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## **Abstract**

Concerns regarding the long term sustainability of the welfare state have urged national governments to reform their pension systems. The pace in which reforms have been implemented in the Netherlands took many employees by surprise. Cohorts born in 1950 and later had to adjust their perspectives on retirement several times in succession. This paper addressed the question how working adults age 60+ adjust to the changing prospects of a longer working life. We argued that feelings of anger about the reforms and worries about one's capability to survive in the job reflect poor adjustment. We theorized about predictors of difficult adjustment based on the resource based dynamic perspective, generally used to study adjustment to retirement. We used a large scale sample survey among 6,800 older workers in the Netherlands, aged 60-65 at time of interview in 2015. Testing our hypotheses revealed that adjustment is more difficult for certain subgroups than for others. Poor health conditions, manual work and long working careers are the strongest predictors of difficult adjustment. This research suggests that the policy makers - mostly higher level professionals who are much less exposed to the challenges of working longer- have underestimated the psychological and social impact of the reforms on vulnerable groups of older workers and, in particular, less educated older workers with lower social status. With a further increase of retirement age to be expected, organizations and governments are challenged to design policies that facilitate more flexibility in the workplace and a in the transition into retirement.

## **Key words:**

Adjustment , rising retirement age, resource based dynamic perspective, working longer, the Netherlands

## **Introduction**

Everywhere in the Western world, retirement conditions are changing seriously. Concerns regarding the long term sustainability of the welfare state have urged national governments to redesign their pension systems. Most OECD countries are using more or less similar strategies. Starting with reforms that reduce early retirement incentives, followed by raising pension eligibility ages (OECD, 2015).

The Netherlands was no exception in this respect. After some minor modifications of the system in the 1990s, which did not had the desired effect on the effective retirement age, new reforms were taken into effect in 2006, blocking early retirement arrangements for cohorts born in 1950 and later. A few years later, government decided to raise the pension eligibility age till age 67. Many other countries, like Italy and Germany, have increased their retirement ages (OECD, 2015). The pace in which the reforms have been implemented in the Netherlands are, however, remarkable and they took many employees by surprise (K. Henkens, Van Solinge, Damman, & Dingemans, 2016). Cohorts born in 1950 and later had to adjust their perspectives on work and retirement several times in succession since 2006. This paper addressed the question how working adults age 60 and over adjust to the changing prospects of a longer working life.

Retirement and its impact on the individual has received extensive attention in the literature (for an overview of the literature see: Wang, 2013). Most of this literature is, however, based on studies that were conducted in a context where early retirement was dominant. Ekerdt et al. (2000) have characterized retirement around the turn of the century as a ‘formalized transition within the life course, but one that grants worker’s agency in directing that transition. Workers make and remake the retirement decision with increasing intentionality as they approach their late fifties’. The consistent finding, however, that a substantial part of retirees perceived their retirement as forced and involuntary suggests that many workers

retired without intending to do so (e.g, Dorn & Sousa-Poza, 2010; Hanna Van Solinge & Henkens, 2007). Current cohorts are confronted with the closing of early retirement opportunities in tandem with a rise in the state pension age. Rather than experiencing involuntary (early) retirement, these cohorts are at risk to face involuntary non-retirement. In both situations, older adults may experience limited control over their retirement. Empirical research has consistently shown that a lack of control (i.e., lack of agency) over the retirement transition is among the most powerful predictors of poor health (Gallo, Bradley, Siegel, & Kasl, 2000; H. van Solinge, 2007), reduced well-being (Dingemans & Henkens, 2014; Hershey & Henkens, 2013) and adjustment problems (Hanna Van Solinge & Henkens, 2008).

The rise in the retirement age has been implemented across the board, but older workers may not be equally willing and able to extend their working lives. Older workers may feel taken by surprise by the reforms and forced to extend their careers. This may give rise to feelings of distress and anger. Another predictable consequence of this change is worry on the part of the individual worker, who may not have a sense that they will be able to survive –physically and mentally- in the jobs till their retirement age. We argue that feelings of anger and worry reflect poor adjustment. Both from a scientific and a policy point of view, it is interesting to know whether certain subgroups are more at risk in this respect.

This articles contributes to the literature in three ways. This study is – to our knowledge – the first that examines how older workers adjust to reforms that induce them to extend their working lives with a number of years. Given that poor adjustment may have negative consequences for well-being and performance at work (Fisher, Ryan, Sonnega, & Naudé, 2016), there is a clear need to deepen our understanding of the challenges older workers face

with the shift in retirement age. Second, we extend the scope of the resource based dynamic perspective – a theoretical approach for understanding retirement adjustment (Wang, Henkens, & van Solinge, 2011) to adjustment to longer working lives. Based on this theoretical approach, we formulate hypotheses why adjustment to longer working lives is much more difficult in some cases than in others, and which factors play a role in this respect. We argue that adjustment to a longer working life is a process that may have many similarities with the process of adjustment to retirement. Rather than adjustment to retirement, current cohorts have to adjust to ‘non-retirement’. We argue that adjustment is a longitudinal process during which retirees’ levels of adjustment (i.e., their psychological comfort regarding their extended working life) may fluctuate as a function of individual resources and changes in these resources. Further, we assume that adjustment is reached when individuals are not preoccupied with the fact that they have to work longer, but instead have integrated the changed retirement perspectives in their lives (Schlossberg, 1981). Third, in order to study older adults’ responses to the retirement reforms, we collected data among a large sample of wage employed older workers aged 60 to 65 years in the Netherlands. Precisely this cohort is the first that has to deal with a retirement age that is much higher than before.

We begin with a summary of the Dutch retirement context. Next we present the theoretical framework for understanding adjustment to prolonged working lives. After discussing the methods, we present results from the first wave (conducted in 2015) of the Netherlands Interdisciplinary Demographic Institute (NIDI) Pension Panel . This is a prospective cohort study among 6,800 wage employed older workers (60-65 at baseline) enrolled in three of the bigger Pension Funds in the Netherlands. We conclude with a discussion.

## **The Dutch retirement context**

The Dutch pension system consists of three pillars: the state pension (AOW), the supplementary collective pensions and the private individual savings. The AOW, which has been implemented in 1957, is the foundation for old-age security. It provides a basic income, the level of which is linked to the statutory minimum wage. The AOW scheme is an insurance scheme which covers everyone who lives in the Netherlands, regardless of nationality. For every year that you are insured, you build up rights to 2% of the full AOW pension. If you have been insured for the full 50 years preceding your pension age, you will get a full AOW pension. The second pillar consists of the collective pension schemes. More than 90 per cent of wage employed workers in the Netherlands have a pension scheme via their employer. There are various forms of pension schemes. The most common is the Defined Benefit scheme (DB). In 2005, the first pillar accounted for 50% of total pension entitlements, the second pillar for 45%, and the third pillar for 5%. The relative share of the first pillar is gradually declining in favor of the second and third pillars.

As in many other countries, the Netherlands has responded to the growing old-age dependency ratios by a few successive reforms. After some minor modifications of the system in the 1990s, which did not had the desired effect on the retirement age, new reforms were taken into effect in 2006. These reforms blocked the early retirement arrangements in the second pillar pensions. Due to these reforms cohorts born in 1950 and later no longer could retire at age 61/62 or after contributing 40 years. A few years later, in 2012, a new Retirement Age Act has passed the Parliament. It has been agreed that the state pension (AOW) age, that has been 65 since 1957, was no longer fixed. Eligibility age will stepwise increase till age 67 in 2021, and is by law connected to the development if life expectancy remains to increase. This has led to the announcement of another increase in public pension age by three months in November 2016. Pension funds have adjusted their schemes in

accordance with this new reality. Although collectively financed opportunities for early retirement have been closed, it is still possible to take up your occupational pension before state pension age. These flexible pension schemes are actuarially neutral, and therefore costly (each year of earlier retirement brings about a pension cut of about 8 percent). These reforms have resulted in a steep increase in the effective retirement age. Till 2006 retirement age was on average 61 years. Since then the effective retirement age has increased by approximately six months each year. In 2015, the effective retirement age in the Netherlands was 64.4 and this is expected to increase further (Statistics Netherlands, 2016).

## **Theoretical background and hypotheses**

Retirement is commonly viewed as a process that evolves over time. Three stages can be distinguished in this process (Feldman & Beehr, 2011). Retirement typically begins with a preretirement phase in which older workers progressively engage themselves with retirement. Next, as the retirement window becomes more proximal, individuals begin the actual retirement decision-making process, taking into account a wide variety of factors, including their health and financial resources, the current employment contexts as well as family considerations. Finally, as individuals have made the actual transition from work to retirement, they begin the retirement adjustment process (Shultz & Wang, 2011). There is evidence that this adjustment process is more challenging for some individuals than for others (Hanna Van Solinge & Henkens, 2008). Wang et al. (2011) have proposed a resource based dynamic perspective as a theoretical framework for studying retirement adjustment.

Retirement adjustment is viewed as a longitudinal process during which retiree's levels of adjustment (i.e. psychological comfort with life in retirement) fluctuates as a function of individual resources and changes in these resources. The central premise of this perspective is that the ease of adjustment is determined by the individual's access to resources.



Ekerdt et al. (2000) have shown that anticipatory engagement with retirement often starts many years in advance. In this process, older workers develop increasingly concrete plans and goals for retirement. This may go in tandem with a process of disengagement from the work role in anticipation of retirement (Damman, Henkens, & Kalmijn, 2013). The recent retirement reforms, that have been implemented in many developed countries, generally leave older workers with few opportunities for agency regarding their retirement timing. As a result older workers may have no other option than to change their perspectives on work and retirement and to adjust to longer working lives. We argue that adjustment to a longer working life is a process that may have many similarities with the process of adjustment to retirement. Rather than adjustment to retirement, current cohorts have to adjust to ‘non-retirement’.

In this paper, adjustment is assessed in two ways. First, the changes in the pension arrangements may have blocked older worker’s plans for retirement. Anger and frustration are emotions that occur in situations where a person is blocked from reaching a desired outcome or goal. Second, the prospect of extending working live may evoke worry concerning one’s capability to survive –physically or mentally- in the job till the new retirement age. We argue that feelings of anger about the reforms and worry about survival reflect the individual’s difficulty with adjustment to a longer working life.

Building on the resource based dynamic perspective (Wang et al., 2011), we assume that the ease of adjustment is determined by the individual’s access to resources. Given that resources can be organized to mitigate or neutralize the negative consequences of an event (or a non-event), we assume that working longer is more challenging whenever job demands are high,

and personal, work and non-work resources are not available to buffer the negative effects of high job demands. We will elaborate on these factors below.

*Personal resources.* Poor health affects workability (Koolhaas, van der Klink, de Boer, Groothoff, & Brouwer, 2014) as well preferences for work (Camerino, Conway, Estryn-Béhar, Costa, & Hasselhorn, 2008). Health limitations are a major reason for retiring (van den Berg, Elders, & Burdorf, 2010). Health may be at odds with prolonged labor market activities. Older workers may feel insecure and have worries about their ability to survive in the job till their retirement age. This insecurity may cause stress at work and anger about the reforms. We assume that older workers are more likely to worry about their ability to survive physically and mentally in their jobs and demonstrate more negative affect (anger) to the extent that they have more chronically health conditions (Hypothesis 1a). Health measures, even the more objective ones, may fail to identify the precise impact on the work- retirement decision, because they measure health rather than work capacity (Mortelmans & Vannieuwenhuyze, 2013). The extent to which workers with chronic health conditions experience problems at work may differ across work settings. This is acknowledged in the following hypothesis: older workers are more likely to worry about their ability to survive physically and mentally and demonstrate more negative affect (anger) in their jobs to the extent that they feel that their conditions more strongly limit their work performance (Hypothesis 1b).

*Work related resources.* Conditions at work play an important role in turnover intentions (e.g., Cottini, Kato, & Westergaard-Nielsen, 2011) as well as in retirement decision making (e.g., Brussig, 2016; Mortelmans & Vannieuwenhuyze, 2013; Hanna Van Solinge & Henkens, 2014). We assume that conditions at work are important as well when it comes to

extending working life. Bakker and Demerouti's (2007) Job Demands Resources Model is helpful in understanding the impact of job characteristics on a worker's propensity to stay or withdraw from the workplace. The model makes a distinction between job demands and resources. Demands or costs refer to aspects of the job that require sustained physical and/or psychological effort. These demands are negative aspects of the job and include burdens such as overload and job pressure. Job resources or rewards, on the other hand, are positive aspects of the job that keep people healthy and motivated and contribute to personal development and growth. Bakker and Demerouti posit that job demands and resources initiate two different psychological processes. In the first place there is the health impairment process. Through this process, poorly designed jobs or chronic job demands exhaust employees' mental and physical resources. This might lead to a depletion of energy and health problems, and eventually dropping off from work. In the second place there is the motivational process, through which job resources exert their motivating potential and lead to high work engagement, low cynicism, excellent performance and low turnover intentions. We assume that extending working life is more challenging in jobs where the demand-resource balance is less favorable. This is deemed to be the case in lower class jobs. These jobs are characterized by lower skill levels, less work autonomy and harsher working conditions compared to higher class jobs. Higher and lower professionals may have a more stressful job in terms of responsibility, supervising and workload, but their jobs are also less physically demanding and offer more possibilities for autonomy (Erikson & Goldthorpe, 1992). As occupational classifications aim to capture the most important aspects of jobs (De Zwart, Broersen, Van der Beek, Frings-Dresen, & Van Dijk, 1997; Henz & Mills, 2015), we expect that a considerable share of the variance in adjustment can be captured by occupational class. We assume that older workers belonging to lower social/occupational classes and (unskilled) manual workers, in particular, have more difficulties extending their employment career.

They will be more likely to worry about their ability to survive physically and mentally and demonstrate more negative affect (anger) in their jobs compared to older workers belonging to the higher occupational classes (Hypothesis 2a). Individual circumstances of working life, however, vary between older workers within the same occupational category. The extent to which extending one's working life is more challenging may also depend on the duration (working hours, career length) and patterns of exposure (shift or irregular work) to physical and mental working conditions. In line with this, we assume that older workers are more likely to worry about their ability to survive physically and mentally and demonstrate more negative affect (anger) in their jobs to the extent that they work full-time rather than part-time (Hypothesis 2b), have unusual working hours or shift work (Hypothesis 2c), or to the extent that they have longer working career (Hypothesis 2d).

*Non-work related factors.* A large body of research points to the importance of family context for understanding work and retirement decisions. Research has shown that behavior, opinions and needs of significant others in the older adult's social network play a role in the retirement process (for an overview: Matthews & Fisher, 2013). In order to understand the role of family factors in extending working life, we make a distinction between family demands and resources. Family demands, defined as aspects in the family domain that require sustained physical and/or mental effort, may drain the employee's personal resources, or at least place them at risk to become overburdened (Peeters, Montgomery, Bakker, & Schaufeli, 2005). Overburdened workers are likely to function sub-optimally in the work role (Edwards & Rothbard, 2000). The more family commitments a person has, the greater are the time demands from the family domain, which limit his or her capacity to accommodate work demands. Caregiving for older, sick, or disabled family members may be particularly demanding and interfering with work requirements. We therefore assume that older workers

are more likely to worry about their ability to survive physically and mentally and demonstrate more negative affect (anger) in their jobs to the extent that they have caregiving responsibilities (Hypothesis 3a).

Family members may be a resource as well. Partners are a source of social support, companionship and help. Previous research points to the potential support provided by partners in demanding work conditions (Bianchi & Milkie, 2010) and adjustment to the retirement transition (Hanna Van Solinge & Henkens, 2005). Henkens (1999) has shown that the partner's attitudes towards work-retirement play a role in retirement decision making. Older workers whose partner does not support extending working life want to retire earlier, than workers whose partner supports staying in the workforce. In line with this, we assume that partners may also be resources – through their social support, companionship and help in the process of adjustment to longer working lives. Older workers with supportive partners are less likely to worry about their ability to survive physically and mentally and demonstrate less negative affect (anger) compared to single workers and workers in with non-supportive partners (Hypothesis 3b).

## **Method**

### **Data**

This article is based on the first wave of the Netherlands Interdisciplinary Demographic Institute (NIDI) Pension Panel. This is a prospective cohort study among wage employed older workers (60-65 at baseline) enrolled in three of the bigger Pension Funds in the Netherlands. The funds represent the following sectors: Civil Servants, Education, Care, Welfare and Construction.

The data for this first wave have been collected in the period May-November 2015. Future waves are envisaged for 2018 and 2021. The study used a stratified design. In a first step, a sample has been drawn from the various organizations covered by one of the three larger pension funds in Netherlands (ABP and PfwZ, BpBouw). These three pension funds represent approximately 45% of wage employed workers in the Netherlands. In a next step, within the selected organizations, a random sample was drawn from the population older workers aged 60 years and over (birth cohorts 1950-1955) who worked at least 12 hours a week.

The selected older workers received a mailing of their pension fund on their postal address. The mailing consisted of a questionnaire for the employee and a questionnaire for the partner (if applicable) with an accompanying letter from a representative of the Pension Fund and also a cover letter of the researchers. Respondents were offered the choice to use the written questionnaire, or to fill in an online questionnaire. In total of 15,496 questionnaires were mailed out, of which 6,800 questionnaires were returned (net response rate: 44%). Item non-response on the independent variables was low (on average, less than 3%). Under these circumstances, less rigorous missing data procedures than multiple imputation (MI) are generally acceptable (Little, Jorgensen, Lang, & Moore, 2014). We therefore dealt with missing data on the explanatory variables by single stochastic regression imputation (STATA 12: `mi impute chained, m=1`; Enders, 2010). Cases with missing data on the dependent variables have been excluded from the analysis.

The analyses presented in this paper are based on a sub-sample of older workers born between 1951 and 1955. The 1950 cohort was excluded since many of them retired during the data collection period, whereas others are very close to State Pension Age and possibly in anticipation of their retirement already. In addition, a small proportion of the sample has

received a shorter version of the questionnaire, that did not include the questions on adjustment. These individuals (N=498) have been removed from the analytical sample as well. As a result, the base sample for the analyses consists of 5,700 workers aged 60-64 year. Both the age and sex distribution of the analytical sample corresponds to that in the total population of wage employed workers (CBS, Statline). The educational level in the sample is relatively high: 47 percent has a higher education, against 30 percent in the total populations of workers in the same age bracket. The proportion with lower education (20%) is low compared to that in the total population(32%).

The participants in this study, all of whom were born between 1951 and 1955 on average expect to retire at age 65.8 ( $SD=1.5$ ). This is already considerably higher than the previously fixed state pension age of 65. If they had a say in matters, they would want to retire on average at age 63.3 ( $SD=2.2$ ). This is 2.5 years earlier than they actually expect to retire. The vast majority (86%) of older workers in the sample has to work till (considerable) later ages than anticipated or desired. Nine percent do not have a time-lag, whereas five percent actually has a preference for later retirement. The variation in the preferred retirement age is substantially greater than in the planned retirement age.

## **Measures**

### *Study variable*

Our study variable is adjustment to longer working lives. We use three questions that measure the two aspects of adjustment: anger about the reforms and worries about surviving in the job. Older workers' feelings about the Pension Reforms have been assessed with the following question with five response options (1= extremely to 5= not at all, reverse coded): "Retirement ages have increased rapidly. Because of this, to what extent do you feel angry?".

Respondents were asked about their worry regarding surviving in their jobs by means of two questions with five response options (1= extremely to 5= not at all, reverse coded): “To what extent do you experience the following issues because of the higher retirement ages....

Worries whether I can keep up physically in my job, and .... worry whether I can keep up mentally in my job. All items as well as their means are listed in Table 1.

### *Work related factors*

Work context is captured by four variables. Occupational Class is 9-category questionnaire-based occupational classification developed by Ganzeboom (De Vries & Ganzeboom, 2008). The classification is based on the EGP social class scheme (Erikson & Goldthorpe, 1992). We distinguish eight classes: (1) higher level professionals, (2) higher level managers, (3) lower level professionals, (4) lower level managers, (5) clerical routine, sales and services non-manual workers, (6) skilled manual workers and manual supervisors, (7) semi-skilled manual workers, (8) unskilled manual workers. Given their small number (N=10) agricultural workers (class 9) have been categorized as semi-skilled manual workers (class 7). Working hours is based on the usual number of weekly working hours in the main job. We distinguish three categories: working full-time (more than 36 hours a week), working part-time (less than 36 hours a week). Part-time workers are divided into those who have reduced working hours in the past 5 years, and those who did not reduce working hours in the past 5 years. Note that the Netherlands has traditionally a large share of workers who are in part-time employment for most of their career. Working unusual hours is a dummy variable that takes value one if the older worker has worked (at the workplace) in the evening or during night-time in the past 30 days. Duration of labor market career is based on the worker's age at interview, his/her age upon first entry in the labor market and interruptions in the career (if any).



### *Family related factors*

Family context is captured with three variables. The measure for partner support is based on marital status and a question on perceived partner support for extending working life: ‘Would your partner support working beyond State Pension Age (for 1 day a week)?’ (1=not at all, 5=very much). We distinguish three categories: people without a partner is the reference category. One dummy variable indicates those older worker with a high partner support for extending working life (answer categories 4 and 5). A second dummy variable indicated those older workers with a low partner support for extending working life. We distinguish two types of family demands (answer categories 1,2 and 3). Caregiving responsibilities is a dummy variable coded one if the older worker provides personal care to members inside or outside his/her household. Frail partner is a dummy variable coded one if the older worker has a partner in poor health.

### *Personal factors*

Health status is assessed with two variables. The number of chronic conditions is derived from a 12-category questionnaire-based inventory of 12 diagnosed longstanding diseases, conditions and handicaps as diagnoses by a doctor (Koppes, Vroome, Mol, Janssen, & Bossche, 2009). Limitations at work is a 3-category variable indicating to what extent (not, slightly, strongly) health conditions limit performance at work.

*Control variables.* Time to State Pension Age is calculated on the basis of administrative data on birth year and month and State Pension eligibility. Gender is a dummy coded one if the older worker is male. Sector indicates in which sector the older worker is employed. We distinguish five sectors: Civil Servants, Education, Construction, Care and Social Work. The information on Time to State Pension Age as well as Sector has been derived from the Administrative Records of the Pension Funds.

Table 1 presents the percentages, means, standard deviations, coding and wording of the survey questions of the measures for the independent variables.

### **Table 1 about here**

## **Analysis**

We first provide some descriptive statistics and qualitative data (quotes) for adjustment. Second, we perform a multivariate analysis. Ordinary least square (OLS) regression is used to determine the conditions under which adjustment to longer working lives is more challenging. To deal with multi-level structure of the data (older workers in three pension funds who are nested in organizations), standard errors that allow for intradepartmental correlation were used in the analyses (STATA command Cluster). Sector dummies were included in the models to control for potential sector-level effects. All analyses were performed using Stata 14 statistical package.

In order to be able to compare the effects sizes of the predictor variables, we standardized the dependent variables (mean = 0,  $SD = 1$ ). to obtain effect sizes in terms of Cohen's  $d$  for the dummy variables in the analyses In the tabular presentations of results, coefficients and standard deviations (SD) are shown (Table 3).

## **Results**

### **Descriptive results**

The results in Table 2 suggest that the reforms had their repercussions. Many older workers feel they have been done a great injustice: 46 percent of all participants are very or extremely angry about the later retirement age. This proportion is substantially higher than the share of

older workers who experience little (15%) of no anger at all (16%). The great number of spontaneous comments on the back of the questionnaires illustrate older worker's frustrations with the increasing retirement age. Lot of the frustrations have to do with how the reforms have been implemented. A 60-year old teacher says: "I do understand that the retirement age had to go up, but the way this is organized makes me very angry". People feel that retirement has become a moving target. This is clearly illustrated by the comments of a 62-year old facility manager who states "I work uninterrupted from age 17 onwards. Initially, I could retire at age 61. That has been increased to 62, then to 65, and now to 66 years. To be honest, I am fed up with this" and a 62-year old engine driver " I am outraged by the haggling with my pension! My state pension age has changed three times within 2 years. Mismanagement!!!". As a result of the changes that have taken place in quick succession people may experience a lack of control, as illustrated by the words of a 63-year old social worker "I have the feeling that I do not have any agency with regard to my retirement, I do not feel in control of my life anymore" . Many older workers doubt whether they will be able to continue working till their new retirement age. A 64-year old truck driver states: "I find it outrageous that the retirement age is raised continuously. I have a lot of problems with my shoulders and neck." The figures suggest that a large proportion of 60-plus workers is very (20%) of extremely (20%) worried that they cannot keep up with their work physically. Only one third of the respondents indicate that they have little (20%) or no worries at all (14%) in this respect. A similar picture emerges when it comes to worries about surviving mentally, though the proportion that is very or extremely worried (32%) is little lower.

**Table 2 about here**

## **Multivariate analyses**

Table 3 presents the results of the Ordinary Least Squares (OLS) regression model, with worry about surviving physically and mentally in the job, and anger as the dependent variable.

### **Tables 3 about here**

In Model 1-3 worry about surviving physically and mentally in the job and anger is regressed on personal, work-related and family-related factors. The results show that- as predicted in Hypothesis 1a and b- workers are more likely to worry about their ability to survive physically and mentally in their jobs and demonstrate more negative affect (anger) to the extent that they have more chronically health conditions, and to the extent that they feel that their conditions more strongly limit their work performance.

We found strong support for Hypothesis 2a, that older workers in more demanding jobs (those in the lower occupational classes and (unskilled) manual workers, in particular) have more difficulties extending their employment career. They are more likely to worry about their ability to survive physically and demonstrate more negative affect (anger) in their jobs compared to older workers belonging to the higher occupational classes. Worry about surviving mentally is more prominent among lower level professionals (this category includes teachers and nurses) and lower level managers.

Our hypothesis that older workers in part-time jobs (either regular part-time jobs or part-time retired persons) will have less adjustment problems: i.e., less worry, less anger (Hypothesis 2b) was only partly confirmed. Indeed, part-time workers demonstrated less anger. But part-time work did not have an effect on physical surviving worry. There was an effect of part-time work/part-time retirement on mental surviving worry, but this effect was in the opposite

direction. Part-time retired workers have more worry about surviving mentally in the job. Hypothesis 2c was partly confirmed as well. Older workers with unusual working hours / shift work have more worry about surviving physically in their job than older workers with regular working hours. No effects were found for worry about surviving mentally and for anger. We found support for the hypothesis that difficult adjustment is more likely among older workers with lengthy labor market careers. Older workers who, at time of interview, stayed in the labor force for 40 years or more have much more worry regarding survival and are much more angry about the reforms (Hypothesis 2d).

Table 3 shows that family factors play a role in adjustment as well. Older workers whose partner does support extending working life are less likely to worry about their ability to survive physically and mentally and demonstrate less negative affect (anger) compared to single workers and workers with non-supportive partners (Hypothesis 3b). Older workers whose partner is *not* supporting extending working life, are more angry about the reforms. Further, there is some evidence that demanding family conditions make adjustment to longer working life more difficult. Older adults who have caregiving responsibilities have more concerns about their ability to survive mentally in the job, and they are more angry as well compared to older workers without caregiving responsibilities. Older workers with a frail partner have more concerns about surviving physically (Hypothesis 3a).

## **Discussion**

All over the world the retirement landscape is changing radically. Probably one of the bigger and more fundamental changes is the rise in the pension eligibility age. In most countries, this age had not increased above 65 years since its inception in the first half of the 20th century. The fact that these reforms came very quickly after the closing of early retirement

opportunities urged the large pre-pension cohorts to adjust their retirement outlooks. This was definitely the case in the Netherlands, where the new pension rules came into effect in less than 10 years.

This research is the first that studied the challenges older workers face due to the prospects of a substantial longer working life. We argued that feelings of anger about the reforms and insecurity about one's capability to survive in the job reflect poor adjustment to a longer working career. Using a large scale sample survey among 6,800 older workers in the Netherlands, aged 60-65 at time of interview in 2015, we examined to what extent certain subgroups are more at risk experiencing adjustment problems.

Our study shows that adjustment to longer working lives is not an easy process. In our sample a large minority stated that they are very or even extremely angry about the reforms that force people to delay their retirement by a number of years. Furthermore, a large proportion of these 60-plus workers report high levels of worry about their ability to keep up with their job till retirement age either physically or mentally. We theorized about predictors of difficult adjustment based on the resource based dynamic perspective (Wang et al., 2011) generally used to study the adjustment to exit from work. Testing of these hypotheses revealed that adjustment is much more difficult for certain subgroups than for others. Poor health conditions, manual work and long working careers are the strongest predictors of difficult adjustment. Health limitations are a major reason for retiring. Yet, trends in health at older ages and longevity are used as an argument to increase retirement age. The reforms have been implemented across the board, but health status and (healthy) life expectancy varies greatly among individuals (Mackenbach et al., 2008). More than 20 percent of the older workers in our study have three or more diagnosed health conditions, and almost 10 percent state that their health condition strongly limits their work performance. Given the limited opportunities

for agency in the retirement system and the tight criteria for disability benefits in the Netherlands, these older workers may have no other choice than to stay in the labor force. This has been referred to as 'job-lock'. Given that this 'job-lock' may have serious negative consequences for work function (Wilkie, Cifuentes, & Pransky, 2011) and well-being (Fisher et al., 2016), more attention could be paid to the occupational health and safety of the older workforce.

Our study also shows that there is a clear social class gradient in adjustment to longer working lives. Individuals with lower socioeconomic status are much more insecure about their ability to survive in their job and they demonstrate much more negative affect than individuals with higher statuses.

This may be related to physically demanding jobs that do not offer workers as much control or flexibility compared to the white collar jobs of individuals with higher social status. Social class disparities in employment, unemployment and disability are well documented (e.g., Warr, 1983). Several authors (e.g., Radl, 2012; Visser, Gesthuizen, Kraaykamp, & Wolbers, 2016) have shown that social class is closely related to disadvantageous early exit pathways (i.e., disability, forced exit) and other adverse labor market outcomes before (early) retirement (i.e., downward mobility and reduction, inadequate pension entitlements). This study shows that the opportunities for healthy ageing and relatively easy adjustment to longer working years are very much socially stratified as well.

Interestingly, we found an effect of number of years in the labor force on adjustment, net off social class. In particular workers with very long (40plus) careers were much more angry about the reforms. This may have to do with implicit and explicit societal standards regarding normative career duration. In the Netherlands, till very recently, full occupational pension eligibility was based on 40 years of contribution, and many retirement schemes

offered opportunities to retire after 40-years in the labor force. Apparently, individuals still have a firm belief that ‘40 years of work is enough’.

With respect to family forces, our results indicate that partner support for extending working life is an important resource that makes adjustment to rising retirement age much easier. Older workers with a supportive spouse are much less likely to experience adjustment problems. This is an important finding because it suggests that not only adjustment to retirement is a household affair, but that adjustment to an extended working life is also dependent on the access to social resources at the household level.

There are several noteworthy strengths of this study. This paper is the first that examines how older workers experience the changes in the retirement regulations that induce them to extend their working lives and how this relates to the individual’s access to resources. This topic is of increasing importance in an area where new generations are likely to be confronted with constantly changing retirement rules and increasing retirement income uncertainty. When interpreting the study findings, some limitations should be kept in mind. First, this study is based on cross-sectional data. In cross-sectional studies, information on risk factors and outcomes as well as other factors, is obtained at the same time-point. This limits possibilities for causal inference. Using objective measures rather than subjective evaluations can help to avoid biases (Yu & Tse, 2012). We therefore preferred structural predictors (occupational class) rather than self-reported evaluations (perceived job demands). New study rounds may offer researchers the opportunity to investigate the dynamic aspects of adjustment to a higher retirement age and show whether anger and worries decrease over time. A second limitation relates to the generalizability of the study. Although the study is based on a random sample of wage employed older workers in more than 1,500 organizations covered by three of the biggest pension funds in the Netherlands, the sample is not representative for all older



workers in the Netherlands. Some sectors and occupations are not included, and this holds for self-employed individuals as well. Our sample includes a larger proportion of higher educated older workers than the general population in the corresponding age bracket. As a result the prevalence of adjustment problems may be somewhat underestimated.

Despite these limitations, this study is an significant step towards a better understanding of the challenges associated with the rapid increase in retirement age. Although it was to be foreseen that raising the retirement age is not a popular policy option. This article suggests that the policy makers - mostly higher level professionals who are much less exposed to the challenges of working longer- have underestimated the psychological and social impact of the reforms on vulnerable groups of older workers and, in particular, less educated, less healthy older workers with lower social status. With a further increase of retirement age to be expected, organizations and governments are challenged to design policies that facilitate more flexibility in the workplace and a more flexible transition into retirement. This type of flexibility may also decrease anger and frustration in large part of the 60-plus workforce that have to deal with the consequences of macro-level policies in their own private lives.

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**Table 1. Descriptive Statistics, Wording and Coding of Predictor Variables**

| Variable  | Mean /<br>% | SD  | Wording, Coding and Psychometric Properties   |
|---|-------------|-----|---|
| <b>Years to State Pension Age</b>                       | 4.7         | 1.9 | Calculation on the basis of administrative data on birth year and month & State Pension Eligibility (range 0-7)   |
| <b>Gender (male=1)</b>                                  | 55          |     | Dummy variable (Male=1)   |
| <b>Number of Chronicle Conditions</b>                   | 1.5         | 1.5 |   |
| 0 (reference group)                                     | 31          |     | Q: Do you have one or more of the following longstanding diseases, conditions, or handicaps (diagnosed by a doctor)? List of 12 conditions. Based on Nationale Enquête Arbeidsomstandigheden (NEA). Sum of conditions (range 0-8)   |
| 1-2   | 47          |     |   |
| 3-4   | 18          |     |   |
| 5 or more   | 4           |     |   |
| <b>Do conditions limit work performance?</b>            |             |     |   |
| No (reference group)                                    | 57          |     | Q: Do these conditions limit your performance at work? 1= I do not have health problems, 2= strongly limited, 3= slightly limited, 4= not limited   |
| Slightly  | 34          |     |   |
| Strongly  | 9           |     |   |
| <b>Occupational Class</b>                               |             |     |   |
| Higher level professionals                              | 8           |     | Q: In which category could your job or profession be grouped? 9-category occupational classifications developed by Ganzeboom.   |
| Higher level managers (reference category)              | 11          |     |   |
| Lower level professionals                               | 36          |     |   |
| Lower level managers                                    | 7           |     |   |
| Clerical routine, sales and services non-manual workers | 18          |     |   |
| Skilled manual work / manual supervisors                | 5           |     |   |
| Semi-skilled manual work                                | 12          |     |   |
| Unskilled manual work                                   | 3           |     |   |
| <b>Sector</b>   |             |     |   |
| Civil Servants (reference category)                     | 24          |     | Administrative data from Pension Funds  |
| Education   | 22          |     |   |
| Construction  | 22          |     |   |
| Care  | 14          |     |   |
| Social Work   | 18          |     |   |
| <b>Unusual Working Hours (yes =1)</b>                   | 23          |     | Q: Did you ever work in the evening or at night, during the last 30 days?   |
| <b>Working Hours</b>                                    |             |     |   |
| Full-Time (reference category)                          | 46          |     | Q: How many hours a week do you work (excluding overtime)?  |
| Part-time   | 38          |     |   |
| Part-Time Work/ Part-time Retired                       | 16          |     | Q: Do you intend to reduce the number of work hours when you get close to your state pension age? (1=no, 2=do not know, 3= I am already doing this, 4=yes I intend to work ... hrs less). Three category-variable: full-time (more than 36 hrs), part-time (less than 36 hrs), part-time work/retired (less than 36 hours, and has reduced working hours ). |
| <b>Number of Years in Labor Force at Interview</b>      | 39.1        | 6.3 |   |
| Less than 30 (reference category)                       | 8           |     | Q: At what age did you start working?   |

| Variable  | Mean /<br>% | SD | Wording, Coding and Psychometric Properties  |
|---|-------------|----|--|
| 30-34   | 11          |    | Q: Have you temporarily stopped working for more than 1 year after that? If yes, for how many years in total? (range 4-50)             |
| 35-39   | 29          |    |  |
| 40-44   | 32          |    |  |
| 45 or more  | 20          |    |  |
| <b>FAMILY RELATED FACTORS</b>                     |             |    |  |
| <b>Partner Support for extending working life</b> |             |    |  |
| No partner (reference category)                   | 18          |    | Q: Do you have a partner?  |
| Partner: low support                              | 57          |    | Q: Would your partner support working beyond State Pension Age (for 1 day a week)? (1=not at all, 5=very much)                         |
| Partner: high support                             | 24          |    |  |
| <b>Care responsibilities (yes = 1)</b>            | 15          |    | Q: Do you provide personal care/nursing to family members or friends who are ill or in need of help?                                   |
| <b>Frail Partner (yes=1)</b>                      | 10          |    | Q (In partner questionnaire): How would you evaluate your health in general? (1=excellent , 2=very good, 3=good, 4=poor, 5=very poor). |

Table 2. Descriptive Statistics of the Dependent Variables

|  | %  | Mean | SD  |
|--|----|------|-----|
| Retirement ages have increased rapidly. Because of this, to what extent do you feel angry? (1-5) |    |      |     |
| Not at all   | 16 | 3.3  | 1.4 |
| A little   | 15 |      |     |
| Rather   | 23 |      |     |
| Very much  | 18 |      |     |
| Extremely  | 28 |      |     |
| To what extent do you experience the following issues because of the higher retirement ages....  |    |      |     |
| ... worry whether I can keep up physically in my job (1-5)                                       |    |      |     |
| Not at all   | 14 | 3.1  | 1.3 |
| A little   | 20 |      |     |
| Rather   | 26 |      |     |
| Very much  | 20 |      |     |
| Extremely  | 20 |      |     |
| ... worry whether I can keep up mentally in my job (1-5)   |    |      |     |
| Not at all   | 18 | 2.9  | 1.3 |
| A little   | 22 |      |     |
| Rather   | 27 |      |     |
| Very much  | 19 |      |     |
| Extremely  | 14 |      |     |

Table 3. Results of OLS Regression explaining Adjustment to Longer Working Lives

|  | Anger    |       | Surviving Physically |       | Surviving Mentally |       |
|--|----------|-------|----------------------|-------|--------------------|-------|
|  | Coef.    | SD    | Coef.                | SD    | Coef.              | SD    |
| <b>PERSONAL FACTORS</b>                                      |          |       |                      |       |                    |       |
| <i>yrs to SPA</i>  | 0.09***  | 0.007 | 0.09***              | 0.007 | 0.10***            | 0.007 |
| <i>Gender (male=1)</i>                                       | 0.12***  | 0.036 | -0.20***             | 0.035 | -0.06*             | 0.036 |
| <i>Number of chronic conditions (none = ref.)</i>            |          |       |                      |       |                    |       |
| 1-2  | 0.12***  | 0.033 | 0.14***              | 0.032 | 0.06*              | 0.034 |
| 3-4  | 0.25***  | 0.045 | 0.39***              | 0.040 | 0.20***            | 0.047 |
| 5 or more  | 0.34***  | 0.071 | 0.55***              | 0.059 | 0.32***            | 0.074 |
| <i>Do conditions limit work performance? (not = ref.)</i>    |          |       |                      |       |                    |       |
| slightly   | 0.17***  | 0.033 | 0.42***              | 0.031 | 0.31***            | 0.034 |
| strongly   | 0.40***  | 0.051 | 0.86***              | 0.044 | 0.59***            | 0.054 |
| <b>WORK RELATED FACTORS</b>                                  |          |       |                      |       |                    |       |
| <i>Occupational class (higher level managers = ref.)</i>     |          |       |                      |       |                    |       |
| Higher level professionals                                   | -0.14**  | 0.061 | -0.01                | 0.055 | -0.04              | 0.061 |
| Lower level professionals                                    | 0.22***  | 0.048 | 0.21***              | 0.041 | 0.20***            | 0.045 |
| Lower level managers   | 0.14**   | 0.064 | 0.14**               | 0.056 | 0.12**             | 0.062 |
| Clerical routine, sales and services non-manual workers      | 0.27***  | 0.054 | 0.14***              | 0.048 | 0.08               | 0.052 |
| Skilled manual work / manual supervisors                     | 0.37***  | 0.062 | 0.44***              | 0.063 | -0.10              | 0.074 |
| Semi-skilled manual work                                     | 0.46***  | 0.059 | 0.56***              | 0.051 | -0.04              | 0.063 |
| Unskilled manual work  | 0.57***  | 0.082 | 0.57***              | 0.082 | 0.05               | 0.090 |
| <i>Unusual Working Hours</i>                                 | -0.00    | 0.032 | 0.09***              | 0.029 | 0.02               | 0.033 |
| <i>Working Hours (Full-time = ref.)</i>                      |          |       |                      |       |                    |       |
| Part-time  | -0.07*   | 0.037 | -0.04                | 0.033 | -0.05              | 0.036 |
| Part-time Retired  | -0.07*   | 0.037 | 0.02                 | 0.033 | 0.07*              | 0.037 |
| <i>Length of Occupational Career (less than 30 = ref.)</i>   |          |       |                      |       |                    |       |
| 30-34  | 0.04     | 0.065 | -0.03                | 0.054 | 0.01               | 0.058 |
| 35-39  | 0.09     | 0.055 | 0.02                 | 0.046 | 0.10*              | 0.052 |
| 40-44  | 0.31***  | 0.055 | 0.14***              | 0.048 | 0.17***            | 0.054 |
| 45 or more   | 0.45***  | 0.065 | 0.21***              | 0.060 | 0.30***            | 0.070 |
| <b>FAMILY RELATED FACTORS</b>                                |          |       |                      |       |                    |       |
| <i>Partner Support for Working Longer(No partner = ref.)</i> |          |       |                      |       |                    |       |
| Partner: low support   | 0.09**   | 0.036 | -0.02                | 0.032 | 0.02               | 0.037 |
| Partner: high support  | -0.15*** | 0.040 | -0.12***             | 0.037 | -0.13***           | 0.041 |
| <i>Care responsibilities</i>                                 | 0.06*    | 0.034 | 0.03                 | 0.033 | 0.07**             | 0.035 |
| <i>Frail partner</i>   | 0.04     | 0.043 | 0.08**               | 0.039 | 0.05               | 0.047 |
| Observations   | 5,193    |       | 5,421                |       | 5,165              |       |
| R-squared  | 0.179    |       | 0.287                |       | 0.137              |       |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1