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Abstract

Objectives. With an increasing retirement age, more older adults are combining employment with informal caregiving responsibilities. However, little is known about how older workers experience caregiving activities next to their paid jobs. This study aims to fill this gap by examining how the work situation (i.e., working hours, occupational status, and perceived access to human resources practices) is associated with both positive and negative experiences of caregiving.

Methods. Using data from the NIDI Pension Panel Survey, we study caregiving experiences – in other words, the extent to which caregiving activities are satisfactory, burdensome, or stressful – of 1,651 Dutch older workers (age 60-65) who provide care at least once per week.

Results. Multivariate analyses reveal that the work situation plays an explanatory role above and beyond sociodemographic factors and indicators of the caregiving situation. Working caregivers who feel they have access to phased retirement and organizational health support experience caregiving as relatively less burdensome and stressful. Moreover, those with access to phased retirement experience relatively higher levels of satisfaction with caregiving.

Discussion. Our findings suggest that offering control over the availability of personal resources such as time and energy to older workers relates to lower levels of caregiving burden and stress, and may make combining work and caregiving obligations easier in a context of longer working lives.

Keywords: Informal care, employment, positive and negative caregiving experiences

The role of work in caregiving experiences among older, working caregivers.

Introduction

Population aging represents a challenge for many Western countries, leading to major changes in health care and retirement systems. In response to the increase in potential care needs (Colombo *et al.* 2011), changes in healthcare systems have raised the threshold for the allocation of formal care (Pavolini and Ranci 2008) and emphasized the role of informal caregivers in maintaining the well-being, quality of life, and health of their dependent spouses, relatives, and friends (Verbeek-Oudijk *et al.* 2014). Informal caregivers provide unpaid and informally organized assistance with instrumental and personal activities of daily living to relatives and friends. The highest proportion of informal caregivers is found among those in mid and later life (Hank and Stuck 2008; Josten and de Boer 2015), and many of them are also engaged in paid work (de Boer and Keuzenkamp 2009). Changes in retirement systems in the form of ending of early retirement schemes and increasing retirement ages, imply that current working caregivers must continue to combine work and caregiving until much higher ages than their earlier counterparts. However, our understanding of how these older people experience caregiving next to their paid jobs, as well as of how their work situation relates to these experiences, is limited. In this study, we aim to address this shortcoming by investigating the extent to which the work situation of older workers explains both their positive and negative experiences of caregiving.

Research on caregiving experiences is dominated by studies on the negative dimension, focusing on burden (e.g., Tolkacheva *et al.* 2011), stress (e.g., Kim *et al.* 2006), and strain (e.g., Gordon *et al.* 2012). Earlier attempts to explain these caregiving experiences have predominantly focused on the characteristics of caregiving, together with sociodemographic aspects (e.g., Broese van Groenou, de Boer and Iedema 2013; Pinquart and Sörensen 2003). Most studies

recognize the importance of work in caregiving experiences, but it often serves as a control variable measured either using a dichotomous indicator for employment status (e.g., Pristavec 2018) or in terms of the number of working hours (e.g., Lin, Fee and Wu 2012). Treating work as a single item in this way can hide important variations in work (Barnett 1998), and a better understanding of this might be necessary to appreciate the different experiences of working caregivers. Longacre *et al.* (2017) point to the importance of studying work characteristics and particularly the organizational support of employers, in order to gain a better understanding of how to protect workers with caregiving responsibilities from burden and stress.

Some scholars have pointed at the dual nature of the caregiving experience, meaning that next to being potentially burdensome and stressful, caregiving also contains a positive dimension (Kramer 1997). Positive caregiving experiences refer to the accumulation of daily "uplifts", or "small events that evoke some response of pleasure, affirmation, or joy" (Lawton *et al.* 1989: 62). Scholars generally measure positive experiences using feelings of reward, satisfaction, uplift, or gain (Kramer 1997; Zarit 2012). Earlier studies have simultaneously considered both positive and negative experiences in the case of specific illnesses such as cancer (e.g., Nijboer *et al.* 1999), stroke (e.g., Kruithof, Post and Visser-Meily 2015), or dementia (e.g., Labra *et al.* 2015). However, only a handful of studies have ever examined positive and negative experiences in large and diverse samples of caregivers (Broese van Groenou, de Boer and Iedema 2013; Lin, Fee and Wu 2012; Pristavec 2018; Raschick and Ingersoll-Dayton 2004). These studies indicate positive and negative caregiving experiences as distinct from one another, rather than as opposites within the same dimension.

This study aims to contribute to the existing literature on caregiving experiences in three ways. First, we study the effect of a broad set of work-related factors on caregiving experiences

above and beyond more established predictors such as measures of the caregiving situation and sociodemographic characteristics (see Carretero *et al.* 2009 for a review). More specifically, we examine the impact of both work characteristics (i.e., working hours, occupational status) and perceived access to a set of human resource practices (i.e., flexplace, flextime, phased retirement, medical examinations) on how the caregiving is experienced by the caregiver. Second, we aim to improve our understanding of the dual nature of caregiving experiences, by looking simultaneously at the extent to which caregiving is a satisfactory, burdensome, and stressful experience. Where prior research has examined these experiences in small-scale samples of limited scope, we study positive and negative experiences in a large and diverse sample of older workers who carry out various caregiving tasks for family members and friends. Third, we study caregiving experiences among working adults aged 60 to 65, who form an age group that has generally been disregarded in research on caregiving experiences. They represent a new population of working caregivers who need to work longer at the same time as they are expected to care for their dependent relatives.

This article is based on data collected in 2015 among a large sample of older Dutch workers in the preretirement period. Amongst these workers, one in four (N=1,651) is engaged in at least weekly caregiving. In the Netherlands, the proportion of employed caregivers in older age increases as a result of recent reforms in the healthcare sector and in pension systems (Josten and de Boer 2015). The Social Support Act 2015 has stimulated communities and families to contribute to a greater extent to the care of people with moderate needs, thereby limiting the institutionalization of dependent people (Verbeek-Oudijk *et al.* 2014). Moreover, the state pension age for cohorts born after 1950 is being increased from 65 to 67 years, at about the same time as early exit routes into retirement were blocked (van Solinge and Henkens 2017). As a

result, today's older Dutch people are on the one hand being encouraged to work, and on the other hand expected to provide informal care to family members and friends.

Theoretical Background

The caregiving stress-process model (Pearlin *et al.* 1990) and the stress-appraisal model (Yates, Tennstedt and Chang 1999) provide a general framework for understanding negative caregiving experiences – in other words, the burden and stress of caregiving. The stress-process model suggests that negative experiences vary according to sociodemographic characteristics, because these characteristics define the social and personal resources required to meet the challenges of caregiving (Pearlin *et al.* 1990). The more resources there are available, the better caregivers are able to deal with caregiving challenges and the lesser the extent to which caregiving is experienced as burdensome and stressful (see studies in Pinquart and Sörensen 2003). Therefore, it can be expected that having more resources (good health, wealth, and having a partner and children) is linked with lower levels of caregiving burden and stress. The stress-appraisal model (Yates, Tennstedt and Chang 1999) integrates the notion of appraisal (Lawton *et al.* 1991) with the stress process, and focuses on the caregiver's appraisal of the situation at hand. Caregivers decide on the amount as well as the type of care, based on the needs of the care-receiver. The greater the needs of the care-receiver, the greater the care load (Gordon *et al.* 2012); in turn, a greater care load is related to more negative caregiving experiences (see studies in Pinquart and Sörensen 2003). Following these earlier studies, it can be expected that a greater care load as indicated by a large number of care-receivers, the provision of physical care, giving care to close kin, frequent caregiving, and long-term caregiving, is linked to higher levels of burden and stress.

The applicability of models of caregiving stress to positive caregiving experiences is a matter of some debate (Farran 1997). Broese van Groenou, de Boer and Iedema (2013) propose that other factors extending beyond sociodemographic characteristics and the caregiving situation, are key to explaining positive experiences. Previous research suggests that predictors of positive caregiving experiences are situated within the person: whether or not caregivers are able to draw positive experiences from caregiving depends primarily on their motivation to provide care (Broese van Groenou, de Boer and Iedema 2013; Farran 1997; Kramer 1997). Studies suggest that the relationship between caregiver and care-receiver, and religiosity, are good proxies for caregiving motivation (e.g., Broese van Groenou, de Boer and Iedema 2013). Many studies show that non-kin caregivers are less likely to provide care out of obligation and thus have higher levels of intrinsic motivation (Lyonette and Yardley 2003). Research has also found that religion fosters a belief system that incorporates a desire to help others (e.g., Farran 1997). In effect, when people provide care because of an intrinsic motivation to help others, and hold a belief that providing care is a good thing in itself, rather than an obligation, the experience is more likely to be satisfactory (Broese van Groenou, de Boer and Iedema 2013). From this line of reasoning, it can be expected that a stronger caregiving motivation, as indicated by caregiving to non-kin and religiosity, is linked to greater satisfaction with caregiving.

Given that working caregivers must simultaneously balance caregiving and work demands, how these people experience caregiving may depend not only on the caregiving situation but also on the work situation. Because both work and caregiving require somewhat similar resources, such as time, physical energy, and psychological energy, working caregivers must divide these personal resources between the two domains. The extent to which work enriches or constrains these resources may depend upon characteristics of the work situation, and

the work situation may in turn affect how working caregivers experience caregiving. Although we do not have an a priori hypothesis regarding how paid work can produce positive experiences of caregiving, we propose that certain characteristics of the work situation increase the likelihood of negative caregiving experiences. We elaborate on these factors in the following sections.

Work Involvement

The extent to which people invest personal resources in a life domain depends on how important this role is to their self-concept (Carlson and Frone 2003). The more involved individuals are in a role, the more difficult they find it to take resources out of that role and invest them in another role. Carlson and Frone (2003) distinguish between behavioral and psychological role involvement. In essence, the more time spent by individuals on one activity, the higher their behavioral involvement with that activity. This finding is supported by research on work attachment, which shows that full-time employees are more attached to their work than part-time employees (Lilly, Laporte and Coyte 2007). Psychological involvement refers to how much mental and cognitive effort workers invest in their work. Research has shown that higher-status workers are more psychologically involved in their work than lower-status workers (e.g., Schieman, Whitestone and van Gundy 2006). If a greater involvement in work makes it more difficult to direct resources towards other activities (Carlson and Frone 2003) such as caregiving (Gordon *et al.* 2012), caregiving may be experienced as relatively more burdensome and stressful for workers with high levels of work involvement. Therefore, we propose the *work involvement hypothesis*, which predicts that higher levels of work involvement as indicated by full-time employment and higher occupational status are associated with higher levels of caregiving burden and stress.

Workplace Flexibility

Workplace flexibility, which is "the ability of workers to make choices influencing when, where, and for how long they engage in work-related tasks" (Hill *et al.* 2008, p. 152), has often been proposed to ease the combination of work and caregiving (e.g., Brown and Pitt-Catsouphes 2016). Through workplace flexibility, working caregivers gain control and autonomy over their personal resources. Having control and autonomy at work may ease the allocation of time and energy according to the needs of care-receivers. Flextime allows working caregivers to decide when to start or stop working, allowing them to arrange their work schedule in a way that is informed by the needs of the care receiver. Flexplace allows working caregivers to decide where to work and to be closer to the care receiver if needed. Phased retirement, another form of workplace flexibility, allows people to determine how much work to do by reducing the number of working hours prior to retirement, and working caregivers thus have more time to engage in caregiving. Given that caregiving is often unpredictable, the perception of access to workplace flexibility may in itself alleviate burden and stress. We therefore propose the *workplace flexibility hypothesis*, which predicts that older working caregivers who perceive that they can access flexplace, flextime, and phased retirement experience lower levels of caregiving burden and stress than those who do not.

Workplace Health Support

Caregivers engage in health-promoting and health-preventive behavior less often than non-caregivers (e.g., Hoffman, Lee and Mendez-Luck 2012). Chaix and colleagues (2006) propose that caregivers may be less inclined to invest in their own health because they may

perceive such an investment to be unwarranted in light of the more severe health needs of the care-receiver; alternatively, they may not have the energy to care for their own health. Working caregivers may be particularly at risk of not engaging in health-promoting behavior, given that both activities may deplete resources. Arksey (2002) shows that one major concern of working caregivers is their own health. However, if the organization provides health support by offering regular medical examinations, these people may have to worry less about their current and future health status because they have sufficient access to health support. Perceptions of organizational health support may thus provide a sense of security that the organization is also concerned with the health of its employees. This may in turn indicate a supportive work environment, which has been found to ease the combination of work and caregiving (e.g., Gordon *et al.* 2012). Along these lines, we propose the *workplace health support hypothesis*, which predicts that perceived access to workplace medical support is associated with lower levels of caregiving burden and stress.

Design and Methods

Sample

In this study, we draw on data obtained from the first wave of the NIDI Pension Panel collected in 2015 (Henkens *et al.* 2017). This is a prospective cohort study sampled via three of the largest pension funds in the Netherlands that cover different sectors (government, education, construction, care, social work). These pension funds represent around 49 percent of all Dutch wage-employed workers. We drew a stratified sample of organizations based on organizational size and sector. Within these organizations, we selected a random sample of older workers aged 60-65 who work at least 12 hours a week (N=15,480). These workers received a mail

questionnaire from their pension fund, but were also able to fill in an online version. In total, 6,793 questionnaires were returned after two reminders, equivalent to a response rate of 44 percent. For the analyses, our base sample consists of older workers who provide care at least once a week. After excluding respondents for whom information on the dependent variables was missing, our analytical sample consisted of 1,651 older working caregivers.

Measures

To measure our dependent variables of caregiving experiences, respondents were asked to evaluate the extent to which they experience caregiving as (1) satisfactory, (2) burdensome, and (3) stressful. The four response categories are 1 = *not at all*, 2 = *a little*, 3 = *fairly*, and 4 = *very*.

The main predictor variables are characteristics of the work situation – i.e., working hours, occupational status, and the perceived access to a series of HR practices (flexplace, flextime, phased retirement, and regular medical examinations). In addition, we include well established correlates of caregiving experiences – namely, the caregiving situation (number of care receivers, care for close kin, physical care, daily caregiving, long-term caregiving) and the caregiver's sociodemographic characteristics (age, gender, marital status, children, health, wealth, religion). Table 1 presents the mean, standard deviation, coding, and wording of survey questions for all the independent variables used in the analyses. In general, item non-response was lower than six percent (found in the wealth variable), and was dealt with using multiple imputation procedures (Stata 14: *mi impute chained*). We imputed the variables with missing cases 25 times and used information from dependent, independent, and control variables. The models were run for all 25 datasets and combined using the *mi estimate* command in Stata.

Analyses

To investigate how sociodemographic characteristics, caregiving situation, and work situation are linked to caregiving satisfaction, burden, and stress, we ran three separate ordinal logistic regression models. We used clustered standard errors to account for the multilevel structure of the data (respondents are nested within organizations).

[Table 1 about here]

Results

First, we consider the prevalence of satisfaction, burden, and stress in our sample, and thereafter present our multivariate findings. Overall, 70 percent of working caregivers report that they are fairly/very satisfied with their caregiving activities. Also, a substantial proportion experience them as fairly/very burdensome (26%) and stressful (16%). The correlation of the three variables (Spearman's Rho) points to the fact that satisfaction is different from burden and stress. While the correlation between burden and stress is relatively high (rho=0.65, $p<0.01$), the correlations between satisfaction and burden (rho=-0.08, $p<0.01$), and satisfaction and stress (rho=-0.23, $p<0.01$) are much lower.

Table 2 presents the results of the ordinal logistic regression models for positive (Model 1) and negative (Model 2a, 2b) caregiving experiences. We hypothesize that work involvement, a lack of workplace flexibility, and limited organizational health support relate to negative caregiving experiences. Our results partly support the *work involvement hypothesis*. We find that older working caregivers with higher occupational status are more likely to experience caregiving as stressful than their lower-status counterparts. The number of working hours is not significantly linked to burden and stress. Next, we find partial support for the *workplace*

flexibility hypothesis. Older workers who perceive that they have access to phased retirement experience relatively lower levels of caregiving burden and stress. Moreover, we also find that perceived access to phased retirement is significantly linked with higher levels of caregiving satisfaction. We find no significant differences in caregiving experiences between older workers who perceive access to flexplace or flextime and those who do not perceive it. The results also support the *workplace health support hypothesis*. We find that perceived access to regular medical examinations is significantly linked to lower levels of caregiving burden and stress.

Aside from work-related factors, we find that a greater care load is significantly linked to higher levels of caregiving burden and stress. In other words, caregivers who provide physical care, daily care, and are long-term caregivers, experience relatively higher levels of caregiving burden and stress. Caregivers who provide care for more than two people experience relatively higher levels of caregiving burden, while those who provide care for close kin experience higher levels of caregiving stress. Moreover, we find a link between sociodemographic characteristics and caregiving experiences. Women experience significantly higher levels of caregiving burden and stress than men. We also find that caregivers with better health experience lower levels of burden and stress than caregivers with worse health. Furthermore, we find evidence for a significant link between religiosity and positive caregiving experiences, but not with negative experiences. Additional analyses were run to test whether the effects of the work situation on caregiving burden and stress differ by gender, health, and frequency of caregiving. None of these interaction terms were, however, significant. In general, the results show that the predictors of positive and negative experiences differ, while the size and direction of the effects on burden and stress are quite similar.

[Table 2 about here]

To get a better understanding of the effect sizes of the relationships we observe, we plot the cumulative predicted probabilities for the effects of access to phased retirement and medical examinations on caregiving burden (Figure 1) and stress (Figure 2) while keeping all other variables constant. The probability of experiencing caregiving as very or fairly burdensome is substantially lower when there is access to phased retirement (25% versus 30% when there is no access, see Figure 1 – left panel). The probability of high levels of caregiving burden is substantially lower (23%) when there is access to medical examinations, than in the case of no access (29%, see Figure 1 – right panel). Figure 2 portrays a similar picture for caregiving stress. At a first glance, the size of the effects of access to HR practices on caregiving experiences might seem small. Nevertheless, it should be kept in mind that only aspects of the work situation, which are rather distant from caregiving experiences, are changed while keeping the care situation constant. Against this background, the difference in caregiving experiences between working caregivers with and without access to phased retirement and medical examinations can be considered as substantial.

[Figure 1 and 2 about here]

Discussion

Providing care to family members and friends is a common area of activity among older workers. One prominent assumption is that combining caregiving with paid work may be difficult (e.g., Tolkacheva *et al.* 2011; Kim *et al.* 2006). In this study, we examine positive and negative caregiving experiences among older workers who provide informal care at least once per week. Our results provide evidence that caregiving is a positive experience for a majority of

Dutch older workers. More than two thirds of working caregivers are satisfied with their caregiving activities, which may be related to the still comparably high level of institutionalized care in the Netherlands. Yet also, a substantial proportion of working caregivers – around one in five – experience caregiving as burdensome and stressful. For understanding differences in caregiving burden and stress, our findings highlight aspects of the work situation as important predictors above and beyond the more commonly studied caregiving situation and the sociodemographic characteristics of caregivers.

We find that perceived access to phased retirement is linked with lower levels of caregiving burden and stress. This finding implies that perceived control over the number of working hours, and therefore to a certain extent control over workload, may be helpful for reducing caregiving burden and stress. However, we do not find that perceived access to flexplace and flextime are significantly associated with lower levels of caregiving burden and stress. Control over when and where to work seems thus not to reduce caregiving burden and stress. The effect of workplace flexibility on levels of caregiving burden and stress is therefore more nuanced and complex than we initially expected. A theoretical distinction between the availability and allocation of personal resources seems therefore to be necessary. The perception of control over the availability of personal resources such as time and energy relates to lower levels of caregiving burden and stress, as opposed to perceived control over their allocation. This difference is particularly interesting, given that flexplace and flextime have often been proposed as ways in which organizations can support workers with caregiving responsibilities (e.g., Brown and Pitt-Catsouphes 2016). Our findings show that working caregivers at the end of their careers may rather seek to reduce their work obligations in order to gain more time and energy – either for caregiving or to gain respite from it.

Our findings also show that perceived access to medical support is significantly associated with lower levels of caregiving burden and stress. This finding underscores the fact that the health concerns of working caregivers may pose an additional stressor and have a knock-on effect in terms of negative caregiving experiences. Given the demands of both work and caregiving, working caregivers may lack sufficient time and energy to engage in health-promoting and health-preventive behaviors next to their work and caregiving responsibilities. Regular medical examinations at work would then seem to provide a way for working caregivers to support their own health without investing additional personal resources. Because the perception of access to medical examinations is linked to lower caregiving burden and stress, organizational health support would seem to represent a form of supportive work environment for working caregivers. This is particularly interesting given that workers in the Netherlands, as well as in other European countries, have access to formal medical care; nevertheless, the perception of access to medical examinations at work seems thus to represent an additional form of health support that lowers the burden and stress of caregiving.

This study also highlights the relevance of examining positive and negative caregiving experiences separately. Our results show that the antecedents of caregiving experiences differ between these positive and negative experiences. In fact, some of the predictors even point in the opposite direction for positive caregiving experiences compared with negative caregiving experiences. Whilst we find that a lack of individual resources and a greater care load are linked with higher levels of caregiving burden and stress, these predictors provide a different picture in terms of satisfaction with caregiving. Older workers who provide care for many dependent people, and provide frequent care, experience relatively higher levels of caregiving satisfaction. This may suggest that these individuals are self-selecting into more intense forms of caregiving

because of a motivation to care for others. In a similar vein, we find that religiosity, as an indicator for caregiving motivation, is linked to higher levels of caregiving satisfaction but is unrelated to levels of caregiving burden and stress. Our findings thus support the notion that positive and negative caregiving experiences are distinct from one another, rather than being opposites within the same dimension. Focusing on both positive and negative experiences thus provides a more complete picture of why people provide care and particularly why they continue to do so despite a heavy care load (Walker, Pratt and Eddy 1995).

In interpreting these findings, some limitations should be borne in mind. First, our dependent variables, namely caregiving satisfaction, burden, and stress, are measured using single indicators. This may have limited our ability to capture the full range of positive and negative caregiving experiences. Second, we use a cross-sectional sample that prevents us from testing the effect of the use of HR practices on caregiving experiences. The use of longitudinal data could allow conclusions to be drawn about whether the actual use of HR practices reduces negative caregiving experiences, and should be the focus of future work. Third, this study takes place in the Netherlands, which may limit the generalizability of the findings to other countries with different welfare regimes.

In general terms, because older workers are expected to work longer but also to care more for dependent family members and friends, questions arise regarding how they experience caregiving next to their paid job. Our findings clearly show that caregiving is a positive as well as a negative experience for working caregivers, and that their work situation is important for explaining caregiving burden and stress. In light of the closure of early retirement routes and higher retirement ages, offering access to phased retirement would appear to ensure that working caregivers retain the autonomy to decide when and how to withdraw from the labor market,

which could in turn alleviate caregiving burden and stress. Specifically, in times of extended careers and given the ever-increasing numbers of dependent people, organizations can be seen as important actors in shaping the workplace in such a way that future cohorts of informal, working caregivers can successfully combine caregiving with paid work.

References

Arksey, H. 2002. Combining informal care and work. Supporting carers in the workplace. *Health and Social Care in the Community*, **10**, 3, 151–61.

Barnett, R.C. 1998. Toward a review and reconceptualization of the work/family literature. *Genetic, Social, and General Psychology Monographs*, **124**.

Broese van Groenou, M.I., de Boer, A.H. and Iedema, J. 2013. Positive and negative evaluation of caregiving among three different types of informal care relationships. *European Journal of Ageing*, **10**, 4, 301–11.

Brown, M. and Pitt-Catsouphes, M. 2016. A mediational model of workplace flexibility, work–family conflict, and perceived stress among caregivers of older adults. *Community, Work & Family*, **19**, 4, 379–95.

Carlson, D.S. and Frone, M.R. 2003. Relation of behavioral and psychological involvement to a new four-factor conceptualization of work-family interference. *Journal of Business and Psychology*, **17**, 4, 515–35.

Chaix, B., Navaie-Waliser, M., Viboud, C., Parizot, I. and Chauvin, P. 2006. Lower utilization of primary, specialty and preventive care services by individuals residing with persons in poor health. *European Journal of Public Health*, **16**, 2, 209–16.

Colombo, F., Llena-Nozal, A., Mercier, J. and Tjadens, F. 2011. *Help wanted?: Providing and paying for long-term care*. OECD Publishing, Paris.

de Boer, A.H. and Keuzenkamp, S. 2009. *Vrouwen, mannen en mantelzorg: [Women, men, and informal caregiving]*. Sociaal en Cultureel Planbureau, Den Haag.

Farran, C.J. 1997. Theoretical perspectives concerning positive aspects of caring for elderly persons with dementia. Stress/adaptation and existentialism. *Gerontologist*, **37**, 2, 250–57.

Ganzeboom, H.B., Graaf, P.M. de and Treiman, D.J. 1992. A standard international socio-economic index of occupational status. *Social Science Research*, **21**, 1, 1–56.

Ganzeboom, H.B. and Treiman, D.J. 1996. Internationally comparable measures of occupational status for the 1988 International Standard Classification of Occupations. *Social Science Research*, **25**, 3, 201–39.

Gordon, J.R., Pruchno, R.A., Wilson-Genderson, M., Murphy, W.M. and Rose, M. 2012. Balancing caregiving and work. Role conflict and role strain dynamics. *Journal of Family Issues*, **33**, 5, 662–89.

Hank, K. and Stuck, S. 2008. Volunteer work, informal help, and care among the 50+ in Europe. Further evidence for 'linked' productive activities at older ages. *Social Science Research*, **37**, 4, 1280–91.

Henkens, K., van Solinge, H., Damman, M. and Dingemans, E. 2017. Design and codebook of the NIDI Pension Panel Study (NPPS) first wave, 2015, The Hague.

Hill, E.J., Grzywacz, J.G., Allen, S., Blanchard, V.L., Matz-Costa, C., Shulkin, S. and Pitt-Catsouphes, M. 2008. Defining and conceptualizing workplace flexibility. *Community, Work & Family*, **11**, 2, 149–63.

Hoffman, G.J., Lee, J. and Mendez-Luck, C.A. 2012. Health behaviors among Baby Boomer informal caregivers. *Gerontologist*, **52**, 2, 219–30.

Josten, E. and de Boer, A.H. 2015. *Concurrentie tussen mantelzorg en betaald werk: [Competition between informal care and paid work]*. Sociaal en Cultureel Planbureau, Den Haag.

Kim, Y., Loscalzo, M.J., Wellisch, D.K. and Spillers, R.L. 2006. Gender differences in caregiving stress among caregivers of cancer survivors. *Psycho-Oncology*, **15**, 12, 1086–92.

Kramer, B.J. 1997. Gain in the caregiving experience. Where are we? What next? *Gerontologist*, **37**, 2, 218–32.

Kruithof, W.J., Post, M.W.M. and Visser-Meily, J.M.A. 2015. Measuring negative and positive caregiving experiences. A psychometric analysis of the Caregiver Strain Index expanded. *Clinical Rehabilitation*, **29**, 12, 1224–33.

Lawton, M.P., Kleban, M.H., Moss, M., Rovine, M. and Glicksman, A. 1989. Measuring caregiving appraisal. *Journal of Gerontology*, **44**, 3, 61-71.

Lawton, M.P., Moss, M., Kleban, M.H., Glicksman, A. and Rovine, M. 1991. A two-factor model of caregiving appraisal and psychological well-being. *Journal of Gerontology*, **46**, 4, 181-189.

Lilly, M.B., Laporte, A. and Coyte, P.C. 2007. Labor market work and home care's unpaid caregivers. A systematic review of labor force participation rates, predictors of labor market withdrawal, and hours of work. *The Milbank Quarterly*, **85**, 4, 641–90.

Lin, I.F., Fee, H.R. and Wu, H.S. 2012. Negative and positive caregiving experiences. A closer look at the intersection of gender and relationship. *Family Relations*, **61**, 2, 343–58.

Lyonette, C. and Yardley, L. 2003. The influence on carer wellbeing of motivations to care for older people and the relationship with the care recipient. *Ageing and Society*, **23**, 4, 487–506.

Nijboer, C., Triemstra, M., Tempelaar, R., Sanderman, R. and van den Bos, G.A. 1999. Determinants of caregiving experiences and mental health of partners of cancer patients. *Cancer*, **86**, 4, 577–88.

Pavolini, E. and Ranci, C. 2008. Restructuring the welfare state. Reforms in long-term care in Western European countries. *Journal of European Social Policy*, **18**, 3, 246–59.

Pearlin, L.I., Mullan, J.T., Semple, S.J. and Skaff, M.M. 1990. Caregiving and the stress process. An overview of concepts and their measures. *Gerontologist*, **30**, 5, 583–94.

Pinquart, M. and Sörensen, S. 2003. Associations of stressors and uplifts of caregiving with caregiver burden and depressive mood. A meta-analysis. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, **58B**, 2, 112-128.

Labra, C. de, Millan-Calenti, J.C., Bujan, A., Nunez-Naveira, L., Jensen, A.M., Peersen, M.C., Mojs, E., Samborski, W. and Maseda, A. 2015. Predictors of caregiving satisfaction in informal caregivers of people with dementia. *Archives of Gerontology and Geriatrics*, **60**, 3, 380–88.

Pristavec, T. 2018. The Burden and benefits of caregiving: A latent class analysis. *Gerontologist*, **00**, 00, 1–14.

Schieman, S., Whitestone, Y.K. and van Gundy, K. 2006. The nature of work and the stress of higher status. *Journal of Health and Social Behavior*, **47**, 3, 242–57.

Raschick, M. and Ingersoll-Dayton, B. 2004. The costs and rewards of caregiving among aging spouses and adult children. *Family Relations*, **53**, 3, 317–25.

Tolkacheva, N., van Groenou, M.B., de Boer, A.H. and van Tilburg, T. 2011. The impact of informal care-giving networks on adult children's care-giver burden. *Ageing & Society*, **31**, 1, 34–51.

Carretero, S., Garces, J., Rodenas, F. and Sanjose, V. 2009. The informal caregiver's burden of dependent people. Theory and empirical review. *Archives of Gerontology and Geriatrics*, **49**, 1, 74–79.

van Solinge, H. and Henkens, K. 2017. Older workers' emotional reactions to rising retirement age. The case of the Netherlands. *Work, Aging and Retirement*, **3**, 3, 273–83.

Verbeek-Oudijk, D., Woittiez, I., Eggink, E. and Putman, L. 2014. *Who cares in Europe?: A comparison of long-term care for the over-50s in sixteen European countries*. Sociall en Cultureel Planbureau / The Netherlands Inst. for Social research / SCP, The Hague.

Walker, A.J., Pratt, C.C. and Eddy, L. 1995. Informal caregiving to aging family members. A critical review. *Family Relations*, **44**, 4, 402–11.

Longacre, M.L., Valdmanis, V.G., Handorf, E.A. and Fang, C.Y. 2017. Work impact and emotional stress among informal caregivers for older adults. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, **72**, 3, 522–31.

Yates, M.E., Tennstedt, S. and Chang, B.-H. 1999. Contributors to and mediators of psychological well-being for informal caregivers. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, **54B**, 1, 12-22.

Zarit, S.H. 2012. Positive aspects of caregiving. More than looking on the bright side. *Aging & Mental Health*, **16**, 6, 673–74.

Tables

Table 1

Means, standard deviations, coding of independent variables, and wording of survey questions

Variables	Mean	SD	Coding and psychometric properties	Description/wording (questions translated from Dutch)
Sociodemographic characteristics				
Age	61.98	1.60	Continuous variable, range 60-65 years	Question: In what year were you born?
Gender	0.47		Dummy variable coded 0-1, 1=woman	Question: Are you a man or a woman?
Partnered	0.83		Dummy variable coded 0-1, 1=with partner (married, cohabitation, living apart)	Question: Do you have a partner? Response categories are 1=Yes, I am married; 2=Yes, I cohabit with a partner; 3=Yes, I do have a partner but we do not live together; 4=No, I am single
Number of children	2.11	1.20	Continuous variable, range 0-6	Question: Do you have children? If so, how many? (cut-off point 6 children)
Health status	3.14	0.85	1-item scale, range 1 (very poor) to 5 (excellent)	Question: How would you characterize your health in general? Response categories are 1=excellent to 5=very poor and were reversely coded
Wealth	120.58	188.03	Quasi-interval measure, range 2.5-750	Question: How large do you estimate your total wealth (own house, savings, stocks, etc. minus debts/mortgage) to be? Response categories are 1=less than 5.000 euros to 7=more than 500 thousand euros. We used class averages and report values in thousands.

Variables	Mean	SD	Coding and psychometric properties	Description/wording (questions translated from Dutch)
Religion	2.62	1.26	1-item scale, range 1 (very unimportant) to 5 (very important)	Question: Can you indicate for the following things how important they are in your life?: My religion/faith. Response categories are 1=very important to 5=very unimportant and were reversely coded
Caregiving situation				
Care for 2+ persons	0.46		Dummy variable coded 0-1, 1=Provision of care to at least two persons	Question: Do you provide help to family members or friends who are ill or in need of help? If yes, what kind of help? Provision of care to (a) partner, (b) child, (c) parent/in-law, (d) brother/sister, (e) friend or acquaintance, (f) neighbors. Type of help given: (1) domestic help, (2) physical care, (3) accompaniment and transportation, (4) administration
Care for close kin	0.90		Dummy variable coded 0-1, 1=Provision of any care to partner, child, or parent/in-law	
Physical care	0.29		Dummy variable coded 0-1, 1=Provision of physical care to any person	
Daily caregiving	0.17		Dummy variable coded 0-1, 1=Daily	Question: How frequently do you provide that help? (1=daily; 2=several times a week; 3=about weekly)
Long-term care	0.26		Dummy variable coded 0-1, 1=Caregiver at age 50-59	Question: Could you indicate whether and when you experienced the following events during your career? Provided long-term care at age 50-59
Work situation				
Full-time work	0.47		Dummy variable coded 0-1, 1=36-50 hours	Question: How many hours do you work on average (per week)? Excluding overtime (cut-off point 50 hours)
Occupational status	0.04	0.90	Coding is based on 2008 International Socio-Economic	Question: What is your job or profession?; In which category could your job or profession

Variables	Mean	SD	Coding and psychometric properties	Description/wording (questions translated from Dutch)
			Index of Occupational Status (ISEI; Ganzeboom and Treiman 1996; Ganzeboom, Graaf and Treiman 1992) and was standardized using the full sample	be grouped? Response categories are 1=higher intellectual or free profession; 2=higher executive profession; 3=intermediate intellectual or free profession; 4=intermediate executive or commercial profession; 5=other non-manual work; 6=skilled and executive manual work; 7=semi-skilled manual work; 8=unskilled and experienced manual work; 9=agricultural profession; 10=I don't know)
Perceived access to HR practices				Question: Are the following measures available in your organization/company? (1) working from home, (2) flexible working hours, (3) reduction of work hours prior to retirement, (4) regular medical examinations. Response categories are 1=yes, I make use of it; 2=no, but it is possible to use it; 3=no, not possible.
Flexplace	0.46		Dummy variable coded 0-1, 1=Making use or having the possibility to make use of HR practice, respectively	
Flextime	0.50		Dummy variable coded 0-1, 1=Making use or having the possibility to make use of HR practice, respectively	
Phased retirement	0.74		Dummy variable coded 0-1, 1=Making use or having the possibility to make use of HR practice, respectively	
Medical examinations	0.45		Dummy variable coded 0-1, 1=Making use or having the possibility to make use of HR practice, respectively	

Note: The descriptive statistics are based on the values prior to multiple imputation.

Table 2

Ordinal logit models with clustered standard errors of explaining positive (Model 1) and negative (Model 2a,b) caregiving experiences (N=1,651)

	1: Satisfactory		2a: Burdensome		2b: Stressful	
	Coef.	*SE*	*Coef.*	*SE*	*Coef.*	*SE*
Sociodemographic characteristics						
Age	-0.02	0.03	-0.01	0.03	-0.03	0.03
Female	-0.06	0.13	0.27*	0.12	0.44**	0.14
Partnered	-0.27*	0.13	-0.25	0.13	-0.09	0.14
Children	0.01	0.04	-0.08	0.04	-0.07	0.05
Health	0.21**	0.06	-0.23***	0.06	-0.30***	0.07
Wealth	0.00	0.00	0.00	0.00	0.00	0.00
Religion	0.15***	0.04	0.00	0.04	-0.04	0.04
Caregiving situation						
Care for 2+ persons	0.27**	0.09	0.20*	0.09	0.06	0.10
Care for close kin	-0.51***	0.16	0.31	0.17	0.66***	0.20
Physical care	0.10	0.11	0.61***	0.11	0.48***	0.12
Daily caregiving	0.30*	0.14	0.65***	0.12	0.49***	0.13
Long-term caregiver	-0.34**	0.11	0.97***	0.11	0.92***	0.11
Work situation						
Full-time work	-0.11	0.12	-0.04	0.12	0.07	0.14
Occupational status	-0.02	0.06	0.09	0.07	0.17*	0.07
HR practice: Flexplace	-0.21	0.12	-0.03	0.11	0.08	0.13
HR practice: Flextime	0.18	0.11	0.12	0.11	0.07	0.12
HR practice: Phased retirement	0.25*	0.11	-0.30**	0.11	-0.27*	0.12
HR practice: Medical exams	0.00	0.11	-0.34***	0.10	-0.44***	0.12
Constant cut1	-3.25	1.88	-1.44	1.94	-1.69	2.13
Constant cut2	-1.59	1.88	0.08	1.94	-0.26	2.14
Constant cut3	0.42	1.89	1.90	1.94	1.30	2.15
Pseudo R-squared [a]	0.02		0.07		0.08	

Note: * p<0.05, ** p<0.01, *** p<0.001; [a] Pseudo R-squared originating from identical regressions in the non-imputed dataset

Figures

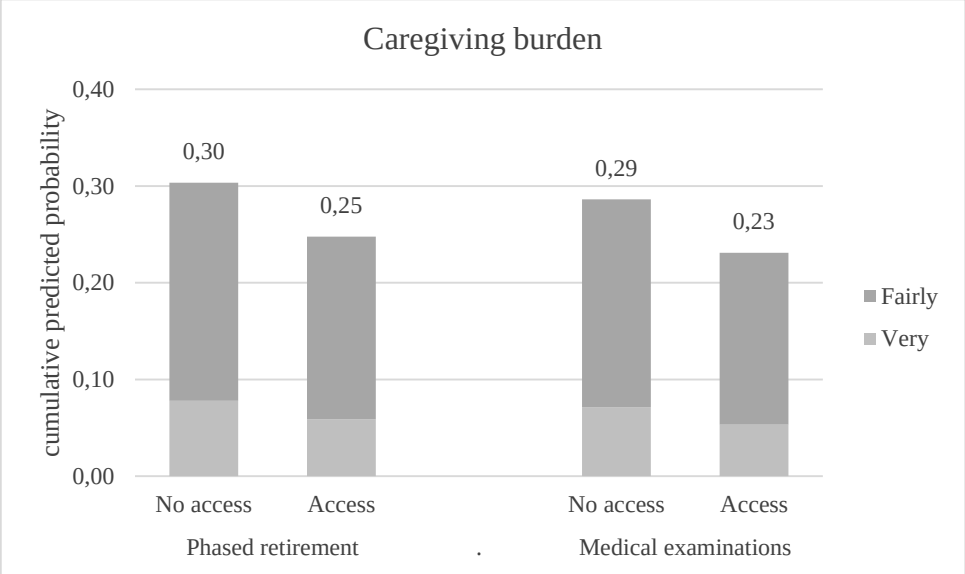

Figure 1. Cumulative predicted probabilities of caregiving burden

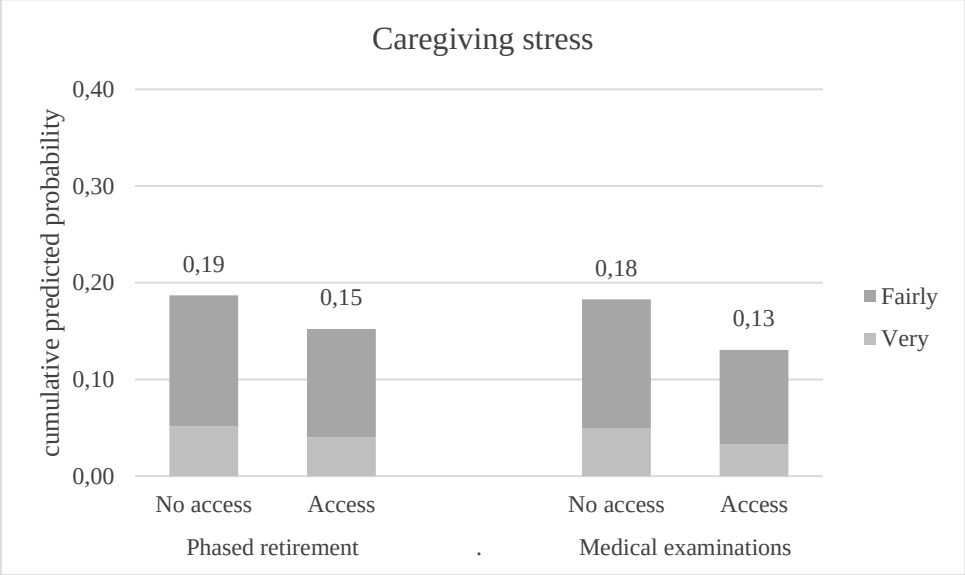

Figure 2. Cumulative predicted probabilities of caregiving stress