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Abstract

Although from a life course perspective women's retirement timing can be expected to be related to family events earlier in life, such as childbirth and divorce, empirical insights into these relationships are limited. Drawing on three-wave panel data, collected in 2001, 2006-2007, and 2011 among Dutch female older workers ($N = 420$) and if applicable their partners, this study examines retirement intentions and behavior in relation to past and proximal preretirement family experiences. The results show that women who postponed childbearing and still have children living at home during preretirement years intend to retire relatively late, as well as ever divorced single women, even when controlling for established correlates of retirement. Women who repartnered after a divorce do not differ from continuously married women in terms of their retirement intentions. Only few of the predictors of retirement intentions also predicted actual retirement behavior. Generally, the results highlight the importance of the notion of linked lives for understanding women's retirement processes.

Key words: children, divorce, life course, retirement, women

1 Introduction

Labor force participation of older women has increased considerably during the last decades in almost all OECD countries (OECD 2006). In line with this trend, a considerable literature on women's retirement transitions has been developed since the early 1990s. Qualitative studies have examined the specific meaning of retirement for women (e.g., August and Quintero 2001; Everingham et al. 2007; C. A. Price 2000; Richardson 1999; Simmons and Betschild 2001; Skirboll and Silverman 1992), thereby often pointing at the proximal preretirement household situation and women's experiences earlier in life as important factors for understanding their retirement experiences. Various quantitative studies have examined how women's retirement processes are related to the current household situation – for example, being married or having resident children – in preretirement years (e.g., Brown and Warner 2008; Choi 2002; Pienta 2003; Raymo et al. 2011; Szinovacz et al. 2001). Nevertheless, quantitative studies that explicitly test the relationships between women's childbearing and marital experiences earlier in life and retirement timing are scarce, even though from a life course perspective it can be expected that more distal life experiences are of importance for understanding retirement. The central question of this study is: To what extent and how can intended and actual retirement timing of female older workers be explained by their timing of childbirth and marital history experiences?

Numerous studies have revealed that childbearing affects women's labor market behavior during early- and mid-careers (Brewster and Rindfuss 2000; Drobnič et al. 1999; Vlasblom and Schippers 2004). Relatively little is known about the relationship between the transition into motherhood and women's retirement timing. Research has shown that women who had their first child relatively late are more likely to remain in the workforce later in life (Pienta 1999) and to reject the "retiree identity" (Szinovacz and DeViney 1999). To our knowledge only one study directly tested the relationships between timing of childbirth and timing of retirement in a systematic manner. In this study Hank (2004) analyzes data from the German Socio-Economic Panel and shows that women who postponed the transition into motherhood are also more likely to postpone retirement. Hank attributes this finding to the relatively strong career orientation of these 'late child bearers', but also acknowledges that having relatively young (i.e., less independent) children in the preretirement years might explain the delay in retirement.

In older women's work and retirement studies, marital status has primarily been included as a control variable (Slevin and Wingrove 1995). Generally divorced women seem to be more likely than married women to work during late careers (Choi 2002; Pienta 1999; Pienta et al. 1994) and have been found to retire later (e.g., Brown and Warner 2008; Raymo et al. 2011). Experiencing a divorce does not imply, however, that one remains single. Many divorced persons remarry or cohabit with a partner, resulting in complex and diverse partnership history patterns (Coleman et al. 2000; De Graaf and Kalmijn 2003; De Jong Gierveld 2004; Mills 2004). In broad marital status measures these

complexities remain hidden. Relatively little is known about (a) the role prior divorce experiences play in the retirement process and (b) about the potential compensating effects of repartnering after a divorce.

This study will contribute to the literature on women's retirement in three ways. First, we aim to improve our understanding of the relationship between timing of childbirth and timing of retirement, by examining how the timing of childbirth is associated with retirement timing with and without taking the proximal preretirement household situation into account. Second, we will study the impact of marital history experiences on women's retirement and examine the potentially compensating role of repartnering after divorce. Given that the resources and retirement timing of the partner may encourage or rather discourage early retirement (Denaeghel et al. 2011; Szinovacz 2002; Szinovacz and DeViney 2000), for the group of women who live with a partner we test the relationships between various partner characteristics and women's retirement timing. Third, we acknowledge the process-character of retirement (Beehr 1986) by not only examining the impact of family history experiences on women's retirement behavior but also on retirement intentions. Most studies solely focus on retirement behavior (e.g., Brown and Warner 2008; Hank 2004; Henretta et al. 1993; O'Rand and Henretta 1982; Raymo et al. 2011; Szinovacz and DeViney 2000). Only few studies pay attention to retirement intentions (e.g., Honig 1998; Zimmerman et al. 2000). None examine intentions as well as behavior among the same women. Given that contextual forces (e.g., forced retirement, policy reforms) might thwart retirement processes during late careers, studying intentions and behavior simultaneously can be expected to result in a more comprehensive understanding of the way in which women's retirement processes are embedded in the family life course.

In this study three-wave panel data collected in 2001, 2006-2007, and 2011 among more than 400 Dutch female older workers – aged 50 and over at the first wave (cf. OECD 2006) – and if applicable their partners will be analyzed to study the relationships between women's family histories and retirement timing. Given that all women were employed at Wave 1 we can study their retirement intentions at Wave 1 and their actual retirement timing in the 10 years after that. Retrospective questions on life histories offer the possibility to study the effects of childbearing and marital histories on retirement. In the Netherlands the net labor participation rate among female older workers (ages 50-64) has increased noticeably in recent years: from 18% in the beginning of the 1990s, to 30% in 2001 and 49% in 2011 (Statistics Netherlands 2012a). From 2001 to 2007 the mean retirement age of Dutch female employees has been around age 61. After 2007, the mean retirement age increased to about 63 in 2011 (Statistics Netherlands 2012b).

2 Background

Older working women form a highly diverse group in terms of their childbearing and marital histories. From a life course perspective (Elder 1994; Settersten 2003) this variation can be expected to be of

importance for understanding differences in their retirement processes. The notion of ‘linked lives’ points at the interdependence of the lives of individuals, and the proposition of ‘lifelong development’ implies that individual behavior cannot be understood thoroughly without information on preceding life experiences. In the retirement literature past life experiences are generally hypothesized to be linked to retirement via the opportunity structure later in life (Damman et al. 2011). Family history experiences will be associated with the preretirement family, work, and financial situation, and consequently can be expected to affect retirement.

2.1 Childbearing, child rearing, and retirement timing

The age at which women make the transition into parenthood increased considerably in many countries during the past decennia (Gustafsson 2001). Women who had their first child relatively late will generally have made more investments in education and their early working career than women who had their first child early (Liefbroer and Dykstra 2000). Educational investments have been found to be an important predictor of access to jobs involving complex work, that is, jobs with a high level and broad scope of cognitive challenge (Hyllegard and Lavin 1992). Given that prior research has shown that substantively complex or challenging jobs are related to later (intended) retirement (Hayward et al. 1998; Hayward et al. 1989; Henkens 1999), women who made the transition into parenthood relatively late can be expected to retire relatively late because of their more beneficial preretirement work situation and stronger labor force attachment (Pienta 1999). Consequently, it can be hypothesized that women who had their first child relatively late (intend to) retire later than women who had their first child relatively early (Hypothesis 1).

The effect of the timing of childbearing cannot be seen in isolation from the preretirement household situation. Women who had their first birth relatively late will be more likely than mothers who had their first birth early to have relatively young children – who might still be living at home – during the preretirement years. Previous research has shown that having children in the household delays women’s retirement (Pienta 2003; Szinovacz and DeViney 2000; Szinovacz et al. 2001). The financial needs of dependent children might pose a barrier for women to stop working (Hank 2004; Szinovacz et al. 2001). Moreover, for women who have children living at home the retiree status might not feel appropriate yet because of these financial obligations. As shown in a study by Choi (2002) older women who have a child living at home are less likely to define themselves as retired than childless women and the ‘child-not-at-home’ group, suggesting they are hesitant to view themselves as retirees. Consequently, mothers who still have child(ren) living at home during preretirement years are expected to (intend to) retire later than mothers who have a so-called ‘empty nest’ during these years (Hypothesis 2).

2.2 Marital histories and retirement timing

Since the 1960s a rise in divorce rates can be observed in most European countries (González and Viitanen 2009). Divorces have been found to have important consequences for women's financial resources. The low household income of women in the years after divorce (Poortman 2000), which will be reflected in a lower pension, might limit the possibilities to retire early. Divorced women are less likely than never married women to be covered by private pensions (Ginn 2003; D. Price and Ginn 2003) and have been found to have lower (pension) income in old age as compared to married (Arber 2004; Arber et al. 2003; Fokkema and Van Solinge 2000; Vartanian and McNamara 2002; Yabiku 2000) or never married women (Fasang et al. 2012; McDonald and Robb 2004). They also accumulate less wealth than women who have continuously been married (Addo and Lichter 2013). As noted by Szinovacz and DeViney (2000), "a history of marital disruptions can be expected to lower the economic feasibility of retirement even among remarried individuals" (p. 477). The experience of a divorce might also affect women's social resources. Whereas divorced women are more involved with friends than first married women, they have less contact with neighbors, participate less in social clubs, and are less likely to participate in volunteer work (Kalmijn and Broese van Groenou 2005). Hence, especially for divorced women the social support offered at work (Bossé et al. 1990) can be expected to be highly relevant in terms of their social integration. Moreover, the workplace is an important setting for single divorced women to find a new partner (De Graaf and Kalmijn 2003). Retiring early therefore can be expected to be relatively unattractive for divorced women. Based on these arguments, we generally hypothesize that female older workers who have ever been divorced (intend to) retire later than continuously married women (Hypothesis 3).

Marital or partner relationships are highly diverse and dynamic (Coleman et al. 2000; De Jong Gierveld 2004). Some divorced women remain single, whereas others will find a new partner and remarry or start cohabiting. Having a partner is likely to affect women's retirement opportunities positively. The partner's financial resources might enable married or cohabiting women to stop working earlier than women who do not live with a partner. Moreover, for women who have a partner the transition into retirement might be more attractive than for women who are single, given that they have their partner to spend their leisure time with (Blau 1998; Blau and Riphahn 1999). Women who live with a partner are, however, a heterogeneous group in terms of their household situation. In line with the notion of 'linked lives', various studies have shown that women's retirement is related to the characteristics (e.g., Denaeghel et al. 2011; Pienta 2003; Szinovacz and DeViney 2000) – such as age, health, and income – and retirement transition of the spouse (e.g., Henretta et al. 1993; Moen et al. 2005; Smith and Moen 1998; Szinovacz 2002). We hypothesize that (a) women who are married or cohabit with a partner in preretirement years (intend to) retire earlier than women who do not live with a partner (Hypothesis 4a) and (b) women are more likely to (intend to) retire early if their partner is relatively old, less healthy, earns more, and intends to retire early (Hypothesis 4b).

3 Method

3.1 Sample

The <blinded for review> Work and Retirement Panel data are three-wave panel data collected by <blinded for review> among Dutch older workers and (if applicable) their partners. In 2001 (Wave 1) data were collected among a random sample of civil servants aged 50-64 years, and all workers aged 50-64 years of three large Dutch multinational private-sector organizations (active in information and communication technology, retail, and manufacturing). In total 3,899 older workers received a mail questionnaire, including 1,053 female workers. Of these women 611 completed the questionnaire (response rate 58%). A follow-up study was carried out in 2006-2007 among surviving and traceable participants of the first wave. Of the 574 questionnaires that were sent out to women 433 were returned (response rate 75%). The third round of data collection took place in 2011 among all 422 surviving and traceable respondents of the second wave. The wave-three questionnaire was completed by 314 women (response rate 74%). Given that in the ICT and manufacturing organizations relatively few women aged 50 and over were employed, the large majority of the female respondents worked in the retail industry (i.e., shop personnel) or as civil servants for the central government.

In the survey respondents were, amongst other things, asked about their retirement intentions (Wave 1), year/age of retirement (Waves 2 and 3), preretirement situation (Wave 1), and life histories (mainly Wave 2). Given that the retrospective data on childbearing and divorce histories were collected during the second wave, the base sample consists of 433 women who at least participated in the first and second wave of data collection. Women who lacked critical information on the dependent variables (3% of base sample, $n = 13$), were removed from the sample, resulting in an analytic sample of 420 women, who were on average 53.9 years old at Wave 1 (age range is 50-62 years). A partner questionnaire was available for 90% of the respondents who were living with a partner at Wave 1 ($N = 286$).

3.2 Measures

3.2.1 Dependent variables

Early retirement *intentions* were measured at Wave 1 by means of four questions that constitute an extended version of the scale used by Henkens (1999): Do you intend to stop working before age 65? (1 = *no*, 2 = *I don't know (yet)*, 3 = *yes*); At which age do you want to stop working? (reversed); Do you intend to continue working after you reach the age of 60? (1 = *yes, certainly* to 5 = *no, certainly not*); If you were able to choose, at what age would you like to stop working? (reversed). Given that response categories differed between the items, an aggregated measure was constructed by calculating the mean score of the available standardized items ($\alpha = 0.87$). We standardized the scale to obtain

effect sizes for the dummy variables in the analyses. High scale scores indicate that respondents are more inclined to retire early.

Based on information provided during Waves 2 and 3 retirement *behavior* – that is, whether and when (age) respondents retired – was determined. Respondents were considered as retired if they made use of an (early) retirement arrangement during the study period. Women who were not yet retired at Wave 3 (or at Wave 2 if they did not participate in Wave 3) were treated as right-censored.

3.2.2 Independent variables

To measure *childbearing histories* respondents were asked at what age they became a mother for the first time (if applicable). Responses were coded into three categories: (1) childless, (2) early childbearing, and (3) late childbearing. We distinguish between ‘early’ and ‘late’ childbearing by the upper quartile of the age of first birth in the sample (age 27). By combining the childbearing history information with characteristics of the household composition at Wave 1 – that is, whether the respondent has children living at home – different *child rearing career* groups were distinguished that reflect both past and present experiences with respect to having children in the household: (1) childless, (2a) early childbearing – empty nest, (2b) early childbearing – child at home, (3a) late childbearing – empty nest, (3b) late childbearing – child at home (see Table 1 for descriptive statistics). We used information about the respondent’s age when the last child left the parental home to construct a time-varying measure of child rearing careers, which was included in the models for retirement behavior.

To measure *marital histories* information about the marital status at Wave 1 is combined with retrospective information about divorce histories (i.e., whether respondents have ever been divorced). Based on this information, the following categories were distinguished: (1) never married, (2) married and never divorced, (3) ever divorced, and (4) widowed. By combining these marital histories with information about the preretirement partner status (i.e., whether the respondent lives with a partner) we further divided the ‘ever divorced’ group into (3a) those who remarried, and (3b) those who remained single, to construct a measure of *marital careers*. Unmarried cohabitation is uncommon for the studied cohort, therefore we do not distinguish between married and cohabiting women. The few never married ($n = 5$) and widowed ($n = 4$) women who live with a partner, were grouped with the married women in the marital careers measure.

Models are estimated with and without controlling for established correlates of retirement timing, which were measured at Wave 1. In all models the respondents’ *age* is controlled for, either as a time-constant (intention models) or a time-varying (behavior models) variable. In the retirement literature employees’ financial and health situation have been shown to be highly relevant for understanding retirement (Schalk et al. 2010; Byles et al. 2013). Two measures of the preretirement financial situation were used. The respondents were asked to estimate their total *wealth* (i.e., own

house, savings, stocks, etc., minus debts/mortgage; 1 = *less than 10,000 guilders* [$\pm 4,500$ Euros] to 7 = *more than 1 million guilders* [$\pm 450,000$ Euros]); responses were coded into four categories.

Moreover, respondents were asked whether they perceive to have a *pension shortage* by the question “Do you think you have sustained pension shortcomings during your career” (1 = *yes*; 2 = *don't know*; 3 = *no*). The preretirement *subjective health* situation was measured by the question “How would you characterize your health in general?” (1 = *very good* to 5 = *very poor*). The variable was recoded in such a way that higher values reflect a better health situation.

Additionally we account for several work-related predictors of retirement. The respondent's highest *educational degree* (1 = *elementary education* to 7 = *university*) was recoded into the minimum number of years necessary to reach the respective educational levels (i.e., 6 to 17 years). Regarding their work histories women were asked at Wave 1 to indicate the age at which they started working and for how many years in total they have been out of the labor force after that (if applicable). We used this information to calculate the *number of years spent in the labor force* at Wave 1. In the models for retirement behavior this measure is included as a time-varying covariate. Prior research has shown that *subjective work challenge* is an important predictor of (intended) retirement timing (e.g., Henkens 1999). Work challenge was measured by a scale based on the following three items ($\alpha = 0.76$): The work that I am doing is not very challenging; My work is characterized by many challenging tasks (reversed); The work that I am doing has become more and more boring and routine (1 = *completely agree* to 5 = *completely disagree*). High scale scores reflect higher levels of subjective work challenge. Given that part-time work is common among women in the Netherlands, we control for the weekly *work hours* of the respondents. Information on work hours was provided by the participating organizations (range 0.10 – 1.00, where 1 represents a full-time work week). We multiplied these values by 40 to obtain the formal number of work hours per week.

Among women who live with a partner, characteristics of the partner are incorporated in the analyses. By subtracting the respondent's age from the partner's age, the *age difference* between partners was determined. The *partner's subjective health* was measured by asking the partner the following question: “How would you characterize your health in general?” (1 = *very good* to 5 = *very poor*; reversed). To determine the *partner's net monthly income*, we used the class averages of the reported income (1 = *no income* to 7 = *more than 5000 guilders*) and transformed these values to euros. The following categories were distinguished to measure the *partner's work status*: (1) not working, (2) working, expects to retire before the public pension age of 65 (reference category), (3) working, expects to retire late (at age 65 or later).

In general item non-response was low (less than 3.6%) and dealt with by using single-regression imputation (STATA command *impute*). On the wealth variable item non-response was higher (10.7%) and missing values were therefore coded into a separate category.

[Table 1 about here]

3.3 Analyses

Linear regression models were estimated to study the relationships between family experiences and retirement intentions. Given that the information on retirement behavior is available in discrete time units (i.e., ages), we turned to discrete-time event history models to test our hypotheses regarding retirement behavior (Mills 2011). The data were reorganized into a person-year file. Each year the respondent was observed – from the age at Wave 1 until the age of retirement/ right censoring – contributes an observation to the data. Left-truncation was accounted for by using the age at Wave 1 as the moment respondents enter the study. Respondents need to be under observation to be included in the risk set (Guo 1993). The person-year file is analyzed by logistic regression models, in which the occurrence of an event (i.e., retirement) rather than experiencing no event is the dependent variable. Duration dependency is assessed by using dummy variables of age groups in the model. To allow for unobserved heterogeneity a random effect was included in the model, which corresponds to unobserved characteristics that are specific to an individual and fixed over time (Steele 2005). Organizational dummy variables were included in all models to control for potential organizational effects.

4 Results

Table 2 shows the results of the multivariate linear regression analyses to explain retirement intentions at Wave 1. In Table 3 the discrete-time event history models for explaining retirement behavior are presented. The statistical models are estimated in four steps. In the first step, the relationships between childbearing and marital history experiences and retirement are examined (a Models). In the second step, the childbearing and marital history models are extended by also taking the preretirement household situation into account (b Models). In the third step, we added measures of the preretirement financial, health, and work opportunity structure to the equations to assess the extent to which the relationships between family experiences and retirement can be explained by these factors (c Models). In the fourth step, the model is solely estimated for women who live with a partner and partner characteristics are incorporated (d Models).

4.1 Retirement intentions

Only a small percentage of the studied women (9%) intends to continue working until the Dutch public pension age, which was age 65 in 2001. The majority intends to retire considerably earlier: The median age women want to stop working is 60. The results of Model 1a in Table 2 show that childless women and women who made the transition into parenthood relatively late do not differ from women who had their first birth earlier in terms of retirement intentions. When the preretirement family

situation is taken into account (see Model 1b), group differences become more pronounced. The findings suggest that especially women who made the transition into parenthood relatively late and still have children living at home during preretirement years intend to retire later than those in the reference group (i.e., women who had their first child early and have an ‘empty nest’ during preretirement years). Given that we standardized the retirement intention scale, the coefficients of the dummy variables reflect effect sizes in terms of Cohen’s *d*. The Cohen’s *d* value is -0.38, which is a medium effect. Retirement intentions of women in the ‘early first birth – child at home’ group did not differ significantly from those in the reference group.

Regarding marital histories the results of Model 1a clearly show that women who have ever been divorced intend to retire later than women who have continuously been married, which supports Hypothesis 3. The timing of the divorce also seems to play a role. Whereas the general effect of being ever divorced is -0.43, the effect is -0.27 ($t(409) = -1.87, p = .062$) for those who divorced before age 40, and -0.59 ($t(409) = -4.03, p < .001$) for those who divorced at age 40 or later (not shown in table). In Model 1b, the group of women who have ever been divorced is subdivided into those who repartnered and those who remained single after the divorce. The results suggest that repartnering can compensate the effect of divorce on retirement intentions. Whereas ever divorced single women intend to retire later than continuously married women, for divorced women who repartnered the contrast is not statistically significant. In terms of Cohen’s *d*, the effect size for single divorced women is -0.71, which is relatively large. The difference between the two ‘ever divorced’ groups is statistically significant ($b = -0.55, t(407) = -3.07, p = .002$). Single widowed women as well as single never married women are also found to intend to retire later than continuously married women. As expected in Hypothesis 4a, the results generally show that not living with a partner is associated with intentions to retire relatively late.

The preretirement financial, health, and work situations are related to retirement intentions in the expected way (see Model 1c). Women who have a better financial situation – wealthier women and those without a pension shortage – are more inclined to retire early than women whose financial situation is poorer. A better health situation, a more challenging job, and a larger number of weekly work hours are related to the intention to retire relatively late. The more years women have been engaged in paid work over the life course, the earlier they intend to retire. The effect of educational level is not statistically significant. Most coefficients of the child rearing and marital career variables hardly change when the measures of the preretirement situation are added to the models.

The retirement intentions of women who live with a partner are associated with the characteristics of the partner (see Model 1d). Especially the retirement intentions of the partner seem to be of importance. Women whose partner intends to retire relatively late, are more likely to intend to retire late themselves. The coefficients for the age difference between partners and the income of the partner are strictly not statistically significant, but in the expected direction. The subjective health of

the partner does not seem to play a role in the retirement intentions of the studied women. When controlling for partner characteristics, the contrast of the ‘late first birth – child at home’ group remains statistically significant.

[Table 2 about here]

4.2 Retirement behavior

Of the studied women 70% retired within the time period they were observed. Their mean retirement age was 59.70 years ($SD = 2.50$). The results of the discrete-time event history analyses for explaining retirement behavior are presented in Table 3. As expected, age is a clear predictor of retirement. The older a woman is, the higher her retirement chances. The effects of family histories are less pronounced. For childbearing histories none of the group differences are statistically significant (see Model 2a). When taking the preretirement family situation into account (see Model 2b), child rearing careers still are not related to retirement timing. Consequently, no support was found for Hypotheses 1 and 2.

With respect to marital histories, the results of Model 2a show that retirement rates do not differ between ever divorced and continuously married women, so no support is found for Hypothesis 3. Nevertheless, when the group of divorced women is studied in more detail (see Model 2b), we see that those who remained single after the experience of a divorce retire later than continuously married women. The effect for women who repartnered after a divorce is not statistically significant.

In Model 2c measures of the preretirement financial, health, and work situation are added to the model. Women who perceive to have a pension shortage retire later than those who perceive to have no pension shortage. A good health situation is found to be associated with lower chances to retire. Having a challenging job is related to retirement behavior as well: The more challenging women’s jobs are, the later they retire. The effects of wealth, education, years in the labor force, and preretirement work hours are not statistically significant. When the measures of the preretirement financial, health, and work situation are added to the model the coefficient of the ‘divorced – no partner’ group is no longer significant, suggesting that the effect is mediated by these variables. Among women who live with a partner, none of the studied partner characteristics has a statistically significant effect on retirement behavior (see Model 2d).

[Table 3 about here]

5 Discussion

Rising labor force participation rates of older women increase the importance of understanding their transitions from work to retirement. This study focuses on the role family history experiences play in

women's retirement processes. The results suggest that the family sphere is an independent force affecting women's (intended) retirement timing. Even when established correlates of retirement timing are controlled for child rearing and marital careers are related to women's retirement intentions. These findings are compatible with the life course perspective, which emphasizes the interconnection between life spheres, the linkages between the lives of individuals, and the importance of experiences earlier in life (Settersten 2003). The theoretical and empirical distinction that has been made between past and proximal preretirement aspects of the family life course improved our understanding of the way in which family histories are related to women's retirement processes.

Regarding childbearing histories, the research findings suggest that especially women who made the transition into parenthood relatively late and still have children living at home during preretirement years intend to retire relatively late. The general effect of the timing of first birth was in the same direction as in the study of Hank (2004), but not statistically significant. These findings suggest that women's retirement processes are likely to be delayed when having relatively young children in the household. Interestingly, women's educational level, years in the labor force, work challenge, and work hours – all potential indicators of career orientations – did not explain differences in retirement intentions between the groups of mothers. Even though childless women generally fare better than mothers in terms of pension building (Ginn 2003; Ginn and Arber 2002), they did not differ from mothers in terms of their retirement timing in this study. Whereas childless women may have acquired more pension benefits over the life course, they might also be more career oriented (Szinovacz et al. 2001). Probably due to these opposing mechanisms, no overall effect is found.

With regard to marital histories, women who have ever been divorced were found to intend to retire later than continuously married women. Especially women who experienced a divorce later in mid-life (i.e., after age 40) intended to retire relatively late, which might reflect the fact that these women have had less time to recover from or adapt to the divorce experience. In line with prior studies showing that repartnering may function as a strategy to compensate the negative financial consequences of a divorce (e.g., Dewilde and Uunk 2008; Jansen et al. 2009; Wilmoth and Koso 2002), our study results suggest that also in terms of retirement timing repartnering may be perceived as a strategy to offset the negative divorce effects. Retirement timing of women who repartnered after a divorce does not differ from continuously married women. For women who remained single after the divorce, continued work seems to be the general strategy to deal with the losses associated with divorce. Also never married and widowed women without a partner intend to retire later than continuously married women, even when controlling for financial, work, and health resources in preretirement years. These findings highlight the importance of having a partner in women's retirement processes and might suggest that for women without a partner the workplace is highly relevant in terms of their social integration. Among women who live with a partner, especially the retirement intention of the partner seems to affect women's retirement. The effects of the age

difference between partners and the partner's income on retirement intentions were in the expected direction, but not statistically significant. These findings provide additional support for the notion that partners tend to synchronize their retirement (Smith and Moen 1998; Szinovacz and DeViney 2000).

Examining retirement intentions in addition to retirement behavior has proven to be highly relevant. As expected most of the hypothesized predictors were found to explain differences in retirement intentions, whereas for retirement behavior the effects were less pronounced. Earlier studies suggest that retirement intentions are not always reflected in actual behavior (Henkens and Tazelaar 1997; Raymo et al. 2010). Relationships between family histories and retirement may be thwarted during late careers. Most likely the Dutch retirement context during the last decade plays an important role here. In the beginning of the 21st century there still was a strong "early exit culture" in the Netherlands (De Vroom 2004, p. 120). Dutch employers offered few opportunities for later retirement, and early retirement programs were designed in such a way that leaving the workforce at early retirement age was an offer older workers could not refuse (Van Solinge and Henkens 2010). During this period many workers retired earlier than they intended. The last years the Dutch government has implemented several policy changes to reverse the early exit culture and to make continued work financially more attractive for older workers. For example, in 2006 a new law was introduced, in which all tax facilities to stop working before age 65 are abolished for cohorts born after 1949. As a result, especially among the younger cohorts studied, many workers have extended their work lives beyond the intended retirement age they reported a decade ago. Contextual forces seem to have limited the possibilities for Dutch women to realize their retirement intentions during the last decade.

When interpreting the research results some limitations of this study should be kept in mind. First, although the study sample has substantial variation in terms of life histories, work characteristics, and health, the employees in the sample are not representative of all female older workers in the Netherlands. Furthermore, the specific character of the Dutch pension system might limit the generalizability of the findings to other countries (see for discussions on gender and pension systems Frericks et al. 2006; Ginn et al. 2001; Jefferson 2009). Second, the marital and work history variables were based on rather broad retrospective questions. Even though timing of marriage, duration in particular marital states, and interactions between work and family histories might be of importance for explaining retirement timing, the data do not allow further specifying the measures used. Moreover, the sample size is too small to study multiple disruptions or to study the effects of family experiences that are rather uncommon, such as repartnering after widowhood. Finally, it should be noted that recall or memory bias effects may play a role when using data collected retrospectively. Nevertheless, the salience and low incidence of the studied life events – timing of first birth and divorce – might have influenced recall accuracy positively (Eisenhower et al. 1991).

Despite these limitations, this study clearly shows that women's retirement processes are associated with family experiences earlier in life. Moreover, the findings provide insights into the way

in which earlier family events are related to later outcomes, which is an important question in the life course literature (Hendricks 2012). Although the preretirement family situation seems to be of overriding importance for explaining women's retirement processes, family histories already "set the stage" (Settersten 2003, p. 29) for retirement decision making. Both the results on child rearing and marital careers highlight the importance of the notion of linked lives for understanding women's retirement. Whether the relationships between the studied family history experiences and retirement timing will be similar among cohorts approaching retirement in the near future – whose life courses show even more diversity (Liefbroer & Dykstra, 2000) – is an important question for future research.

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Table 1 Descriptive Sample Statistics

Variables	Full sample <i>N</i> = 420 (Partner variables <i>N</i> = 286)	Person-Years <i>N</i> = 2841 (Partner variables <i>N</i> = 1870)
	M (SD) or % ^a	M (SD) or % ^a
Childbearing history		
No children	23.1%	23.2%
Early first birth (<=27)	60.5%	59.7%
Late first birth (>27)	16.4%	17.1%
Child rearing career (past & present)		
No children	23.1%	23.2%
Early first birth – empty nest	52.1%	54.8%
Early first birth – child at home	8.3%	4.8%
Late first birth – empty nest	6.9%	12.3%
Late first birth – child at home	9.5%	4.9%
Marital history		
Never married	9.8%	10.4%
Married – never divorced	62.1%	61.0%
Ever married – ever divorced	23.8%	24.8%
Widowed	4.3%	3.8%
Marital career (past & present)		
Never married, no partner	8.6%	9.0%
Married – never divorced ^b	64.3%	63.1%
Ever divorced, repartnered	11.2%	10.4%
Ever divorced, no partner	12.6%	14.4%
Widowed, no partner	3.3%	3.0%
Age	53.92 (2.67)	56.78 (3.16)
Wealth		
Low (<50.000 guilders)	31.2%	32.2%
Middle	19.0%	19.7%
High (>200.000 guilders)	39.0%	37.0%
Missing	10.7%	11.1%
Perceived pension shortage		
Yes	46.4%	48.4%
Don't know	26.0%	25.6%
No	27.6%	26.0%
Subjective health	4.02 (0.80)	4.05 (0.76)
Education	10.85 (2.68)	10.95 (2.77)
Years in labor force	29.51 (8.38)	32.34 (8.60)
Subjective work challenge	3.07 (0.93)	3.12 (0.94)
Number of work hours	30.26 (9.27)	30.83 (9.03)
<i>Partner variables^c</i>		
Age difference partners	3.02 (3.90)	3.01 (3.73)
Subjective health partner	4.09 (0.80)	4.10 (0.82)
Income partner	1732.85 (643.11)	1724.65 (649.60)
Work status partner		
Not working	29.4%	25.4%
Intends to retire early (< age 65)	56.3%	57.5%
Intends to retire late (≥ age 65)	14.3%	17.1%

^aNo standard deviations are displayed for binary variables. ^bThis group also includes 5 never married and 4 widowed women who are living with a partner. ^cBased on the partner questionnaire, *N* = 286.

Table 2 Models of Retirement Intentions^a, Coefficients and Standard Errors

Variable	Model 1a		Model 1b		Model 1c		Model 1d	
	Full sample		Full sample		Full sample		Living with partner	
	<i>B</i>	<i>SE b</i>	<i>B</i>	<i>SE b</i>	<i>B</i>	<i>SE b</i>	<i>B</i>	<i>SE b</i>
Intercept	-0.20†	0.11	-0.16	0.11	-0.28*	0.13	-0.24	0.19
Age at baseline (standardized)	-0.26***	0.04	-0.27***	0.05	-0.29***	0.05	-0.23***	0.06
Childbearing history								
No children	0.03	0.13						
Early first birth (<=27)	Ref.							
Late first birth (>27)	-0.21†	0.13						
Child rearing career (past & present)								
No children			-0.00	0.13	-0.14	0.13	-0.06	0.18
Early first birth – empty nest			Ref.		Ref.		Ref.	
Early first birth – child at home			-0.14	0.16	-0.15	0.16	-0.23	0.20
Late first birth – empty nest			-0.01	0.18	0.01	0.18	-0.05	0.24
Late first birth – child at home			-0.38*	0.16	-0.36*	0.15	-0.49**	0.19
Marital history								
Never married	-0.32†	0.17						
Married – never divorced	Ref.							
Ever married – ever divorced	-0.43***	0.11						
Widowed	-0.46*	0.22						
Marital career (past & present)								
Never married, no partner			-0.41*	0.18	-0.38*	0.18		
Married – never divorced ^b			Ref.		Ref.		Ref.	
Ever divorced, repartnered			-0.16	0.14	-0.08	0.14	0.04	0.18
Ever divorced, no partner			-0.71***	0.14	-0.51***	0.14		
Widowed, no partner ^c			-0.56*	0.25	-0.52*	0.24		
Wealth								
Low (<50.000 guilders)					Ref.		Ref.	
Middle					0.19	0.12	0.11	0.17
High (>200.000 guilders)					0.27*	0.11	0.25†	0.14
Missing					0.04	0.15	-0.03	0.20
Perceived pension shortage								
Yes					Ref.		Ref.	
Don't know					0.19†	0.11	0.34*	0.14
No					0.23*	0.10	0.25†	0.13
Subjective health (standardized)					-0.11*	0.04	-0.07	0.06
Education (standardized)					-0.02	0.05	0.02	0.07
Years in labor force (standardized)					0.11*	0.05	0.11†	0.06
Subjective work challenge (standardized)					-0.21***	0.05	-0.23***	0.06
Number of work hours (standardized)					-0.12*	0.05	-0.11	0.06
Age difference partners (standardized)							0.12†	0.06
Subjective health partner (standardized)							0.02	0.06
Income partner (standardized)							0.12†	0.06
Work status partner								
Not working							-0.14	0.16
Intends to retire early (< age 65)							Ref.	
Intends to retire late (≥ age 65)							-0.43**	0.17
<i>R</i> ²	0.21		0.24		0.34		0.28	
<i>F</i>	11.98		10.59		9.19		4.31	
<i>N</i>	420		420		420		286	

Note: The dependent variable and continuous independent variables are standardized. In all models organization is controlled for by including organizational dummy variables. ^aRetirement intention – High scores indicate that respondents are more inclined to retire earlier. ^bThis group also includes 5 never married and 4 widowed women who are living with a partner. ^cThe group of widowed women is very small ($n = 14$) so the coefficients should be interpreted with caution. † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 3 Models of Retirement Behavior^a, Coefficients and Standard Errors

Variable	Model 2a		Model 2b		Model 2c		Model 2d	
	Full sample		Full sample		Full sample		Living with partner	
	<i>B</i>	<i>SE b</i>	<i>B</i>	<i>SE b</i>	<i>B</i>	<i>SE b</i>	<i>B</i>	<i>SE b</i>
Intercept	-4.94***	0.39	-4.95***	0.39	-3.88***	0.78	-4.93***	1.19
Age category ^b								
50-55	Ref.		Ref.		Ref.			
56-57	2.30***	0.35	2.31***	0.35	2.31***	0.35	2.56***	0.47
58-59	2.62***	0.36	2.64***	0.36	2.67***	0.37	3.13***	0.52
60-61	3.37***	0.40	3.42***	0.40	3.49***	0.42	4.09***	0.62
62-63	4.34***	0.51	4.44***	0.50	4.59***	0.53	5.07***	0.79
64-65	4.77***	0.69	4.90***	0.68	5.11***	0.70	5.60***	1.02
Childbearing history								
No children	0.05	0.20						
Early first birth (<=27)	Ref.							
Late first birth (>27)	-0.32	0.20						
Child rearing career (past & present) ^b								
No children			0.02	0.20	-0.19	0.22	-0.02	0.31
Early first birth – empty nest			Ref.		Ref.		Ref.	
Early first birth – child at home			-0.00	0.41	0.01	0.42	-0.17	0.52
Late first birth – empty nest			-0.33	0.22	-0.27	0.23	-0.39	0.31
Late first birth – child at home			-0.53	0.47	-0.60	0.49	-0.68	0.57
Marital history								
Never married	-0.20	0.29						
Married – never divorced	Ref.							
Ever married – ever divorced	-0.22	0.18						
Widowed	-0.54	0.38						
Marital career (past & present)								
Never married, no partner			-0.30	0.31	-0.31	0.32		
Married – never divorced ^c			Ref.		Ref.		Ref.	
Ever divorced, repartnered			0.12	0.23	0.16	0.24	0.27	0.33
Ever divorced, no partner			-0.58*	0.25	-0.39	0.26		
Widowed, no partner ^d			-0.78†	0.43	-0.70	0.44		
Wealth								
Low (<50.000 guilders)					Ref.		Ref.	
Middle					0.36†	0.21	0.43	0.31
High (>200.000 guilders)					0.33†	0.19	0.36	0.27
Missing					-0.18	0.26	-0.05	0.36
Perceived pension shortage								
Yes					Ref.		Ref.	
Don't know					0.30	0.20	0.26	0.26
No					0.43*	0.18	0.37	0.24
Subjective health					-0.23*	0.10	-0.22	0.14
Education					0.01	0.03	0.06	0.05
Years in labor force ^b					0.02†	0.01	0.02	0.01
Subjective work challenge					-0.21*	0.09	-0.16	0.12
Number of work hours					-0.01	0.01	-0.02	0.01
Age difference partners							-0.01	0.03
Subjective health partner							-0.06	0.13
Income partner							0.00	0.00
Work status partner								
Not working							0.16	0.27
Intends to retire early (< age 65)							Ref.	
Intends to retire late (≥ age 65)							-0.46	0.31
Lnsig2u	-3.44	9.29	-2.67	4.06	-2.41	3.31	-0.95	1.28
Wald χ^2	82.56		87.10		90.11		53.54	
Number of observations	2841		2841		2841		1870	
Number of groups	420		420		420		286	

Note: In all models organization is controlled for by including organizational dummy variables. ^aRetirement behavior – High scores indicate that respondents have a higher chance of retirement. ^bTime-varying covariate. ^cThis group also includes 5 never married and 4 widowed women who are living with a partner. ^dThe group of widowed women is very small ($n = 14$) so the coefficients should be interpreted with caution. † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$