by the resources (finances, health, leisure, marital quality, network and status) available to the couple as well as the circumstances in which the transition takes place (forced retirement, work attachment). Given the context, individuals may experience the retirement transition differently. This may be true for two older workers within different households as well as for partners within one household; that is to say, the older worker may assess and evaluate the consequences of his or her retirement differently than his or her spouse (Smith and Moen, 2004). Following

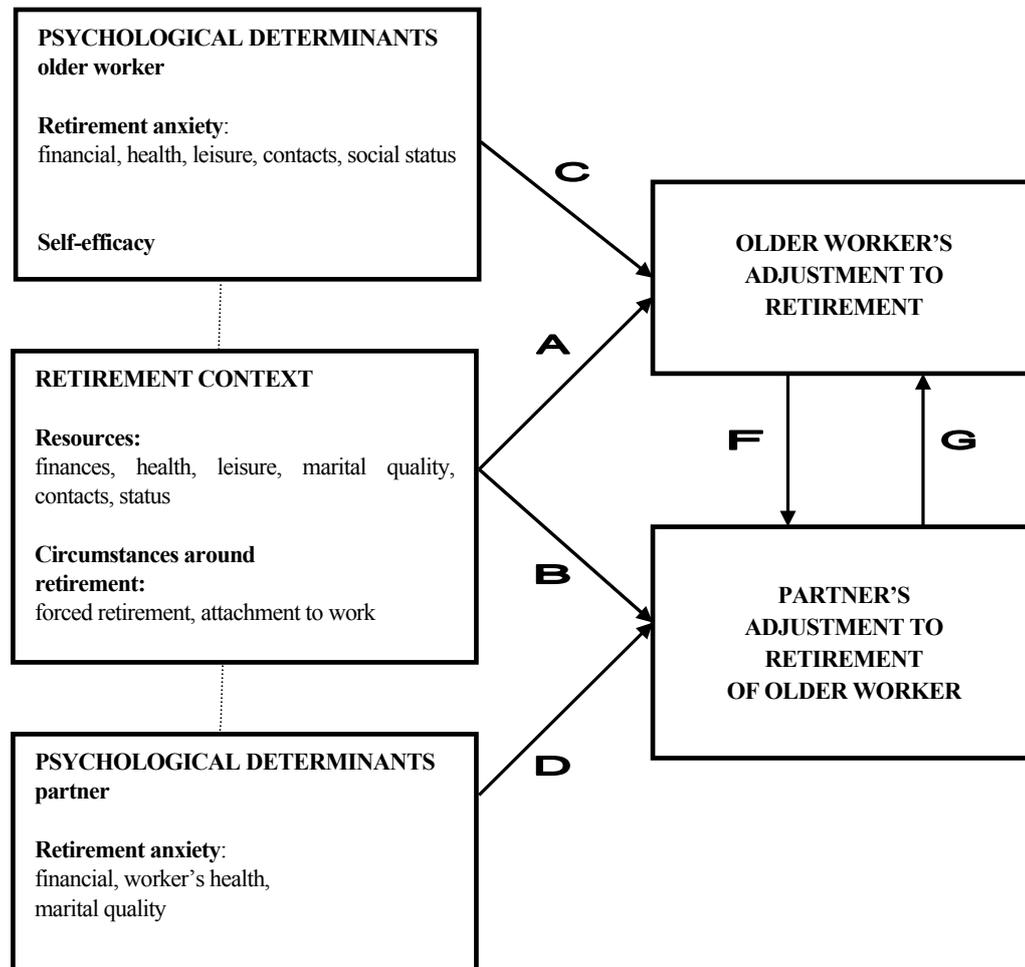
Taylor and Cook (1995), we assume that much of the variation in retirement adjustment is attributable to these *psychological determinants*. Two factors are deemed important: pre-retirement expectations of the consequences of retirement (we call this retirement anxiety) and self-perceptions of the ability to cope with change (self-efficacy). Partners influence each other. As a result of this *interdependency*, adjustment processes among workers and their partners will not take place independently of each other (Haug *et al.*, 1992). A person who experiences difficulties in adjusting to (own or partner's) retirement will be a burden, and may thus hinder adjustment of his/her partner. *Figure 2.1* offers a graphical representation of our model. First, the retirement context is expected to influence adjustment to retirement of both the older worker and his/her partner (arrows A and B). Variations in adjustment may also stem from psychological factors that determine an individual's expectations of and responses to change (arrows C and D). Finally, partners may influence each other directly in the process of adjustment to retirement (arrows E and F). We will elaborate on these factors below.

### 2.2.1. Retirement context

Retirement brings about changes in a couple's *financial situation*. It is generally assumed that the couple's ability to maintain their pre-retirement lifestyle is crucial to the adjustment process. Findings from the US suggest that a lack of financial resources correlates negatively with the ease of adjustment in terms of post-retirement satisfaction and well-being (Braithwaite and Gibson, 1987; Richardson and Kilty, 1991; Gallo *et al.*, 2000). Though financial decline after (early) retirement tends to be relatively low in the Netherlands, we anticipate that among Dutch couples, too, low household income as well as a financial drawback after retirement constitute risk factors with regard to adjustment.

Poor *health* in retirement may disrupt the plans partners had for this stage of their lives. Both partners' health problems may hamper adjustment to retirement, since health problems of one of the partners restrict the possibility of taking up new activities for both partners (Haug *et al.*, 1992). In addition, whenever a poor health condition of one of the partners implies demanding care responsibilities, this may place added strains on the relationship and thus hinder adjustment for both partners (Szinovacz, DeViney and Davey, 2001).

Figure 2.1. Graphical representation of the conceptual model



Retirement requires a reorganization of activities and *leisure* time. Participation in activities contributes to retirement adaptation, whereas boredom is related to difficult adjustment. Vinick and Ekerdt (1991) found that only few people take up totally new endeavours and activities in retirement. Retirees tend to spend more time on activities they were already involved in prior to retirement. It may therefore be assumed that a greater involvement in leisure activities prior to retirement facilitates adjustment to retirement.

*Marital quality* can be considered a resource in the process of adjusting to retirement. Those with less satisfying marriages start the transition into retirement at a disadvantage and may be less well-positioned to weather

retirement adjustments (Myers and Booth, 1996). Marital interaction enhances marital satisfaction and can thus be regarded as an indicator of marital quality (Davey and Szinovacz, 2004).

The ability to take up new activities or to further develop existing endeavours is related to characteristics of the retiring couple's *social network*. Many relationships, in particular those with colleagues, are terminated, and the partner, family and friends become more important (Bossé *et al.*, 1993). We hypothesize that the more children a couple has, and the greater the number of retired people in a couple's social network, the easier adjustment to retirement will be. The possibility for couples to engage in shared post-retirement leisure activities may be limited if the older worker's partner is still employed at retirement (Talaga and Beehr, 1995). Several studies have shown that simultaneous retirement is most conducive to marital satisfaction and that asynchronous retirement is negatively correlated to marital happiness (e.g. Moen *et al.*, 2001). We expect that asynchronous retirement will also hamper adjustment to retirement.

Individuals strive for *social status*. Status is an aspect of well-being that is gained by the feeling of 'being superior' to others in the eyes of relevant others and oneself. Status is largely determined by occupational prestige. After retirement, status will become difficult to maintain because status through occupational prestige is reduced. We hypothesize that the higher a worker's social status, the more difficult adjustment will be for both members of the couple.

Retirement often occurs under conditions that leave individuals little choice over the transition (Gallo *et al.*, 2000). Figures from the US suggest that 'forced' retirement may account for 30-40 percent of early retirement (Henkens and Van Dalen, 2003). Unanticipated and involuntary retirement tends to have negative effects on well-being (Marshall, Clarke and Ballantyne, 2001). Since planning for retirement is largely a couple affair (Smith and Moen, 1998; Henkens, 1999), we expect that forced retirement will cause adjustment problems for both partners in a household.

Individuals who express a strong *attachment to their work* feel less positive about leaving their jobs (Taylor and Shore, 1995). We expect that work attachment influences adjustment to retirement negatively, and we foresee greater difficulty in adjusting among people for whom work is more central to

their lives, as captured by the number of years and hours per week spent in the labour force, and the worker's evaluation of job challenge.

Most studies on women's retirement assume that women, given their different work histories and general life experiences, may adjust differently than men (Gratton and Haug, 1983). Gender-based differences in work commitment, caused by the fact that women's primary role was in the home, are believed to result in fewer adjustment problems among women (Slevin and Wingrove, 1995). In line with this reasoning, we expect that female retirees adjust more easily than male retirees. Since more distal events may be subject to recall bias, time elapsed since retirement is included as a control variable.

### 2.2.2. *Psychological determinants*

People respond not only to the objective features of a situation, but also to the meaning this situation has for them. Belief systems (i.e. expectations of change) have been identified as a central factor in determining adjustment to the aging process (Abel and Hayslip, 1986), and retirement research has shown that pre-retirement expectations are important determinants of the retirement decision (Henkens, 1999) and play a role in the retirement adjustment process (Gall and Evans, 2000). *Retirement anxiety*, i.e. negative expectations about the consequences of the transition, may negatively influence adjustment (Fletcher and Hansson, 1991). We distinguish five domains that are particularly important to the older worker's adjustment to retirement: viz. financial well-being, health, involvement in activities/leisure, social contacts and social status (see also: Higginbottom, Barling and Kelloway, 1993; Henkens, 1999).

*Self-efficacy*, or the belief that one can effectively cope with a given situation, predicts whether people will enter a new and unfamiliar situation, as well as the affective reactions to the situation (Bandura, 1982; Sherer *et al.*, 1982). Self-efficacy predicts confidence in the ability to deal with changes. Given that retirement is a new experience we assume that higher scores on self-efficacy will be associated with greater ease in adjustment.

Previous research on adjustment of couples to retirement has almost exclusively focused on adjustment of housewives to their husbands' retirement. Three factors have been found to be particularly relevant to partners' evaluation of retirement. First, for the US, (Hill and Dorfman, 1982; Sherer *et al.*, 1982) suggest that decline in income is an important negative aspect of retirement for partners. Second, partners may anticipate an improvement in health resulting

from the withdrawal from an unhealthy work environment (Henkens, 1999). Third, many partners expect that retirement will result in marital problems arising from the division of housework, too much togetherness, and a decrease in personal freedom and privacy (Vinick and Ekerdt, 1991; Henkens, 1999; Hilborne, 1999). This study assumes that workers' partners will have more difficulty in adjusting to retirement if they expect problems concerning finances, worker's health status and marital conflict.

### 2.2.3. *Interdependency of partners*

Health-psychological research shows that partners are important resources in the process of adjustment to illness or disability (e.g. Northouse *et al.*, 1995). We argue that this holds for adjustment to retirement as well. Partners can provide resources, such as companionship and social support, which makes adjustment easier. Whereas having a partner who adjusts with ease to the changes involved in retirement can be considered a resource, a partner who experiences difficulty in adjusting will be a burden, and may thus hinder adjustment. The influence is not necessarily symmetrical, however. For the worker, retirement creates the need to redesign his/her personal life (temporal structuring, purposefulness, changed interpersonal contacts etcetera) as well as to adjust to the changed relationship with the partner (couple adjustment). For the partner, couple adjustment is the dominant aspect in the process of adjusting to the partner's retirement. For both worker and partner, the spouse may be instrumental, and difficult adjustment by the partner may hamper the individual's own adjustment. Since couple adjustment is much more central to the adjustment process of the partner, and difficult adjustment by the worker is likely to have direct and greater repercussions for the couple relationship, we expect that older workers will be more influential in the spousal adjustment process than their partners.

## 2.3. **Methods**

### 2.3.1. *Data*

This article is based on panel data about 559 older employees and their partners. In 1995 (first wave), data were collected among older employees working in more than 50 operating companies and branches of two large Dutch multinational companies active in the field of retail, trade and industry. A mail questionnaire was sent to all employees aged 55 years and over, and to their (married or unmarried) partners (for details see: Henkens, 1999). A follow-up study was conducted in 2001. A total of 824 questionnaires were mailed to the original participants in the first wave. A total of 629 questionnaires were sent

back (76 percent). Sensitivity analysis, using multivariate analysis revealed that no selective attrition between the first and the second wave could be established with respect to the independent variables in our model. Since our interest was in couples who experienced the transition into retirement together, our sample contained only continuously married or unmarried cohabiting couples. Non-marital couples constituted three percent of the sample. Excluded were couples where the partner failed to participate in either wave (N=37), or couples whose marriage ended in divorce or widowhood (N=43). As a result, the remaining sample consisted of 559 couples. The questionnaire contained mainly closed questions. Overall, the frequency of item non-response was low in the returned questionnaires (less than three percent on average). Missing values were replaced by the mean value of the variables, computed from the non-missing values (Anderson, Baselevsky and Hume, 1983).

### 2.3.2. *Measures*

*Table 2.1* present the means, standard deviations, coding algorithms, and wording of the survey questions of all measures, as well as the psychometric properties of the scales used in this article. The context variables and psychological determinants were taken from wave 1; transition characteristics were taken from wave 2. The measure for self-efficacy was only available in the second, post-retirement wave. Our self-efficacy scale, however, measures generalized self-efficacy expectations. According to Mowen (2000), general self-efficacy meets the criteria for a so-called compound trait. A compound trait is a disposition that emerges from the interplay between elemental traits (dominated by genetic factors and early learning), from the culture in which the person lives, and from his/her learning history. Although general self-efficacy is partly dependent on past experiences, we assume that this measure is sufficiently stable over time to defend its use as an explanatory variable for adjustment.

### 2.3.3. *Analytical strategy*

Since we conceptualize that workers' and partners' adjustment to retirement are reciprocally related, single-equation estimate techniques are not appropriate and will produce biased and inefficient estimates of the specified relationships. To account for non-independence of actors we use a simultaneous equation model. There are two fundamental methods of estimation for simultaneous equations: Maximum Likelihood (ML) and Least Squares (LS). Following (Pienta and Hayward, 2002), we use a Three Stage Least Squares model (3SLS). An alternative approach to study non-independent data that has recently been

Table 2.1. Means (M), Standard deviations (SD), Coding Algorithms, Wording of Survey Questions and Psychometric properties of the dependent and independent variables (N=599)

	M	SD	Coding Algorithm	Wording	Psychometric properties
Adjustment – Worker	3.9	2.3	3-item scale. A single measure for adjustment was constructed by summing the standardized and unweighted items. The scale was subsequently linearly transformed into a range from 0 to 10, were '0' indicates very few difficulties and '10' very many difficulties in adjusting to retirement.	Questions: How long did it take you to get used to retirement? (4 answer categories ranging from 1=less than one month to 4=more than 1 year/not yet) How difficult has it been for you to adjust to a retirement? (5 answer categories ranging from 1=very difficult to 5=not difficult at all) It took quite some getting used to retirement for me. (5 answer categories ranging from 1=completely agree to 5=completely disagree)	Alpha=0.82
Adjustment – Partner	2.9	2.2	3-item scale ranging from 0=very few difficulties in adjustment to 10=very many difficulties (identical procedure as described above)	Questions: How long did it take <u>you</u> to get used to your partner's retirement? (4 answer categories ranging from 1=less than one month to 4=more than 1 year/not yet) How difficult was it for <u>you</u> to adjust to your partner's retirement? (5 answer categories ranging from 1=very difficult to 5=not difficult at all) My husband/wife's retirement took quite some getting used to for me. (5 answer categories ranging from 1=completely agree to 5=completely disagree)	Alpha=0.62

Table 2.1. (continued)

	M	SD	Coding Algorithm	Wording	Psychometric properties
<b>Retirement Context</b>					
Household income ( $t_1$ )	3.9	2.3	Sum of workers and partners yearly income (in € divided by 10.000), ranging from 0,6 to 15,4	Worker's salary obtained from the Central Salary Administrations, partner's income asked in questionnaire	N/a
Replacement rate (net)	81.3	3.2	Continuous variable ranging from 68.8 to 88.4	Net replacement rate is the percentage of the net monthly salary received upon retirement (obtained from the Central Salary Administrations)	N/a
Health worker ( $t_1$ )	1.9	0.9	2-item scale, ranging from 1=very poor to 5=very good health	Questions: What is your general state of health? (five answer categories: 1=very poor to 5=very good) Do you have recurring health problems (yes/no)	Alpha=0.76
Health partner ( $t_1$ )	2.1	0.7	1-item, ranging from 1=very poor to 5=very good health	Question: What is your general state of health? (five answer categories: 1=very poor to 5=very good)	N/a
Health deterioration Worker Partner	0.12 0.19	0.3 0.4	Dummy variable, 1=yes, 0=no	Constructed on the basis of the following question: Has your health changed since retirement (worker)/ in last three years (partner) (five answer categories: 1=yes, much worse to 5=yes, much better)	N/a
Number of hobby's of older worker ( $t_1$ )	6.1	1.9	Summed answers to one question concerning leisure activities of older worker, ranging from 0 to 12	On which of the following activities do you spend your free time (16 categories)?	N/a
Marital interaction ( $t_1$ )	6.0	1.9	2-item scale, ranging from 0=very few to 10=very many shared interests	Questions: Do you and your husband/wife share many interests? (posed to both worker and partner) (five answer categories: 1=yes, many to 5=no, very few; coding reversed)	Alpha=0.62
Number of children	2.2	1.0	Number of children, ranging from 0 to 8		N/a
Friends/family have retired ( $t_1$ )	3.1	1.0	4-item scale ranging from 1=most of the social network active in the labour force, to 5=most of the social network have retired	Items asked to both the worker and his/her partner: 'Most of our friends have stopped working,' and 'Most of my brothers and sisters have stopped working' (five answer categories: 1=completely agree and 5=completely disagree) [coding reversed]	Alpha=0.74
Partner works at retirement worker	0.23	0.4	Dummy variable, 1=yes, 0=no	Variable constructed on the basis of information on the moment of retirement of worker and spouse	N/a

Table 2.1. (continued)

	M	SD	Coding Algorithm	Wording	Psychometric properties
Job prestige (t <sub>i</sub> )	41.0	16.8	Occupations have been coded according to the Occupational Classification 1992 of Statistics Netherlands	The codes of the SBC92 have been converted to an occupational prestige scale developed by Sixma and Ultee (See: Sixma, H. and Ultee, W. (1983), Een beroepsprestigeschaal voor Nederland in de jaren tachtig. Mens en Maatschappij, 58, 4, 360-382).	N/a
Involuntary retirement	3.3	2.7	4-item scale ranging from 0=voluntary, to 10=involuntarily	Questions: Was your decision to retire (early) entirely voluntary, or not? (2 answer categories: 1=yes, 2=no not (entirely) voluntary) Items asked: I would have liked to have taken early retirement a few years later ; You could I retired against my will; My decision to retire was voluntary. (five answer categories: 1=completely agree and 5=completely disagree)	Alpha=0.85
Job challenge (t <sub>i</sub> )	2.4	1.5	3-item scale ranging from 0=not challenging at all to 5=very challenging	Items: My work is characterized by many challenging tasks (2 answer categories 0=no, 1=yes). The work I am doing is not very challenging; The work I am doing has become more and more boring and routine (five answer categories: 1=completely agree and 5=completely disagree).	Alpha=0.72
Number of hours worked	30.9	9.9	Continuous variable, ranging from 4 to 40	Question: How many hours did you work shortly before you retired?	N/a
Work history (years)	39.5	7.9	Continuous variable ranging from 7 to 51	Number of years worked before retirement.	N/a

Table 2.1. (continued)

	M	SD	Coding Algorithm	Wording	Psychometric properties
<b>Psychological determinants worker</b>					
Retirement anxiety (t <sub>1</sub> ) Financial	3.0	1.0	1-item ranging from 1=many negative consequences to 5=few negative consequences	Question: To what extent would you miss income if you were to retire early (five answer categories: 1=very much to 5=not at all).	N/a
Health	2.7	1.3	1-item ranging from 1=negative consequences to 5=positive consequences	Item: Early retirement will be beneficial to my health (five answer categories: 1=completely agree to 5=completely disagree).	N/a
Social contacts	2.9	1.1	1-item ranging from 1=many negative consequences to 5=few negative consequences	Question: To what extent would you miss social contacts with co-workers if you were to retire early (five answer categories: 1=very much to 5=not at all).	N/a
Leisure	2.1	0.8	4-item scale ranging from 1=many negative consequences to 5=few negative consequences	Items: I'm always very busy, even in my spare time; I think I'll continue to be pressed for time once I retire; With so many hobbies, I'll never be bored; If I don't work, I'll get bored. (five answer categories: 1=completely agree and 5=completely disagree).	Alpha=0.77
Social status	1.8	0.8	2-item scale ranging from 1=many negative consequences to 5=few negative consequences	Question: To what extent would you miss self-esteem/social status if you were to retire early? (five answer categories: 1=very much to 5=not at all).	Alpha=0.79
Self-efficacy (t <sub>2</sub> )	6.5	1.9	4-item scale ranging from 0=low level of self-efficacy, to 10=high level of self-efficacy	Shortened version of the General Self-Efficacy Scale (Sherer <i>et al</i> , 1982). Items: If I make plans, I am convinced I will succeed in executing them; If I absolutely want something, it usually goes wrong; I doubt myself; If I have the impression something new is complicated, I don't start. (Five answer categories: 1=completely agree and 5=completely disagree).	Alpha=0.58

*Table 2.1. (end)*

	M	SD	Coding Algorithm	Wording	Psychometric properties
<b>Psychological determinants partner</b>					
Retirement anxiety (t <sub>i</sub> ) Financial	2.5	1.1	1-item scale ranging from 1=many negative consequences to 5=few negative consequences	Question: Do you expect to encounter income problems if your partner were to retire early? (five answer categories: 1=very much to 5=not at all).	N/a
Worker's health	2.4	1.2	1-item scale ranging from 1=negative consequences to 5=positive consequences	Item: Early retirement will be beneficial to my partner's health? (five answer categories: 1=completely agree to 5=completely disagree).	N/a
Marital conflict	1.6	0.7	4-item scale ranging from 1=many negative consequences to 5=few negative consequences	Questions: If your husband/wife were to stop working, to what extent would you expect problems to arise with respect to (a) joint leisure time activities, (b) division of household chores, (c) your social life, (d) relationship between you and your partner? (five answer categories: 1=very much to 5=not at all).	Alpha=0.79

applied in the retirement literature is structural equation modelling (SEM) (Davey and Szinovacz, 2004). SEM allows the explicit representation of a distinction between observed and latent variables (Kline, 1998). 3SLS is an extension of the OLS regression model, except that older workers' and partners' adjustment to retirement are two simultaneously determined dependent (endogenous) variables. In the first stage, each dependent variable is regressed on all the independent variables (retirement context and individual psychological factors of the older worker and the partner) in the model, which is called the estimation of the reduced-form coefficients. In the second stage, the estimated values of the dependent variables derived in the first stage are included as independent variables to obtain two-stage least squares (2SLS) estimates for each equation in the system. In the third stage of 3SLS, generalized least squares is used to simultaneously estimate all the coefficients in the entire system of equations. Identification in a two-equation system requires that at least one variable in each equation does not appear in the other equation. In our model, two dependent variables—older workers' and their partners' adjustment to retirement—are both affected by the retirement context and each is uniquely determined by each of the partner's individual evaluations of the consequences of retirement (see *table 2.2*). Mutual influence is represented by the two direct effects of partners' adjustment on each other.

#### 2.4. Results

The majority of older workers (and their partners) in our study adjusted well. For almost half of the older workers, adjustment was very quick: they had become accustomed to a non-working life within a month; over three-quarters within a year (*table 2.2*). In about nine percent of the cases adjustment took more than a year. Half the older workers adjusted very easily, and about 13 percent reported (severe) difficulties in adjusting to retirement. Partners were found to adjust more easily than the employees themselves; only six percent reported difficulties ( $\chi^2=13.85$ ,  $df=2$ ,  $p<0.01$ ). At the couple level, 17 percent had problems adjusting in the sense that either the retiree or the partner, or both, reported difficulty adjusting.

The results of the multivariate regression analysis to explain adjustment to retirement among older workers and their partners are shown in *table 2.3*. Three models have been estimated. First, we used OLS regression to present the relationships between the retirement context and the dependent variables (model 1). In the second model, psychological determinants were added to the

Table 2.2. Univariate descriptive statistics for items constituting the adjustment scale for older workers and their partners (N=559), %

	Older worker	Older worker's partner
<i>How long did it take you to get used to (your partner's) retirement?</i>		
Less than a month	46	59
Between one and six months	32	25
Between six months and a year	13	9
More than a year	9	7
Total	100	100
<i>How difficult has it been for you to adjust to (your partner's) retirement?</i>		
Very difficult	3	1
Quite difficult	10	5
Neither difficult nor easy	19	19
Not very difficult	19	21
Not difficult at all	49	54
Total	100	100
<i>"It took quite some getting used to (my partner's) retirement for me"</i>		
Strongly agree	8	6
Agree	23	16
Neither agree nor disagree	19	26
Disagree	34	47
Strongly disagree	16	5
Total	100	100

regression equation (model 2). In doing so, we underlined the importance of these determinants in addition to the context. Moreover, parts of the effects of the contextual variables may manifest themselves via the individual's evaluations and expectations. The third model presents the results of 3SLS regression to establish the extent to which the adjustment of one partner is related to that of the other.

Interactions were tested in line with standard regression procedures. Priority was given to interaction effects of contextual variables with gender and control over the retirement transition (involuntary retirement). In addition, we explored whether combinations of circumstances, or contingencies, generate cumulative disadvantage. For example, does poor health in combination with low income

Table 2.3. Regression analyses Explaining Older Workers' Adjustment to Retirement and Partners' Adjustment to their partners retirement, N=559

Explanatory Variables	MODEL 1 (OLS)				MODEL 2 (OLS)				MODEL 3 (3SLS)			
	Workers' Adjustment		Partners' Adjustment		Workers' Adjustment		Partners' Adjustment		Workers' Adjustment		Partners' Adjustment	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
Constant	3.10	0.331	3.45	0.334	3.45	0.270	0.99	0.752	2.99	0.318	0.43	0.887
<b>Couple's retirement context</b>												
Gender worker (female=1)	1.19**	0.000			0.87**	0.006			1.01**	0.002		
Gender partner (male=1)			-0.79*	0.016			-0.76*	0.017			-1.05**	0.002
Time elapsed since retirement	-0.04	0.499	0.13*	0.025	-0.02	0.746	0.11	0.067	-0.04	0.486	0.12*	0.034
<i>Resources</i>												
<i>Financial-economic:</i>												
Household income	0.07	0.287	0.07	0.240	0.02	0.684	0.09	0.158	0.01	0.805	0.07	0.238
Replacement rate	-0.02	0.624	0.05	0.872	-0.02	0.522	0.01	0.843	-0.02	0.488	0.01	0.744
<i>Health:</i>												
State of health Worker	0.02	0.655	0.20	0.616	-0.00	0.959	0.03	0.515	-0.00	0.912	0.02	0.565
State of health Partner	-0.10	0.487	0.27	0.844	-0.21	0.110	-0.03	0.786	-0.21	0.099	-0.01	0.943
Health deterioration worker (0-1)	0.48	0.092	0.11	0.698	0.41	0.129	0.09	0.751	0.39	0.125	-0.03	0.920
Health deterioration partner (0-1)	0.26	0.273	0.34	0.161	0.20	0.373	0.38	0.107	0.16	0.487	0.31	0.173
Leisure: Number of hobby's	-0.02	0.703	-0.02	0.708	0.01	0.870	-0.01	0.822	0.01	0.845	-0.01	0.874
<i>Marital:</i>												
Marital interaction	-0.08	0.088	-0.23**	0.000	-0.02	0.732	-0.13**	0.007	0.02	0.767	-0.12*	0.011
Number of children	0.02	0.805	-0.15	0.084	0.02	0.822	-0.15	0.074	0.42	0.602	-0.16	0.054
<i>Social:</i>												
Friends/family have retired	-0.11	0.251	-0.16	0.108	-0.10	0.300	-0.15	0.132	-0.07	0.434	-0.12	0.197
Partner still working (0-1)	-0.42	0.055	-0.16	0.472	-0.28	0.174	-0.19	0.362	-0.26	0.187	-0.09	0.671
Social status: Job prestige	-0.00	0.784	0.00	0.646	0.00	0.924	0.00	0.812	-0.00	0.988	0.00	0.733
<i>Characteristics transition</i>												
Involuntary Retirement	0.35**	0.000	0.11**	0.001	0.31**	0.000	0.09**	0.008	0.30**	0.000	0.01	0.914
Number of years in labour force	0.26*	0.045	0.01	0.532	0.02	0.065	0.01	0.650	0.02	0.067	-0.00	0.971
Number of hours worked before retirement	0.23	0.087	0.00	0.878	0.03**	0.007	0.00	0.889	0.03**	0.006	-0.01	0.769
Job challenge	-0.10	0.196	-0.04	0.643	-0.05	0.493	-0.06	0.406	-0.05	0.497	-0.04	0.626

Table 2.3. (end)

Explanatory Variables	MODEL 1 (OLS)		MODEL 2 (OLS)		MODEL 3 (3SLS)	
	Workers' Adjustment <i>Coef.</i>	Partners' Adjustment <i>p-value</i>	Workers' Adjustment <i>Coef.</i>	Partners' Adjustment <i>p-value</i>	Workers' Adjustment <i>Coef.</i>	Partners' Adjustment <i>p-value</i>
<b>Psychological determinants</b>						
<b>Worker</b>						
<i>Retirement Anxiety</i>			0.10	0.234	-0.11	0.192
Financial			0.05	0.596	0.04	0.591
Health			-0.06	0.644	-0.06	0.650
Leisure			0.22**	0.015	0.20*	0.017
Social contacts			0.53**	0.000	0.51**	0.000
Social status						
<i>Self-efficacy</i>			-0.26**	0.000	-0.24**	0.000
<b>Psychological determinants</b>						
<b>Partner</b>						
<i>Retirement Anxiety</i>						
Financial				0.18*	0.028	0.17*
Worker's health				-0.02	0.764	-0.03
Marital conflict				0.87**	0.000	0.80**
						0.000
<b>Spousal interdependency</b>						
Adjustment Worker						0.24*
Adjustment Partner					0.16	0.318
R <sup>2</sup>	20.9	15.1	30.4	21.9	33.0	25.2

Notes: OLS=ordinary least squares; 3SLS=three-stage least squares.

\* p<0.05; \*\* p<0.01.

create more problems in adjustment to retirement? Since none of the interaction terms proved to be significant, they have not been included in the models presented in table 2.3.

*Retirement context* – The results of model 1 in table 2.3 show that the ‘traditional predictors’ of adjustment—wealth and health—play a minor role in explaining differences in adjustment to retirement in the Netherlands. We did not find significant effects of the household’s financial situation on the difficulties they experienced in adjusting to retirement. The same holds for the other resources (health, leisure, network, and social status). The expected influence of marital interaction on adjustment has been confirmed for the partners of the retirees, not for the retirees themselves. Adjustment to retirement was found to be easier for workers with part-time jobs and employees with shorter work histories. We did not find evidence for the hypothesis that a strong attachment to work, as expressed by the worker’s evaluation of job challenge, is related to difficult adjustment. We found strong empirical support for our hypothesis that control over the decision to retire is of primary importance: forced retirement is a strong predictor of adjustment problems. Contrary to our expectations, the labour market position of the partner was not found to have a significant effect on adjustment to retirement. The results suggest that women experience more problems adjusting to retirement, both as workers and as partners. Partners of recently retired workers report more adjustment problems than partners of workers who retired longer ago.

*Psychological determinants* – The results of model 2 indicate that individual psychological determinants provide additional insight into the adjustment to retirement. In step 2, the explanatory power ( $R^2$ ) increases by 9.5 percent for the worker and by 6.6 percent for the partner. The results show that two dimensions of retirement anxiety are of particular relevance. Negative pre-retirement expectations about the consequences of retirement for social contacts and status predict difficulty in adjusting among retirees. As hypothesized, we also found a strong effect of self-efficacy. Workers with higher scores on self-efficacy were much more likely to adjust easily. Among couples, anxiety about the implications of retirement on marital conflict were felt to be particularly important. Anticipated post-retirement financial strain was associated with adjustment problems for partners, not for workers.

*Partners’ interdependency* – Model 3 presents the final model. The 3SLS regression analysis shows the factors that influence the adjustment of older

workers and their partners, and the extent to which partners influence each other. The table presents asymmetrical results for the partner and for the older worker. When workers experience problems adjusting to retirement, their partners' adjustment is hampered. We did not find significant effects of the partners' adjustment on that of the older workers, however. Our results suggest that the extent to which partners influence each other in the process of adjusting to retirement is limited.

The incorporation of additional variables in the successive models does not change the effects of the original variables. There is one exception, however. Initially, forced retirement was found to negatively affect the partner's adjustment. The results of the full model suggest that this effect is spurious and can be traced back to influence processes within the couple: the way the retiree deals with forced retirement is crucial to the adjustment of his/her partner.

## **2.5. Conclusions and discussion**

This study provides strong support for the suggestion put forward by Taylor and Cook (1995) that both the context in which the transition is made and psychological factors are important predictors of difficult adjustment. First, our study shows that, in the Dutch context, health and financial considerations are of relatively minor importance to adjustment to retirement. This is an interesting finding in the light of the results of an earlier study on the same data set, showing that financial and health considerations are important determinants in decision making on retirement (Henkens, 1999). Recent studies for the US and Canada, however, suggest that finances and health are losing their effect as predictors of difficult adjustment to retirement in these countries too (Belgrave and Haug, 1995; Gall and Evans, 2000). Though there is no strong empirical support for a negative influence of retirement on the quality of marriage (Vinick and Ekerdt, 1991; Davey and Szinovacz, 2004), our results suggest that pre-retirement concerns about marital conflict predict problems adjusting to retirement among partners.

Second, our study suggests that social embeddedness is an important determinant of adjustment to retirement. Older workers who expressed anxiety about the consequences of retirement for their social contacts and social status had greater problems adjusting. This study is among the first to give empirical evidence for the importance of (perceived) loss of social status as a determinant of difficult adjustment. In this respect it is interesting that we did not find an

effect for the individual's pre-retirement social status as such, indicating that anxiety about a loss of status is *not* restricted to the higher social strata.

Third, this study provides additional evidence that a lack of control, as is the case with forced retirement, is a risk factor for the development of adjustment problems (e.g. Marshall *et al.*, 2001). Moreover, there is empirical support for the hypothesis put forward by Taylor and Cook (1995), that perceived control (self-efficacy) is an additional factor with regard to adjustment to retirement. Workers who expressed more confidence in the ability to deal with changes adjusted with greater ease. Many studies, among which (Mowen, 2000), have shown that elemental personality traits — such as extraversion and neuroticism — predict self-efficacy. Examination of the direct effects of these higher-order personality traits is an important issue for future research on adjustment to retirement.

Another issue raised in this article is the way partners influence each other in the process of adjusting to retirement. Several studies (Smith and Moen, 1998; Henkens, 1999; Pienta and Hayward, 2002) have shown that the partner plays an important role in decision making with regard to retirement. In this light, it is interesting to note that adjustment to retirement within couples was found to be much more of an individualistic process. The extent to which partners influence each other appears to be limited. This is, however, not unique to adjustment to retirement. Grief and adjustment after the death of a child has, for example, been shown to be a highly individualized process experienced differently by each partner (Rando, 1991).

Among the unexpected findings in this study is the fact that the partner's labour market position does not appear to affect adjustment to retirement. Two possible explanations can be put forward. First, in the Netherlands there is still little opportunity for couples to retire at the same time since eligibility for a benefit is subject to strict age limits. Couples may accept this situation. Second, adjustment to and enjoyment of retirement are different concepts, referring to different dimensions of the retirement experience (MacLean, 1982). The determinants underlying these phenomena may also differ. Asynchronous retirement may be important to well-being and satisfaction with or within retirement, but less relevant to adjustment.

An interesting finding in this study are the strong gender differences with regard to adjustment. Women tend to have greater problems adjusting to retirement,

both as retirees and as partners. Two possible explanations can be put forward. First, since for women the majority of obligations remain unchanged, the reality of being a retiree may be less attractive to women than to men. Earlier findings point in this direction (Szinovacz, 1982). Second, it has been suggested that women have a greater tendency to admit symptoms such as pain, depression or other negative feelings (Schwarzer and Schulz, 2002). Future research should explore in more detail possible gender specificity in the way partners influence each other in the process of adjustment to retirement e.g. by means of structural equation modelling.

When evaluating the results presented here, some limitations need to be emphasized. First, though the sample has substantial variation on relevant variables such as gender, occupational classification categories and health, this research is not representative of all Dutch older workers or couples in the age bracket studied.

A second limitation concerns the absence of information on pre-retirement well-being, which can be seen as a resource in adjustment to retirement. Though our study does have information on some of the major determinants of well-being among older adults, such as their financial resources, health and social contacts, a low level of subjective well-being may be an important determinant of adjustment problems.

Despite these limitations, the results of this study show that it is possible to identify potential indicators of adjustment problems. Research has shown that individuals benefit from pre-retirement courses and planning programs (Gall and Evans, 2000; Hershey, Mowen and Jacobs-Lawson, 2003). These courses and programs should, however, not be limited to financial planning for retirement. Social adjustment should be addressed in pre-retirement programs too. Moreover, retirement preparation programs should acknowledge the fact that adjustment is an individualized process experienced differently by each partner.



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### 3. Adjustment to and satisfaction with retirement: Two of a kind?<sup>13</sup>

#### 3.1. Introduction

As a result of earlier retirement and increasing longevity most people can expect to live many healthy years as retirees. The media and advertisements foster a view of retirement as a period of leisure, recreation and self-expression, in contrast to working life, which is shown to be a period of sober, dutiful responsibility (Ekerdt, 2004). In this article, we study the subjective evaluations of retirement by both members of a couple.

Most older workers approach retirement as a member of a couple. Retirement is therefore not only an occupational career transition, but a family transition as well. Several recent studies have shown that spousal and marital relationship characteristics influence retirement decision making (e.g. Henretta *et al.*, 1993b; Smith and Moen, 1998; Henkens, 1999; Pienta and Hayward, 2002) and/or its outcomes (Kim and Moen, 2002; Davey and Szinovacz, 2004). Research on the subjective experience of retirement, however, has largely adopted an individualistic approach (e.g. Gall *et al.*, 1997). We postulate that retirement is a couple experience, requiring adjustment by the retiring individual as well as his/her partner. Spouses will influence each other in the process of adjusting to retirement (Haug *et al.*, 1992; Smith and Moen, 2004; Szinovacz and Davey, 2004). We therefore use a multi-actor approach in this article.

Subjective evaluations of retirement have been variously investigated under headings such as happiness (Beck, 1982), well-being (Herzog, House and Morgan, 1991; Richardson and Kilty, 1991), retirement satisfaction (Gall *et al.*, 1997; Quick and Moen, 1998), and life satisfaction (Calasanti, 1996). High levels on well-being or satisfaction are usually interpreted as indicators of easy or successful adjustment (e.g. Gall *et al.*, 1997; Isaksson and Johansson, 2000). On many occasions, adjustment to and satisfaction with retirement are used interchangeably, suggesting that they are synonymous with one another. This is not necessarily the case, however, as has been raised by MacLean (1982). More recently, Van Solinge and Henkens (2005b) have argued that the relation

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<sup>13</sup> This chapter is submitted for publication: Van Solinge, H. and K. Henkens, Adjustment to and satisfaction with retirement. Two of a kind?

between satisfaction and adjustment may be more complex. For example, it is possible to adjust to a new situation (e.g. a chronic illness) without enjoying it, and the fact that an outcome is positive does not necessarily imply that adjustment was easy. A positive outcome may be the end of a painful process (see for example, Henkens *et al.*, 1996). This argues for making a distinction between both concepts, both empirically and theoretically.

In the current article the primary focus is on couples' satisfaction with retirement. We study both partners' satisfaction with the retirement of one of them. The first issue addressed is how we can explain individual differences in satisfaction with retirement. The second issue addressed is whether adjustment to and satisfaction with retirement are indeed similar concepts, as has been—implicitly or explicitly—implied in many studies. The third issue concerns the role of the spouse. To what extent do spousal and relationship marital characteristics influence satisfaction with retirement? Do adjustment problems experienced by one of the spouses influence the other's satisfaction with retirement?

This article is based on multi-actor panel data from 559 older employees working in Dutch industry and trade and their partners. Couples were interviewed in 1995 in the pre-retirement phase and again in 2001 when all employees had made the transition into retirement. In the present study, retirement is defined as having ended one's career job, and receiving a pension (or early retirement package) from one's former employer. Contrary to the situation in the US, retirement almost always entails a final exit from the labour market.

## **3.2. Theoretical background**

### *3.2.1. Conceptual model*

MacLean (1982) has argued that adjustment to and satisfaction with retirement may represent different dimensions of the retirement process. Adjustment refers to the process of getting used to retirement as a new stage in life. Satisfaction, on the other hand, captures the evaluative assessment of the quality of life in retirement. Adjustment is a dynamic process that changes over time. In a review of the literature Silver and Wortman (1980), conclude that most people who have experienced a life crisis adjust with time. Even after a traumatic event, such as a disabling accident, people appear to adjust sooner or later. The evaluation of life in retirement may also change with time, as has been suggested by Atchley

(1976). There is some evidence that retirees experience a honeymoon stage early in retirement during which they show increasing levels of well-being (e.g. Gall *et al.*, 1997), but in general, initial reactions appear to be highly predictive of long-term well-being (Silver and Wortman, 1980). The effect of time on satisfaction with retirement may thus be relatively small.

Satisfaction with retirement has been addressed in many previous studies and from different scientific disciplines, such as economics, sociology and psychology. In their explanatory models, these disciplines tend to focus on specific types of factors, although there is some overlap. Economists emphasize that low levels of well-being in retirement derive from constraints, such as limited access to key resources, such as money and health, as well as changes in these resources, particularly if these changes are negative or unexpected (e.g. Charles, 2002).

Sociological research emphasizes that an understanding of life transitions requires specifications of the context in which the transition occurs, the interdependency between various actors, and timing (e.g. Kim and Moen, 2002; Elder and Johnson, 2003). The role theoretical approach postulates that people who retire are vulnerable to feelings of role loss, which can lead to psychological distress. Alternatively, retirement may promote a sense of well-being, as workers move out of demanding and/or stressful career jobs (Wheaton, 1990). The life course approach emphasizes that life transitions are contextually embedded, and pathways to retirement shape the quality of the retirement experience (Quick and Moen, 1998; Elder and Johnson, 2003). The consequences of life transitions are assumed to vary according to their timing in a person's life (e.g. work history), the couple's life (e.g. couple's retirement timing), as well as social time (social and age norms). Another key principle of the life course perspective is interdependency (Elder and Johnson, 2003); life transitions take place in the context of ongoing social relations, changes in the life of one person may affect other persons.

In the psychological literature, two main approaches have been put forward to explain individual differences in life satisfaction. These are the so-called top-down approach, which emphasizes the role of individual differences in personality, and the bottom-up approach, which focuses on the role of situations, events and contexts in explaining satisfaction (see Heller, Watson and Ilies, 2004, for an overview of this literature). Psychological research on well-being in retirement has stressed the importance of subjective variables —such as

expectations and perceptions of control— in addition to situational factors (Herzog *et al.*, 1991; Taylor and Cook, 1995). The assumption is that psychological resources, which vary among individuals, will determine whether people take advantage of the material and social resources available to them (Windle and Woods, 2004).

Our conceptual model for explaining satisfaction with retirement combines insights from economics, sociology and psychology. We assume that differences in satisfaction with retirement can be explained by differences in the couple's access to resources and characteristics of the transition (the retirement context), as well as variations in the psychological factors. Additionally, we assume interdependency within couples. That is, the worker's and spouse's satisfaction with retirement is influenced by characteristics of their partner as well as their marital relationship. We will elaborate on these factors below.

### 3.2.2. Hypotheses

*Resources* – Most married couples pool their financial resources and see themselves as an integral economic unit (Treas, 1993). Retirement commonly involves a decrease in household income. Prior studies have found that inadequate incomes and financial problems predict dissatisfaction with retirement (Seccombe and Lee, 1986; Kim and Moen, 2002). We anticipate that couples with lower household incomes as well as those who experience a greater financial setback after retirement are less likely to be satisfied with retirement (*Hypothesis 1*).

Retirement requires a reorganization of activities and leisure time. The number of activities individuals engage in has proven to be strongly related to retirement satisfaction (O'Brien, 1981). Boredom on behalf of the retiree may negatively affect the partner's satisfaction with retirement (Hilborne, 1999). Only few people take up totally new endeavours and activities in retirement. Retirees tend to spend more time on activities they were already involved in prior to retirement (Vinick and Ekerdt, 1991). We expect that a greater involvement in leisure activities prior to retirement will increase retirement satisfaction for both partners (*Hypothesis 2*).

Poor health in retirement may disrupt the plans partners had for this stage of their lives. Both partners' health problems may affect satisfaction with retirement, since health problems faced by one of the partners restrict both partners' possibility of taking up new activities (Haug *et al.*, 1992). We expect

that good health facilitates the implementation of retirement plans and in turn increases retirement satisfaction (*Hypothesis 3*).

Marriage and family relationships serve as social-relational resources in retirement. Being married and having a high-quality marriage has been shown to contribute to post-retirement well-being (Myers and Booth, 1996; Kim and Moen, 2002; Szinovacz and Davey, 2005b). We expect marital quality to be positively related to satisfaction with retirement for both partners (*Hypothesis 4*). Couple-oriented activities solidify their identity as a couple and may enhance their quality of life, as well as the quality of their relationship. Marital interaction enhances marital satisfaction (Szinovacz and Davey, 2004) and will be regarded as an indicator of marital quality in this study.

Individuals strive for social status. Status is an aspect of well-being that is gained by the feeling of 'being superior' to others in the eyes of relevant others and oneself. Status is largely determined by occupational prestige. After retirement, status will become difficult to maintain because status through occupational prestige is reduced. We anticipate that a decline in status, which is assumed to be greatest among people with a high social status (in terms of occupational prestige), decreases satisfaction with retirement (*Hypothesis 5*).

*Transition characteristics* – Many workers are 'forced' to leave the labour force long before the usual retirement age. Involuntary retirement tends to have negative effects on well-being and retirement satisfaction (Gall *et al.*, 1997; Isaksson and Johansson, 2000), and workers who feel they had to retire 'too early' are less satisfied (Hardy and Hazelrigg, 1999). Since planning for retirement is largely a couple affair (Smith and Moen, 1998; Henkens, 1999; Henkens and Van Solinge, 2002), we expect that forced retirement will negatively affect both partners' retirement satisfaction (*Hypothesis 6*).

The consequences of the older worker's retirement may vary according to the partner's labour force status (e.g. Kim and Moen, 2002). Several studies have shown that simultaneous retirement is most conducive to marital satisfaction and that continued employment of the wife after the husband's retirement is negatively related to marital happiness (e.g. Myers and Booth, 1996). Asynchronous retirement may restrict the possibilities for couples to engage in shared post-retirement leisure activities. We expect that continued labour force participation by the spouse will negatively affect both partners' retirement satisfaction (*Hypothesis 7*).

Retirement may have different implications depending on the particular features of the work role or work environment. The effects are likely to depend on job characteristics, such as physical demand, workload and intrinsic value (Wheaton, 1990; Herzog *et al.*, 1991). Stopping work may have positive effects on well-being to the extent that it allows the worker to disassociate from demanding work (*Hypothesis 8a*), and negative effects to the extent that it implies the cessation of stimulating and challenging work (*Hypothesis 8b*).

*Psychological factors* – Belief systems (i.e. expectations of change) have been identified as a central factor in determining the nature of individuals' adjustment to the aging process (Abel and Hayslip, 1986), and research has shown that pre-retirement expectations and retirement anxiety are important determinants not only of the retirement decision (Fletcher and Hansson, 1991; Henkens, 1999) but also of adjustment among retirees (Van Solinge and Henkens, 2005b). We expect retirement anxiety to be negatively related to retirement satisfaction as well. We distinguish five retirement domains: viz. financial well-being, health, leisure, social contacts and social status (see also Higginbottom *et al.*, 1993; Henkens, 1999). We assume that the more older workers expect that retirement will have negative consequences for their financial situation (*Hypothesis 9a*), health (*Hypothesis 9b*), level of activities after retirement (*Hypothesis 9c*), social contacts (*Hypothesis 9d*), and their social status (*Hypothesis 9e*), the lower their retirement satisfaction will be.

Three factors are considered particularly relevant to partners' evaluation of retirement. First, in the US (Hill and Dorfman, 1982) suggest that a decline in income is an important negative aspect of retirement for partners. Second, partners may anticipate an improvement in health resulting from the withdrawal from an unhealthy work environment (Henkens, 1999). Third, many partners expect that retirement will result in marital problems arising from the division of housework, or a decrease in personal freedom and privacy (Vinick and Ekerdt, 1991; Henkens, 1999; Hilborne, 1999). In this study we assume that older workers' partners will be less satisfied with their retirement if they expect financial problems (*Hypothesis 10a*), problems related to the worker's health status (*Hypothesis 10b*) or marital conflict (*Hypothesis 10c*).

People who are able to exert control over their environment show enhanced well-being, whereas a lack of control reduces well-being (e.g. Heckhausen and Schulz, 1995; Lachman and Weaver, 1998). Self-efficacy, or the belief that one can effectively cope with a given situation predicts whether people will enter a

new and unfamiliar situation, as well as the affective reactions to the situation (Bandura, 1982; Sherer *et al.*, 1982). We expect self-efficacy to be positively related to satisfaction with retirement (*Hypothesis 11*).

*Adjustment* – Retirement satisfaction may relate to how the older worker and his/her partner deal with the transition. We expect that difficult adjustment will have a negative impact on retirement satisfaction (*Hypothesis 12a*), but this impact may fade with time (*Hypothesis 12b*). Partners can provide resources, which makes the transition into retirement easier. We expect that a partner who experiences difficulty in adjusting will be a burden and may thus negatively affect the other partner's retirement satisfaction (*Hypothesis 13*).

There is some indication that retirement experiences differ by gender. However, evidence on the association between gender and well-being in retirement has been inconsistent (for an overview see Slevin and Wingrove, 1995). These inconsistencies suggest that it is not gender per se that influences well-being, but rather gender differences in work histories, income and other life experiences (Calasanti, 1996; Kim and Moen, 2002). In the present study, we have included gender as a control variable.

It has been proposed that adjustment to retirement is a process, and satisfaction with retirement may vary over time (Atchley, 1976; Gall *et al.*, 1997). In order to account for possible time (or stage)-dependent variation in satisfaction, time elapsed since retirement has also been included as a control variable in the present study.

### **3.3. Methods**

#### *3.3.1. Data*

This article is based on panel data from 559 older employees and their partners. In 1995, data were collected among older employees working in more than 100 operating companies of two large Dutch multinational companies. A mail questionnaire was sent to all employees aged 55 years and over, and to their (married or unmarried) partners (for details see: Henkens, 1999). A follow-up study was conducted in 2001. A total of 824 questionnaires were mailed to the original participants in the first wave and 629 questionnaires were returned (76 percent). Sensitivity analysis revealed no selective attrition between the first and the second wave with respect to the independent variables in our model.

The sample contained only continuously married or unmarried cohabiting couples. Couples where the partner failed to participate in either wave (N=37) were excluded from the investigation, as were couples whose marriage ended in divorce or widowhood in this period (N=43). The remaining sample consisted of 559 couples. The average age of the older workers in 1995 was 57.1 years; at the time of the interviews in 2001, the average time since retirement was 3.7 years. The questionnaire contained mainly closed-ended questions. Overall, the frequency of item non-response was low (< 3 percent on average). Missing values were replaced by the mean value of the variables, computed from the non-missing values.

### 3.3.2. *Measures*

Most older studies on satisfaction rely on the Retirement Descriptive Index (RDI) developed by Smith, Kendall and Hulin (1969). This scale measures four aspects of satisfaction with life *in* retirement. In this study, we focus on satisfaction *with* retirement. This is a more general evaluation of life in retirement, and implies a comparison with pre-retirement life. *Table 3.1* shows all measures used in this study, as well as their range of scores, means, standard deviations, coding algorithms, wording of the questions, and psychometric properties. Scores on access to resources, job characteristics and retirement anxiety were taken from wave 1; voluntariness of the retirement transition and partner's labour force status were taken from wave 2. The measure of self-efficacy was only available in the second, post-retirement wave. Our self-efficacy scale, however, measures generalized self-efficacy expectations (Sherer *et al.*, 1982). According to Mowen (2000), general self-efficacy meets the criteria for a so-called compound trait. A compound trait is a disposition that emerges from the interplay between elemental traits (dominated by genetic factors and early learning), from the culture in which the person lives, and from his/her learning history. Although general self-efficacy is partly dependent on past experiences, we assume that this measure is sufficiently stable over time to defend its use as an explanatory variable.

Table 3.1. Means (M), Standard deviations (SD), Coding Algorithms, Wording of Survey Questions and Psychometric properties of the dependent and independent variables (N=599)

	M	SD	Coding Algorithm	Wording	Psychometric properties
Satisfaction – Worker	8.1	1.6	4-item scale A single measure for satisfaction was constructed by summing the standardized and unweighted items. The scale was subsequently linearly transformed into a range from 0 to 10, were ‘0’ indicates not satisfied at all and ‘10’ indicates very satisfied with retirement.	Questions: How are you enjoying your retirement? (3 answer categories ranging from 1=Better than expected to 3=I am not enjoying it as much as I thought I would) Have the years since your retirement been better, more or less the same or not as good as the two years preceding your retirement? (3 answer categories ranging from 1=better to 3=not as good) Overall, how happy do you feel about having retired? (4 answer categories ranging from 1=happy to 4 not happy at all). Being retired/not working suits me very well (5 answer categories ranging from 1=completely agree to 5=completely disagree).	Alpha=0.65
Satisfaction – Partner	7.1	1.8	3-item scale ranging from 0=not satisfied at all to 10=very satisfied with retirement. (identical procedure as described above)	Questions: How are you enjoying your partner’s retirement?” (3 answer categories ranging from 1=Better than expected to 3=I am not enjoying it as much as I thought I would) Have the years since your partner’s retirement been better, more or less the same or not as good as the two years preceding his/her retirement? (3 answer categories ranging from 1=better to 3=not as good) Overall, how happy do you feel about your partner having retired? (4 answer categories ranging from 1=happy to 4 not happy at all).	Alpha=0.49
Adjustment – Worker	6.1	2.3	3-item scale. A single measure for adjustment was constructed by summing the standardized and unweighted items. The scale was subsequently linearly transformed into a range from 0 to 10, were ‘0’ indicates many difficulties and ‘10’ indicates few difficulties in adjusting to retirement.	Questions: How long did it take you to get used to retirement? (4 answer categories ranging from 1=less than one month to 4=more than 1 year/not yet, coding reversed) How difficult has it been for you to adjust to a retirement? (5 answer categories ranging from 1=very difficult to 5=not difficult at all) It took quite some getting used to retirement for me (5 answer categories ranging from 1=completely agree to 5=completely disagree)	Alpha=0.82

Table 3.1. (continued)

	M	SD	Coding Algorithm	Wording	Psychometric properties
Adjustment – Partner	7.1	2.2	3-item scale ranging from 0=many difficulties to 10=very few difficulties in adjusting to retirement. (identical procedure as described above)	Questions: How long did it take <i>you</i> to get used to your partner's retirement? (4 answer categories ranging from 1=less than one month to 4=more than 1 year/not yet, coding reversed). How difficult was it for <i>you</i> to adjust to your partner's retirement? (5 answer categories ranging from 1=very difficult to 5=not difficult at all). My husband/wife's retirement took quite some getting used to for me. (5 answer categories ranging from 1=completely agree to 5=completely disagree).	Alpha=0.62
<b>Retirement Context</b>					
Household income (t <sub>i</sub> )	3.9	2.3	Sum of worker's and partner's yearly income (in € divided by 10,000), ranging from 0.6 to 15.4	Worker's salary obtained from the Central Salary Administrations, partner's income asked in questionnaire.	N/a
Income setback	2.9	1.1	1-item, ranging from 1=large drop to 5=very small drop in income	Question: Did your income fall substantially when you retired, or was the drop small? (five answer categories: 1=large drop to 5=very small drop in income).	N/a
Health worker (t <sub>i</sub> )	1.9	0.9	2-item scale, ranging from 1=very poor to 5=very good health	Questions: What is your general state of health? (five answer categories: 1=very poor to 5=very good) Do you have chronic health problems (yes/no).	Alpha=0.76
Health partner (t <sub>i</sub> )	2.1	0.7	1-item, ranging from 1=very poor to 5=very good health	Question: What is your general state of health? (five answer categories: 1=very poor to 5=very good).	N/a
Health deterioration					
Worker	0.12	0.3	Dummy variable,	Constructed on the basis of the following question:	N/a
Partner	0.19	0.4	1=yes, 0=no	Has your health changed since retirement (worker)/ in the last three years (partner)? (five answer categories: 1=yes, much worse to 5=yes, much better).	
Number of hobbies of older worker (t <sub>i</sub> )	6.1	1.9	Summed answers to one question concerning leisure activities of older worker, ranging from 0 to 12	On which of the following activities do you spend your free time? (16 categories)	N/a

Table 3.1. (continued)

	M	SD	Coding Algorithm	Wording	Psychometric properties
Marital interaction ( $t_1$ )	6.0	1.9	2-item scale, ranging from 0=very few to 10=very many shared interests	Questions: Do you and your husband/wife share many interests? (posed to both worker and partner) (five answer categories: 1=yes, many to 5=no, very few; coding reversed)	Alpha=0.62
Partner works at retirement worker	0.16	0.4	Dummy variable, 1=yes, 0=no	Variable constructed on the basis of information on the moment of retirement of worker and spouse	N/a
Job prestige ( $t_1$ )	41.0	16.8	Occupations have been coded according to the Occupational Classification 1992 of Statistics Netherlands	The codes of the SBC92 have been converted to an occupational prestige scale developed by Sixma & Ultee (See: Sixma, H. & Ultee, W. (1983), Een beroepsprestigeschaal voor Nederland in de jaren tachtig. Mens en Maatschappij, 58, 4, 360-382)	N/a
Involuntary retirement	3.3	2.7	4-item scale ranging from 0=voluntary, to 10=involuntary	Questions: Was your decision to retire (early) entirely voluntary, or not (2 answer categories: 1=yes, 2=no not (entirely) voluntary) Items asked: I would have liked to have taken early retirement a few years later; You could say I retired against my will; My decision to retire was voluntary. (five answer categories: 1=completely agree and 5=completely disagree)	Alpha=0.85
Demanding job	0.2	0.4	Dummy variable, 1=yes (if one of the items is yes), 0=no	Two questions: Is your work physically demanding? (yes/no). Is your work characterized by many inconveniences (like smell, noise, and draught)? (yes/no).	N/a
Job challenge ( $t_1$ )	2.4	1.5	3-item scale ranging from 0=not challenging at all to 5=very challenging	Items: My work is characterized by many challenging tasks (2 answer categories 0=no, 1=yes). The work I am doing is not very challenging; The work I am doing has become more and more boring and routine (five answer categories: 1=completely agree and 5=completely disagree).	Alpha=0.72
Number of hours worked	30.9	9.9	Continuous variable, ranging from 4 to 40	Question: How many hours a week did you work shortly before you retired?	N/a

Table 3.1. (continued)

	M	SD	Coding Algorithm	Wording	Psychometric properties
<b>Psychological determinants worker</b>					
Retirement anxiety (t <sub>1</sub> ) Financial	3.0	1.0	1-item ranging from 1=many negative consequences to 5=few negative consequences	Question: To what extent would you miss income if you were to retire early?(five answer categories: 1=very much to 5=not at all).	N/a
Health	2.7	1.3	1-item ranging from 1=negative consequences to 5=positive consequences	Item: Early retirement will be beneficial to my health. (five answer categories: 1=completely agree to 5=completely disagree).	N/a
Social contacts	2.9	1.1	1-item ranging from 1=many negative consequences to 5=few negative consequences	Question: To what extent would you miss social contacts with co-workers if you were to retire early? (five answer categories: 1=very much to 5=not at all).	N/a
Leisure	2.1	0.8	4-item scale ranging from 1=many negative consequences to 5=few negative consequences	Items: I'm always very busy, even in my spare time; I think I'll continue to be pressed for time once I retire; With so many hobbies, I'll never be bored; If I don't work, I'll get bored. (five answer categories: 1=completely agree and 5=completely disagree).	Alpha=0.77
Social status	1.8	0.8	2-item scale ranging from 1=many negative consequences to 5=few negative consequences	Question: To what extent would you miss self-esteem/social status if you were to retire early? (five answer categories: 1=very much to 5=not at all).	Alpha=0.79
Self-efficacy (t <sub>2</sub> )	6.5	1.9	4-item scale ranging from 0=low level of self-efficacy, to 10=high level of self-efficacy	Shortened version of the General Self-Efficacy Scale (Sherer et al, 1982). Items: If I make plans, I am convinced I will succeed in executing them; If I absolutely want something, it usually goes wrong; I doubt myself; If I have the impression something new is complicated, I don't start. (Five answer categories: 1=completely agree and 5=completely disagree)	Alpha=0.58

Table 3.1. (end.)

	M	SD	Coding Algorithm	Wording	Psychometric properties
<b>Psychological determinants partner</b>					
Retirement anxiety (t <sub>1</sub> )					
Financial	2.5	1.1	1-item scale ranging from 1=many negative consequences to 5=few negative consequences	Question: Do you expect to encounter income problems if your partner were to retire early? (five answer categories: 1=very much to 5=not at all).	N/a
Worker's health	2.4	1.2	1-item scale ranging from 1=negative consequences to 5=positive consequences	Item: Early retirement will be beneficial to my partner's health. (five answer categories: 1=completely agree to 5=completely disagree).	N/a
Marital conflict	1.6	0.7	4-item scale ranging from 1=many negative consequences to 5=few negative consequences	Questions: If your husband/wife were to stop working, to what extent would you expect problems to arise with respect to (a) joint leisure time activities, (b) division of household chores, (c) your social life, (d) relationship between you and your partner? (five answer categories: 1=very much to 5=not at all.)	Alpha=0.79

### 3.3.3. Analytical strategy

Our analyses are based on ordinary least squares (OLS) regressions. In order to control for the design effect we adjusted for clustering at the company level as well as the branch level, using robust regression techniques. Three separate models have been estimated for adjustment and satisfaction. The first model only includes the couple's access to and changes in resources. The second model includes resources *and* transition characteristics. The third model includes resources, transition characteristics *and* psychological factors. In the fourth step, the analysis is extended by incorporating the worker's and the partner's adjustment in the models of retirement satisfaction. Including adjustment as an explanatory variable in model 4 introduces the risk that one of the basic assumptions of the Classical Linear Regression Model will be violated because of endogeneity. Since the results of the Hausman test in the STATA statistical package indicate that the difference between the coefficients of the instrumental variables regression and the OLS regression were not systematic, an OLS regression has been performed in model 4. Spousal interdependency is represented by including spousal (health and health change) and marital characteristics (marital quality, a couple's retirement timing) in the models. Mutual influence is further represented by the direct effects of the partner's adjustment on the other spouse's satisfaction with retirement.

## 3.4. Results

*Table 3.2* shows that the vast majority of workers and their partners said they were satisfied with retirement. More than 40 percent of older workers and one-third of their partners stated that the years since retirement had been better than the two years preceding retirement. The results of the multivariate regression analyses to explain adjustment to and satisfaction with retirement are shown in *table 3.3* (for older workers) and *table 3.4* (for their partners).

*Resources* – The results of model 1 in *table 3.3* suggest a relationship between the older worker's satisfaction with retirement and the couple's access to resources. Household income as well as the older worker's health status has a positive effect on satisfaction with retirement. However, differences in satisfaction with retirement cannot be explained merely by the access to these resources. The results provide evidence for the hypothesis that changes in resources upon retirement also play a role: older workers who experience a deterioration in health or a stronger income setback appear to be less satisfied

Table 3.2. Univariate descriptive statistics for three items constituting the Satisfaction scale for older workers and their partners ( $N=559$ ), %

	Older worker	Older worker's partner
<b>How are you enjoying your (partner's) retirement?</b>		
It's better than I'd expected	42	27
It's exactly as I'd imagined it would be	52	70
I'm not enjoying it as much as I thought I would	6	3
Total	100	100
<b>Have the years since your (partner's) retirement been better, more or less the same or not as good as the two years preceding his/her retirement?</b>		
Better	43	32
More or less the same	54	66
Not as good	3	2
Total	100	100
<b>Overall, how happy do you feel about your (partner) having retired?</b>		
Happy	89	86
Quite happy	9	13
Not too happy/Not happy at all	2	1
Total	100	100

with retirement. Contrary to our expectations, the partner's health status did not influence the worker's satisfaction with retirement. The expected influence of marital interaction on satisfaction was confirmed. Moreover, pre-retirement marital quality positively contributed to satisfaction with retirement. We did not, however, find evidence for the hypothesis that social status and involvement in leisure activities influenced retirement satisfaction. With respect to the control variables, no significant effects were found. The explanatory power of this model, as indicated by the  $R^2$  of the fitted model, is 9.0 percent for satisfaction (cf. 4.6 percent for adjustment).

The results for the partners of the older workers (table 3.4) show that resources play a minor role in explaining satisfaction with retirement. The explained variance ( $R^2$ ) of the model is 4.6 percent (cf. 12.3 percent for adjustment). We did not find significant effects for household income, (own and partner's) health,

Table 3.3. Regression analysis explaining older worker's adjustment to and satisfaction with retirement

	Model 1		Model 2		Model 3		Model 4		Model 3		Model 4		Model 4			
	Adjustment		Satisfaction		Adjustment		Satisfaction		Adjustment		Satisfaction		Adjustment		Satisfaction	
	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t
Constant	5.47	6.14	7.01	11.64	6.88	6.75	7.46	10.68	7.14	6.81	7.57	9.60		5.61	6.72	
Gender worker (female=1)	-0.47 †	-2.21	-0.20	-1.14	-0.91 *	-2.89	-0.34	-1.46	-0.61 †	-2.12	-0.22	-0.92		-0.10	-0.50	
Time elapsed since retirement	-0.01	-0.09	0.04	0.88	0.07	1.11	0.07	1.53	0.04	0.68	0.05	1.07		0.04	1.05	
<b>Context</b>																
<i>Resources</i>																
Financial-economic																
Household income	0.00	-0.06	0.10 †	2.31	-0.06	-1.39	0.08	1.91	-0.03	-0.59	0.08 †			0.09 †	2.41	
Income drawback	0.26 *	2.63	0.22 *	3.04	0.16	1.70	0.17 †	2.28	<u>0.15</u>	1.68	<u>0.18</u> †	2.39		0.14 †	2.28	
Health:																
State of health Worker	-0.05	-1.06	-0.08 *	-2.85	-0.23	-0.62	-0.05 †	-1.99	0.01	0.15	-0.02	-0.81		-0.02	-0.82	
State of health Partner	0.04	0.29	0.03	0.28	0.09	0.68	0.03	0.27	0.22	1.58	0.04	0.36		-0.01	-0.09	
Health deterioration worker (0-1)	0.77 †	-2.36	-0.74 *	-2.92	-0.47	-1.58	-0.64 *	-2.60	<u>-0.39</u>	-1.39	<u>-0.60</u> †	-2.50		-0.50 †	-2.13	
Health deterioration partner (0-1)	-0.26	-0.91	-0.20	-1.09	-0.26	-1.05	-0.20	-1.14	-0.21	-0.88	-0.19	-1.12		-0.13	-0.76	
Leisure: number of hobby's	0.02	0.37	0.33	0.74	0.02	0.56	0.04	1.04	0.00	-0.10	0.02	0.46		0.02	0.53	
Marital quality: marital interaction	0.10	1.72	0.09 †	2.45	0.07	1.33	0.07 †	2.18	0.01	0.11	0.43	1.38		0.04	1.23	
Social status: Job prestige	-0.01	-0.70	0.00	-0.41	0.00	0.25	0.01	0.87	0.00	-0.39	0.00	0.63		0.00	0.83	
<i>Characteristics of transition</i>																
Involuntary retirement					-0.34 *	-9.31	-0.16 *	-5.32	<u>-0.31</u> *	-8.22	<u>-0.15</u> *	-4.62		-0.07 †	-2.32	
Demanding job (0-1)					-0.05	-0.27	0.27	1.95	-0.11	-0.56	0.21	1.50		0.23	1.74	

Table 3.3. (end)

	Model 1		Model 2				Model 3				Model 4						
	Adjustment		Satisfaction		Adjustment		Satisfaction		Adjustment		Satisfaction		Adjustment		Satisfaction		
	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t	
Job challenge			0.07	1.18	-0.07	-1.37	0.03	0.55	-0.07	-1.46			-0.08	-1.69			
No. of hours worked before retirement			-0.02	-1.18	0.00	-0.45	-0.03 †	-2.08	-0.01	-0.66			0.00	0.13			
Partner in labour force at t <sub>2</sub>			0.34 †	2.06	0.21	1.34	0.25	1.35	0.18	1.21			0.12	0.77			
<b>Psychological determinants</b>																	
<i>Retirement anxiety</i>								0.12	1.44	0.05	0.94			0.03	0.49		
Financial								-0.08	-1.06	-0.14 †	-2.26			-0.12	-1.95		
Health								0.04	0.31	-0.04	-0.31			-0.04	-0.34		
Leisure								<u>-0.22</u> †	-2.51	<u>-0.03</u>	0.44			0.03	0.54		
Social contacts								<u>-0.54</u> *	-4.67	<u>-0.10</u>	-1.06			0.04	0.41		
Social status																	
<i>Self-efficacy</i>								<u>0.25</u> *	5.84	<u>0.09</u> *	2.27			0.03	0.79		
<b>Adjustment</b>																	
Adjustment worker														0.24 *	6.20		
Adjustment partner														0.03	0.84		
	R2	4.6	9.0	20.4	1.8	30.2	20.2								29.0		

† p &lt; 0.05, \* p, 0.01.

Underscored coefficients differ significantly for adjustment and satisfaction (p &lt; 0.05).

Table 3.4. Regression analysis explaining partner's adjustment to and satisfaction with retirement of older worker

	Model 1		Model 2		Model 3		Model 4								
	Adjustment		Satisfaction		Adjustment		Satisfaction		Adjustment		Satisfaction				
	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t			
Constant	6.61	6.68	5.68	10.17	6.87	5.83	5.82	9.02	9.03	8.64	6.98	9.28	3.83	4.30	
Gender partner (male=1)	0.97 *	3.71	0.06	0.26	0.87 *	2.65	-0.01	-0.03	<u>0.81</u> *	2.59	<u>-0.03</u>	-0.13	0.26	-1.14	
Time elapsed since retirement	-0.13 †	-1.97	-0.03	-0.53	-0.11	-1.54	-0.02	-0.41	-0.09	-1.18	-0.02	-0.42	0.00	0.06	
<b>Context</b>															
<i>Resources</i>															
Financial-economic															
Household income	-0.05	-0.78	0.03	0.57	-0.07	-1.16	0.03	0.45	-0.09	-1.32	0.01	0.23	0.04	0.99	
Income drawback	0.05	0.54	0.06	0.68	0.02	0.19	0.04	0.41	<u>0.01</u>	0.07			0.02	0.31	
Health:															
State of health Worker	-0.03	-0.91	-0.05	-1.51	-0.02	-0.60	-0.03	-1.07	-0.03	-0.69	-0.03	-0.78	-0.02	-0.53	
State of health Partner	-0.06	-0.46	0.11	0.90	-0.05	-0.38	0.10	0.83	0.00	0.03	0.13	1.07	0.13	1.06	
Health deterioration worker (0-1)	-0.17	-0.57	-0.53	-1.70	-0.09	-0.29	-0.52	-1.61	-0.08	-0.25	<u>-0.50</u>	-1.61	-0.46	-1.79	
Health deterioration partner(0-1)	-0.32	-1.48	-0.05	-0.24	-0.33	-1.57	-0.05	-0.25	-0.37	-1.72	-0.07	-0.36	0.05	0.28	
Leisure: number of hobby's	0.02	0.56	-0.04	-1.05	0.02	0.52	-0.03	-0.98	0.01	0.27	-0.04	-1.19	-0.05	-1.39	
Marital quality: marital interaction	0.22 *	4.28	0.21 *	4.00	0.22 *	4.10	0.20 *	3.94	<u>0.12</u> †	2.19	<u>0.16</u> *	3.18	0.12 *	2.80	
Social status: Job prestige	-0.01	-0.67	0.01	0.99	0.00	-0.30	0.01	1.47	0.00	-0.04	0.01	1.67	0.01 †	2.10	
<i>Characteristics of transition</i>															
Involuntary retirement					-0.11 *	-3.15	-0.05	-1.73	<u>-0.09</u> †	-2.45	<u>-0.03</u>	-1.19	0.01	0.19	
Demanding job (0-1)					0.23	1.18	0.25	1.35	0.33	1.77	0.29	1.52	0.18	0.97	

Table 3.4. (end)

	Model 1		Model 2				Model 3				Model 4					
	Adjustment		Satisfaction		Adjustment		Satisfaction		Adjustment		Satisfaction		Adjustment		Satisfaction	
	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t	Coef.	t
Job challenge			0.03	0.47	-0.04	-0.64	0.06	1.11	-0.02	0.38			-0.05	-0.83		
No. of hours worked before																
Retirement			0.00	-0.30	0.00	-0.37	0.00	-0.35	0.00	-0.41			0.00	-0.21		
Partner in labour force at t <sub>2</sub>			0.15	0.65	0.11	0.51	0.17	0.69	0.13	0.61			0.07	0.31		
<b>Psychological determinants</b>																
<i>Retirement anxiety</i>																
Financial								<u>-0.18</u> †	-2.32	<u>-0.12</u>	-1.80			-0.06	-0.94	
Worker's health								0.03	0.44	-0.04	-0.54			-0.05	-0.72	
Marital conflict								<u>-0.90</u> *	-5.39	<u>-0.39</u> *	-3.36			-0.10	-0.84	
<b>Adjustment</b>																
Adjustment worker														0.04	1.09	
Adjustment partner														0.32 *	9.11	
R2		12.3		4.6		14.3		7.6		21.4		10.7				22.2

† p &lt; 0.05, \* p, 0.01.

Underscored coefficients differ significantly for adjustment and satisfaction (p &lt; 0.05).

leisure and social status. Marital interaction, however, was found to have a positive effect on the partner's satisfaction. There were no significant gender differences in satisfaction with the older worker's retirement.

*Transition characteristics* – In model 2, characteristics of the retirement transition have been incorporated in the analyses. In this step, the explanatory power doubles for satisfaction ( $R^2=17.8\%$ ). For adjustment, the increase is more than fourfold ( $R^2=20.4\%$ ). The results in table 3.3 show that among the transition variables, control over the decision to retire is of primary importance. Forced retirement is a strong predictor of dissatisfaction with retirement. Contrary to our expectations, job characteristics had no significant effect on satisfaction. The same holds for the spouse's employment status. We did not find an effect of asynchronous retirement on the older worker's satisfaction with retirement.

The results for the partners of the older workers (table 3.4) show that involuntary retirement did not influence the partner's satisfaction. Neither did asynchronous retirement have an effect on the partner's satisfaction with retirement. More detailed analyses (results not included in the tables) using gender interaction terms did not provide evidence that the wife's continued employment after the husband's retirement had more adverse effects on both partners' retirement satisfaction than the reverse (i.e. husband continues to work after his wife's retirement). The explained variance ( $R^2$ ) of model 2 for the partner's retirement satisfaction was 7.6 percent (cf. 14.3 percent for adjustment).

*Psychological factors* – The results of model 3 indicate that psychological factors play a role in explaining retirement satisfaction. Their contribution, however, appears to be modest: in this step, the explanatory power of the retirement satisfaction model ( $R^2$ ) increased by 2.2 percent to 20.2 percent (cf. 9.8 percent point in the model for adjustment). Only one of the dimensions of retirement anxiety was found to be significantly related to satisfaction with retirement: older workers who are anxious that retirement would negatively influence their health were less satisfied with retirement. As hypothesized, we found a significant effect of self-efficacy. Workers with higher scores tended to be more satisfied with retirement. After incorporating psychological factors in the model, the effect of marital interaction was no longer significant in explaining satisfaction with retirement.

For the partners, in step 3, the explanatory power ( $R^2$ ) increased by 3.1 percent point for satisfaction (cf. 7.1 percent point for adjustment). The results show that negative pre-retirement expectations about the consequences of retirement for marital quality predict dissatisfaction among partners. Contrary to our expectations, we did not find significant effects for anticipated post-retirement financial strain.

The results of model 3 for the older workers reveal that there are differences in the determinants of older workers' adjustment to and satisfaction with retirement. Adjustment problems are influenced in particular by anxiety about the social consequences of retirement (loss of contacts, loss of social status), by a lack of control over the decision (involuntary retirement), and the individual's ability to deal with change (self-efficacy). Satisfaction with retirement is related primarily to the couple's access to key resources: their financial resources, their health and the quality of the marital relationship. For partners, the differences were far less pronounced. Both retirement satisfaction and adjustment could be explained primarily by marital relationship characteristics.

Women tend to experience more problems in adjusting to retirement, both as workers and as partners. Gender had no significant effect on retirement satisfaction.

*Adjustment* – In model 4, the adjustment of both worker and partner have been added to the analyses. The results show that, indeed, older workers who experience more problems in adjusting to retirement tend to be less satisfied. However, the partner's adjustment is not significantly related to the older worker's satisfaction with retirement (table 3.3). Similar results were found for the partners of older workers (table 3.4). Incorporating adjustment in the model did not change the effects of context variables (resources and transition characteristics). Self-efficacy and retirement expectations, however, lost their significance in explaining satisfaction with retirement, both for the older workers themselves and for their partners. This suggests that these psychological factors operate through their influence on the adjustment processes.

In addition to the analyses presented in table 3.3 and table 3.4, several interaction effects were tested. Priority was given to the interaction of contextual variables with gender. In addition, we explored whether combinations of circumstances generated a cumulative disadvantage. For example, does poor health result in lower satisfaction with retirement more strongly when income is

low? Only one of the interaction terms proved to be significant: among female older workers, satisfaction with retirement was more strongly influenced by family income than among male older workers. The interaction term adjustment\*time elapsed had no significant effect, implying that the impact of adjustment on satisfaction does not fade with time.

### 3.5. Conclusions and discussion

This study provides empirical evidence for the suggestion put forward by MacLean (1982) and Van Solinge and Henkens (2005b) that adjustment to and satisfaction with retirement are related, but *not* identical constructs. Adjustment to retirement appears to be a predominantly psychological process, involving a detachment from the social ties of work. Adjustment problems arise from pre-retirement anxiety about the social consequences of retirement (in particular loss of contacts and loss of social status), from a lack of control over the decision (forced retirement), and the individuals' perceived control (e.g. their perceived ability to deal with change). Retirement satisfaction, on the other hand, is primarily related to the couples' access to key resources: their financial situation, health and the quality of the marital relationship.

Second, this study confirms the profound significance of voluntary choice of labour force participation for psychological well-being at older ages (e.g. Gall *et al.*, 1997; Isaksson and Johansson, 2000). A lack of control, as is the case with forced retirement, is a risk factor for adjustment problems (Kim and Moen, 2002; Van Solinge and Henkens, 2005b). This study shows that involuntary departure from the workforce also has a more long lasting effect since it has repercussions for satisfaction with retirement as well.

Third, job characteristics appear to be of minor importance in explaining individual differences in retirement satisfaction. Retiring from an occupation that is not challenging and/or takes up many hours a week and/or has a low status or is physically or mentally demanding does not increase the individual's satisfaction with retirement. This is an interesting finding in light of the emphasis placed on these factors in the role theoretical approach (e.g. Wheaton, 1990).

Fourth, the results of this study suggest that the association between psychological factors and satisfaction with retirement may be indirect rather than direct. Our findings provide empirical support for the suggestion put

forward by Windle and Woods (2004), that the regulation of subjective well-being may occur through psychological resources that promote adaptation to adverse situations. Well-being or satisfaction with retirement is thus partly dependent on how older workers face up to and deal with the transition.

Fifth, partners' satisfaction with older workers' retirement is predominantly influenced by marital characteristics. Marital quality *and* pre-retirement concerns about marital conflict predicted partner's satisfaction with retirement. This centrality of marital quality indicators may be due to the fact that for the spouse, in particular if this is a housewife, adaptation to the changed relationship with the spouse is the dominant aspect in the process of adjusting to the worker's retirement.

Another issue raised in this article is the way subjective evaluations of retirement are influenced by the partner. Prior studies have shown that partners play an important role in decision making with regard to retirement (Smith and Moen, 1998; Henkens, 1999; Henkens and Van Solinge, 2002), but that their role in the adjustment process is less pronounced (Van Solinge and Henkens, 2005b). The results of this study support this conclusion. Adjustment problems faced by one of the partners do not influence the other partner's satisfaction with retirement. In contrast to decision making on retirement, which was found to be a couple affair, adjustment appears to be a much more individualistic process, which that is experienced differently by each partner. This does not mean that the partner is irrelevant: pre-retirement marital quality is an important predictor of retirement satisfaction, particularly for the older worker's partner. Given the importance of marital relationship characteristics, future research should include a broader variety of marital characteristics (e.g. preferences for joint retirement, marital arguments, task division) in order to be able to investigate what elements of the marital relationship account for workers' and partners' retirement satisfaction. Including such variables may also improve the explanatory power of the models explaining retirement satisfaction, in particular for the partners.

When evaluating the results presented here, some limitations need to be mentioned. The first relates to the generalizability of the study. Even though the sample contains substantial variation in terms of important variables such as gender, job category and health, it is not necessarily representative of the total population of former older workers with a partner in the Netherlands. A second point that warrants attention is the low alpha of the measure for the partner's satisfaction with the older worker's retirement, which is partly due to the fact

that the partner's scale contained one item fewer. Future research should seek to improve this measurement. Despite these limitations, the results of this study suggest that adjustment to and satisfaction with retirement are conceptually different, which has consequences for future research into the retirement process.

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## 4. Health change in retirement: A longitudinal study among older workers in the Netherlands<sup>14</sup>

### 4.1. Introduction

This article deals with health change in retirement. This issue has been addressed in many earlier studies and from various disciplinary perspectives (see for an overview: Minkler, 1981; Kasl and Jones, 2000). Points of view have shifted over time. The older studies, in particular those conducted in the period 1960-1985, started from the assumption that retirement as a potential stressful life change event may have adverse health consequences (Kremer, 1985; Ekerdt, 1987). More recent studies acknowledge that retirement may also, or predominantly have beneficial effects on health, given that people feel less stress and are able to spend more time on healthy pursuits. Many of these studies have looked at group rather than individual changes over time (Bossé, Aldwin, Levenson and Ekerdt, 1987; Midanik, Soghikian, Ransom and Tekawa, 1995), or reported cross-sectional differences between workers and retirees (Herzog *et al.*, 1991; Drentea, 2002). The empirical evidence on this issue is not uniform, in the sense that either no effects (e.g. Ekerdt, Baden *et al.*, 1983; Mein *et al.*, 2003), positive effects (e.g. Vallery-Masson *et al.*, 1981) or mixed effects (e.g. Tuomi, Järvinen, Eskelinen, Ilmarinen and Klockars, 1991) are reported. These results suggest that retirement does not categorically harm or benefit health. Instead, it is likely that health consequences vary across individuals and that the circumstances under which retirement takes place matter (Bossé, Aldwin, Levenson and Workman-Daniels, 1991). This article deals with the question how health changes in the transition period from work to retirement, and what individual characteristics and retirement conditions play a role in this respect.

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<sup>14</sup> This chapter has been accepted for publication in Research on Aging. Van Solinge, H., Health change in retirement: A longitudinal study among older workers in the Netherlands.

Health is a broad concept, which is illustrated by the definition that has been used by the World Health Organization since 1946<sup>15</sup>. The research literature on health and retirement shows a multitude of health concepts. Measures are either based on more objective data, such as the presence of disease or health problems identified in medical exams (Vallery-Masson *et al.*, 1981; Ekerdt, Baden *et al.*, 1983) or reported by the person him/herself (Bossé *et al.*, 1987), or else based explicitly on subjective data, such as self-rated health (Ekerdt, Bossé and LoCastro, 1983; Kremer, 1985). The instruments appear to measure different aspects of health. Elderly people who are regarded as unhealthy from an objective point of view (medical diagnosis etcetera) do not necessarily feel unhealthy (Helmer, Barberger-Gateau, Letteneur and Dartigues, 1999). People who feel physically better after retirement, are not necessarily healthier in an objective sense (Ekerdt, Bossé *et al.*, 1983). This suggests that outcomes may vary according to the health measures adopted. We will investigate what aspects of health are more inclined to change in retirement and will therefore make a distinction between more objective and more subjective health measures, namely medical consumption, the severity of health problems and self-rated or perceived health.

This article addresses three research questions. The first is descriptive and addresses the question whether the older workers experienced health changes in retirement. The second question concerns the conditions under which retirees experienced improvement or deterioration of their state of health. The third question examines the extent to which the findings differ for the three health aspects distinguished. The article is based on panel data on 778 older employees working in Dutch industry and trade. The employees (aged 55 years and over) were interviewed in 1995 and again in 2001. In the intervening period, all older workers except four made the transition into retirement. Due to their small number, the group that did not undergo retirement had to be excluded from the analysis.

The Netherlands has a mandatory retirement age of 65. Early retirement arrangements are very popular and —as yet— rather generous. Only few workers remain in the labour force until mandatory retirement. As a result the effective retirement age is much lower than the official retirement age. For the period 1997-2002, it was 61.0 for men and 59.1 for women. In international

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<sup>15</sup> “Health is a state of complete physical, mental and social-well-being and not merely the absence of disease or infirmity”.

comparison, the effective retirement age in the Netherlands is low (OECD, 2005). Contrary to the situation in the United States where retirement is often not a single transition but rather a 'blurry' process (Mutchler, Burr, Pienta and Massagli, 1997), in the Netherlands retirement generally entails the end of paid employment.

#### 4.2. Theoretical considerations

Retirement is one of the major life transitions in late adult life and has a long history of scientific investigation. The impact of retirement has been studied from a variety of scientific disciplines, such as sociology, psychology and epidemiology. Much of the literature on the impact of retirement on health is grounded in the stressful life event approach (Pearlin, 1989; Wortman *et al.*, 1993). This literature offers clues for this study into the conditions associated with health change in retirement as well.

Within the stressful life event approach three lines of research can be distinguished (Schwarzer and Schulz, 2002). The so-called '*response-based perspective*', adopted in much biomedical stress research, is based on the assumption that every major event in life produces stress. Stress may subsequently evoke health change (Seyle, 1956). Researchers are not so much interested in the nature of the stressor, but more in the physiological response and the occurrence of complaints and diseases. Many epidemiological studies into the impact of retirement on health use this stress model. The influence of retirement on health is studied by comparing the health status of retirees with that of employees who remained in the labour force. The models used are relatively simple, as they usually control for a limited number of socio-demographic variables only (e.g. Tuomi *et al.*, 1991; Mein *et al.*, 2003).

In the so-called '*stimulus-based perspective*' emphasis is placed on the event that gives rise to stress (the stimulus). The models used are more complex. The assumption is that not all life events are equally stressful; the greater the changes events bring about, the greater the adjustment required, and therefore the more stressful these events are. Within this tradition great effort has been put in the development of life-event scales, such as the Social Readjustment Rating Scale (SSRS) (Holmes and Rahe, 1967; Miller and Rahe, 1997). Holmes, Rahe and their colleagues empirically derived a list of 43 events, which were rated by convenience samples of judges for the amount of readjustment each event required. A classification of stressful events was subsequently drawn up on the

basis of the average values. In this research tradition, respondents are typically asked which of a list of events they have experienced over a specified time period, allowing researchers to examine the (cumulative) impact of various types of events. The impact is thus determined by external factors and is independent of individual perceptions.

The third line of research is the so-called '*cognitive stress approach*'. In this approach stress is defined as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus and Folkman, 1984). The individual, thus, plays an active role in the relationship between the life event and its outcome, because he/she assigns a cognitive and evaluative value to the event. The models used are more complex. They assume that the stressfulness of an event is determined not only by the objective nature of the stressor, but also by its subjective interpretation. The lines of research described above are complementary rather than contradictory. The main difference lies in the robustness of the underlying models and therefore in the simplified assumptions used.

### **4.3. Conceptual model and hypotheses**

Our conceptual model combines insights from these three perspectives. We will use a step-by-step approach to answering the explanatory question into the conditions under which retirees experience improvement or deterioration in their state of health. The first step—which is more or less in line with the stimulus-based perspective—assumes that health change in retirement is associated with the characteristics of the retirement transition. In the second step we assume that health change in retirement, can be explained by characteristics of the transition, which make the event more or less stressful, but also by the individual's pre-retirement job characteristics. In the third step we additionally assume that health change in retirement is related to the individual's access to resources (e.g. money, social support). Together, the characteristics of the event, characteristics of the job and access to resources form the *context* in which the transition takes place. In the fourth step—which incorporates elements of the cognitive stress approach—we assume that people do not respond only to the objective features of a situation but also to the meaning this situation has for them. Contextual factors and the *individual's appraisal* of the event determine to what extent retirement affects health. We will elaborate on these factors below.

#### 4.3.1. *Characteristics of the transition*

Not all events are equally stressful. The greater the changes caused by an event, thus requiring greater adjustment, the more stressful the event will be. We therefore expect that retirement following a long employment history will bring about a greater change than retirement after a shorter or more fragmented career (*Hypothesis 1a*). Thoits (1983) has argued that the stressfulness of an event is determined by factors such as the desirability of the event, the degree of control, its predictability and irreversibility. Desirability, predictability and degree of control over withdrawal from the labour force are strongly interrelated and will jointly affect the degree to which the transition is perceived voluntary. Expected changes are more easily adapted than are unanticipated events (Moen, 1996), and forced retirement is a risk factor for the development of adjustment problems (Van Solinge and Henkens, 2005b). Employees who retired unanticipated and involuntarily report poorer health following retirement than employees who had control over their exit from the labour force (Herzog *et al.*, 1991; Gallo *et al.*, 2000; He and Marshall, 2003). We assume that involuntary retirement will increase the probability of health deterioration in the transition from work to retirement (*Hypothesis 1b*). To control for the fact that poor health may invoke premature and/or involuntary retirement (Szinovacz and Davey, 2005a), information on the reason for involuntary retirement (health, organizational reasons, other reasons) will be included. This allows us to control for health change prior to retirement as well.

Changes in a given domain of life may coincide with changes in other domains of life (e.g. Moen, 1996). In many instances, there is even a clear interrelationship between changes, such as in case of retirement migration (Mulder and Hooimeijer, 1999). The impact of events is presumed to be additive (Holmes and Masuda, 1974; Thoits, 1983). If an event coincides with changes in other domains, such as moving home, a serious illness in the family, or the loss of one's partner, the impact will be greater. We expect that the probability of deterioration in health following retirement will be greater if retirement coincides with other transitions (*Hypothesis 1c*).

#### 4.3.2. *Characteristics of the job*

Events may bring about both loss and gain. Which element predominates will differ from one individual to the next (Murray Parkes, 1993). Effects likely depend on the particular job and its features, such as physical demand, workload and intrinsic value (Wheaton, 1990; Shultz, Morton and Weckerle, 1998). There is ample evidence that working conditions increase the onset of health related

problems among older workers (Hayward, Friedman and Chen, 1998; Blekesaune and Solem, 2005). Retirement may then come as a relief. We assume that the more physically demanding a job is (*Hypothesis 2a*) and the higher the job pressure (*Hypothesis 2b*), the greater the advantages of retirement will be. In such instances, the probability of an improvement in health will be greater. The greater the intrinsic value of the job, e.g. because the job offers greater challenges (*Hypothesis 2c*), and the greater the prestige offered by the job (*Hypothesis 2d*), the greater the potential loss. In this situation retirement will likely be more stressful and this will increase the probability of deterioration in health.

#### 4.3.3. *Access to resources*

Life events do not necessarily have the same effect on individuals. Some people are more vulnerable to change and stress and are therefore likely to be more susceptible to health problems than others. The susceptibility is determined in part by the access an individual has to resources. Social and financial resources are particularly important in this respect (Wortman *et al.*, 1993). Resources can be organized to mitigate or neutralize the negative consequences of a stressful event and therefore play a role as buffers in the adjustment process. Marital status is considered a resource. Ties to a spouse might buffer the potential stressful or negative effects of retirement (*Hypothesis 3a*). Participation in post-retirement informal networks is considered to be consequential for health of retirees (Moen, 1996). This possibility is restricted when most people in one's social network are still active in the labour force (*Hypothesis 3b*). Socio-economic resources promote health throughout the life course (e.g. Borg and Kristensen, 2000), including following retirement (e.g. Deeg and Bath, 2003). Financial resources could constrain the economic means for optimal health care and financial strain can produce stress. We expect that older workers with lower household incomes are more likely to experience health problems in retirement (*Hypothesis 3c*). With respect to support given by the partner, we shall examine to what extent the sole presence of a partner acts as a buffer, or whether it is the quality of the partner relationship (in terms of interaction) that makes the difference. Hobfoll (1989) stated that it is not so much the availability of or access to resources as such but rather a change in the level of resources (notably loss of resources) that produces stress, in particular if the loss can not be compensated for. We expect that the greater the drop in income following retirement, the greater the probability of a deterioration in health (*Hypothesis 3d*).

#### 4.3.4. *Individual appraisal*

Individual behaviour is influenced not only by the objective characteristics of the situation (the context), but also by the meaning people assign to a situation or event (e.g. Taylor and Cook, 1995; Moen, 1996). Negative expectations and fears about retirement contribute to delayed retirement (Fletcher and Hansson, 1991; Henkens and Tazelaar, 1997; Henkens, 1999; Barnes-Farrell, 2003). Older workers with negative expectations about the consequences of leaving their jobs are likely to experience greater difficulty adjusting to retirement (Van Solinge and Henkens, 2005b). We expect that the individual's pre-retirement appraisal of the impact of retirement predicts to what extent retirement is experienced as a stressful event. The more the older worker expresses fear about retirement, the more likely he/she will be to experience stress, which in turn will increase the likelihood of deterioration in health following retirement (*Hypothesis 4a*).

Various authors (e.g. Heckhausen and Schulz, 1995; Taylor and Cook, 1995; Moen, 1996; Gall *et al.*, 1997) have argued that control, that is the feeling that one is able to manage transitions and life changes, is an important factor with regard to adjustment to new circumstances. Feelings of personal control are widely regarded as a key marker of successful aging (Krause and Shaw, 2003). Older workers who have confidence in their own ability to cope with change (self-efficacy) have less difficulty adjusting to retirement (Van Solinge and Henkens, 2005b). We assume that self-efficacy influences the way in which individuals deal with stressful events. Older workers, who feel that they are less able to deal with changes, are more likely to experience stress upon retirement. This increases the likelihood of deterioration in health (*Hypothesis 4b*).

#### 4.3.5. *Gender*

Gender structures pre-retirement employment experiences (Calasanti, 1996), and this may lead to significantly different post-retirement experiences as well. Most studies on women's retirement assume that women, given their different work histories and general life experiences may adjust differently than men. It has been suggested that gender-based differences in work commitment, caused by the fact that women's primary role was in the home result in fewer adjustment problems among women (Gratton and Haug, 1983; Moen, 1996). Following this line of reasoning retirement may be less stressful and one may expect women to be less likely to experience a deterioration of health in retirement (*Hypothesis 5a*). The empirical evidence is, however, mixed (see: Slevin and Wingrove, 1995 for an overview of this literature).

## 4.4. Methods

### 4.4.1. Data

The data have been taken from a panel study on retirement behaviour. The first wave of this longitudinal study on retirement behaviour was carried out in the spring of 1995. Data were collected among older employees working in more than 50 operating companies of two large Dutch multinational companies active in the field of retail and trade and industry. A mail questionnaire was sent to all employees aged 55 years and over and their partners. Older workers and partners were asked about their plans and preferences regarding retirement, and information was gathered about their job situation, health, financial situation, and their expectations about retirement (for details, see: Henkens, 1999). Response in the first wave was 78 percent for older workers and 97 percent for partners. In the spring of 2001, a follow-up study was conducted. For this follow up, participants in the first wave were approached. A total of 1,058 questionnaires were sent off. Response after two reminders was 75 percent for older workers and 97 percent for partners, which means that 59 percent of the original sample of older workers participated in both waves. Sensitivity analysis using multivariate analysis revealed that no selective attrition between the first and second wave could be established with respect to the independent variables in the model.

The 793 questionnaires returned showed that only four people had *not* made the transition into retirement in between the two waves of the study. Because of their small numbers, the non-retirees have been excluded from the analysis. Complete information was gathered about a total of 778 people who had recently withdrawn from the labour force. Of the sample, 58 percent were men. The average age of the respondents in 1995 was 57.1 years (sd=1.7). Average age at retirement in the sample was 60.0 (sd=1.8), which is almost identical to the effective retirement age in the Netherlands in the period 1997-2002 (OECD, 2005). Only 2.5 percent of the sample retired at age 65 (mandatory retirement age). Almost all of the questions were closed questions. The item non-response was low (on average less than 3 percent). Missing data were imputed using the MVA option in SPSS (Acock, 2005).

### 4.4.2. Measures

We distinguish between three aspects of health, namely medical consumption, the severity of health problems and self-rated or perceived health. Following Kremer (1985) and Muller and Boaz (1988), we assume that health problems

manifest themselves in *medical consumption*, such as visiting a GP or a medical specialist and use of medication. In both waves data were collected on the last visit to family doctor, the number of visits to the GP in the past two months, treatment by and/or contact a medical specialist and use of prescribed medicine in the past two weeks. A scale was constructed by summing the standardized and unweighted answers to these five questions ( $\alpha=0.67$  in 1995;  $\alpha=0.72$  in 2001). The scale was subsequently linearly transformed, and runs from 0 (very low) to 10 (very high medical consumption).

*Seriousness of health problems.* In both waves older workers were asked if they had any serious health problems at present, and if so to describe them. The answers to this open question were coded on the basis of a modified version of the ‘Seriousness of Illness Rating Scale’ (SIRS) (Bossé *et al.*, 1987). This scale assigns a value to a large number of illnesses and conditions corresponding to their seriousness. The values have been assigned by medical specialists based on factors such as prognosis, duration, threat to life, physical limitations and degree of discomfort (Wyler, Masuda and Holmes, 1967) and range from 03 (a cold) to 124 (cancer). In case of multi-morbidity, the condition with the highest score has been assigned.

*Perceived health* is a general self-assessment of physical health. This measure is represented by a single question, asking respondents to rate their health at the present time. The five answer categories varied from 1 ‘very good’ to 5 ‘very bad’. In national population surveys, global self-rated health has been found to provide a reliable, valid, and cost-effective measure of health (e.g. Cunny and Peri, 1991; Van de Water, Boshuizen and Perenboom, 1996). Single-item measures of perceived health have been criticized because there is limited understanding of the complex and varied processes that individuals employ to rate their health (Krause and Jay, 1994; Idler, Leventhal, McLaughlin and Leventhal, 2004). Nonetheless, single-item, self-rated health assessments have been consistently shown to predict mortality and functional decline (Wolinsky and Johnson, 1992; Grant, Piotrowski and Chappell, 1995; Idler, Hudson and Leventhal, 1999). Perceived health appears to have an added value compared with measures obtained by more objective measurements of health conditions (Deeg and Bath, 2003).

*Table 4.1* presents information about the independent variables used. Access to resources, job characteristics and the pre-retirement expectations were taken from wave 1; transition characteristics and changes in resources have been taken

from wave 2. Unfortunately, the measure for self-efficacy was only available in the follow-up. The measure used here measures the confidence people have in their own ability to effectively cope with *general* changes (Sherer *et al.*, 1982) as opposed to *domain-specific* measures, which relate to specific situations or behaviour. Although self-efficacy is influenced in part by earlier experiences in life, general self-efficacy appears to be relatively stable over time (Hofstetter, Sallis and Hovell, 1990). This seems to justify the use of this measure as an independent variable in the explanatory model.

The effect of involuntary retirement is captured with dummy variables that combine information on the extent to which retirement was perceived involuntary (voluntary, bit involuntary, very involuntary) and the reason for involuntary retirement (health reasons, organizational reasons, other reasons). Seven dummies will be used in the analysis (bit involuntary-health reasons; bit involuntary-organizational reasons; bit involuntary-other reasons; very involuntary-health reasons; very involuntary-organizational reasons; very involuntary-other reasons) with voluntary retirement as reference.

#### 4.4.3. *Analytical strategy*

OLS regression is used to determine the conditions under which retirement results in a change in health (be it an improvement or a deterioration). We used a so-called '*conditional change model*', where the value of the health variable in question at  $t_2$  is predicted on the basis of the value of the same variable at  $t_1$ , various independent variables and a random error term (Finkel, 1995). Since the effects of the health of the older worker at  $t_1$  are controlled for, the significant effects of the independent variables can be interpreted as factors that play a role in changes in health. High values for the dependent variables indicate deterioration in health, whereas low values indicate an improvement.<sup>16</sup>

Apart from baseline health, age and time since retirement are included as control variables in the models. Age is included in order to distinguish age-related

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<sup>16</sup> The three dependent variables have a skewed distribution, which means that the assumption of normality is violated. We have considered two solutions for this problem, viz. log transformation of the dependent variables and ordered logistic regression. Alternative analyses have been performed without any change in results. For this reason, and since these solutions may interfere with the analytical strategy (conditional change model – with  $t_1$  dependent variable included), only OLS regressions are presented in this chapter.

Table 4.1. Means (M), Standard deviations (SD), Coding Algorithms, Wording of Survey Questions and Psychometric properties of the dependent and independent variables (N=789)

	M	SD	Coding Algorithm	Wording	Psychometric properties
<b>Retirement context</b>					
Gender	0.6	0.5	Dummy (male=1)		N/a
Age at baseline	57.1	1.8	Reconstructed from year of birth		N/a
Time elapsed since retirement	3.2	1.5	Year of interview (2001) minus year of exit from labour force		N/a
<i>Transition characteristics</i>					
Voluntariness of retirement	0.67 0.03 0.07 0.09 0.03 0.08 0.02	0.47 0.18 0.26 0.28 0.18 0.27 0.14	7 dummies Voluntary retirement (ref) bit involuntary - health reason bit involuntary - organ. reason bit involuntary - other reason very involuntary - health reason very involuntary - organ. reason very involuntary - other reason	Dummy variable combining information on the extent to which retirement was voluntary, and reason for involuntary retirement (health, organizational reason, other reason)  Was your decision to retire (early) entirely voluntary, or not (2 answer categories: 1=yes, 2=no not (entirely) voluntary) Items asked: My decision to retire was voluntary (five answer categories: 1=completely agree and 5=completely disagree)	N/a
Work history (years)	39.6	8.0	Continuous variable ranging from 7 to 51	Number of years in labour force	N/a
No. of simultaneous events	0.6	0.7	1. sum of life events between $t_1$ en $t_2$ 2. weighted sum of events	Have you experienced one of the following life events since the first interview in 1995: moving home, death of spouse, divorce, and serious illness in the family. Weighted using: Miller, M. A., and Rahe, R. H. (1997), Life changes scaling for the 1990s. <i>Journal of Psychosomatic Research</i> , 43(3), 279-292.	N/a

Table 4.1. (continued)

	M	SD	Coding Algorithm	Wording	Psychometric properties
<i>Job characteristics</i>					
Demanding job (t <sub>1</sub> )	0.2	0.4	Dummy (1=physically and/or environmentally demanding)	Two questions: Is your work physically demanding? (yes/no) Is your work characterized by many inconveniences (like smell, noise, and draught)? (yes/no)	N/a
Job pressure (t <sub>1</sub> )	2.6	1.2	3-item scale ranging from 0=not challenging at all to 5=very challenging	Items: At times, job pressure is so great that it creates tensions. At times, there is so much work to be done that I'm unable to do everything well. I often have to do my utmost to perform well. (five answer categories: 1=completely agree and 5=completely disagree)	Alpha=0.87
Job challenge (t <sub>1</sub> )	2.3	1.4	3-item scale ranging from 0=not challenging at all to 5=very challenging	Items: My work is characterized by many challenging tasks (2 answer categories 0=no, 1=yes) The work I am doing is not very challenging: The work I am doing has become more and more boring and routine (five answer categories: 1=completely agree and 5=completely disagree)	Alpha=0.70
High prestige job (t <sub>1</sub> )	0.1	0.3	Dummy (1=yes)	Dummy variable indicating whether the respondent assessed his/her job as prestigious	N/a

Table 4.1. (end)

	M	SD	Coding Algorithm	Wording	Psychometric properties
<i>Resources</i>					
Household income ( $t_1$ )	36.1	22.3	Sum of workers and partners yearly income (in € divided by 1000), ranging from 6 to 154	Workers salary obtained from the Central Salary Administrations, partners income asked in questionnaire	N/a
Replacement rate	81.3	3.2	Continuous variable ranging from 68.8 to 88.4	Net replacement rate is the percentage of the net monthly salary received upon retirement (obtained from the Central Salary Administrations)	N/a
Marital interaction ( $t_1$ )	0.2 0.4 0.4	0.4 0.5 0.5	Three dummies No partner (ref) Partner – few interaction Partner – much interaction	Marital interaction is assessed by a question posed to both older worker and spouse on the extent to which spouses are involved in shared activities / share interests. The answers have been combined in one scale. Question: Do you and your husband/wife share many interests? (posed to both worker and partner if available) (five answer categories: 1=yes, many to 5=no, very few; coding reversed)	Alpha=0.61
Friends/family have retired ( $t_1$ )	2.9	1.0	2-item scale ranging from 1=most of the social network active in the labour force, to 5=most of the social network have retired	Items asked to both the worker: Most of my friends have stopped working, and Most of my brothers and sisters have stopped working (five answer categories: 1=completely agree and 5=completely disagree) [coding reversed]	Alpha=0.53
<b>Individual appraisal</b>					
Fear for retirement ( $t_1$ )	2.3	0.8	Summed answers to 6 questions. Values range from 1 (not much fear) to 5 (strong fear)	Questions: To what extent will you miss: Income, social contacts with co-workers, self-esteem, social status, routine, goal in life (five answer categories from 1=very much to 5=not at all) [coding reversed]	Alpha=0.80
Self-efficacy ( $t_2$ )	6.4	1.9	4-item scale ranging from 0=low level of self-efficacy, to 10=high level of self-efficacy	Shortened version of the General Self-Efficacy Scale (Scherer et al, 1982). Items: If I make plans, I am convinced I will succeed in executing them; If I absolutely want something, it usually goes wrong; I doubt myself; If I have the impression something new is complicated, I don't start. (Five answer categories: 1=completely agree and 5=completely disagree)	Alpha=0.57

health declines from health declines following retirement. In order to account for possible time (or stage) dependent variation in health and well being (Atchley, 1976; Gall *et al.*, 1997), time elapsed since retirement is included as a control variable.<sup>17</sup>

## 4.5. Results

### 4.5.1. Descriptive analysis

Table 4.2 presents the inter-correlations between the three outcome variables at  $t_1$  (pre-retirement), as well as  $t_2$  (post-retirement). Based on the correlation coefficients between the variables at  $t_1$ , we can conclude that there is some overlap. The correlation are, however, not sufficiently strong to conclude that we have to do with parallel measurements.

Table 4.2. Inter-correlations between the three outcome variables at  $t_1$  (pre-retirement) and  $t_2$  (post-retirement)

	$t_1$ medical consumption	$t_1$ seriousness of health problems	$t_1$ perceived health	$t_2$ medical consumption	$t_2$ seriousness of health problems
$t_1$ medical consumption	--				
$t_1$ seriousness of health problems	0.38*	--			
$t_1$ perceived health	0.28*	0.56*	--		
$t_2$ medical consumption	0.29*			--	
$t_2$ seriousness of health problems		0.37*		0.48*	--
$t_2$ perceived health			0.46*	0.52*	0.54*

\*  $p < 0.01$ .

<sup>17</sup> Stage models of retirement (e.g. Atchley, 1976) suggest that the time effect on health change may be curvilinear rather than linear. Curvilinearity has been explored using four dummy variables as well as interactions between time elapsed since retirement and other predictors. Since the results of these analyses did not provide evidence for a curvilinear effect, dummies nor interaction terms have been presented in tables 4.4-4.6.

Table 4.3 gives an overview of respondent's pre and post retirement health. The number of older adults who received specialist medical care dropped from 57 to 31 percent ( $\chi^2=112.6$ ,  $df=1$ ,  $p<0.01$ ); and the use of medication declined from 52 to 46 percent ( $\chi^2=5.56$   $df=1$ ,  $p<0.05$ ). The average score on the medical consumption scale was lower in 2001 than in 1995. With respect to seriousness of illness, no significant change were observed between 1995 and 2001.

Table 4.3. Descriptive Statistics for the Dependent Variables in 1995 en 2001 (N=778), %

	1995 pre- retirement	2001 post- retirement
<b>Medical consumption</b>		
<i>"When was your last visit to your GP" (*)</i>		
< 2 months	34	34
Between 1 and 12 months	40	44
> 1 year	26	22
Total	100	100
<i>"Are you receiving specialist care or are you having regular specialist medical checkups?" (% yes)</i>		
	57	31
<i>"Have you taken any prescription drugs in the past <u>two weeks</u>?" (% yes)</i>		
	52	46
Average value "Medical consumption" (0 very low -10 very high)		
	2.5	2.0
<b>Seriousness of health problems</b>		
Average value Seriousness of health problems (*) (3 cold -124 cancer)		
	33.3	34.0
<b>Perceived health</b>		
<i>"How would you describe your general state of health?"</i>		
(Very) good	82	86
Not good/ not bad	14	11
(Very) bad	4	3
Total	100	100
Average value "Perceived Health" (1 very good- 5 very bad)		
	1.9	1.8

(\*) Differences between 1995 and 2001 not significant.

Perceived health, finally, was more positive following retirement in 2001 than in 1995 ( $\chi^2=6.44$ ,  $df=2$ ,  $p<0.05$ ). These results paint a slightly positive general picture. Average results, however, conceal considerable diversity. In terms of subjective health, 25 percent of the older workers experienced an improvement; 19 percent a deterioration. In terms of seriousness of illness, 15 percent faced an improvement; 15 percent a decline.

#### 4.5.2. *Multivariate analysis*

Table 4.4-4.6 present the results of the regression analyses to explain changes in health in retirement. Apart from a base model that includes the baseline value of the dependent variable (model 0), 4 models are estimated for all three dependent variables. The first model only includes characteristics of the transition, in addition to the baseline value of the dependent variables and the control variables (model 1). In the second model, characteristics of the job are added (model 2). The third model additionally includes access to resources (model 3). The fourth model examines the contribution of individual appraisal to explaining health changes in retirement (model 4).

The results of model 1 in table 4.4-4.6 show that after controlling for age, time since retirement and baseline health, *characteristics of the transition* play a role in explaining changes in health in the transition from work to retirement. It is not surprising that older workers who left the labour force involuntary for health reasons have lower post-retirement scores on all health measures. A comparison of the coefficients for those who retired ‘bit involuntary’ for health reasons with those who retired ‘very involuntary’ reveals that the extent to which the health induced retirement transition was perceived as forced has only weak additional explanatory power (table 4.4-4.6).

There is evidence that involuntary retirement for other than health reasons has an impact on perceived health (table 4.6). Compared to workers who retired voluntary, workers who retired involuntary for organizational or other reasons (e.g. care obligations) are more likely to experience a decline in perceived health after retirement. Again, the degree of involuntariness has no additional explanatory power. No significant effects in this respect have been established for medical consumption (table 4.4) or seriousness of health problems (table 4.5). *Hypothesis 1b* was therefore only partially confirmed. The expected influence of accumulation of events on health has been confirmed for medical consumption. The more other events experienced around the retirement transition, the greater the probability of an increase in medical consumption. No

significant effects were established for the other dependent variables. *Hypothesis 1c* was thus partly supported.

Interestingly, adding *characteristics of the job* to the regression equation (model 2) did not yield a significant improvement in the explanatory power of the models used. Job characteristics appear to play a minor role in explaining health change after retirement. The assumption that retirement will improve health in instances in which the job is physically demanding (*Hypothesis 2a*) or characterized by high job pressure (*Hypothesis 2b*) was not confirmed. The hypothesis that retirement will be more stressful – and will therefore increase the likelihood of a deterioration in health – for people who had a job that offered many challenges (*Hypothesis 2c*), and high social prestige (*Hypothesis 2d*) was not confirmed either.

In model 3 we added *access to resources* to the regression equation. This did not result in a significant improvement in the models' explanatory power. There is some indication that access to financial resources relate to health in retirement (*Hypothesis 3b*). Whereas there appears to be a correlation between household income and medical consumption ( $p < 0.08$ ) as well as household income and perceived health ( $p < 0.06$ ), the direction of these correlations is opposite to what was assumed: older workers with higher household incomes are more likely to experience an increase in medical consumption and a decrease in perceived health after retirement. No significant effect was found for social contacts (*Hypothesis 3c*). A significant correlation was found, however, between medical consumption after retirement and the presence of a partner, but again the direction of the correlation was opposite to what was assumed (*Hypothesis 3a*). An increase in medical consumption after retirement was found to be more common among people with a partner than among those without a partner. The quality of the relationship did not contribute to explaining changes in medical consumption. The hypothesis that changes in the level of resources produce health problems was not confirmed. The likelihood of deterioration in health after retirement was not significantly greater among people who experienced a drop in income (*Hypothesis 3d*).

Table 4.4. Regression analysis explaining changes in medical consumption

	Medical consumption at t <sub>2</sub>											
	Model 0		Model 1A		Model 2A		Model 3A		Model 4A			
	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>		
Constant	1.18	*	10.34	1.16	0.54	1.19	0.55	-0.53	-0.16	-0.10	-0.03	
Baseline value medical consumption	0.33	*	8.36	0.30	*	7.50	0.30	*	7.42	0.30	*	7.38
Gender (male=1)				-0.04	-0.27	0.00	0.03	-0.15	-0.85	-0.14	-0.80	
Age				0.00	0.02	0.00	0.06	0.01	0.22	0.01	0.16	
Time elapsed since retirement				0.03	0.60	0.02	0.53	0.01	0.33	0.02	0.42	
<b>Retirement context</b>												
<i>Transition characteristics</i>												
Voluntariness of retirement												
Voluntary retirement (reference)				---		---		---		---		
Bit involuntary-health reason				0.93	*	2.79	0.93	*	2.77	0.91	*	2.61
Bit involuntary-organizational reason				0.22		0.92	0.22		0.92	0.24		1.00
Bit involuntary-other reason				0.25		1.15	0.25		1.13	0.25		1.14
Very involuntary-health reason				1.02	*	3.04	1.02	*	3.03	1.05	*	3.13
Very involuntary-organizational reason				-0.10		-0.46	-0.10		-0.42	-0.08		-0.37
very involuntary-other reason				-0.30		-0.70	-0.30		-0.71	-0.20		-0.48
No. of years in labour force				-0.01		-0.83	-0.01		-0.90	0.00		-0.39
No. of simultaneous events				0.30	*	3.34	0.30	*	3.30	0.29	*	3.26
<i>Job characteristics</i>												
Demanding job						-0.09	-0.60	-0.07	-0.50	-0.07	-0.44	
Job stress						0.00	0.07	-0.00	0.05	-0.01	-0.14	
Job challenge						-0.02	-0.32	-0.04	-0.79	-0.03	-0.54	
Job prestige						-0.00	-0.40	-0.01	-1.11	-0.01	-0.88	

Table 4.4. (end)

	Model 0		Model 1A		Model 2A		Model 3A		Model 4A	
	<i>B coef.</i>	<i>t</i>								
<i>Resources</i>										
Financial:										
Household income							0.08	# 1.77	0.08	# 1.72
Replacement rate							0.01	0.48	0.01	0.43
Marital interaction										
Resp. has no partner (reference)							---		---	
Partner-few interaction							0.41	† 2.31	0.43	† 2.40
Partner-much interaction							0.35	† 2.00	0.38	† 2.20
Social network:										
Friends/family have retired							-0.02	-0.37	-0.03	-0.39
<b>Individual appraisal</b>										
Pre-retirement fear for retirement									0.04	0.45
Self-efficacy									-0.06	# -1.73
R2		8.3		12.1		12.2		13.4		13.8
Sign. F-change		0.00		0.00		0.96		0.62		0.18

Low values on dependent: low medical consumption.

High values on dependent: high medical consumption.

# p<0.10.

† p<0.05.

\* p<0.01.

Table 4.5. Regression analysis explaining seriousness of health problems

	Seriousness of health problems at $t_2$									
	Model 0		Model 1A		Model 2A		Model 3A		Model 4A	
	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>
Constant	20.07	* 12.77	38.49	1.13	32.75	0.95	24.06	0.45	17.67	0.33
Baseline value seriousness h problems	0.42	* 11.09	0.37	* 9.45	0.36	* 9.20	0.36	* 9.14	0.37	* 9.37
Gender (male=1)			-0.61	-0.28	-2.04	-0.81	-2.31	-0.83	-1.97	-0.70
Age			-0.32	-0.51	-0.28	-0.45	-0.31	-0.48	-0.45	-0.70
Time elapsed since retirement			0.89	1.33	0.84	1.23	0.71	1.01	0.99	1.40
<b>Retirement context</b>										
<i>Transition characteristics</i>										
Voluntariness of retirement										
Voluntary retirement (reference)			---		---		---		---	
Bit involuntary-health reason			23.56	* 4.42	23.31	* 4.36	23.64	* 4.40	22.57	* 4.19
Bit involuntary-organizational reason			-3.07	-0.82	-2.92	-0.78	-2.89	-0.77	-3.16	-0.84
Bit involuntary-other reason			3.65	1.07	3.69	1.08	3.54	1.03	3.04	0.89
Very involuntary-health reason			14.69	* 2.79	14.91	* 2.82	15.11	* 2.84	13.88	* 2.60
Very involuntary-organizational reason			-0.27	-0.08	-0.06	-0.02	0.20	0.06	-1.00	-0.27
very involuntary-other reason			-3.55	-0.53	-3.34	-0.50	-3.14	-0.47	-4.34	-0.64
No. of years in labour force			-0.08	-0.63	-0.06	-0.46	-0.07	-0.54	-0.08	-0.60
No. of simultaneous events			1.44	* 1.03	1.62	1.15	1.70	* 1.20	1.77	1.25
<i>Job characteristics</i>										
Demanding job					3.90	1.64	3.78	1.59	3.67	1.54
Job stress					-0.24	-0.28	-0.31	-0.36	-0.35	-0.41
Job challenge					-0.74	-0.94	-0.60	-0.74	-0.62	-0.75
Job prestige					0.13	1.73	0.14	1.46	0.16	1.69

Table 4.5. (end)

	Model 0		Model 1A		Model 2A		Model 3A		Model 4A	
	<i>B coef.</i>	<i>t</i>								
<i>Resources</i>										
<i>Financial:</i>										
Household income							0.23	0.32	0.29	0.39
Replacement rate							0.16	0.38	0.23	0.55
<i>Marital interaction</i>										
Resp. has no partner (reference)							---		---	
Partner-few interaction							-1.10	-0.39	-0.44	-0.16
Partner-much interaction							0.33	0.12	1.35	0.49
<i>Social network:</i>										
Friends/family have retired							-0.96	-0.96	-1.04	-1.03
<b>Individual appraisal</b>										
Pre-retirement fear for retirement									2.93	* 2.19
Self-efficacy									-0.07	-0.13
R2		13.7		17.4		18.0		18.1		18.7
Sign. F-change		0.00		0.00		0.27		0.90		0.08

Low values on dependent: low medical consumption.

High values on dependent: high medical consumption.

# p< 0.10.

† p< 0.05.

\* p<0.01.

Table 4.6. Regression analysis explaining changes in perceived health

	Perceived health at $t_2$									
	Model 0		Model 1A		Model 2A		Model 3A		Model 4A	
	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>	<i>B coef.</i>	<i>t</i>
Constant	0.99 *	16.34	0.16	0.19	0.12	0.14	0.05	0.04	0.27	0.19
Baseline value perceived health	0.43 *	14.29	0.39 *	12.6	0.39 *	12.03	0.39 *	12.02	0.39 *	12.03
Gender (male=1)			-0.04	-0.82	-0.04	-0.64	-0.05	-0.77	-0.04	-0.62
Age			0.01	0.85	0.01	0.92	0.01	0.76	0.01	0.56
Time elapsed since retirement			-0.01	-0.80	-0.02	-0.89	-0.02	-0.93	-0.01	-0.56
<b>Retirement context</b>										
<i>Transition characteristics</i>										
Voluntariness of retirement										
Voluntary retirement (reference)			---		---		---		---	
Bit involuntary-health reason			0.59 *	4.43	0.57 *	4.29	0.59 *	4.39	0.55 *	4.14
Bit involuntary-organizational reason			-0.02	-0.19	-0.02	-0.21	-0.01	-0.10	-0.03	-0.28
Bit involuntary-other reason			0.19 †	2.18	0.18 †	2.14	0.17 †	1.99	0.16	1.87
Very involuntary-health reason			0.62 *	4.69	0.62 *	4.65	0.63 *	4.74	0.58 *	4.37
Very involuntary-organizational reason			0.17 #	1.92	0.17 †	1.96	0.19 †	2.12	0.18 †	2.00
very involuntary-other reason			-0.15	-0.93	-0.14	-0.86	-0.14	-0.85	-0.19	-1.11
No. of years in labour force			0.00	0.95	0.00	0.97	0.00	1.08	0.00	1.04
No. of simultaneous events			0.04	1.23	0.05	1.29	0.05	1.30	0.05	1.44
<i>Job characteristics</i>										
Demanding job					0.08	1.43	0.08	1.31	0.08	1.40
Job stress					-0.02	-0.98	-0.02	-1.09	-0.03	-1.45
Job challenge					-0.00	-0.16	-0.00	-0.24	0.00	0.14
Job prestige					0.00	0.24	-0.00	-0.84	-0.00	-0.33

Table 4.6. (end)

	Model 0		Model 1A		Model 2A		Model 3A		Model 4A	
	<i>B coef.</i>	<i>t</i>								
<i>Resources</i>										
<i>Financial:</i>										
Household income							0.04 #	1.92	0.03	1.89
Replacement rate							0.00	0.34	0.00	0.34
<i>Marital interaction</i>										
Resp. has no partner (reference)							---		---	
Partner-few interaction							-0.07	-0.99	-0.05	-0.70
Partner-much interaction							-0.06	-0.87	-0.02	-0.31
<i>Social network:</i>										
Friends/family have retired							-0.02	-0.94	-0.03	-1.03
<b>Individual appraisal</b>										
Pre-retirement fear for retirement									0.06 #	1.86
Self-efficacy									-0.04 *	-2.95
R2		20.8		25.7		25.9		26.5		27.8
Sign. F-change		0.00		0.00		0.61		0.37		0.00

low values on dependent: low medical consumption.

High values on dependent: high medical consumption.

# p< 0.10.

† p< 0.05.

\* p<0.01.

Model 4 presents the final model. The results show that *individual appraisal* plays a role in explaining health changes after retirement. The explanatory power of the models in this step increased significantly for ‘seriousness of illness’ and perceived health. The ideas and expectations people have about retirement affect their state of health. The more fears about retirement, the greater the increase in severity of health problems (table 4.5) and the greater the decrease in perceived health (table 4.6) after retirement (*Hypothesis 4a*). Further, older workers who scored low on low self-efficacy, were more likely to experience deterioration in health problems (table 4.6) and an increase in medical consumption (table 4.4) (*Hypothesis 4b*).

In order to investigate gender differences in the response to retirement, we ran the final model separately for men and women. In order to test for differences in coefficients between men and women, a Chow test has been performed (Gould, 2002). Chow statistics revealed significant gender differences in only one occasion. In this study, we did find only weak empirical evidence for the hypothesis that retirement has different health consequences for women and men (*Hypothesis 5a*). In the regression analysis explaining changes in perceived health upon retirement coefficients for time elapsed since retirement differed significantly for men and women. The results indicate that men report more health problems directly after retirement than females do.

#### **4.6. Conclusions and discussion**

The main question pursued in this article is whether and under which conditions individuals experience health reversals in retirement. We followed 778 older workers in their transition from work to retirement. In order to understand health as a multi-faceted concept, three different measures were used. This study provides additional empirical evidence for the notion that retirement does not categorically harm or benefit health. Instead, health consequences vary across individuals and according to the health measures adopted. On average, health did not deteriorate and even improved on some of the measures (self-rated health and medical consumption) during a period of six years from age 57 to 63 (average), in which the older workers made the transition into retirement. Given the fact that health tend to decrease with age, the average positive effect found here, although relatively small, is remarkable.

Analyses specifying the conditions under which individuals experience health change in retirement reveal that the knowledge on the *characteristics of the*

*transition* contributes to the understanding of health change. The assumption put forward in the stimulus based perspective (e.g. Holmes and Masuda, 1974) that life events are more stressful and will have more adverse consequences when they involve greater changes is partly supported. Medical consumption has been found to increase more strongly among people who experience other stressful events at the same time as the transition into retirement. Earlier research has shown that the degree of control over the decision to leave the labour force is an important factor affecting adjustment to retirement (Van Solinge and Henkens, 2005b). This study provides additional evidence that employees' failure to control retirement according to their wishes has adverse effects on health (e.g. Marshall and Clarke, 1998; Gallo *et al.*, 2000; He and Marshall, 2003). Our results, however, indicate that the strong association found in other studies (Palmore, Fillenbaum and George, 1984; Herzog *et al.*, 1991) might be primarily attributable to the fact that forced retirement is often induced by health reasons. The results of this study show that, controlled for health as a reason for leaving the labour force (six percent of total sample; 30 percent of involuntary retirees), involuntary retirement negatively influences health in subjective terms (i.e. perceived health).

This study does not provide empirical support for the suggestion put forward by Shultz *et al.* (1998) and Wheaton (1990), that health consequences of retirement differ according to work conditions and/or *job characteristics*. We did not find evidence that retiring from a stressful or a physically demanding job leads to an improvement in health. This is in line with findings of other studies (e.g. Marmot and Shipley, 1996), suggesting that occupying demanding, lower strata jobs produces a more rapid physiological aging as a consequence of an accumulation of hardship over the life course. Although leaving the labour force can give these older workers a sense of relief, it does not lead to an improvement in health.

We found only weak support for the hypothesis that access to *resources* in terms of money and social contacts, or a decline in income predict health change in retirement. Nor did we find strong evidence for the assumption that the presence of a partner mitigates the negative consequences of stressful situations. Much research into stress assumes that partners act as buffers in stressful situations (e.g. Lin, Ensel, Simeone and Kouo, 1979; Norris and Murrell, 1984; DuPertuis, Aldwin and Bossé, 2001). The partners of retired workers *were* found to play a role in medical consumption: medical consumption tends to increase more strongly among older workers with a partner than among those without a

partner. Contrary to what has been assumed, the quality of the relationship did not play a role. We know that decisions about retirement are strongly influenced by the older workers' partners (Henkens and Van Solinge, 2002), and that their reasons for encouraging or discouraging retirement is often related to health (Henkens, 1999). This study suggests that partners do not only act as 'watch dogs' with respect to the older workers' health in the period leading up to retirement but also after retirement. Partners stimulate that the older workers seek medical assistance on time. This underscores the role of the spouse as a major actor in the retirement transition.

This study also supports the assumptions derived from the cognitive stress approach that the individual's *appraisal* is a crucial factor in the relationship between the life event and its outcome (Lazarus and Folkman, 1984). We found further evidence for the importance of individual differences in appraisal with regard to health in the transition from work to retirement (e.g. Gall *et al.*, 1997). Our results show that pre-retirement fear about retirement, or retirement anxiety, plays a role in the development of health problems in retirement. Health—both objectively in terms of severity of health problems and in subjective terms (perceived health)—decreased among older workers who had negative expectations about retirement. The results of this study provide strong support for the suggestion put forward by Krause and Shaw (2003), that feelings of personal control are associated with health. Persons who feel more confident about their own ability to cope with changes (high self-efficacy) showed more favourable health change: we see an increase in perceived health and a decrease in medical consumption, even if the objective facts in terms of the severity of the health problems may not have changed.

When evaluating the results presented here, some limitations have to be mentioned. First, since almost all respondents made the transition into retirement between the baseline study in 1995 and the follow-up in 2001, there was no control group of older adults who remained in the labour force. Although we controlled for the possibility that health change may have occurred prior to retirement, we were not able to determine whether health changes between wave 1 and 2 were the result of retirement as such, or whether they could be attributed to the aging process, or to other unmeasured determinants. The fact, however, that the average trend suggests health improvement rather than deterioration indicates that the aging effect is not of overriding importance. Future studies, however, should also gather information about older adults who have *not* yet left the labour force.

Second, this study examined the experiences of older workers who left paid work via early retirement arrangements, or as a consequence of reaching the mandatory retirement age of 65. Workers were aged 55 and over at the time of first interview. Many older workers in the Netherlands, however, leave the labour force at much younger ages (e.g. aged 50-55) as a result of disability or unemployment (de facto early retirement). As a consequence the older workers who survive in the labour force till (early) retirement will be relatively healthy, and the changes in health relatively modest. A sample made up of older individuals with greater variation on all health measures (e.g. including also persons who left the labour force via de facto early retirement arrangements) would provide a more rigorous test of the manner in which retirement may affect health.

A third point that warrants attention concerns the health measures. We used three measures. They range from objective to subjective and jointly offer a broad overview of health. It could be questioned whether medical consumption reflects care seeking behaviour rather than health. The effect of 'exposure to other life transitions' and 'partner support' points in the direction of an utilization effect, which may or may not go together with health change. With respect to self-rated health it could be argued that this measure may reflect in part the influence of morale and depression. The existence of a correlation between self-rated health and depression among older adults has been demonstrated in a variety of studies (Mulsant, Ganguli and Seaberg, 1997; Pinquart, 2001; Han, 2002). The mechanism that underlies this association remains unclear (see: Kosloski, Stull, Kercher and Van Dussen, 2005). One possibility is that poor health or a perceived change in one's overall health leads to depression. An alternative possibility is that depressed state causes a change in the assessment of one's health. The study of Kosloski *et al.* (2005) on data from the Health and Retirement Study shows that depressive symptomatology has little, if any, effects on self-rated health. Self-rated health, however, clearly affects depressive symptomatology, the conclusion being that global pronouncements of overall health are not simply manifestations of a depressive state. Nevertheless retirement may have —maybe even in first instance— repercussions for people's mental health or morale (Reitzes *et al.*, 1996a; Gall *et al.*, 1997; Kim and Moen, 2002). This issue has not been addressed in this study, but is worth investigating. Future studies should therefore include one or more psychological measures of health in addition to physical health measures.

The results of this study clearly show that the possibilities for 'healthy retirement' are very much related to the ability of the older worker to manage the last years of their careers. These possibilities are often restricted or thwarted by developments in the macro context of the organization or by institutional arrangements. The incidence of health problems after retirement is influenced not only by the actual control one has over the transition, but also by the perceived control (self-efficacy). Older workers who have to retire involuntarily and people who have little faith in their ability to cope with changes in life constitute a clear risk group in terms of health. Conversely, the results suggest that retirement has a positive effect on the health of older workers who were free to decide when they wanted to leave the labour force. People for whom retirement was a conscious, positive choice tend to feel better after retirement. For them, retirement may be an investment in health.

Fear for retirement, or retirement anxiety is another risk factor. Negative expectations about retirement initially lead to delayed exit from the labour force (e.g. Henkens and Tazelaar, 1997). Once retired, older workers with negative pre-retirement expectations have more problems in adjusting to retirement (Van Solinge and Henkens, 2005b), and appear to be less healthy. This effect is probably more pronounced in The Netherlands, as possibilities for postponement are restricted given mandatory retirement at the age of 65. In countries that do not have mandatory retirement, such as the US, older workers will have more opportunities to prolong their careers, preventing them from involuntarily retirement. One should, however, notice that in the Netherlands only few workers remain in the labour force until age 65. As a result, mandatory retirement accounts for only a small proportion of involuntary retirements.

How can the findings of this study be put to use in everyday practice? What the results clearly show is that managers of companies and other organizations could contribute to the 'healthy retirement' of their employees, but that they should not overestimate their power to influence the course of affairs. The incidence of health problems following retirement largely depends on the individual employees' self-management skills and their ability to manage their own careers.

Self-management is a personal skill and one on which managers have little influence. Managers could, however, keep a close tab on employees who appear to be very reluctant to retire. These employees could then be offered training programs in preparing themselves for retirement.

The ability of older workers to manage the last years of their careers is often restricted or thwarted by developments in the macro context of the organization. In the years ahead we expect to see that many older adults will become involved in restructuring processes as a result of which they will leave the labour force, be it voluntarily or involuntarily. Against this background it is important that managers are aware of the fact that they are able to influence the degree to which their employees feel that they are being forced to retire. Good preparation for retirement, open and honest communication, and a farewell that does justice to the employee's often year-long contribution to the organization help create a positive attitude towards retirement (Henkens and Van Solinge, 2003), and thus a greater likelihood of a healthy retirement.



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## 5. Involuntary retirement: The role of restrictive circumstances, timing, social embeddedness and control<sup>18</sup>

### 5.1. Introduction

Prior to the 1980s most older workers did not choose to retire. The company retired them, or they were forced to leave the labour force for health reasons (Hardy, 2002). The introduction of early retirement schemes in most western countries as well as the abolition of mandatory retirement in some others has resulted in a de-institutionalization of the retirement transition (Kohli and Rein, 1991). The variation in retirement timing has grown, suggesting that individual choice has increased (Guillemard and Van Gunsteren, 1991). The shift from retirement as a transition beyond individual control to retirement as a matter of individual choice is reflected in the scientific retirement literature. Retirement is mainly viewed as a voluntary and employee-driven transition (e.g. Hanisch and Hulin, 1990; Hardy, 2002). Early retirement arrangements, however, are often tied to labour market conditions. The practice of offering employees early retirement incentives as a way of reducing the company's workforce is forcing many older people to withdraw from the labour force involuntarily (Armstrong-Stassen, 2001). Empirical studies consistently indicate that a substantial proportion of retirees (20-30 percent) perceive their retirement as forced or involuntary (see: Shultz *et al.*, 1998 (USA) ; Isaksson and Johansson, 2000 (Sweden)), and that involuntary retirement is a key factor in explaining negative retirement outcomes. Involuntary retirement is a risk factor for the development of adjustment problems (Van Solinge and Henkens, 2005b). There is evidence that involuntary departure from the workforce also has more long-lasting negative effects on post-retirement well-being (Hardy and Quadagno, 1995; Quick and Moen, 1998; Van Solinge and Henkens, 2005a) and health (Gallo *et al.*, 2000; Hyde, Ferrie, Higgs, Mein and Nazroo, 2004; Van Solinge, 2005).

Involuntary retirement, however, should not be confounded with no-choice retirement, since even under no-choice conditions older workers may not perceive their retirement as forced (Szinovacz and Davey, 2005a). Older workers with strong preferences for early retirement may view their retirement

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as voluntary, even if the retirement was organizationally induced. On the other hand, workers who are reluctant to retire may perceive retirement as essentially involuntary, even if they formally had a choice.

In this article we will investigate the conditions under which retirees perceive their retirement as forced rather than voluntary. We argue that these perceptions and their determinants advance our understanding of negative retirement outcomes.

Many studies acknowledge that retirement may occur under conditions that leave the individual limited choice over the transition, such as poor health or job loss (e.g. Herzog *et al.*, 1991; Gallo *et al.*, 2000; Isaksson and Johansson, 2000). Only few have explicitly investigated the conditions under which retirees perceive their retirement as forced rather than wanted (e.g. Shultz *et al.*, 1998; Szinovacz and Davey, 2005a). We follow Szinovacz and Davey (2005a, p. 27) by assuming that differences in how retirement is experienced stem from differences in the older workers' retirement context (i.e. situational constraints and opportunities), the older workers' retirement preferences, and their perceptions of control.

The importance of the context in understanding life transitions has been stressed in the life course literature as well (e.g. Moen, 1996). Life course scholars draw attention to specific aspects of this context such as the interdependencies between the various actors involved (the social embeddedness of the transition), and the timing of the transition (e.g. Settersten, 1999; Kim and Moen, 2002; Elder and Johnson, 2003). Moreover, they underline the importance of human agency in how life transitions are experienced (Elder and Johnson, 2003).

We have used insights from the life course approach to study involuntary retirement in the Netherlands. We build on earlier work on this issue by elaborating on the impact of the timing of the transition, on how the transition is embedded in social relationships with the spouse and in work-related contacts, and on the importance of psychological resources that are an expression of human agency. Insight in the perceived involuntariness of retirement may enhance our knowledge on the role of external circumstances and human agency in structuring the life course in late adult life.

This article is based on multi-actor panel data about 778 older employees working in Dutch industry and trade and their partners (if applicable).

Respondents were interviewed in 1995 in the pre-retirement phase and again in 2001 when all employees had made the transition into retirement.

## 5.2. Theoretical background and hypotheses

We assume that differences in how retirement is perceived stem from differences in (1) restrictive circumstances, (2) the older worker's preferences for retirement, (3) timing, (4) social embeddedness, and (5) their perceptions of control.

### *Restrictive circumstances: health and organizational context –*

External conditions may restrict older workers' ability to remain employed or even prompt workers to retire from the labour force. Restrictions may derive from personal, family or organizational circumstances that are beyond the individual's control. There is considerable evidence that poor health restricts older workers' opportunities to remain in the labour force and leads to early retirement (Henkens and Tazelaar, 1997; Mutchler, Burr, Massagli and Pienta, 1999; Mein *et al.*, 2000). We hypothesize that older workers' health limitations reinforce perceptions of involuntary retirement.

Family conditions, such as illness in the family or care obligations may also restrict people's choice when it comes to retirement. Although these conditions may permit some flexibility in retirement timing, they may at the same time prompt the older worker to leave the labour force or to retire, giving rise to perceptions of involuntary retirement (Szinovacz *et al.*, 2001; Szinovacz and Davey, 2005a). Our hypothesis is that having a spouse in bad health increases involvement in care activities and reinforces perceptions of involuntary retirement.

The older workforce is usually disproportionately at risk in an organizational restructuring process (Laczko and Phillipson, 1991; Mollica and DeWitt, 2000). Two mechanisms lie at the root of this phenomenon. First, there is a strong tendency to use early retirement programs to prune the company's workforce. Second, older workers are overrepresented in jobs that have become redundant as a result of technological developments (Mollica and DeWitt, 2000). We hypothesize that organizational restructuring and job redundancy reinforce perceptions of involuntary retirement.

*Preferences for retirement* – The impact of restricted choice conditions is likely to vary according to the older worker's retirement preferences. Strong retirement intentions may reflect a positive benefit-costs ratio of retirement, but may also indicate that the older worker is mentally prepared for retirement, thus facilitating the transition into retirement, even under restricted choice conditions. We hypothesize that perceptions of involuntary retirement prevail among individuals who are less in favour of early retirement.

*Timing of retirement* – Life transitions, including retirement, are subject to social norms about the appropriate timing (Settersten and Hagestad, 1996; Settersten, 1998). Cultural and individual norms and expectations about the 'right' time for a transition influence not only the individual's transition but also the meaning attached to the transition by the individual and by others. Individuals tend to have an awareness of their own position in the social timetable, and describe themselves as 'off-time' or 'on-time'. When a transition occurs off-time individuals may not have had the chance to go through anticipatory socialization, or the individual may lack peers with whom he/she shares transition experiences and who provide social support (Hagestad and Neugarten, 1985). Premature transitions may give rise to unfavourable social comparisons with one's peers, who are not experiencing the event, and may thus induce perceptions of involuntary retirement. We hypothesize that perceptions of involuntary retirement prevail among individuals who retired socially off-time in the sense that retirement took place earlier than the current retirement age of 60.

Personal timing refers to the timing of the transition in the individual's life course in relation to his or her expectations or preferences. Retirement may be perceived as involuntary if it was off-time from the retiree's perspective (Szinovacz and Davey, 2005a). This may be the case in particular if the discrepancy between the expected and actual retirement age is large.

*Social embeddedness of retirement* – The retirement process is shaped by social relationships within the family and with colleagues and supervisors (Henkens and Tazelaar, 1997; Henkens, 1999). Retirement is largely experienced through changes in these relationships (e.g. Vinick and Ekerdt, 1991; Bossé *et al.*, 1993; Szinovacz and Schaffer, 2000; Van Tilburg, 2003). Whereas relationships with colleagues become less frequent or come to an end, relationships within the family, in particular with the partner, become more important (Bossé *et al.*, 1993; Van Tilburg, 2003). Partners are important sources of support in life

transitions. Partners can provide resources such as companionship and emotional support, which makes adjustment easier (e.g. Northouse *et al.*, 1995). After retirement, couples are thrown back on each other's company. Encouragement or discouragement of retirement by the partner will affect the worker's subjective experience of the retirement transition. We hypothesize that a lack of spousal support for early retirement reinforces perceptions of involuntary retirement.

Social embeddedness at work has been identified as an important factor in the retirement process. Low levels of co-worker and supervisor support increase the older worker's intention to leave the company (Armstrong-Stassen, 1994; Henkens and Tazelaar, 1997; Henkens, 1999). Co-workers' support for the employee to remain in the labour force may reflect the quality of social relationships and the older worker's social integration at work. We hypothesize that workplace (supervisor's and co-workers') support for remaining in the labour force decreases perceptions of involuntary retirement.

*Perception of control* – Psychological resources, such as optimism, mastery and self-efficacy, serve as protective mechanisms at all stages in the life course (Moen, 1996). Self-efficacy can be considered a psychological account of agency (Elder and Johnson, 2003), and mirrors an individual's sense of control over his/her environment and beliefs about causality (Gecas, 1989). A low sense of self-efficacy is associated with depression, anxiety and helplessness (Scholz, Gutiérrez-Doña, Sud and Schwarzer, 2002). Self-efficacy is an important resource in the retirement transition (Van Solinge and Henkens, 2005b). We hypothesize that older workers with a low sense of self-efficacy experience a lower sense of control over the transition and have a greater tendency to perceive the transition as externally caused and thus forced.

*Gender* – Gender structures pre-retirement employment histories and other life experiences (Calasanti, 1996; Kim and Moen, 2002). Women are over-represented in secondary labour market positions and work arrangements that allow them to combine work and care obligations. They are more likely to work in part-time jobs or to work fewer years in pension-covered employment because of interruptions in their careers to take care of family members (Laczko and Phillipson, 1991). First, we expect that given their generally more unstable work histories and their clustering in industries and occupations that are more prone to cutbacks (Calasanti, 1996), women are more vulnerable to forced labour force exit in later life. Second, we expect that due to gender specific

societal norms women have a greater tendency than men to experience their retirement as forced in response to family constraints such as care obligations.

*Background* – Background factors serve as control variables in our analyses. We have included age at first interview. Workers aged 60 years and over at baseline may have different preferences for retirement since they have remained in the workforce despite eligibility for early retirement programs.

### 5.3. Methods

#### 5.3.1. Data

The data used have been taken from a panel study on retirement behaviour. In 1995 (first wave), data were collected among older employees working in more than 50 business units of two large Dutch multinational companies active in the field of retail and trade and industry. A mail questionnaire was sent to all employees aged 55 years and over and their partners. The older workers were asked about their preferences regarding retirement, and information was gathered about their job situation and health. Spouses were asked about their health status and their opinions regarding older worker's retirement (for details see: Henkens, 1999). Response in the first wave was 78 percent for older workers and 97 percent for partners. In 2001, a follow-up study was conducted. For this follow-up, participants in the first wave were approached. A total of 1,058 questionnaires were sent off. Response after two reminders was 75 percent for the older workers and 97 percent for the partners. The 793 questionnaires returned showed that only four people had *not* made the transition into retirement in between the two waves of the study. Because of this small number, the non-retirees have been excluded from the analysis. Complete information was gathered about a total of 778 people who had recently withdrawn from the labour force. Of the sample, 58 percent were men. The average age of the respondents in 1995 was 57.1 years. Sensitivity analyses using multivariate analysis revealed that no selective non-response between the first and the second wave could be established with respect to the independent variables in our model. Almost all of the questions were closed questions. The item non-response was low (on average less than 3 percent). Missing data were imputed using the MVA option in SPSS (Acock, 2005).

The Netherlands has a mandatory retirement age of 65. Early retirement arrangements are very popular and —as yet— rather generous. Only few workers remain in the labour force until mandatory retirement. As a result the effective retirement age is much lower than the official retirement age. Average

age at retirement in the sample was 60.0 (sd=1.8), which is almost identical to the effective retirement age in the Netherlands in the period 1997-2002 (OECD, 2005). Only 2.5 percent of the sample retired at age 65 (mandatory retirement age).

### 5.3.2. Measures

Our dependent variable is based on a 3-item scale indicating the extent to which retirement was perceived as involuntary. First the following question was asked: "Was your decision to retire (early) entirely voluntary, or not?" (2 answer categories: 1=yes, 2=no not (entirely) voluntary). Respondents were also asked to indicate the extent to which they agreed or disagreed with the following statements: "You could say I retired against my will" and "My decision to retire was entirely voluntary" (five answer categories: 1=strongly agree and 5=strongly disagree). A single measure was constructed by summing the standardized and unweighted items ( $\alpha=0.82$ ). The scale was subsequently linearly transformed into a range from 0 to 10, where a score of '0' indicated voluntary, and '10' involuntary. Since the items have a different scaling and the distribution of the items as well as the constructed scale turned out to be rather skewed, an alternative dependent variable has been created. We dichotomized both Likert type items into 0=voluntary and 1=involuntary. Item "You could say I retired against my will" was recoded (agree codes 1 and 2 versus not agree codes 3, 4, 5). Item "My decision to retire was entirely voluntary" was recoded (agree codes 4 and 5 versus not agree codes 1, 2 and 3). The Kuder-Richardson coefficient of reliability (KR20) for this set of dichotomous items was 0.80. The items have been summed into one scale consisting of four categories ranging from 0 (voluntary retirement) to 3 (involuntary retirement).

*Table 5.1* present the means, standard deviations, coding algorithms, and wording of the survey questions of the measures for the independent variables, as well as the psychometric properties of the scales used in this article. The context variables were taken from wave 1; transition characteristics were taken

Table 5.1. Means (M), Standard deviations (SD), Coding Algorithms, Wording of Survey Questions and Psychometric properties of the independent variables (N=789)

	M	SD	Coding Algorithm	Wording	Psychometric Properties
<b>Control variables</b>					
Male	0.58	0.49	Dummy variable, 1=male		N/a
Age at baseline	57.1	1.75			
<b>RETIREMENT CONTEXT</b>					
<b>Individual constraints</b>					
Health condition (t <sub>1</sub> )	8.0	2.3	2-item scale ranging from 0 'poor health' to 10 'good health'	<p>Questions:</p> <p>What is your general state of health? (five answer categories: 1=very good health; 5=very poor health)</p> <p>Do you have any recurring health problems, and if so describe them. The answers to this open question were coded on the basis of a modified version of the 'Seriousness of Illness Rating Scale' (SIRS) (Bossé <i>et al.</i>, 1987). This scale assigns a value to a large number of illnesses and conditions based on their seriousness. The values have been assigned by medical specialists based on factors such as prognosis, duration, threat to life, physical limitations and degree of discomfort (Wylser <i>et al.</i>, 1967).</p>	Alpha=0.71
<b>Familial restrictions</b>					
Care: having partner in bad health (t <sub>1</sub> )	0.03	0.2	Dummy variable, 1=partner in bad health, 0=partner not in bad health/no partner	<p>Question posed to partner:</p> <p>What is your general state of health? (five answer categories: 1=very poor to 5=very good)</p>	N/a
<b>Organizational restrictions</b>					
Organizational restructuring (t <sub>2</sub> )	0.47	0.5	Dummy variable, 1=yes, 0=no	<p>Question:</p> <p>Has your department been reorganized since the first interview in 1995?</p>	N/a
Redundancy(t <sub>2</sub> )	0.26	0.4	Dummy variable, 1=yes, 0=no	<p>Has your position been replaced after retirement?</p>	N/a

Table 5.1. (continued)

	M	SD	Coding Algorithm	Wording	Psychometric Properties
<b>Social timing</b>					
Off-time	0.31	0.46	Dummy variable indicating whether retirement was off-time (yes=1, no=0).	Respondents who retired earlier than the firm's normal early retirement age (60 years) were coded 1.	N/a
Personal timing	0.08 0.11 0.11 0.33 0.12 0.24	0.3 0.3 0.3 0.5 0.3 0.4	Five dummies > 2 years earlier 1-2 years earlier <=1 year earlier at expected age (reference) <=1 year later > 2 years later	Personal timing indicates whether retirement occurred earlier or later than expected (based on the respondent's expectations as captured at baseline and the actual retirement age). Six dummy variables were created: More than 2 years earlier (1=yes, 0=no); between 1 and 2 years earlier; less than 1 year earlier; at expected age (reference group); less than 1 year later; more than 1 year later.	N/a
<b>Partner's support to remain working</b>	0.18 0.57 0.25	0.4 0.5 0.4	Three dummies No partner Partner supports early retirement (ref) Partner does not early retirement	Question posed to partner: How would you feel if your husband/wife continued working until the age of 65?	N/a
<b>Workplace support</b>					
Perceived support from colleagues (t <sub>i</sub> )	3.3	1.0	1 item ranging from 1=few support to 5=strong support	Item: My co-workers would like me to remain in the workforce (1=strongly disagree; 5=strongly agree; reverse coded). Question:	N/a
Perceived support from supervisor (t <sub>i</sub> )	3.1	1.0	1 item ranging from 1=few support to 5=strong support	How would your direct supervisor feel about you continuing to work after you reach the age of 60? (1=my boss would not be at all happy about that; 5=my boss would be very much in favour of this).	N/a

Table 5.1. (end)

	M	SD	Coding Algorithm	Wording	Psychometric Properties
<b>PREFERENCES</b> Older worker's preferences for retirement ( $t_1$ )	6.98	1.53	3-item scale ranging from 0=a very strong intention to continue working to 10=very strong intention to retire early.	Questions: Do you intend to use the opportunity to retire early? (1=yes, 2=don't know (yet), 3=no); Do you intend to continue working after you reach the age of 60?"(1=no, certainly not; 2=no, probably not, 3=maybe, 4=yes, I think so, 5=yes, most certainly). If you were able to choose, at which age would you like to stop working? (continuous variable).	Alpha=0.77
<b>PERCEPTION OF CONTROL</b> Self-efficacy ( $t_2$ )	6.4	1.88	4-item scale ranging from 0=low level of self-efficacy, to 10=high level of self-efficacy	Shortened version of the General Self-Efficacy Scale (Sherer et al, 1982). Items: If I make plans, I am convinced I will succeed in executing them; If I absolutely want something, it usually goes wrong; I doubt myself; If I have the impression something new is complicated, I don't start. (Five answer categories: 1=completely agree and 5=completely disagree).	Alpha=0.58

from wave 2. Self-efficacy is a measure for perceived control. Self-efficacy was assessed with a shortened version of the General Self-Efficacy Scale (Sherer *et al.*, 1982) and was only available in the follow-up. The measure used here captures the confidence people have in their own ability to effectively cope with general changes as opposed to domain-specific measures, which relate to specific situations or behaviour. Although self-efficacy is influenced in part by earlier experiences in life, general self-efficacy appears to be relatively stable over time (Gecas, 1989; Hofstetter *et al.*, 1990). This seems to justify the use of this measure as an independent variable in the explanatory model.

### 5.3.3. Analytical strategy

We started our analyses using OLS regression indicating the extent to which retirement was perceived involuntary. However, due to skewness and scaling (non-interval scale) of this dependent variable, the OLS assumption of normality was violated. Therefore, we additionally conducted ordered logistic regression for our categorical dependent variable. Unlike OLS regression, logistic regression does not require a normally distributed dependent variable. Ordered logistic regression analysis is deemed an appropriate multivariate procedure for analysing a skewed and ordinal dependent variable. Ordered logistic estimates indicate the chance that a subject with a specific score on the independent variable will be observed in a higher category on the outcome variable. In order to control for the design effect we adjusted for clustering at the company level as well as the business unit level, using the SVY command in STATA (Huber, 1967; STATA, 2003). Without controlling for design effects we would be likely to produce standard errors that are much smaller than they should be. We compared the results of the OLS and ordered logistic regression. The results of this sensitivity analysis yield similar conclusions. In the Result section, we will only present the results of the ordered logistic analysis. Gender specific interaction effects are estimated using the Chow test of equality between coefficients (Chow, 1960; Gould, 2002).

## 5.4. Results

About one in every four older workers stated that the decision to retire was not (entirely) voluntary. Seventeen percent retired against their will. Twenty four percent disagreed with the statement “My decision to retire was entirely voluntary” (*table 5.2*).

*Table 5.2. Univariate descriptive statistics for the items constituting the scale for Perceptions of Involuntary Retirement (N=789), %*

<i>Was your decision to retire (entirely) voluntary, or not?</i>	
Yes, voluntary	74
No, (partly) involuntary	26
Total	100
<i>“You could say I retired against my will”</i>	
Strongly agree	5
Agree	12
Neither agree, nor disagree	15
Disagree	36
Strongly disagree	32
Total	100
<i>“My decision to retire was entirely voluntary”</i>	
Strongly agree	29
Agree	38
Neither agree, nor disagree	9
Disagree	14
Strongly disagree	10
Total	100

The results of the multivariate analyses explaining perceptions of involuntary retirement are presented in *table 5.3*.

The results in *table 5.3* suggest that restrictive circumstances (health, organizational constraints) as well as retirement preferences affect perceptions of involuntary retirement. Poor health is associated with perceptions of involuntary retirement. We do find some evidence for the hypothesis that family constraints are related to perceptions of involuntary retirement. Poor health of the spouse increases perceptions of involuntary retirement. Perceptions of forced retirement prevailed among older workers whose departments had been reorganized. In addition to general restructuring at department level, older workers whose own position had become redundant after retirement, in particular, tended to perceive their retirement as involuntary. As expected perceptions of involuntary retirement prevailed among individuals who were less in favour of early retirement.

Table 5.3. Results of the Ordered Logit analysis explaining older worker's perception of involuntary retirement (N=778)

	Coef.		t
Gender (male=1)	-0.09		-0.46
Age at baseline (1995)	0.07		1.40
<b>Restrictive circumstances</b>			
<i>Individual constraints</i>			
Worker's health condition (t <sub>i</sub> )	-0.13	**	-2.96
<i>Family constraints</i>			
Having partner in bad health (0-1)	0.64	†	1.73
<i>Organizational constraints</i>			
Organizational restructuring (0-1)	0.36	†	1.96
Redundancy (0-1)	0.51	**	2.97
<b>Preferences</b>			
Older worker's preferences for retirement	-0.38	**	-5.60
<b>Timing</b>			
<i>Social timing of retirement:</i>			
Off time (< 60 years)	1.26	**	5.11
<i>Personal timing of retirement:</i>			
> 2 years earlier	0.79	*	2.34
1 to 2 years earlier	0.40		1.29
0-1 years earlier	0.31		1.13
at expected age (ref.)	---		
0-1 year later	0.35		1.46
> 1 year later	0.01		-0.03
<b>Social embeddedness</b>			
<i>Partner's support for early retirement</i>			
No partner	0.18		1.28
Partner supports early retirement (ref)	---		
Partner does not support or is indifferent	0.54	**	2.83
<i>Workplace support to remain working</i>			
Perceived support from colleagues	0.13		1.28
Perceived support from supervisor	-0.26	**	-2.99
<b>Perception of control</b>			
Self-efficacy	-0.03		-0.46
Intercept 1	1.76		0.55
Intercept 2	2.53		0.79
Intercept 3	3.43		1.07
Pseudo R2			11.5
Log Likelihood			-703.0
Chi2 LR			183.0

† p < 0.10 \* p < 0.05 \*\* p < 0.01.

Our results support the hypothesis that the timing of the transition is an important factor in explaining perceptions of involuntary retirement. With respect to social timing we found that retirement transitions that were ‘off-time’ in the sense that they took place earlier than the current early retirement age (age 60 in both firms), were perceived as being more involuntary than retirement transitions that were normatively ‘on-time’. There is also support for our hypothesis with regard to personal timing: a lack of correspondence between the expected and actual time of retirement reinforces perceptions of involuntary retirement. Premature retirement in particular strengthens perceptions of forced retirement, and the greater the discrepancy, the stronger this effect.

The results point to the importance of social embeddedness for the retirement transition. We found empirical support for our hypothesis that social network influences affect older worker’s perceptions of involuntary retirement. Our hypothesis concerning the role of the partner was confirmed. Older workers who have a spouse who does not support early retirement are much more inclined to perceive their retirement as involuntary than workers whose spouses support early retirement. Social relations at work are important as well. In line with our expectation, supervisor’s support for prolonged labour force participation was negatively associated with perceptions of involuntary retirement: older workers with strong managerial support for them to remain in their jobs were less likely to perceive their retirement as involuntary. We did not find a significant effect of co-worker support.

We included self-efficacy as a factor in explaining perceptions of involuntary retirement. We suggested that a sense of self-efficacy among older workers, i.e. their control over life transitions in general, may colour the retirement experience. This hypothesis was not supported. We did not find a significant correlation between self-efficacy and perceptions of forced retirement.

The results did not reveal a main effect of gender on perceptions of involuntary retirement. We ran separate models for men and women to test gender specific interaction effects. A Chow test has been performed to test for differences in coefficients between men and women. Chow statistics reveal interesting gender differences with regard to the impact of restrictive circumstances and social network support. Health problems ( $\chi^2=6.60$ ;  $p>0.02$ ) and health problems of the spouse ( $\chi^2=3.95$ ;  $p<0.05$ ) induce perceptions of involuntary retirement among female workers more often than among male workers. Moreover, supervisor’s support to remain in the workplace appears to be more important for male workers ( $\chi^2=5.57$ ;  $p<0.02$ ).

## 5.5. Conclusions and discussion

In this article, we studied older worker's perceptions of involuntary retirement using longitudinal multi-actor data about 778 older workers in the Netherlands. First, the study confirms findings from earlier studies (Shultz *et al.*, 1998; Szinovacz and Davey, 2005a; Van Solinge, 2005) that situational constraints (especially poor health and organizational restructuring) promote perceptions of involuntary retirement. Restrictive circumstances, however, do not necessarily create perceptions of involuntary retirement. Many older workers appear to welcome an organizationally induced, more or less mandatory early retirement.

Second, this study provides additional evidence that the timing of retirement affects older workers' perceptions of involuntariness of the transition. Although timing of retirement may reflect situational constraints, and timing cannot be separated completely from choice and control (Szinovacz and Davey, 2005a), this study suggests that timing may also independently affect the older worker's account of the transition. To begin with, deviation from the social timetable, as reflected in the official early retirement age, reinforces perceptions of involuntary retirement. Retirement is perceived differently if it takes place earlier than socially expected. This suggests that, despite the strong trend towards deinstitutionalization of the retirement transition (Settersten, 1998), robust social norms exist about the appropriate time for retirement. In addition to these social norms, people have their own personal timetables; disruption of this personal calendar gives rise to feelings of involuntary retirement. It is, however, not so much a question of *whether* retirement occurred earlier than expected (see: Szinovacz and Davey, 2005a), but rather the discrepancy between expected and actual retirement time that matters. The greater the discrepancy the greater the feeling of forced retirement.

Third, this study provides empirical evidence for the importance of the older worker's social network in the retirement process. Social group preferences for and expectations about the timing of retirement affect the retiree's propensity to perceive retirement as involuntary. Spouses and supervisors, however, appear to have different interests and thus represent different forces in the retirement process. In the pre-retirement stage, spousal support for early retirement appears to be a pull factor for retirement (Henkens, 1999). Spousal preferences for retirement also play a role in the post-retirement phase. A lack of spousal support for retirement, or spousal pressure to remain in the workforce, strengthens perceptions of involuntary retirement among retirees. This study

shows the importance of the supervisor in the retirement process. Managerial support for remaining in the workforce is associated with perceptions of *voluntary* retirement. The results suggest that it is unlikely that an older worker will have to retire involuntarily if the supervisor is in favour of retaining him/her. Prior studies (Henkens, 1999; Henkens, 2000) have shown that supervisors' attitudes towards early retirement have an impact on the retirement intentions of older workers. Our results show that supervisors are also important when it comes to actual retirement behaviour. Supervisors are able to facilitate the prolonged labour force participation of their older workers. Strong managerial support thus gives the older worker more flexibility and freedom regarding the timing of retirement.

The Netherlands traditionally had a low level of female labour force participation and a high level of part-time employment in comparison with other countries. Earlier research suggests that few married women in the Netherlands remain in the labour force until they are eligible for early retirement (Van Solinge and Fokkema, 2000), and that those who do are characterized by a high level of independence (Henkens and Van Solinge, 2002; Van Solinge, Henkens and Tazelaar, 2006). In that respect it is interesting that this study shows that female older workers tend to experience their retirement as forced when they have a spouse in bad health at home. This suggests that *also* at the end of the working career labour force decisions of women are structured by experiences in the family domain, and that this reinforces feelings of involuntary retirement.

A number of limitations of our study need to be addressed here. The first limitation is the generalizability of the results to other countries. The Netherlands, like Japan and other European countries, have mandatory retirement ages. In the Netherlands, older workers have to retire at the age of 65. In countries that do not have mandatory retirement ages, such as the US, people probably have more opportunities to prolong their careers in their current job, or else in another position, preventing them from having to retire involuntarily.

Second, our analyses relate to perceptions of involuntary retirement. Szinovacz and Davey (2005a) have argued that this should not be confounded with no-choice retirement. Our study does not include detailed information about older worker's decision latitude. We lacked objective indicators of the actual degree of choice older workers had regarding retirement, as well as information about what triggered them to retire. Further research on this topic should preferably address these issues as well.

Life course scholars have emphasized the importance of timing and social embeddedness in understanding life transitions (e.g. Elder and Johnson, 2003). This study shows that older workers' perceptions of retirement from the labour force are influenced not solely by factors that diminish the older worker's amount of choice (health and organizational constraints), but also by the social environment. Our results clearly show the relevance of social timing and social embeddedness in explaining perceptions of involuntary retirement, suggesting that involuntary retirement is largely socially defined and determined. Involuntary retirement has no absolute meaning. The way the retirement transition is framed in social relationships within the family and at work affects the older worker's subjective experience of retirement.



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## 6. Conclusions and discussion

### 6.1. Introduction

This study examined the experiences of older workers and their partners in the transition from work to retirement. The central question was how employees and their partners experience retirement in terms of it being a voluntary or involuntary transition, why adjustment to retirement is more difficult and has more negative implications (in terms of health and wellbeing) in some cases than in others, and which factors play a part in this respect. To answer these questions, multi-actor panel data were collected about 778 older workers and their partners (if a partner was present in the household). Issues studied were the adjustment to retirement (chapter 2), and the consequences of retirement for well-being (chapter 3) and health (chapter 4). Chapter 5 focused on involuntary retirement. In the present chapter, I will summarize the results of these studies (6.2). Furthermore, I will discuss the scientific (6.3) and societal (6.4) relevance of the results. In the final section I will address the limitations of the current study and put forward some suggestions for future research (6.5).

### 6.2. Summary of the conclusions

The transition from work to retirement brings about several changes for the retiring individual as well as for his or her partner, requiring adjustment for both spouses. The results of this study show that both structural (the retirement context), social (social interdependency) and psychological factors are important in clarifying interpersonal differences in workers' and spouses' reactions to the retirement transition and in differentiating levels of satisfaction with the retirement experience and health in retirement.

The question why some individuals adjust more easily than others and to what extent spouses influence each other in the process of adjustment to retirement is addressed in chapter 2. Adjustment has been assessed on the basis of the individual's own subjective evaluation of the difficulties he/she had in the transition to retirement. The results show that the majority of older workers and partners adjusted well. For almost half of the workers adjustment was very quick: they had become accustomed to a non-working life within a month; over three-quarters within a year. In about nine percent of the cases adjustment took more than a year. Half the older workers adjusted very easily. However, about

13 percent reported difficulties in adjusting to retirement. Partners were found to adjust more easily than the employees themselves; only six percent reported difficulties. At the couple level, 17 percent had problems adjusting in the sense that either the retiree or the partner, or both, reported difficulty adjusting. We found strong gender differences with regard to adjustment. Women tend to have greater problems adjusting to retirement, both as workers and as partners.

The results show that the structural context of retirement, shaped by the couple's access to resources and transition characteristics, influences their adjustment. Adjustment to retirement depends on many factors, the most important of which appears to be whether or not it was voluntary or forced. Those who perceived their retirement as forced tended to face the greatest difficulties in adjusting to the transition. Interestingly, traditional predictors of difficult adjustment in international research (health and income) were found to be of minor importance in the Netherlands. The same holds for pre-retirement involvement in leisure activities, which may signal boredom in retirement. The quality of the marital relationship is an important resource in the partner's adjustment to the older worker's retirement: low involvement in shared activities is associated with difficult adjustment. We did not find evidence that asynchronous retirement timing results in more problems in adjusting. Job characteristics do have some effect: adjustment is easier for workers with part-time jobs. There is, however, no evidence that the older worker's evaluation of job challenge relates to difficult adjustment.

Prior research has suggested that the partner plays an important role in decision making with regard to retirement. In this light it is interesting that adjustment — in particular for the older worker— is a much more individualistic process. The older workers themselves were not found to 'suffer' greatly from adjustment problems experienced by their spouses. The opposite was found to be the case, however. The adjustment process of spouses *was* affected by adjustment problems experienced by retiring older workers.

In addition to the structural and social context of retirement, psychological determinants were shown to be important factors in explaining difficult adjustment. Self-efficacy, which is an expression of the individual's confidence in his/her ability to deal with changes, is related to adjustment. A low level of self-efficacy is associated with adjustment problems. The same holds for retirement anxiety: negative expectations, in particular about the social consequences of retirement (loss of social status and social contacts), predict

difficult adjustment. Pre-retirement concerns about marital conflict were also found to relate to problematic adjustment among partners.

In chapter 3, the primary focus was on couple's satisfaction with retirement. The first question posed was how we can explain individual differences in satisfaction with the older worker's retirement. This chapter builds on the results of chapter 2 and was inspired by the fact that it is common practice in the scientific retirement literature to treat adjustment and satisfaction as equivalent concepts. In applying basically the same conceptual models (cf. chapter 2) to both concepts, we investigated whether there are differences in the determinants that explain adjustment to and satisfaction with retirement. The results show that the vast majority of workers and their partners are satisfied with retirement. More than 40 percent of older workers and one-third of their partners stated that the years since retirement had been better than the two years preceding retirement. Three percent considers retirement as worse than working life.

The findings indicate that the structural context of retirement is of particular relevance with regard to retirement satisfaction. The couple's access to resources such as health and income, and changes in these resources upon retirement affect satisfaction. Transition characteristics influence retirement satisfaction. Forced retirement is a strong predictor of dissatisfaction with retirement. Job characteristics, such as physical demand and job challenge, have only weak effect on worker's retirement satisfaction. The partner's satisfaction with the worker's retirement is influenced predominantly by marital relationship characteristics.

As was the case with adjustment, direct spousal influence in the adjustment process appears to be limited. Adjustment problems faced by one of the partners was not found to affect the other partner's retirement satisfaction. This does not mean that the partner is irrelevant: a satisfactory spousal relationship prevents adjustment problems (for the partner) and is also related to retirement satisfaction.

Psychological factors play a modest role in explaining retirement satisfaction. Older workers who feel confident that they will be able to deal with change (high self-efficacy) tend to be more satisfied with retirement. Among partners, negative expectations about the consequences of retirement for the quality of the marital relationship predict dissatisfaction with retirement.

The analyses show that adjustment and satisfaction have some determinants in common. For example, involuntary retirement and self-efficacy are related to both. This underlines the importance of having control of the retirement transition process. There are, however, also substantive differences, suggesting that adjustment to and satisfaction with retirement refer to different aspects of the retirement experience. Adjustment refers to the process of getting used to retirement as a new stage in life and involves the social detachment of work. Satisfaction on the other hand, captures the evaluation of life in retirement. Resources—such as money and health (for the worker/retiree) and the quality of the marital relationship (for the partner)—largely determine whether retirement is enjoyed or not. Poor health and financial conditions apparently prevent retirees from enjoying retirement. Older workers who experienced a deterioration in health or a stronger income decline were less satisfied with retirement.

Chapter 4 addressed health change in retirement. This chapter shows that retirement does not categorically harm or benefit health. Instead, health consequences vary across individuals and according to the various health measures adopted. On average, health did not deteriorate and even improved on some of the measures (self-rated health and medical consumption) during a period of six years from age 57 to 63 (average), in which the older workers made the transition into retirement. Given the fact that—overall—health tends to decrease with age, the average positive effect found here, although relatively small, is remarkable. However, average results conceal considerable diversity. In terms of subjective health, 25 percent of the older workers experienced an improvement; 19 percent a deterioration. In terms of serious health problems, 15 percent showed an improvement; 15 percent a decline.

This study provides additional evidence that employees' failure to control retirement according to their wishes may have adverse effects on health as well. Older workers who perceived retirement as involuntary show a decrease in perceived health. In this study, we also examined the role of the spouse as a resource in the retirement process. We did not find strong evidence for the assumption that the presence of a partner mitigates the negative consequences of stressful situations. However, the partners of the retired workers *were* found to play a role in medical consumption: medical consumption increased more strongly among retirees with a partner than among those without a partner. Apparently, partners encourage older workers to seek medical assistance on time. This underscores the role of the spouse as a major actor in the retirement

transition. This study does not provide empirical support for the hypothesis that the health consequences of retirement differ according to working conditions or job characteristics. Nor did we find evidence that access to resources in terms of income and social contacts, or a decline in income or social status predict health change in retirement.

Psychological factors play a role as well. The results indicate that pre-retirement fear of retirement, or retirement anxiety, is related to health change in retirement. Health, in both objective (in terms of severity of health problems) and subjective terms (self-assessed health condition), decreased among older workers who had negative expectations about retirement. Self-efficacy is also associated with health change in retirement. People who felt less confident about their ability to cope with change showed more adverse health change: we registered a decrease in subjective health and an increase in medical consumption.

Chapter 5 focused on perceptions of involuntary retirement. In line with results for empirical studies conducted in other regions, we found that a substantial proportion of older workers perceive their retirement as being more or less forced or involuntary. Involuntary retirement is not identical to no-choice retirement, since even under no-choice conditions older workers may not perceive their retirement as forced. In this chapter we investigated the conditions under which older workers perceive their retirement as forced rather than voluntary.

The results show that situational constraints (poor health or organizational restructuring) reinforce perceptions of involuntary retirement. Transition characteristics matter as well. The timing of retirement is an important factor in explaining perceptions of involuntary retirement. Deviation from the social timetable, i.e. leaving earlier than the standard pre-retirement age, increases perceptions of involuntary retirement. Individuals tend to have their own personal timetables as well; disruption of this personal timetable gives rise to feelings of involuntary retirement. The greater the discrepancy between preferred and actual retirement time, the stronger the feeling of forced retirement.

The way the retirement transition is embedded in social relationships within the family and at work affects the older worker's subjective experience of retirement. Lack of spousal support for retirement in particular increases feelings

of involuntary retirement. Supervisor's support for remaining in the workforce is associated with perceptions of voluntary retirement.

The hypothesis that older workers with a low sense of self-efficacy are more inclined to perceive the retirement transition as forced, was not supported. The relevance of social timing and social embeddedness in explaining perceptions of involuntary retirement suggests that involuntary retirement is largely socially defined and determined.

### **6.3. Scientific relevance**

This study's objective was to advance the existing research literature on the impact of retirement on the life of older adults by integrating insights provided by various scientific disciplines into a single conceptual model. The three major characteristics were:

1. A broader view of the structural retirement context (including not only health and finances, but also information about leisure, work and the family);
2. Acknowledgement that the retirement experience may be dependent on attitudes and behaviour of relevant others in the social network (social interdependency);
3. Acknowledgement that the retirement experience may be dependent on the individual's subjective evaluation and psychological resources as well. These three elements will be elaborated below.

To start with the first point, in this study we adopted the life course notion of contextual embeddedness, which is a broader, and therefore also more complex, view of the retirement context than usually employed in retirement studies and includes the individual's access to resources (health, income, leisure, marital quality, social network and social status), job characteristics (job stress, job challenge, demanding work), as well as transition characteristics (involuntary retirement, attachment to work, partner's work status).

Thus far, resources, health and income in particular, dominate the explanatory models of existing studies on the impact of retirement. In this research, the role of these key resources was found to be variegated. In the Dutch context, health and income appear to be of minor importance in the older worker's adjustment process, yet central to retirement satisfaction. Marital quality was found to be an important resource in the partner's adjustment to the older worker's retirement.

Many studies, particularly those grounded in the role theoretical approach, assume that the impact of retirement depends on the particular job and its features, such as physical strain, workload and intrinsic value. This study did not find evidence for the assumption that retiring from a stressful or physically demanding job is experienced as a relief and that retiring from a challenging job is felt to be particularly stressful (e.g. Drentea, 2002). Job characteristics were found to be of minor importance in explaining adjustment to retirement and retirement satisfaction as well as health in retirement. The degree to which the older worker him- or herself is able to influence the retirement decision is far more important. Involuntary retirement was found to be a key factor in explaining adjustment to retirement and retirement outcomes. This leads us to the conclusion that *how* one retires from one's job is more important than *which* job one retires from.

As for the second point, a central assumption underlying this study is that retirement is shaped by social relationships within the family and with colleagues and one's supervisor. This notion of interdependency implies that adjustment to and evaluations of the consequences of retirement will be dependent on the attitudes and behaviour of relevant others in the social network. Social interdependency has been incorporated in the conceptual models in a variety of ways. First, by incorporating marital characteristics, and by explicitly modelling the influence of the spouse (in chapters 2 and 3). In the second place, by including the attitudes of co-workers and supervisors in the study of perceptions of involuntary retirement (in chapter 5).

The results underscore the importance of social network influences in the retirement process. The way the retirement transition is framed in social relationships within the family influences adjustment to retirement as well as satisfaction with this new stage in life. Whereas the direct influence of the partner on the older worker's adjustment to and satisfaction with retirement may be limited, the partner does play a role in how retirement is perceived in terms of it being voluntary or involuntary. A lack of spousal support for early retirement (or pressure to remain in the workforce) strengthens perceptions of involuntary retirement among retirees. For the partner, adaptation to the changed relationship with the spouse (couple adjustment) is key to the process of adjusting to the older worker's retirement. When workers experience problems in adjusting to retirement, their partner's adjustment is hampered. Marital quality predicts difficult adjustment as well as dissatisfaction with the worker's

retirement. This underscores the importance of the marital relationship in late life.

This study has shown that social relationships at work matter in the retirement process. Retirees consider the loss of contacts with co-workers as one of the main drawbacks of retirement. Social detachment from work (social contacts, social status) is a central aspect of the adjustment process for older workers in the Netherlands. This underlines the role of one's job as a social integrative framework. The results also provide evidence for the impact of supervisors on the retirement experience. Older workers with strong managerial support for them to remain in their jobs are less likely to perceive their retirement as involuntary. It is unlikely that an older worker will have to retire involuntarily if his/her supervisor is in favour of retaining him/her. This underscores the role of the supervisor as an actor in shaping the older worker's retirement transition.

With respect to the third point: This study is among the few that include psychological determinants in the models, in addition to structural and social factors. In this study, individuals are not seen as merely passive products of their environment. They are assumed to construct their own life course through the choices they make and the actions they take within the opportunities and constraints of their structural and social circumstances (Settersten, 2003). The results of this study provide evidence for the assumption that how people deal with retirement may also be governed by psychological predispositions that vary among individuals (Taylor and Cook, 1995). Self-efficacy is an important factor in explaining adjustment to retirement as well as outcomes of retirement in terms of retirement satisfaction and subjective health. This may lead to the conclusion that psychological resources determine whether people take advantage of the material and social resources available to them.

Further, we argue that people do not only respond to the objective features of a situation, but also to the meaning this situation has for them. It was explicitly assumed that within a given structural retirement context, people may assess and evaluate the consequences of early retirement differently, and that these evaluations (i.e. expectations of change) can be a factor in the retirement transition. The results of this study have shown that people have expectations of what their future lives in retirement will look like. These expectations have an effect on how retirement is experienced. Fear of the social consequences of retirement in particular predict how difficult adjustment to retirement will be.

The results suggest a relation with health in retirement as well. Health did decline among workers who had negative expectations about retirement.

Some comments are in order here. The older worker's pre-retirement expectations about the consequences of retirement for specific domains of life (e.g. health, income, leisure, social contacts and social status) reflect his or her evaluation of three elements. First, the pre-retirement level of available resources in a specific domain ('What is my actual income?'). Second, an estimation of the decline in this domain as a result of retirement ('To what extent will I be worse off if I stop working?'). Third, an assessment of the meaning of the life domain ('How important is financial comfort?'). This study contains estimates of the pre-retirement level of resources in the various domains of life; information on the other aspects is insufficient, however, to separate the impact of the three elements. This means that we do not know, for example, whether the impact of pre-retirement expectations about the implications of retirement for social status on adjustment is caused by the fact that the person in question attaches great importance to status or by the fact that the loss of status was substantial. Future research could study these three elements in more detail.

We opted for a step-by-step approach both in constructing the conceptual models and in the analyses. The reason for doing so was to determine the extent to which more complex explanatory models, which include social interdependency (2) and psychological determinants (3) in addition to the structural context (1), yield substantially better explanations for the phenomena examined. All in all, the results suggest that theoretically more complex models that include psychological determinants in addition to the structural and social context, yield substantially better explanations. This holds in particular for the study of adjustment to retirement and the study of changes in health upon retirement. While the explanatory model for adjustment needs to be rather complex, including both structural constraints and psychological determinants, the model for satisfaction can be more robust.

#### **6.4. Societal relevance**

In policy circles there is wide agreement that labour participation should be stimulated. However, the results of this study suggest that the popularity of early retirement is unlikely to decline as long as arrangements continue to exist that enable older workers to withdraw from the labour force without too sharp a drop in income. Older workers and their spouses tend to prepare themselves for a life

without work long before the actual retirement date. Enjoying the Good Life in old age, referred to as the 'Zwitserveengevoel', has become a reality for a majority of older adults in the Netherlands: adjustment to retirement is quick and easy and the level of satisfaction is high as long as money and health do not impose too many restrictions. New arrangements, however, will be less generous, and this retrenchment may cause lower levels of well-being in retirement. On the other side, increasing flexibility in arrangements may provide workers more opportunities to 'manage' their own retirement, which may increase well-being.

This study has also yielded a number of interesting findings for company policies. The first finding relates to the part played by health in the retirement process. Countless studies have shown that health is an important factor in retirement decision making. The finding that the state of health of a substantial percentage of the interviewees improved following retirement may suggest that working life is too demanding for many older workers. Second, in the somewhat longer term companies and organizations will be confronted with the implications of an aging population and a shrinking labour market. An important issue for the future will be how older workers can be encouraged to continue working longer, and to what extent older adults are interested in work after age 65? The positive impact of retirement on well-being suggests that the propensity to re-entry the labour market after retirement will be limited. This study, however, does show that social attachment to work is very important for workers who are about to retire, and even after retirement. These factors may provide opportunities for organisations to delay the retirement of their older employees.

A third interesting finding relates to how the retirement process is managed. This study has shown that about one quarter of the employees felt that their retirement was involuntary. This indicates that having to withdraw from the labour force was unexpected and/or that it was forced upon them. This study suggests that the supervisor is an important actor in the retirement process. Older workers are less likely to experience an involuntary exit from the labour force in case the supervisor favours remaining in the labour force. In this regard it is interesting to note that only few supervisors are aware of their central role in late adult career (Cozijnsen, Henkens and Van Solinge, 2005).

Lastly, this study provides further insight into factors that affect the well-being in retirement. Even though retirement is no longer a 'crisis event', and most

older workers and their spouses adjust to retirement quickly and easily, there are circumstances under which there is a heightened risk of a lack of well-being. Following retirement, the social focus shifts from work to private life: the household and the marital relationship become more central. The quality of this relationship is an important factor affecting adjustment to retirement and well-being in retirement. This applies in particular to the older worker's spouse. For the retiree him- or herself, social detachment from work is the key issue in the retirement process. Fear of a loss of social contacts and status increases the risk of adjustment problems. This appears to be the case irrespective of the level of job prestige and applies to blue and white collar workers alike.

Control over the retirement transition is deemed important. Whether or not the older worker had a say in the timing of retirement greatly affects adjustment to and well-being in retirement. The fact that about one quarter felt that their retirement was involuntary shows that many older workers have only limited influence on the retirement transition. As a result of policy changes, early retirement arrangements will increasingly become an affair for which employees will be largely individually responsible. New pension schemes will be more flexible, giving individuals a greater say in the timing of retirement. In order to achieve optimal freedom regarding retirement, individuals have to prepare themselves as early as possible in their working lives by saving for this purpose. This implies that individuals have to bear more individual responsibility in retirement planning than in the current case. It remains to be seen to what extent people will be able to plan over such long time horizons. The way how people fill in this responsibility will determine to a large extent whether future retirement will be a transition with predominantly positive consequences as it is today, or a transition in which negative consequences prevail.

## **6.5. Discussion**

When evaluating the results presented in this book, some limitations need to be addressed. First, a major drawback of this study is the absence of a control group that did not undergo retirement. A full understanding of the impact of retirement on matters such as health and well-being requires longitudinal data, as well as a control group of non-retirees in the same age bracket. The data, however, had insufficient variance in retirement status. Almost all older workers retired in the period in between the two waves. In view of the extremely small numbers, non-retirees were excluded from the analysis. As a result, this study did not allow us to identify the effect of retirement beyond that of aging or the passage of time. In order to ensure a sufficiently large control group, future research designs should

be adapted to this specific methodological problem and select broader age ranges (e.g. workers aged 50 and over) for base-line studies.

A second point that warrants attention concerns the fact that our data have not been randomly collected. The older workers were selected from two large and potentially heterogeneous firms. As a result of this data selection strategy, the workers studied in this research are not representative of all older workers in this age range. This holds especially for the descriptive results of the study. The sample, however, contains substantial variation in terms of important variables, such as gender, educational level, job category and health. As a result, the explanatory mechanisms described in this book—that is the conditions under which retirement results in difficult adjustment or negative outcomes—are assumed to be representative.

Third, this study examined the experiences of older workers who left paid work through early retirement arrangements, or at reaching the mandatory retirement age of 65. Retirement ages were clustered around the firms' standard early retirement age of 60. Many older workers, however, leave the labour force at much younger ages (e.g. 50-55 years) as a result of disability or unemployment. Since reintegration opportunities tend to be extremely bleak, unemployment and disability often mean the end of paid labour, even for people in their early fifties. This *de facto* early retirement has not been the topic of this study. Adjustment to this type of *de facto* early retirement is expected to be much more difficult and the consequences are likely to be more negative.

Fourth, when interpreting the results regarding female workers, one should realize that only few women work until early retirement age are. In 1995 (at the time of wave 1), 20 percent of women aged 55-59 and only five percent of women aged 60-64 were active in the labour force. It was rather uncommon for this generation of women to continue working after marriage and the birth of children (Van Solinge and Fokkema, 2000). Women who continued working up to retirement may therefore be seen as a select group of motivated and job-focused employees (Van Solinge *et al.*, 2006).

Fifth, this study focused on married couples. As a result, the retirement experiences of single and re-partnered workers and non-cohabiting couples, which may be qualitatively different from that of married workers (e.g. De Jong Gierveld, 2004a), have received relatively little attention. The question as to whether the conclusions of this study apply to non-married older workers as

well remains unanswered. Future research should pay more attention to the possible impact of marital or partner status on adjustment to and the consequences of retirement in terms of health and well-being.

Sixth, this study has mainly focused on current opportunities and constraints and attitudes and their impact on the retirement process. However, resources that restrict or facilitate retirement are often formed over the life course. As life courses become less standardized, retirement research should pay more attention to how the retirement process and its outcomes is contingent on earlier decisions and experiences in the life course.

This book has presented the results of a study on retirement in the Netherlands at the dawn of the 21<sup>st</sup> century. As mentioned in Chapter 1, the position of the aged in society as well as the meaning of retirement has drastically changed over the past 100 years. Old is no longer synonymous with poor. Under the state pension scheme (AOW), every Dutch resident aged 65 or older is entitled to a benefit equal to subsistence level. As a result, there is no longer a strict need for the elderly to remain in the labour market. The old and tattered pensioner has made way for the fit and trim early retiree. Retirement has evolved from an insecure and unattractive state to an appealing life stage.

The retirement arena is in a state of flux, however. The collective, generous early retirement schemes are being dismantled and replaced by flexible arrangements under which employees save money or time individually for the option of early retirement. As a result of these developments retirement patterns will become much more heterogeneous and dynamic. For a growing minority, retirement may cease to be the one-time-irreversible event it tends to be now in the Netherlands. How these developments will affect the well-being of older adults is an interesting issue for future research.



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## Samenvatting

In deze studie staat de overgang van werk naar (vervroegde) uittreding centraal. Meer in het bijzonder wordt onderzocht wat die transitie met mensen doet. Hoe verloopt de aanpassing aan een leven zonder betaald werk, en wat zijn de gevolgen voor het welbevinden en de gezondheid van oudere werknemers.

Pensioen lijkt nu de normaalste zaak van de wereld. Echter, historisch gezien is sprake van een relatief jong fenomeen. Pas vanaf 1957, met de invoering van de Algemene Ouderdoms Wet (AOW), heeft de gehele Nederlandse bevolking recht op een basispensioen vanaf het 65<sup>ste</sup> jaar. De sociaal-economische positie van gepensioneerden is de afgelopen 50 jaar drastische gewijzigd. In de beginperiode voorzag de AOW-uitkering nauwelijks in de kosten van levensonderhoud. Omdat slechts weinig ouderen over een aanvullend pensioen beschikten, waren velen aangewezen op de bijstand of arbeid als aanvulling op de AOW. Ook in hoe tegen pensionering wordt aangekeken is de laatste decennia verandering gekomen. In de jaren vijftig van de vorige eeuw was bijvoorbeeld pensionering in de ogen van veel artsen eerder een gevaar dan een goede zaak voor bejaarden. Deze zorgen hadden te maken met de ‘heillose leegte’ in het bestaan van de gepensioneerden en de problemen van aanpassing die daarmee gepaard gingen. Vijftig jaar later, in 2005, is de beeldvorming rondom stoppen met werken totaal gewijzigd. De samenleving heeft ontdekt dat er leven is na pensioen. Het ‘Zwitserlevengevoel’, synoniem voor het financieel onbezorgd genieten van een vervroegd pensioen, is een begrip in Nederland. Vervroegde pensionering is de norm; de laatste decennia werken slechts weinig werknemers door tot de pensioengerechtigde leeftijd en betaalde arbeid na het 65<sup>ste</sup> levensjaar is al helemaal uitzonderlijk. De financiële situatie van gepensioneerden is de afgelopen decennia sterk verbeterd. In de media wordt vervroegde pensionering afgeschilderd als een aantrekkelijk en wenkend perspectief, waar iedere werknemer voor kiest als dat maar enigszins (financieel) binnen bereik is. Dit beeld suggereert dat pensionering een transitie is die zonder problemen wordt doorgemaakt en dat de aanpassing snel en gemakkelijk verloopt.

Echter, over hoe dat aanpassingsproces aan pensionering daadwerkelijk verloopt is nog weinig bekend. Deze studie beoogt het inzicht te vergroten in de aanpassing aan pensionering door oudere werknemers én hun (huwelijks)partner in Nederland. De centrale vraag in dit boek is hoe de werknemers en hun

partners de pensionering beleven in termen van vrijwillig – onvrijwillig. En waarom aanpassing aan pensionering in het ene geval veel moeilijker verloopt en veel meer negatieve consequenties heeft (in termen van gezondheid en welbevinden) dan in het andere geval, en welke factoren hierop van invloed zijn. Pensionering is geen individuele aangelegenheid. De overgrote meerderheid van de mensen die met pensioen gaan woont (gehuwd of ongehuwd) samen met een partner. Stoppen met werken lijkt in hoge mate een huishoudensbeslissing. Ook aanpassing aan pensionering is geen individueel proces. Als één van de partners stopt met werken heeft dat consequenties voor de andere partner. Hoewel er in de pensioneringsliteratuur in toenemende mate aandacht is voor het duale karakter van het uittredeproces, is het merendeel van het onderzoek op het terrein van pensionering gericht op de oudere werknemer zélf. In dit onderzoek is expliciet aandacht besteed aan de partner en hoe deze de pensionering van de oudere werknemer ervaart. Voor dit onderzoek werden bijna 800 oudere werknemers én hun eventuele (huwelijks)partner gevolgd in de overgang van werk naar pensioen.

Deze studie richt zich op de aanpassing aan pensionering en de gevolgen van pensionering in termen van welbevinden en gezondheid. De impact van pensionering is een thema dat met name in de internationale literatuur brede belangstelling geniet. Opvallend daarbij is dat aanpassing aan pensionering vooral op indirecte wijze wordt bestudeerd. Op basis van uitkomstmaten zoals welbevinden, tevredenheid of depressie worden conclusies getrokken over de aanpassing aan pensionering. Een laag welbevinden zou dan duiden op aanpassingsproblemen. Een nadeel van deze werkwijze is dat —zonder longitudinale gegevens— niet valt te achterhalen of vóór de pensionering ook al sprake was van een verlaagd welbevinden, of dat het lage welbevinden wordt veroorzaakt door andere factoren dan de pensionering (bijvoorbeeld ziekte van de werknemer zelf of de partner). In deze studie is aanpassing op een meer directe wijze bestudeerd, op basis van de eigen beoordeling van de moeite die men had met de overgang van werk naar pensioen (werknemer) of de pensionering van de echtgenoot of echtgenote (partner).

Het gangbare onderzoek naar de gevolgen van pensionering richt zich vooral op de beschrijvingsvraag óf pensionering effect heeft op gezondheid of welbevinden. Met name in de oudere literatuur uit de periode 1960-1985 wordt de pensionering gezien als stressvolle gebeurtenis of zelfs een crisis, met alle (negatieve) consequenties van dien voor gezondheid en welbevinden. Meer recent wordt onderkend dat pensionering ook, of vooral een positieve uitwerking

kan hebben, onder andere doordat men minder stress ervaart en meer tijd kan besteden aan gezonde activiteiten. De diversiteit in de onderzoeksuitkomsten suggereert dat pensionering niet categorisch goed of slecht is voor de gezondheid of het welbevinden. Of, en de mate waarin pensionering effect heeft lijkt veeleer individueel bepaald en persoonlijke kenmerken alsook de pensioneringscontext spelen daarbij een rol. Dit is precies waar dit onderzoek zich op richt. In deze studie gaan we na in hoeverre er sprake is van aanpassingsproblemen, tevredenheid met pensionering en gezondheidsveranderingen, en welke factoren hierbij een rol spelen.

Kenmerkend voor de gevolgde aanpak is dat een onderscheid wordt gemaakt tussen drie groepen factoren: structurele kenmerken van de pensioneringscontext, sociale factoren en sociale interdependenties, en psychologische factoren. We veronderstellen dat hoe de pensionering wordt ervaren in de eerste plaats samenhangt met de pensioneringscontext: de specifieke omstandigheden waaronder de pensionering plaatsvindt. Naast financieel-economische factoren en gezondheid, wordt er binnen de pensioneringscontext ook gekeken naar kenmerken van het werk van waaruit men pensioneert, het huishouden (bijvoorbeeld werkt de partner wel of niet), en vrije tijd.

In de tweede plaats, veronderstellen we dat de pensionering niet in een sociaal vacuüm plaatsvindt, maar dat de transitie sociaal ingebed is. Met andere woorden, gedrag en opinies van relevante andere in het sociale netwerk van de oudere werknemer en zijn/haar partner zijn mede van invloed op hoe de aanpassing verloopt en hoe de pensionering wordt ervaren.

Tenslotte, personen die zich in een gemeenschappelijke of identieke pensioneringscontext bevinden hoeven de transitie niet noodzakelijkerwijze het zelfde te ervaren of er identiek op te reageren. Voor de ene werknemer kan stoppen met werken een zegen zijn, voor de andere een ramp. De betekenisgeving door het individu wordt geacht van invloed te zijn op de aanpassing aan pensionering en op het welbevinden en de gezondheid erna. Verder zijn individuen geen passieve producten van hun omgeving. Zij geven zelf vorm aan hun leven door de keuzes die ze maken en acties die ze ondernemen. Wij veronderstellen dat psychologische hulpbronnen een rol spelen bij de wijze waarop de oudere werknemer omgaat met pensionering. Bij de opbouw van het verklaringsmodel zoals hierboven beschreven, is een bepaalde systematiek gehanteerd die ook in de analyses is gebruikt. Er wordt gestart met een relatief robuust en simpel model waarin de nadruk ligt op de

structurele pensioneringscontext. In volgende stappen wordt het model stapsgewijs uitgebreid tot een meer complex model, waarin ook sociale interdependenties en psychologische kenmerken zijn opgenomen. Deze structureringsmethode kan inzichtelijk maken hoe robuust de verklaring kan zijn, dan wel hoe complex hij moet zijn.

Deze studie is gebaseerd op multi-actor gegevens van bijna 800 oudere werknemers en hun eventuele partner. De eerste ronde van dit longitudinale onderzoek naar uittrede uit het arbeidproces vond plaats in 1995 (zie voor een uitgebreide beschrijving: Henkens, 1998). Naar alle werknemers van 55 jaar en ouder van Unilever en VendexKBB is een schriftelijke vragenlijst gestuurd waarin hen werd gevraagd naar plannen ten aanzien van stoppen met werk. Voor de eventuele partner was een eigen vragenlijst ingesloten. Meer dan driekwart (78 procent) van de werknemers zond destijds de vragenlijst retour; ook de deelname van de partners was groot, namelijk 97 procent. De in 1995 ondervraagde medewerkers zijn in 2001 opnieuw benaderd in het kader van een bredere studie naar uittrede-intenties en -gedrag uitgevoerd op verzoek van de Stichting Management Studies (SMS) in Den Haag (Henkens en Van Solinge, 2003). In totaal werden 1.058 vragenlijsten verzonden. De response bedroeg 75 procent voor werknemers; 95 procent voor partners. In totaal is op deze wijze informatie verkregen over bijna 800 personen (waaronder 559 paren) die recent zijn uitgetreden uit het arbeidsproces.

In de hoofdstukken 2 tot en met 5 wordt ingegaan op verschillende aspecten van de transitie van werk naar pensioen, zoals aanpassing (hoofdstuk 2), tevredenheid (hoofdstuk 3), gezondheid (hoofdstuk 4) en onvrijwilligheid (hoofdstuk 5). Elk van de hoofdstukken heeft de vorm van een tijdschriftartikel. Dit heeft als voordeel dat de hoofdstukken zelfstandig te lezen zijn, zonder dat kennis van de voorafgaande hoofdstukken noodzakelijk is. Twee artikelen (hoofdstuk 2 en 4) zijn inmiddels gepubliceerd. De overige artikelen zijn aangeboden aan redacties van wetenschappelijke tijdschriften.

In hoofdstuk 2 staat de vraag centraal waarom aanpassing in het ene geval veel moeilijker verloopt dan in het andere geval en in welke mate de partners elkaar beïnvloeden in het aanpassingsproces. Het blijkt dat aanpassing aan pensionering over het algemeen snel en gemakkelijk verloopt. Bijna de helft van de oudere werknemers en partners is reeds binnen een maand gewend aan de nieuwe situatie; drie kwart binnen een jaar. In negen procent van de gevallen kostte de aanpassing meer dan een jaar. De helft van de werknemers heeft nauwelijks

problemen met de aanpassing; 13 procent rapporteert moeilijkheden. Partners passen zich veel gemakkelijker aan dan werknemers zelf; slechts zes procent geeft aan last te hebben gehad van aanpassingsproblemen. In Amerikaans onderzoek worden aanpassingsproblemen vooral in verband gebracht met twee specifieke aspecten van de pensioneringscontext, namelijk de gezondheid en de financiële situatie. In dit onderzoek blijken in Nederland geld en gezondheid maar van beperkt belang bij de verklaring van aanpassingsproblemen. Kenmerken van het werk spelen een rol bij aanpassing. Aanpassing lijkt gemakkelijker te verlopen wanneer werk qua tijdsbeslag een minder centrale rol speelt in het leven: parttimers hebben minder aanpassingsproblemen. Van groot belang is verder in hoeverre pensionering een vrijwillige keuze is. Oudere werknemers die de uittrede uit het arbeidsproces als onvrijwillig ervaren vertonen veel meer aanpassingsproblemen dan werknemers voor wie de pensionering een vrijwillige keuze was. In contrast met gangbare beeldvorming op dit punt vinden we dat vrouwen meer aanpassingsproblemen hebben dan mannen. Dit geldt zowel voor de vrouwelijke werknemers als voor vrouwelijke partners.

Eerder onderzoek naar stoppen met werken heeft laten zien dat de partner een belangrijke rol speelt in het besluitvormingsproces rondom pensionering (o.a. Henkens, 1999). In hoeverre is er ook in de post-pensioenfase sprake van sociale interdependentie? Beïnvloeden partners elkaar in het proces van aanpassing aan pensionering? De resultaten maken duidelijk dat aanpassing —vooral voor de werknemer zélf— een veel individueler proces is. De oudere werknemer lijkt nauwelijks ‘last’ te hebben van eventuele aanpassingsproblemen van de partner. Andersom lijkt dat wél het geval te zijn: als een werknemer aanpassingsproblemen heeft, heeft dat effect op het aanpassingsproces van de partner.

Naast de structurele en sociale pensioneringscontext, blijken psychologische factoren van belang bij aanpassing aan pensionering. Gebrek aan controle over de transitie vormt een belangrijke risicofactor. Het gaat daarbij zowel om daadwerkelijke controle (in het geval van onvrijwillige pensionering) als om gepercipieerd controle (weinig vertrouwen in eigen vermogen om met veranderingen om te gaan). Verder heeft die aanpassing te maken met het zich losmaken van vooral de sociale aspecten van werk. Personen die al voor hun pensioen bang zijn voor de gevolgen van pensionering voor hun sociale contacten, tijdsbesteding en sociale status hebben over het algemeen meer moeite met de aanpassing. Bij partners hangen aanpassingsproblemen ná

pensionering vooral samen de kwaliteit van de huwelijksrelatie. Een minder goede relatie maakt aanpassing aan pensionering beduidend moeilijker.

In hoofdstuk 3 staat tevredenheid met de pensionering centraal. In dit hoofdstuk wordt voortgebouwd op de resultaten van hoofdstuk 2. Nagegaan wordt welke factoren verantwoordelijk zijn voor tevredenheid met pensionering. Uit dit onderzoek blijkt dat het merendeel van de oudere stellen tevreden is met de pensionering. De ervaringen van de ondervraagde ex-werknemers en partners met het ‘niet meer werken’ zijn overwegend positief: 86 procent bevalt het bijzonder goed. Minder dan drie procent evalueert de situatie na de uittrede ronduit negatief. Meer dan 40 procent van de werknemers en een derde van de partners geeft aan dat de jaren na pensionering beter zijn dan de jaren voorafgaande aan de uittrede. Daarentegen geeft slechts drie procent aan dat de jaren na pensionering slechter zijn. Tevredenheid met pensionering lijkt vooral samen te hangen met de structurele pensioneringscontext. Een laag pensioeninkomen en een slechte gezondheid, maar vooral ook een achteruitgang in inkomen en/of gezondheid leiden tot verminderde tevredenheid. Kenmerken van de baan van waaruit men pensioneert (zwaarte, uitdaging) lijken veel minder van belang dan de mate waarin de werknemer invloed heeft over de beslissing al dan niet te stoppen. Van grote invloed op het welbevinden van de ex-werknemer is of men het stoppen met werken als vrijwillig dan wel (deels) onvrijwillig heeft ervaren. De ervaringen van de mensen die onvrijwillig zijn uitgetreden, zijn gemiddeld negatiever dan van hen die geheel vrijwillig zijn gestopt.

De directe invloed van de partner op hoe de pensionering wordt ervaren lijkt beperkt. Als één van de partners problemen heeft met aanpassing aan de pensionering, heeft dat geen direct effect op de tevredenheid van de andere partner. Dat wil niet zeggen dat de partner of de relatie met de partner volstrekt irrelevant is. Hoe de partner de pensionering van de oudere werknemer ervaart hangt voor een belangrijk deel samen met de kwaliteit van de relatie: laat die te wensen over dan is vaker sprake van ontevredenheid met de pensionering.

Net als het geval was bij aanpassing aan pensionering, spelen psychologische factoren een rol bij de verklaring van verschillen in tevredenheid met pensionering. Ontevredenheid hangt samen met de mate waarin de werknemer controle heeft over de transitie; naast de feitelijke controle (mate van vrijwilligheid) over de uittrede, is de mate waarin men zichzelf capabel voelt om met veranderingen in het leven om te gaan van belang. Er zijn echter ook

verschillen. Bij aanpassing gaat het vooral om gewenning aan een nieuwe levensfase zonder werk. Het loslaten van met name de sociale kanten van het werk speelt daarbij een centrale rol. Tevredenheid is een evaluatie van de kwaliteit van het leven als gepensioneerde: geld en gezondheid (werknemer) en de kwaliteit van de relatie (voor de partner) bepalen in hoge mate of men geniet van de pensioentijd.

Hoofdstuk 4 gaat in op veranderingen in de gezondheid van ouderen in de overgang van werk naar pensioen. In beschrijvende zin kan worden geconcludeerd dat de veranderingen in de gezondheid van de oudere werknemers die stoppen met werken eerder positief dan negatief zijn: voor de totale groep oudere werknemers zien we een verbetering van de ervaren gezondheid en een afname van de medische consumptie. Dit is een opvallende conclusie in het licht van het gegeven dat gezondheidsklachten met het ouder worden doorgaans toenemen. Het door ons gevonden gemiddeld licht positieve beeld verhult echter een aanzienlijke diversiteit. Tegenover de groep oudere werknemers die een verbetering in de ervaren gezondheid rapporteert (25 procent), staat een niet onaanzienlijke groep (19 procent) die aangeeft dat de gezondheid verslechterd is.

Uit de multivariate analyses naar de condities waaronder bij gepensioneerden sprake is van een verbetering dan wel een verslechtering van de gezondheid blijkt dat zowel de pensioneringscontext als psychologische factoren (betekenisgeving) een rol spelen. Binnen de pensioneringscontext lijken vooral de kenmerken van de transitie relevant bij de verklaring van gezondheidsveranderingen in de overgang van werk naar pensioen. Onvrijwilligheid vanwege reorganisatieredenen heeft een negatief effect op gezondheid. Opvallend is dat kenmerken van het werk geen of een slechts geringe rol spelen bij de verklaring van de gezondheidssituatie ná pensionering. Er werd in dit onderzoek geen empirische ondersteuning gevonden voor de veronderstelling dat pensioneren uit een baan met stressvol en zwaar werk tot een verbetering van de gezondheid leidt.

Ook betekenisgeving speelt een rol. Onder oudere werknemers die erg tegen de pensionering opzien zien we een toename in de ernst van de gezondheidsklachten, zowel in meer objectieve (ernst van de aandoeningen) als in subjectieve (ervaren gezondheid) zin. Dit staat los van de feitelijke kenmerken van het werk (zoals maatschappelijk aanzien, uitdaging, stress, zwaarte etcetera). De resultaten van dit onderzoek laten duidelijk zien dat controle een belangrijke

rol speelt bij de wijze waarop oudere werknemers reageren op de pensionering. De mate waarin de werknemer aangeeft regie te hebben over gebeurtenissen in het leven is van invloed op het ontstaan van gezondheidsklachten na pensionering. Oudere werknemers die weinig vertrouwen hebben in het eigen vermogen veranderingen in het leven aan te kunnen, vormen een risicogroep in verband met de gezondheid. Spiegelbeeldig lijkt pensionering een positief effect te hebben op de gezondheid als in vrijheid kan worden besloten over (de timing van) de pensionering. Personen voor wie stoppen met werken een weloverwogen, positieve keuze is, voelen zich ná pensionering beter. De pensionering kan in deze gevallen gezien worden als een investering in de gezondheid.

Uit voorgaande hoofdstukken blijkt dat onvrijwilligheid een belangrijke rol speelt waar het gaat om de consequenties van pensionering voor de werknemer. Werknemers die onvrijwillig stopten met werken hebben meer moeite met aanpassen, zijn minder tevreden met de pensionering en hebben grotere kans op verslechtering van gezondheid. Vervroegde uittreding kan worden ‘opgelegd’ door bijvoorbeeld een slechte gezondheid of reorganisaties op het werk. Het lijkt er echter op dat onvrijwilligheid complexer is dan ‘er uit gegooid worden op je werk’ of ‘stoppen vanwege je gezondheid’. In hoofdstuk 5 wordt nagegaan welke factoren bepalend zijn voor de mate waarin de oudere werknemer de uittrede als onvrijwillig ervaart. Voor een aanzienlijk deel van de oudere werknemers in deze studie was de pensionering onvrijwillig. Dit is in lijn met de bevindingen in buitenlands onderzoek, waar in 25-30 procent van gevallen sprake is van onvrijwillige uittrede.

Uit de resultaten blijkt een duidelijk verband tussen de aanwezigheid van beperkende omstandigheden in de persoonlijke sfeer of op het werk en onvrijwilligheid. De kans dat een werknemer de pensionering als opgelegd ervaart is groter indien hij/zij een slechte gezondheid heeft en/of er sprake is van reorganisaties of inkrumping op het werk. Daarbovenop speelt ook de timing van de uittrede een rol. Stoppen met werken vóór de ‘normale’ pre-pensioenleeftijd van plusminus 60-61 jaar versterkt gevoelens van onvrijwilligheid. Individuen lijken ook zelf een tijdsfad voor ogen te hebben. Naarmate het feitelijke tijdstip van stoppen met werken meer afwijkt van het tijdstip dat men zelf in gedachten had, wordt de pensionering als meer onvrijwillig ervaren. Al eerder zagen we dat de pensionering zich niet in een sociaal vacuüm voltrekt. Onvrijwilligheid lijkt deels sociaal bepaald: het doet ertoe hoe de sociale omgeving, en met name de partner of de collega’s en leidinggevende er tegenaan kijken. Pensionering

wordt als onvrijwillig ervaren als er signalen zijn dat de partner de werknemer nog niet thuis wil hebben. Als doorwerken wordt ondersteund door de leidinggevende, is de kans klein dat stoppen met werken als onvrijwillig wordt ervaren. Dat is niet zo vreemd. Meer dan de collega's heeft de leidinggevende immers invloed op de arbeidsverhoudingen. Dat wil zeggen dat hij of zij over mogelijkheden beschikt om te zorgen dat de oudere werknemer blijft werken als dat wenselijk wordt geacht.

In hoofdstuk 6 wordt ingegaan op de wetenschappelijke relevantie en de beleidsrelevantie van de resultaten. In dit slothoofdstuk worden ook kanttekeningen geplaatst bij de theoretische aanpak en de empirische uitwerking. De conclusie lijkt gerechtvaardigd dat bij het beantwoorden van de vraag waarom aanpassing aan pensionering in het ene geval veel moeilijker verloopt en in termen van gezondheid en welbevinden veel meer negatieve consequenties heeft dan in het andere geval, het integreren van inzichten uit verschillende wetenschappelijke disciplines en het gebruik van panelgegevens van zowel de werknemer als de partner de moeite waard is. Het onderzoek laat zien dat meer complexe verklaringsmodellen, waarin naast de structurele pensioneringscontext ook de sociale inbedding en psychologische determinanten zijn opgenomen, voor sommige van de onderzochte verschijnselen een substantieel betere verklaring opleveren. De resultaten van dit onderzoek bevestigen het huishoudenskarakter van de transitie. Ze laten zien dat in het tot nu toe gangbare onderzoek onvoldoende rekening is gehouden met de sociale context waarin pensionering plaatsvindt en met het sociaal interdependente karakter van de transitie.

De resultaten van dit onderzoek doen vermoeden dat de populariteit van vervroegde pensionering niet snel zal verminderen wanneer er regelingen blijven bestaan die uittreden tegen een relatief geringe inkomensachteruitgang mogelijk maken. Al ver voor de feitelijke pensioendatum wordt er geanticipeerd op een leven zonder werk. Is men eenmaal gepensioneerd, dan verloopt de aanpassing snel; de tevredenheid is groot zolang geld en gezondheid niet al te veel restricties opleggen. Nieuwe arrangementen kunnen vanwege financiële versoering echter leiden tot meer onwelbevinden.

Ook voor het organisatiebeleid levert deze studie een aantal relevante bevindingen op. In de eerste plaats over de rol die gezondheid speelt in het uittredeproces. Uit talloze studies blijkt dat gezondheid een belangrijke rol speelt bij de besluitvorming rondom pensionering. De bevinding dat de

gezondheidstoestand van een substantieel deel van de ondervraagden verbetert na pensionering zou kunnen betekenen dat bij veel oudere werknemers sprake is van overbelasting in de laatste fase van hun arbeidsloopbaan. In de tweede plaats zullen op de iets langere termijn arbeidsorganisaties de gevolgen van vergrijzing en de krimpende arbeidsmarkt gaan ervaren. Een belangrijke vraag voor de toekomst is hoe organisaties werknemers kunnen bewegen pensionering uit te stellen en of er onder werknemers veel belangstelling zal zijn om ook na het pensioen actief te zijn op de arbeidsmarkt. De positieve gevolgen van pensionering voor het welbevinden van veel werknemers doen vermoeden dat de drang om zich na de pensionering weer op de arbeidsmarkt te begeven beperkt zal zijn. Wat dit onderzoek wel duidelijk maakt is dat de sociale binding met het werk een belangrijke factor is in de periode voor en na pensionering. Hierin bevinden zich mogelijk aanknopingspunten om langer werken te stimuleren.

Een derde punt betreft het management van uittreden. Uit dit onderzoek blijkt dat ongeveer een kwart van de werknemers de pensionering als onvrijwillig ervaart. Dit doet vermoeden dat voor een aanzienlijk deel van de oudere werknemers stoppen met werken onverwacht en/of opgelegd was. Bekend is dat oudere werknemers veel over pensionering spreken met hun partner en vrienden, maar dat een meerderheid tot vlak voor de pensionering niet met de direct leidinggevende over dit onderwerp heeft gesproken. Een betere communicatie binnen arbeidsorganisaties op dit punt kan mogelijk voorkomen dat werknemers de pensionering als onvrijwillig ervaren, met alle positieve gevolgen van dien.

Tenslotte geeft deze studie ook inzicht in factoren die van belang zijn voor het welbevinden van ouderen na pensioen. Hoewel pensionering thans geen crisis gebeurtenis meer is en het merendeel van de oudere werknemers en partners zich snel en gemakkelijk aanpast, zijn er toch omstandigheden te onderscheiden die het risico op onwelbevinden vergroten. Door de pensionering verplaatst de sociale focus zich van het werk naar de privé-situatie. Het huishouden en de huwelijksrelatie komen heel centraal te staan. Deze privé-situatie bepaalt voor een belangrijk deel of de aanpassing voorspoedig verloopt en hoe men de pensionering ervaart. Een goede huwelijksrelatie maakt dat de aanpassing veel gemakkelijker verloopt, zowel voor de werknemer als voor de partner.

Cruciaal is of pensionering een vrijwillige beslissing is. Het zelf kunnen beslissen over het tijdstip van pensionering is van groot belang gebleken voor

aanpassing aan en welbevinden na pensioen. Uit het feit dat ongeveer een kwart de pensionering als onvrijwillig ervaart, kan worden opgemaakt dat het veel oudere werknemers ontbreekt aan feitelijke sturingsmogelijkheden. Door de recente hervormingen op pensioengebied wordt vervroegde uittreding een aangelegenheid waar de individuele werknemer meer dan in het verleden zelf voor verantwoordelijk is. De nieuwe arrangementen zijn flexibeler, waardoor naar verwachting meer zelfsturing mogelijk is over het moment van uittreden. Hiervoor is echter wel noodzakelijk dat mensen vroeg in de levensloop financiële middelen opzij zetten. Dit impliceert dat op de eigen verantwoordelijkheid een veel groter beroep zal worden gedaan dan tot op heden gebruikelijk was. Hoe deze verantwoordelijkheid door werknemers zal worden ingevuld zal voor een belangrijk deel bepalen of uittreden in de toekomst een transitie blijft met overwegend positieve gevolgen, of dat negatieve consequenties meer op de voorgrond komen te staan.



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## Curriculum Vitae

Hanna van Solinge groeide op in Amstelveen. In 1978 behaalde zij haar Gymnasium Bèta diploma aan het Hermann Wessink College aldaar. Zij startte haar academische loopbaan met een studie Pedagogiek (propedeuse in 1979) aan de Vrije Universiteit te Amsterdam. In 1980 maakte zij een overstap naar de Nieuwe Leraren Opleiding van de Vrije Universiteit (VL-VU) voor de vakken Huishoudkunde en Textiele Werkvormen. Van 1985 tot 1988 was zij werkzaam als lerares Huishoudkunde in Deventer. In 1988 verruilde zij haar baan als lerares voor een studie Huishoudwetenschappen aan de toenmalige Landbouw Universiteit in Wageningen. Deze studie werd in 1990 cum laude afgesloten. Vanaf augustus 1990 is zij werkzaam als onderzoeker bij het Nederlands Interdisciplinair Demografisch Instituut (NIDI) te Den Haag. Zij was betrokken bij een groot aantal uiteenlopende onderzoeken op sociaal-demografisch terrein. In de periode tot 2000 lag het accent vooral op onderzoek naar de huishoudens- en leefsituatie van specifieke bevolkingsgroepen. Zo deed zij onderzoek naar de woon- en leefomstandigheden van ouderen en van verstandelijk gehandicapten, en naar de partnerkeuze van Turken en Marokkanen. Zij was voorts als projectleider betrokken bij een onderzoek onder de joodse bevolking in Nederland. Vanaf 2001 is zij werkzaam op het onderzoeksterrein 'Ouderen en Arbeid', waar zij samen met Kène Henkens werkte aan een grootschalig onderzoek onder oudere werknemers en voormalig werknemers van een aantal organisaties in de private en publieke sector. Dit onderzoek werd afgesloten met de op een breed lezerspubliek gerichte publicatie 'Het Eindspel'. Het promotieproject waarin in dit boek verslag wordt gedaan is een vervolg op dit onderzoek.