

Determinants of early retirement preferences in Europe: The role of grandparenthood

International Journal of

Comparative Sociology

54(1) 29–47

© The Author(s) 2013

Reprints and permissions:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/0020715213480977

cos.sagepub.com



Oshrat Hochman

Tel Aviv University, Israel

Noah Lewin-Epstein

Tel Aviv University, Israel

Abstract

Various family characteristics are acknowledged as important determinants of retirement preferences. Yet, the relevance of the third family generation – the grandchildren – has been largely overlooked. In this article we bring the association between grandparenthood and retirement preferences to the fore. We expect to find such a relationship for two main reasons: first, rising participation rates in the labor market, especially among mothers, increases the need for childcare which, in some countries, is only partially provided by the state. Second, for many people grandparenthood marks the transition to a new phase in the life-course, implying new role-identities. We thus expect grandparenthood to decrease anxieties associated with retirement and with the potential loss of one's role-identity as a working person. We test the association between grandparenthood and retirement preferences using data from the Survey of Health, Aging, and Retirement in Europe (SHARE). The findings confirm that grandparenthood increases an individual's chances of looking forward to retiring early, thus supporting the claim that individuals' lives are linked to the lives of their family members. Contrary to expectations, the association of grandparenthood with retirement preferences is particularly strong in countries that provide extensive childcare support.

Keywords

Europe, grandparenthood, linked-lives, retirement

Introduction

In the last few decades, longevity and life expectancy have increased dramatically. This demographic change has led to important alterations in the population distributions of many industrialized societies, increasing the share of elderly retired people whose financial well-being depends, to a varied extent, on state support systems. In combination with declining birthrates, the rising share of retired individuals increases the danger that, in the not too distant future, countries will not be able to adequately provide for the elderly population.¹ As a result many countries have raised the

Corresponding author:

Oshrat Hochman, Department of Sociology and Anthropology, Tel Aviv University, Ruppin Academic Centre, Eemek Hefer 4025000, Israel.

Email: oshrath@ruppin.ac.il

formal retirement age. Yet, as Van Bavel and De Winter (2011) point out ‘. . . in most countries many people retire before reaching the standard retirement age’ (p. 3).²

In light of these developments, there is a vital need to improve our understanding of retirement and, more importantly, of individuals’ preference regarding the timing of retirement. This article proposes to contribute to that understanding by extending the empirical research on the role of family characteristics in forming retirement preferences. It argues that grandparenthood, which is generally omitted from the discussion on labor market participation and retirement, should be given serious consideration. We argue that the relevance of grandparenthood to retirement preferences derives from the theory of linked-lives, representing an extension of the wider sociological life-course approach. Together with economic theory of utility maximization, as well as macro-level theories, this body of knowledge provides a useful basis for understanding the mechanisms that shape retirement preferences and decisions (Bengston et al., 2012; Kohli and Rein, 1991).

Our research has two main contributions: first, it integrates the issue of grandparenthood into the study of retirement preferences. Second, it investigates the relationship between grandparenthood and retirement preferences in a cross-national context. More specifically, employing data from the Survey of Health, Aging and Retirement in Europe (SHARE), this article tests the association between grandparenthood and retirement preferences across 13 countries. The next part provides the theoretical framework for the study, with a special emphasis on grandparenthood and its relevance. The subsequent section discusses the data and methods, followed by a presentation of the findings. In the last section the theoretical implications of the findings are drawn.

Theoretical considerations and empirical applications

Determinants of retirement and retirement preferences

Studies of retirement preferences demonstrate that they are affected by multiple factors (Beehr, 1986; Dahl et al., 2000; Kubicek et al., 2010). These can be grouped into four broad categories: institutional factors; financial factors; personal employment experiences and work attitudes; and family characteristics (see e.g. Damman et al., 2011; Feldman and Beehr, 2011).³

The most obvious of the institutional factors determining retirement preferences is the existence (or absence) of a mandatory retirement age that forces all individuals to retire at a certain age. In contemporary Europe, however, mandatory retirement is becoming less prevalent. In fact, in most European countries (with the exception of Italy and Switzerland) it is allowed only in exceptional cases, or in the public sector (European Commission, 2011). Generous pension policies practiced by the state represent another important institutional determinant of retirement. The more generous they are, the more attractive retirement becomes (Engelhardt, 2011).⁴

The main premise on which the association between retirement preferences and financial factors is based can be found in the work of Lazear (1979). Focusing on the financial aspects of retirement, he suggested that for various reasons employers prefer to pay workers less than their marginal product when young and more than their marginal product when old. It is the employers’ interest, then, to retire the worker (or reduce wages) when the lifetime pay equals the worker’s lifetime marginal product. While Lazear (1986) argues that this is the preferable point in time for the employer to dismiss the employee, it is not necessarily so for the employee to leave work. For the employee, other financial factors may be at play. Clearly, having a pension and being able to realize it at a self-selected age (e.g. also in early retirement) should increase the attractiveness of earlier retirement (Kim and Feldman, 1998; McGarry, 2004). Stable work careers are also associated with higher motivation to retire because they often imply improved pension conditions (Banks and Smith, 2006; Noone et al., 2010; Szinovacz and Deviney, 2000).

Pension is but one of the financial factors considered in the context of retirement. Another example is one's earnings from work. Because earnings are not fully replaced by pension income, they make an important contribution to the decision to retire. Dahl and his colleagues, for instance, find that high earnings increase individuals' probabilities of remaining in the labor force (Dahl et al., 2000; see also McGarry, 2004). Household wealth, representing accumulated assets, is expected to have an opposite effect on retirement preferences to that of earnings. Individuals who have wealth to draw on in retirement are expected to retire earlier. Yet, the findings regarding the effect of wealth are inconsistent, some reporting that wealth encourages early retirement (e.g. Bloemen, 2011; Honig, 1998; Szinovacz and Deviney, 2000), while others find that it delays retirement (e.g. Larsen and Pedersen, 2008).

The decision to retire is additionally expected to depend on personal employment experiences and work attitudes. Theoretically, this association is related to the effects and consequences of psychological stress. Elovainio and colleagues (2005) demonstrated, for example, that individuals reporting to have demanding jobs, or lack of control on the job, were more likely to think about or plan their retirement (see also Moen et al., 2006; Sutinen et al., 2005). Beehr (1986) points out that lack of self-fulfilment on the job is similarly associated with preferences to retire. Another individual-level determinant of retirement decisions and preferences is individuals' health and, more specifically, bad health, which forces individuals to go into retirement (Banks and Smith, 2006; also Burr et al., 1996; Dentinger and Clarkberg, 2002; Heyma, 2004; McGarry, 2004; Riphahn, 1997).⁵

The association between family characteristics and retirement derives from a wider theoretical discourse on the work–family balance (Dahl et al., 2000; Dentinger and Clarkberg, 2002). In the context of retirement, a discussion has also emerged that ties one's family status to retirement by reference to couples' wishes to go through the transition into retirement together (e.g. Banks and Smith, 2006). Consequentially, among family characteristics associated with retirement and early retirement, the most extensively studied is one's marital status.

Studies have repeatedly shown that marital status shapes individuals' retirement preferences (e.g. Dahl et al., 2000; Larsen and Pedersen, 2008; Szinovacz and Deviney, 2000). Marital status also has indirect effects on the preferences of men and women to retire. One such indirect path involves the labor market status of the spouse. Studies indicate that this factor implies different decisions among men and women (Blau, 1998). Typically, women are found to retire earlier than their partners so as not to undermine the gender-based division in the household (Desmette and Gaillard, 2008; Heyma, 2004; Honig, 1996; Mutchler et al., 1997). The health of one's spouse is also marked as a determinant of retirement preferences and the timing of retirement (Banks and Smith, 2006; Dentinger and Clarkberg, 2002; Honig, 1996). Children represent another family-related factor that determines retirement timing and preferences. Studies indicate that having young children tends to delay retirement among men. To the contrary, caring for children was found to motivate retirement among women (Dentinger and Clarkberg, 2002; Forma, 2009; Henkens and Tazelaar, 1997).

Grandparenthood and retirement

The role of the third generation in determining retirement preferences remains, to date, understudied (but see Wang and Marcotte, 2007). This is in stark contrast to the growing attention devoted in contemporary research to multigenerational bonds and relations between grandparents and grandchildren (see e.g. Bengtson, 2001; Brandon, 2000; Hank and Buber, 2009; Mueller and Elder, 2003). The rise in life expectancy and changes in fertility patterns in Western societies in recent decades affected grandparenthood in two important ways: unlike earlier times, today there is little overlap between the parent and grandparent stage in the lifecycle. People are more likely

to enter the grandparent stage after their 'nest has emptied' and are thus less burdened by routine familial chores. Second, with an ever-growing number of people living longer, many grandparents now live to see their grandchildren grow into adulthood. Hence, the relations between the three generations span a rather long period and evolve as the grandchildren themselves grow up (Sprey and Matthews, 1982).

Systematic figures on the age of transition into grandparenthood are not readily available. Yet, in a study conducted in Germany researchers found that for the cohort born around 1960 the median age at which their parents became grandparents was 57 and 60 for women and men, respectively; two to three years older than was the case for cohorts born 10–20 years earlier (Engstler and Menning, 2005). It is reasonable, then, to conclude more generally that persons who got married in the 1960s and 1970s are likely to become grandparents in their mid or late 50s; within the age range in which many people consider early retirement. This coincidence provides an opportunity for individuals in a certain age range to tie retirement and grandparenthood together.

The working hypothesis of this article, namely that retirement preferences are associated with grandparenthood, is premised on the theory of linked-lives, which assumes an interdependence between events occurring over the life-courses of individuals (Elder, 1994; Greenfield and Marks, 2006). In accordance with this proposition, we argue that the familial status of one's adult children is consequential for one's own retirement preference. One possible mechanism derives from the social-instrumental perspective, underlining the importance of social structures like norms, laws, and culture. The other mechanism emerges from the social-role perspective, which stresses changes in social identity that are associated with the passage into grandparenthood. Both mechanisms imply that grandparenthood entails certain utilities to aging individuals approaching retirement.

The instrumental perspective is based on notions of intergenerational exchange and family solidarity (e.g. Albertini et al., 2007; Attias-Donfurf et al., 2005; Bengtson and Roberts, 1991). One such form of intergenerational exchange is the informal care that grandparents provide to their grandchildren. This behavior demonstrates the grandparents' willingness to assist their children and participate in the lives of their grandchildren. In this regard, Igel and Szydlik (2011) point out that 'especially while the grandchild is very young, important basic bonds are established, and grandchild care often provides a good opportunity for grandparents to build an emotional relationship with their grandchildren' (p. 212). In countries where subsidized childcare is limited, the grandparents may be the only available option that allows both parents, and mostly mothers, to participate in the labor market (Gray, 2005; Kuhlthau and Oppenheim-Mason, 1996; Lowe-Vandell et al., 2003). Even where such childcare facilities are found, parents often prefer the care of the grandparents (Kuhlthau and Oppenheim-Mason, 1996; Van Bavel and De Winter, 2011).

The role-based mechanism taps into the concepts of social role and social identity. Borrowing from symbolic interactionism theory (Mead, 1967) and identity theory (Stryker and Burke, 2000), we assume that as individuals move between social statuses in their life-course, they adopt different roles, which imply different role-identities. From this perspective, the transition to grandparenthood may be conceived as two-dimensional: the first dimension links persons horizontally with their expanding family system, while the second links the new stage vertically or diachronically with the individual's life-course (Sprey and Matthews, 1982). Whereas the first dimension focuses on the changing family roles brought about by the birth of a grandchild, roles that evolve as the grandchild matures, the second dimension links grandparenthood to the previous and future phases (familial and other) of one's own life-course.

One's view of retirement as a distinct life-cycle stage (Treas and Bengtson, 1982) may thus be affected by the transition to grandparenthood, in turn implying changes in the way individuals self-identify (e.g. Adams et al., 2002; Desmette and Gaillard, 2008; Teuscher, 2010). Indeed, focusing on the dimension of age identity, Kaufman and Elder (2003) noted that for some people the

transition into grandparenthood is associated with an older age identity than persons of similar age who have not made the transition. It is possible, then, that such persons will not perceive retirement as a threat to their identity and accept it as the 'natural' course of their lives as aging individuals.

The social-instrumental and the social-role perspectives suggest that grandparenthood may be related to retirement not only due to the proximity in the timing of both events, but also due to the benefits that grandparenthood status may yield to the grandparents. The two perspectives offer, however, different explanations for the association between grandparenthood and retirement. The social-instrumental perspective emphasizes intergenerational reciprocity and various forms of exchange among the generations, such as financial support, support in kind, and social-emotional support (e.g. Attias-Donfut et al., 2005). Caring for grandchildren is one particular instance of such relationships (Coall and Hertwig, 2010; Hank and Buber, 2009; Thiele and Whelan, 2008). According to the social-role perspective, through its effect on the tri-generational interactions the presence of grandchildren alters the social role and self-identity of grandparents, resulting in a more favorable attitude toward early retirement that similarly fits the normative components of aging.

Based on this brief theoretical account, we hypothesize first that respondents who are grandparents will be more likely than similar persons with no grandchildren to look forward to retiring as early as possible. Investigating the two mechanisms and their potential impact on the respondents' retirement preferences, we hypothesize further that respondents for whom grandparenthood implies a familial obligation in the form of childcare will be more probable to report a preference to retire early. To the extent that the social-role mechanism provides the explanation for the relations between retirement preferences and grandparenthood, we expect all grandparents to have a higher probability to prefer an earlier retirement compared to respondents who are not grandparents, regardless of the extent of care they provide to their grandchildren.

Given that in most modern societies family-related expectations differ between men and women, the effects of grandparenthood may depend on the gender of the respondents. The gendered role differences reflect a greater tendency of grandmothers to care for their grandchildren, compared to grandfathers (e.g. Albertini et al., 2007; Gray, 2005; Hank and Buber, 2009). They may also be related to women's normatively administered attachment to the family sphere (e.g. Lewin-Epstein et al., 2006).

Cross-national similarities and differences

To shed light on the interactions between the institutional macro level and the micro-level factors discussed above, we conduct a cross-national comparison among 13 European countries. While trends of increasing longevity and increasing proportions of retired persons are present across all the countries to varied extent, the countries do differ in terms of the policies they practice.

Our focus on retirement from a family-oriented perspective requires some elaboration with regard to retirement and old age policies, but also with regard to family policies associated with women's labor market participation and childcare availability. As noted earlier, retirement policies are relatively similar in the different countries we analyze here. In most of the countries we study (for example, Austria, Belgium, Denmark, Germany, Greece and Spain), mandatory retirement is found only in the public sector or in specific occupations. Mandatory retirement age still applies only in Italy and in Switzerland (European Commission, 2011). Early retirement is still prevalent in most of the countries we analyze, with the exception of Denmark and Sweden (where it is possible in public pension schemes). Retirement ages do vary to some extent between the countries, with a low of 60 among French men and women (as well as women in Austria, Greece, Italy, and Poland) and a high of 67 among Danish men (OECD, 2011).

To the extent that grandparents are stepping in to support their daughters and daughters-in-law who work, we also address the conditions under which women are integrated into the labor market. These conditions are primarily represented by the availability and extent of childcare support. The ability of the state to provide sufficient care for children is composed of the quantity of childcare institutions, their costs, and their availability (Brewster and Rindfuss, 2000). Saraceno and Keck (2010) also add the provision of child allowance and its duration, and the duration of maternal and paternal leave.

In view of our interest in the association between grandparenting and retirement and the emphasis on the extent to which individuals' decisions are embedded within familial relations, we find the typology proposed by Saraceno and Keck (2010) most suitable for organizing the various countries in our study in meaningful categories.⁶ Using valuable information on the childcare support provided by the different countries, Saraceno and Keck (2010) create clusters of four policy 'types': the first, the de-familialization type of childcare policy, is found in the Nordic European countries as well as France and Belgium. In these countries, the state provides the most complete coverage in terms of public childcare services, thus relieving individuals of familial obligations to the largest extent. The second is the familialization policy type, which is practiced in Cyprus, Greece, Italy, Spain, Poland, Portugal, and the Netherlands. Most of these countries are characterized by low public support, particularly for children under the age of three, forcing individuals, primarily women, to maintain their familial roles. Germany and Austria, as well as Latvia, Luxemburg, Slovakia, Slovenia, and the UK, are placed in a mixed model where an intermediate level of childcare is provided for children below, but also above, the age of three. Finally, the Czech Republic, together with Estonia and other central and East European countries, practice a second mixed type of childcare policy in which maternity leave is relatively long but childcare coverage is low to moderate.

Due to the weaker role of the state in providing care to children in countries characterized as familialization regimes, we might expect stronger family ties and greater involvement of grandparents in childcare in countries with this (familialization) policy regime. In accordance with this notion, we hypothesize that the social-instrumental mechanism will be more dominant in countries of the familialization policy type. Furthermore, we expect that the difference in retirement preferences between persons with and without grandchildren, more generally, will be more pronounced in these countries, due to the high importance of family values in countries such as Spain, Greece, and Italy, which represent the familialization type.

Data and method

The second wave of the Survey of Health Aging and Retirement in Europe (SHARE) is used for the analysis.⁷ Data were collected in 2006–2007 in 13 countries (Austria, Germany, Sweden, the Netherlands, Spain, Italy, France, Denmark, Greece, Switzerland, Belgium, Czech Republic, and Poland). We limit the analysis to respondents aged 50 to 64 who were still working, for whom the question on retirement preferences is most relevant. The final sample analyzed in the multivariate models includes 6989 respondents of whom 3799 are men and 3190 women.⁸

A preference to retire early is measured with the question: 'Thinking about your present [main/secondary] job, would you like to retire as early as you can from this job?' This item was used in the past primarily to study the relationship between health, job satisfaction and retirement preferences (e.g. Barnay and Debrand, 2005; Siegrist et al., 2006). In Feldman and Beehr's terms, it gauges perceptions of the possibility and proper timing of retirement (Feldman and Beehr, 2011).

We are aware, of course, that the question we use to gauge retirement preferences (whether respondents are looking forward to retire as early as possible) may be strongly affected by the

respondents' actual ability to retire early at a given point in time. This ability depends, in turn, on a mix of different factors related to the respondents' individual pension plans and retirement policies in their country, among other things. Yet, studies demonstrate that intentions to retire serve as a strong predictor of actual retirement (Henkens and Tazelaar, 1994). Additionally, we believe that studying such intentions is valuable in its own right since it provides some indication of labor force commitment among individuals of advanced age.

Grandparenthood was determined from respondents' self-reports of how many grandchildren they have. In the analysis we first compare the retirement preferences of respondents with any grandchildren to those of respondents with no grandchildren. We next make use of respondents' reports regarding the extent to which they look after their grandchildren. To model the role-based and instrumental mechanisms, we compare grandparents that report looking after their grandchildren almost daily or almost every week, and respondents who have grandchildren but who look after them less frequently or not at all.⁹

To examine the relationship between grandparenthood and retirement preferences, we estimated multivariate logistic regression models (correlation matrix is provided in Appendix 1). This estimation method was preferred, given the dichotomous structure of the dependent variable; namely, whether or not the respondent would like to retire as early as possible. Taking account of the complex sampling structure and the possibility of estimating individual preferences of persons who might be members of the same household, we use the Huber-White Sandwich procedure to derive robust standard errors. In addition to information on the presence of grandchildren and the extent of care that grandparents provide to them, the models control for the other factors associated with retirement preferences discussed above. Addressing the family factors, we control for the respondents' marital status and number of children. We additionally control for the labor market status of the respondents' partners. We also control for the respondents' health, represented by self-reported health status measured on a scale ranging from bad health (1) to excellent health (5). Respondents who reported very good or excellent health are compared to other respondents.

To account for the economic factors, we refer first to the respondents' household wealth as indicated by its net worth.¹⁰ In the model, the logged value of net worth is used.¹¹ Respondents' earnings from work were also introduced into the model in logged form.¹² Both net worth and earnings from work were adjusted to the purchasing power of money in each country.^{13,14} The models also account for whether or not the respondents have a pension plan.

Education is measured using the 1997 ISCED indicator generated by the SHARE team.¹⁵ ISCED (the International Standard Classification of Education) is based on seven levels of education ranging from pre-primary education (pre-school) to first stage tertiary education which must not include advanced research qualifications, and second stage tertiary education which is tertiary education that involves research qualifications. Respondents with academic education (first and second tertiary stage) are compared to those with primary education or less, or secondary to non-academic postsecondary education.

The work-related characteristics we control for in our analysis are the respondents' satisfaction from work, the number of years they held their current job (number of years elapsed since the year respondents started working in their current job), and the number of hours they work weekly. We also control for the respondents' leisure activities in order to account for their social involvement. Respondents who do not engage in any leisure activities are compared to those who participated in one activity and those who participated in two activities or more. Finally, the age of respondents was also included as a control variable.¹⁶

To examine the potential effect of policy differences, we include in the analysis dummy variables representing the familialization as well as the mixed policy types (both combined into one category), using the de-familialization type as our category of reference.

Findings

The descriptive statistics (weighted with the calibrated cross-sectional respondent weights) are presented in Table 1. The table differentiates among three childcare policy types prevalent in Europe (combining the two mixed types together), and separates the women from the men in each policy type given the expected differences between them.¹⁷ It is interesting to see that in countries adhering to the familialization policy, more respondents report that they would like to retire as early as possible, whether women or men (53.79% and 55.36%, respectively). By way of contrast, women from countries of the de-familialization policy type are least inclined to retire as early as possible (46.46%). Most men in these same countries do report they would like to retire as early as they can (53.57%). Respondents from countries of the mixed policy type show a low tendency to report preferences to retire early (49.27% and 47.72% for women and men, respectively).

Most of the respondents have no grandchildren at all. Yet, this finding may be the result of our focus on respondents who are currently working, leaving those already in retirement out of the sample. Appendix 2 presents the sample distribution of employed and not employed respondents, by the presence of grandchildren and frequency of care. The table indicates that higher proportions of employed respondents report having no grandchildren than is the case for those who are not employed. This is true for women and men alike.¹⁸

Looking at Table 1 again, more women report having grandchildren than men; these gendered differences are largest in the de-familialization policy regime. As expected, the likelihood of caring for grandchildren frequently (given that respondents have grandchildren) is highest in countries of the familialization policy type.

With respect to other family-related characteristics, Table 1 demonstrates that in all policy types, most of the respondents live with a partner. The number of women reporting they have a working partner is somewhat higher than the number of men who report this to be the case.¹⁹ The average number of children that respondents have is a little above 2 across all policy types.

The highest rate of academics is found among the men in the mixed policy type (42.62%). However, in all policy types secondary and nonacademic postsecondary education is more prevalent. Men earn higher incomes than women across all policy types. Household wealth varies considerably across the different policy types, with particularly low levels found in the mixed type (€243,261.8 and €259,800.8 for women and men, respectively). The great majority of respondents reported having a pension plan.

Women and men from the de-familialization type countries appear to be in better health than others; approximately 43 percent of them report being in excellent or very good health. These respondents also appear to be a little more satisfied with their jobs than other respondents. Men report working longer hours than women in all regimes, and men in the mixed type countries work longer hours on average (nearly 44 hours) than men in other types. As might be expected, men also accrued more years in their current job, with the greatest stability found among men in the familialization type (22.77 years).

The average age of respondents is approximately 55. These respondents are generally not very active outside their family and working lives, as indicated by their low levels of participation in leisure activities.

The models presented in Table 2 were estimated for the total population and for women and men separately. Models 1, 3, and 5 present our basic models for each of these three groups. Grandparenthood has a clear and significant effect on the aspirations of the respondents to retire as early as they can (OR = 1.22, 1.18, and 1.25 for the total population, for women and for men, respectively). Thus, persons with grandchildren are more likely to report they would like to retire early than respondents with no grandchildren. We should emphasize that these significant estimates are net of a large list of attributes controlled for in the models.

Table 1. Descriptive statistics by policy type and gender.

	De-familialization model		Familialization model		Mixed model	
	Women	Men	Women	Men	Women	Men
<i>Retirement preferences: %</i>						
No	53.54	46.43	46.21	44.64	50.73	52.28
Yes	46.46	53.57	53.79	55.36	49.27	47.72
<i>Grandchildren: %</i>						
No grandchildren	45.02	62.03	62.97	70.31	55.93	61.89
Look after at least every week	15.78	9.28	18.33	12.35	15.19	11.73
Look after every month or less	39.20	28.69	18.71	17.34	28.88	26.38
<i>partner labor status: %</i>						
No partner	24.99	11.86	22.04	7.20	26.74	8.79
Partner employed	52.62	41.44	40.29	41.75	43.31	45.40
Partner not employed	5.06	7.56	8.00	13.91	7.16	8.08
Partner's lms unknown	17.33	39.14	29.70	37.14	22.79	37.73
Gender: %	45.31	54.69	35.04	64.96	44.05	55.95
<i>Education: %</i>						
Primary	26.84	23.08	35.53	41.60	10.48	9.05
Secondary/post sec.	40.68	44.56	44.93	37.78	60.96	48.33
Academic	32.48	32.36	19.55	20.62	28.56	42.62
<i>Has pension: %</i>						
No	15.11	9.17	25.46	25.06	10.93	12.62
Yes	84.89	90.83	74.54	74.94	89.07	87.38
<i>Excellent health: %</i>						
No	57.99	57.18	65.65	66.58	63.81	66.59
Yes	42.02	42.82	34.35	33.42	36.19	33.41
<i>Satisfied with job agreement: %</i>						
Strongly agree	43.30	46.83	36.55	34.51	38.49	37.66
Other	56.70	53.17	63.45	65.49	61.51	62.34
<i>Leisure activities: %</i>						
None	50.83	46.18	65.10	70.37	56.49	50.93
1 activity	35.84	31.91	23.05	22.04	31.87	30.95
2 or more	13.33	21.92	11.84	7.59	11.64	18.13
Number of children (mean, SD)	2.31 (1.01)	2.42 (1.07)	2.20 (0.94)	2.23 (0.91)	2.02 (0.82)	2.26 (1.13)
Age (mean, SD)	55.31 (3.43)	54.65 (3.29)	55.22 (3.34)	55.45 (3.47)	55.7 (3.33)	56.03 (3.39)
Hours worked weekly (mean, SD)	35.46 (11.2)	42.73 (10.41)	33.34 (13.93)	41.18 (13.70)	33.85 (12.18)	43.96 (9.8)
Years in main job (mean, SD)	19.57 (11.85)	21.13 (12.56)	17.87 (12.12)	22.77 (12.02)	17.34 (11.6)	19.26 (12.8)
Income (mean, SD)	17,518.09 (13,143.47)	26,761.34 (23,784.96)	14,391.82 (22,270.85)	20,408.64 (21,060.45)	15,970.47 (14,374.5)	26,698.17 (23,179.61)
Household net worth (mean, SD)	423,104.2 (761,964.7)	492,539.4 (974,836.3)	382,784.3 (804,144.7)	350,121.6 (639,067.7)	243,261.8 (315,783.4)	259,800.8 (290,277.6)
N	1425	1453	1112	1623	653	722

Source: SHARE wave 2.

Table 2. Odds ratio predicting respondents' retirement aspirations (SE) with or without grandchildren, with policy interactions.

	All sample		Women		Men	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Has grandchildren	1.22*** (0.07)	1.31** (0.12)	1.18 (0.10)	1.17 (0.15)	1.25** (0.10)	1.43** (0.17)
Number of children	0.93* (0.03)	0.93* (0.03)	0.96 (0.04)	0.96 (0.04)	0.92* (0.04)	0.92* (0.04)
Partner not employed	1.14 (0.11)	1.14 (0.11)	1.70** (0.29)	1.70** (0.29)	0.95 (0.11)	0.95 (0.11)
No partner	0.82* (0.07)	0.82* (0.07)	0.91 (0.09)	0.91 (0.09)	0.68** (0.10)	0.68** (0.10)
Partner status unknown	0.87* (0.06)	0.87* (0.06)	0.84 (0.08)	0.84 (0.08)	0.88 (0.07)	0.88 (0.07)
Female	1.01 (0.06)	1.01 (0.06)	—	—	—	—
Age	0.94*** (0.01)	0.94*** (0.01)	0.95*** (0.01)	0.95*** (0.01)	0.93*** (0.01)	0.93*** (0.01)
Income (log)	1.02 (0.02)	1.01 (0.02)	0.99 (0.03)	0.99 (0.03)	1.02 (0.02)	1.02 (0.02)
Household worth (log)	0.80 (0.15)	0.80 (0.15)	0.91 (0.30)	0.91 (0.30)	0.82 (0.15)	0.82 (0.15)
Academic education	0.72*** (0.04)	0.72*** (0.04)	0.91 (0.08)	0.91 (0.08)	0.58*** (0.05)	0.58*** (0.05)
Years in main job	1.02*** (0.002)	1.02*** (0.002)	1.02*** (0.003)	1.02*** (0.003)	1.02*** (0.003)	1.02*** (0.003)
Hours of work weekly	1.00 (0.002)	1.00 (0.002)	1.01* (0.003)	1.01* (0.003)	1.00 (0.003)	1.00 (0.003)
Has pension	0.83* (0.06)	0.83* (0.06)	0.84 (0.09)	0.84 (0.09)	0.82 (0.08)	0.82 (0.08)
Job satisfaction	0.39*** (0.02)	0.39*** (0.02)	0.42*** (0.03)	0.42*** (0.03)	0.37*** (0.03)	0.37*** (0.03)
Excellent health	0.61*** (0.03)	0.61*** (0.03)	0.60*** (0.05)	0.60*** (0.05)	0.62*** (0.04)	0.62*** (0.04)
No leisure	1.31*** (0.07)	1.31*** (0.07)	1.54*** (0.12)	1.54*** (0.12)	1.13 (0.08)	1.13 (0.08)
Familialization policy	1.23** (0.08)	1.29** (0.10)	1.16 (0.11)	1.18 (0.14)	1.33*** (0.11)	1.44*** (0.15)
Mixed policy	0.97 (0.08)	1.02 (0.11)	0.98 (0.10)	0.92 (0.14)	0.99 (0.10)	1.15 (0.17)
Familialization* has grandchildren	—	0.88 (0.11)	—	0.95 (0.17)	—	0.84 (0.14)
Mixed* has grandchildren	—	0.91 (0.13)	—	1.11 (0.23)	—	0.74 (0.15)
pseudo R ² (McFadden's; McKelvey and Zavoina's)	0.09; 0.15	0.09; 0.15	0.09; 0.15	0.09; 0.15	0.10; 0.17	0.10; 0.17
pseudo Log likelihood	-4352.52	-4351.90	-1987.01	-1986.74	-2342.94	-2341.70
N	6989	6989	3190	3190	3799	3799

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Source: SHARE wave 2.

It is important to note that in order to directly test the social-instrumental perspective we also estimated models that identified grandparents who frequently care for their grandchildren and those who care for them less frequently (not presented). The findings from this comparison revealed *no significant differences* and failed to support the hypothesis that retirement preferences derive from time constraints directly associated with care for grandchildren. We therefore continue to test our hypotheses using the more parsimonious distinction between grandparents and others.

Additional findings that emerge from these models are very much in line with previous research. Having many children decreases men's odds of wanting to retire as early as they can (OR = 0.92). This finding is typically understood to indicate men's commitment to supporting their children financially. The same models also indicate that men with no partner exhibit lower odds of wanting to retire as early as possible than other men (OR = 0.68). One explanation for this finding could be the social meaning that single men derive from their work.

The prospect of retiring as early as possible is more appealing to younger men in our sample, as is evident from the significant odds ratio of age (OR = 0.93). In some sense, older persons who are still employed have opted not to retire as early as they could and may thus be a more selected group of respondents. Education also has a statistically significant effect on respondents' retirement preferences, but only for men. Men with academic education are less likely than less educated men to report they would like to retire as early as they can (OR = 0.58). Good health decreases respondents' odds of wanting to retire, among women and men alike (OR = 0.60 and 0.62 for women and men, respectively). For women we also find that not participating in any leisure activity increases their odds of wanting to retire (OR = 1.54), maybe also so as to find more time for such activities.

Economic factors do not appear to play an important role in forming respondents' preferences to retire as early as possible. Although persons with a pension plan are less likely to report they would like to retire compared with other persons (OR = 0.83), the effect is significant only in models which include both men and women. One reason for the lack of stability of this indicator might be its low variance, as revealed in Table 1. With regard to work-related factors the results of the analysis are in line with our predictions. Higher stability on the job is associated with higher odds of wanting to retire (OR = 1.02). The same is also true for longer working hours among the women (OR = 1.01). While women aged 50–64 who are still working may be a rather select group, it is still the case that long working days appear to take their toll and foster the consideration of retiring early. Respondents who describe themselves as strongly satisfied with their jobs are considerably less likely than others to report they would like to retire early (OR = 0.42 and 0.37 for women and men, respectively).

The policy context in which retirement preferences are formed is captured by two contrasts in which the familialization and the mixed policy types are each compared to the de-familialization type (bottom of Table 2). Even after statistically controlling for social and demographic differences, we still find that men (model 5) are more likely to express a preference for early retirement (OR = 1.33) if they live in a country classified under the familialization policy type. Among the women from this regime, the effect is in the same direction, but it is not statistically significant.

What the findings so far reveal is that there are differences in the preferences of respondents who are grandparents and those who are not to retire as early as possible. It is also evident that preference to retire early varies across countries, with a higher likelihood of such preferences in countries with familialization policies. While these findings are telling, they do not provide a direct test of our hypothesis that grandparenthood will have different implications for retirement preferences in the different policy types. In order to estimate the differential effect of grandparenthood in different contexts, we added interaction terms between policy type and grandparenthood. The estimates from these models are presented in Table 2 in models 2, 4, and 6.

Looking at the figures in these models, we find that none of the interaction terms are statistically significant and that most effects remain unchanged. It appears, then, that grandparenthood matters in all policy types. We further note that the likelihood of preferring to retire as early as possible when people are not grandparents is stronger in countries with familialization policies than in countries with de-familialization policies, as is evident from the significant odds ratio estimates contrasting this policy type with the de-familialization policy type ($OR = 1.44$). While grandparents show a stronger preference for retiring early than others in all population groups, the differences are not statistically significant when estimated separately for women. These results are consistent with the results presented in previous models and suggest that women in the age group under study who are still working may be self-selected and more committed to working.

Summary and conclusions

The main interest of the study reported here was in drawing the theoretical links between grandparenthood and retirement from work, and empirically testing hypotheses derived from the theoretical framework. The conceptual construct of linked-lives was invoked as a means of associating transitions in the family life-cycle with transitions in the labor market. We argued that although the transition to grandparenthood is not self-initiated (although it is typically dependent on having offspring), the shift into this life-cycle phase often entails adjustments in both intergenerational relations and one's self-identity. These in turn may impact the work-life balance; that is, the choice of a satisfactory level of involvement in multiple roles in a person's life. Our central hypothesis, therefore, was that grandparents are more likely than similar persons with no grandchildren to report a preference for retiring early as a way of shifting the balance and focusing on other social roles.

The study further advances the grandparenthood hypothesis in two important ways. First, we pointed out two possible mechanisms that link the status of grandparenthood to retirement preferences. One mechanism relates to time constraints; the argument being that if grandparents are instrumental in looking after grandchildren, the extent of such care should affect retirement preferences. Another possible mechanism linking grandparenthood and retirement derives from social-role theory. As the transition into grandparenthood is culturally imbued with a sense of aging, it is likely that persons with grandchildren embrace their new role and view it as an acceptable substitute to their work identity, irrespective of the actual time they spend caring for grandchildren.

The findings that emerged from our study provided consistent support for the proposition that retirement preferences are related to grandparenthood status. Yet, in various tests we conducted we found no support for the hypothesis that the need for childcare is the underlying mechanism that links retirement preferences and grandparenthood. We found no significant differences in preference for retiring early between grandparents who frequently looked after their grandchildren and those who did not.

A second way in which the grandparent hypothesis was extended relates to gender differences and institutional context. Based on the vast literature concerning the gendered division of labor as it applies to caring activities, we hypothesized that grandparenthood would affect women's preferences to retire as early as possible more so than men's. We applied a similar logic with respect to country differences. Using a family policy-based typology of countries, we proposed that grandparenthood would be most strongly linked to preferences to retire as early as possible in countries with weak family-oriented policies (the familialization type).

Contrary to our hypothesis, the findings provide no confirmation of the expected tendency of women to be more subject to the effect of grandparenting than men due to their stronger familial commitment. The findings also fail to support the hypothesis that family policy regime modifies the relationship between grandparenthood and retirement preferences.

Taking the two central results of the analysis jointly, we conclude that the association reported here between grandparenthood and retirement relies more on the universal social-role mechanism. The results, which appear to be robust, suggest a genuine relationship that should be understood within the context of life-cycle shifts and their impact on role identities. It is clear that there is a link between the choices offspring make regarding their own family, and their parent's lives. Thus, as a child becomes a parent, its own parent takes on a new social role of grandparent, which, though not necessarily chosen by this parent, has meaningful consequences for her or his life. In this regard, our study underscores the enduring relevance of the extended family in modern – post-industrialized – societies.

Through the prism of retirement preferences we extended the notion of work–family balance to encompass multigenerational relations and pointed to the fact that work decisions are affected by a wider range of considerations than is generally alluded to in the employment and retirement literature. More specifically, these findings are relevant to the debate concerning increasing longevity and whether the age of retirement should be raised. Many and complex economic considerations are involved in such policy debates. Yet, our study suggests that attention must also be paid to extended family relations, and prolonged labor market participation may have to take on new forms that are sensitive to transitions in family roles and intergenerational commitments.

To buttress the above argument we note the weak relationship found between economic factors (e.g. pension plan, income, and household wealth) and retirement preferences as manifest in the wish to retire as early as possible. These findings are in contrast to studies that show economic factors to be important for retirement decisions (e.g. Beehr et al., 2000; Dahl et al., 2000). The discrepancy likely derives from the difference between attitudes and behavior. Expressing a preference to retire early, may be related to actual behavior, but is not the same as actually retiring. It is quite possible that when forming preferences more weight is ascribed to social circumstances, while economic factors are barriers that are ascribed more weight when retirement decisions are actually made. Nonetheless, preferences are not absent from the decision-making process and are likely, in many cases, to affect the outcome.

A key contribution of this article lies in provoking an interest in an overlooked feature of family life and ascertaining its significance. Several ideas have been proposed for creating a bridge between grandparenthood and retirement in association with the linked-lives theory, with gender roles and with identity issues. We hope that our study will help move this issue to the fore and encourage further inquiries into its meaning and social import.

Acknowledgements

This article uses data from SHARE release 2.5.0, as of 24 May 2011. The SHARE data collection has been primarily funded by the European Commission through the 5th framework programme (project QLK6-CT-2001- 00360 in the thematic programme Quality of Life), through the 6th framework programme (projects SHARE-I3, RII-CT- 2006-062193, COMPARE, CIT5-CT-2005-028857, and SHARELIFE, CIT4-CT-2006-028812) and through the 7th framework programme (SHARE-PREP, 211909 and SHARE-LEAP, 227822). Additional funding from the US National Institute on Aging (U01 AG09740-13S2, P01 AG005842, P01 AG08291, P30 AG12815, Y1-AG-4553-01 and OGHA 04-064, IAG BSR06-11, R21 AG025169) as well as from various national sources is gratefully acknowledged (see <http://www.share-project.org> for a full list of funding institutions). Authors wish to thank Alisa Lewin, Moshe Semyonov, and Haya Stier for their insightful comments and suggestions.

Funding

This work was supported by the German-Israel Foundation for Scientific Research (GIF) grant (#1021-305.4/2008).

Appendix Table 1. Correlation matrix.

	No grandc. after grandc.	Look after grandchildren	Age	Number of children	No leisure	Partner not empl	No partner	Unknown LMS of partner	female Inc.	household net worth	Academic edu.	Years in main job	Hours worked weekly	Has pension	Job Satis.	Excellent health	
No grandchildren	1.00																
Look after grandchildren often	-0.43	1.00															
Age	-0.19	0.03	1.00														
Number of children	-0.22	0.02	-0.03	1.00													
No leisure	-0.05	0.01	-0.08	-0.05	1.00												
Partner not empl	-0.03	0.05	0.05	-0.03	-0.01	1.00											
No partner	0.09	-0.12	-0.01	-0.09	-0.02	-0.13	1.00										
Unknown LMS of partner	0.12	-0.07	-0.11	0.04	-0.07	-0.16	-0.20	1.00									
female	-0.01	0.02	-0.18	-0.07	0.07	-0.06	0.20	-0.16	1.00								
Income	0.08	-0.05	0.06	0.02	-0.10	0.02	-0.02	0.02	-0.15	1.00							
household net worth	0.14	-0.03	0.09	0.01	-0.19	0.00	-0.14	0.02	-0.02	0.10	1.00						
Academic education	0.18	-0.11	0.11	-0.02	-0.24	-0.01	0.01	0.04	-0.09	0.18	0.26	1.00					
Years in main job	0.05	-0.06	0.19	-0.04	-0.13	0.02	-0.05	0.00	-0.10	0.24	0.09	0.08	1.00				
Hours worked weekly	-0.02	-0.05	-0.02	0.05	0.02	-0.05	0.01	0.04	-0.34	0.10	0.02	0.03	0.03	1.00			
Has pension	-0.01	0.01	-0.05	0.05	-0.12	-0.01	0.04	0.06	0.03	0.11	0.05	0.07	-0.01	0.04	1.00		
Job Satisfactopn	0.04	-0.01	0.09	-0.04	-0.13	-0.01	-0.02	0.04	0.00	0.11	0.17	0.15	0.03	0.01	0.02	1.00	
Excellent health	0.10	-0.06	-0.06	-0.07	-0.04	-0.03	-0.02	0.02	-0.01	0.04	0.14	0.14	0.03	0.00	-0.12	0.15	1.00

Source: SHARE wave 2.

Appendix Table 2. Percentage of respondents with grandchildren (according to age) among employed and not employed men and women aged 50 to 64^a.

	Female		Male	
	Not employed	Employed	Not employed	Employed
No grandchildren	50.66	44.16	57.91	49.17
Look after grandchildren at least every week	15.03	16.05	10.21	12.77
Look after grandchildren once a month or less	24.49	29.51	21.55	27.17
Information on care for grandchildren is missing	9.81	10.28	10.33	10.89

Source: SHARE 2nd wave; own analysis. Source: SHARE wave 2.

^aNot employed here means any status apart from employment: homemaker, retired, unemployed, or permanently sick or disabled. Missing cases are also included under not-employed.

Notes

1. In 2005 birthrates were less than two children per women in the EU 15 countries (World Bank, 2011).
2. In 2007, the average retirement age in Europe was 60–61 (Eurostat, 2007). In most countries however, the formal retirement age is 65–67.
3. We review here studies that investigate the timing of retirement and retirement decisions and preferences. We believe that the different factors discussed should have similar outcomes for one's preferences to retire and one's actual decision to leave the labor market.
4. The most direct indicator of a system's generosity is the 'replacement rate', typically defined as the ratio of pension level if retiring at a given age, to earnings just before retirement. According to Duval (2003) the expected replacement rates at age 60 in many European countries were well above 50 percent.
5. The association between bad health and retirement is confirmed using objective and subjective measures (McGarry, 2004).
6. There are additional available typologies one could use for the purpose of comparing the European countries we analyze. One example is the north–south division of strong and weak family ties (e.g. Dykstra and Fokemma, 2011; Reher, 1998), that is similar to the typology used here: Greece, Spain, and Italy represent a different model to Sweden and Denmark. Another possible choice would be the Esping-Andersen (1990) typology of welfare state regimes. It falls short, however, in drawing useful distinctions for the grandparenthood–retirement association we are interested in.
7. The SHARE is a household panel study with a primary interest in individuals aged 50 or more in different European countries (see <http://www.share-project.org/>).
8. Most of the demographic information regarding the respondents was collected in the first wave of SHARE and updated in the second wave where necessary.
9. Respondents report on the extent to which they look after several grandchildren they have separately. In order to determine the extent to which respondents look after their grandchildren in a general manner, we collected their responses regarding each grandchild and used the value representing the highest investment in care.
10. In SHARE, net wealth contains the value of the following assets: 1) real assets, i.e. the ownership and value of the primary residence, of other real estate, of the share owned of own businesses and of owned cars; and 2) gross financial assets, i.e. the ownership and value of bank accounts, government and corporate bonds, stocks, mutual funds, individual retirement accounts, contractual savings for housing and life insurance policies. The values of these variables are summed over all household members in order to generate the corresponding household-level variables (Christelis et al., 2005: 358; text slightly adapted). From this sum one's value of mortgages and other financial liabilities are deducted.
11. Due to the fact that household net worth may receive negative values, we shifted the distribution by adding the lowest value on the original scale plus 0.1 prior to the logarithmic transformation: $(\log(\text{net worth} + |\text{minimum} + 0.1|))$.

12. Income from work is measured using the respondents' reported earnings from self- or other employment. Prior to the logarithmic transformation, we added the minimum value to the distribution due to reports of zero income ($\log(\text{income} + \text{minimum})$).
13. The units of analysis in the inquiries are individuals within households. Information collected only from one household member in households (the financial respondent, for example) was copied from the member who responded to its respective partner so that both will have valid answers.
14. High rates of missing responses on the earnings and household wealth items are not uncommon in household surveys. The SHARE team addresses this problem by applying a multiple imputation strategy for filling in missing values (for further information on multiple imputation, see Rubin, 1987). In the following, statistical results are calculated using the second imputation set.
15. Respondents' education, ISCED-97 coding. The exact coding can be looked up under: http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm
16. We compared the current model with one where age was modeled in three categories and one where we included age and age². We found no indication of a nonlinear association between age and the respondents' odds of looking forward to retire early.
17. We combine the two mixed policy types due to the small number of countries included in SHARE that comply with these two types. We thus end up with three policy types – defamilialization, familialization, and mixed. Switzerland, not included in Saraceno and Keck's typology (2010), is integrated into the familialization model.
18. These differences imply that grandparents with a strong preference for retirement had already satisfied their preferences and exited employment. In this sense, empirical findings of a relationship between grandparenthood and retirement preferences will provide a conservative estimate of the relationship.
19. In most countries, women have higher chances of being selected out of the sample due to their employment status, with the exception of Sweden, France, Denmark, and Switzerland.

References

- Adams GA, Prescher J, Beehr TA, et al. (2002) Applying 'work-role' attachment theory to retirement decision-making. *International Journal of Aging and Human Development* 54(2): 125–137.
- Albertini M, Kohli M and Vogel C (2007) Intergeneration transfers of time and money in European families: Common patterns – different regimes? *Journal of European Social Policy* 17(4): 319–334.
- Attias-Danfut C, Ogg J and Wolff FC (2005) European patterns of intergenerational financial and time transfers. *European Journal of Ageing* 2(3): 161–173.
- Banks J and Smith S (2006) Retirement in the UK. *Oxford Review of Economic Policy* 22(1): 40–56.
- Barnay T and Debrand T (2006) Effects of health on the labor force participation of older persons in Europe. *Health Economics Letters* 109: 1–6.
- Beehr TA (1986) The process of retirement: A review and recommendations for future investigation. *Personnel Psychology* 39: 31–55.
- Beehr TA, Glazer S, Nielson NL, et al. (2000) Work and nonwork predictors of employees' retirement ages. *Journal of Vocational Behavior* 57(2): 206–225.
- Bengston VL (2001) The Burgess Award Lecture: Beyond the nuclear family: The increasing importance of multigenerational bonds. *Journal of Marriage and the Family* 63(1): 1–16.
- Bengston VL and Roberts REL (1991) Intergenerational solidarity in aging families: An example of formal theory construction. *Journal of Marriage and the Family* 53(4): 856–870.
- Bengston VL, Elder GH and Putney NM (2012) The life course perspective on ageing: Linked-lives, timing, and history. In: Katz J, Peace S and Spurr S (eds) *Adult Lives: A Life Course Perspective*. Bristol: The Policy Press.
- Blau DM (1998) Labor force dynamics of older married couples. *Journal of Labor Economics* 16(3): 595–629.
- Bloemen HG (2011) The effect of private wealth on the retirement rate: An empirical analysis. *Economica* 78(312): 637–655.
- Brandon PD (2000) An analysis of kin-provided child care in the context of interfamily exchanges: Linking components of family support for parents raising young children. *American Journal of Economics and Sociology* 59(2): 191–216.

- Brewster K and Rindfuss RR (2000) Fertility and women's employment in industrialized nations. *Annual Review of Sociology* 26: 271–296.
- Burr JA, Massagly MB, Mutchler JE, et al. (1996) Labor force transitions among older African American and white men. *Social Forces* 74(3): 963–982.
- Christelis D, Jappelli T and Padula M (2005) Wealth imputation. In: Börsch-Supan A, Alcser KH and Mannheim Research Institute for the Economics of Ageing (eds) *Health, Ageing, and Retirement in Europe. First Results from the Survey of Health, Ageing and Retirement in Europe*. Mannheim: MEA.
- Coall DA and Hertwig R (2010) Grandparental investment: Past, present, and future. *Behavioral and Brain Sciences* 33(1): 1–59.
- Dahl SÅ, Oivind AN and Vaage K (2000) Work or retirement? Exit routes for Norwegian elderly. *Applied Economics* 32(14): 1865–1876.
- Damman M, Henkens K and Kalmijn M (2011) The impact of midlife educational, work, health, and family experiences on men's early retirement. *The Journal of Gerontology Series B* 66(5): 617–627.
- Dentinger E and Clarkberg M (2002) Informal caregiving and retirement timing among men and women: Gender and caregiving relationships in late midlife. *Journal of Family Issues* 23(7): 857–879.
- Desmette D and Gaillard M (2008) When 'worker' becomes an 'old worker': The effect of age-related social identity on attitudes towards retirement and work. *Career Development International* 13(2): 168–185.
- Duval R (2003) The retirement effects of old-age pension and early retirement schemes in OECD countries. *Economics Department Working Papers # 370*, OECD.
- Dykstra P and Fokemma T (2011) Relationships between parents and their adult children: A West European typology of late life families. *Ageing & Society* 31(4): 545–569.
- Elder GH (1994) Time, human agency, and social change: Perspectives on the life course. *Social Psychology Quarterly* 57(1): 4–15.
- Elovainio M, Forma P, Kivimäki M, et al. (2005) Job demands and job control as correlates of early retirement thoughts in Finnish social and health care employees. *Work and Stress* 19(1): 84–92.
- Engelhardt H (2011) Late careers in Europe: Effects of individual and institutional factors. *European Sociological Review* (Advance Access published 14 April 2011).
- Engstler H and Menning S (2005) Transition to grandparenthood in Germany: Historical change in the prevalence, age and duration of grandparenthood. Paper presented at the Meetings of the European Sociological Association.
- Esping-Anderson G (1990) *The Three Worlds of Welfare Capitalism*. Princeton, NJ: Princeton University Press.
- European Commission (2011) *Age and Employment*. Luxemburg: Publication Office of the European Union.
- Eurostat (2007) *Statistics in Focus: Population and Social Conditions 97/2007*. Luxemburg: European Commission, Office for Official Publications of the European Communities.
- Feldman DC and Beehr TA (2011) A three-phase model of retirement decision making. *American Psychologist* 66(3): 193–203.
- Forma P (2009) Work, family and intentions to withdraw from the workplace. *International Journal of Social Welfare* 18(2): 183–192.
- Gray A (2005) The changing availability of grandparents as carers and its implications for childcare policy in the UK. *Journal of Social Policy* 34(4): 557–577.
- Greenfield AA and Marks NF (2006) Linked lives: Adult children's problems and their parents' psychological well-being. *Journal of Marriage and the Family* 68(2): 442–454.
- Hank C and Buber I (2009) Grandparents caring for their grandchildren: Findings from the 2004 Survey of Health Aging and Retirement in Europe. *Journal of Family Issues* 30(1): 53–73.
- Henkens K and Tazelaar F (1994) Early retirement of civil servants in the Netherlands. *Journal of Applied Social Psychology* 24(21): 1927–1943.
- Henkens K and Tazelaar F (1997) Explaining retirement decisions of civil servants in the Netherlands. Intentions, behavior and the discrepancy between the two. *Research on Aging* 19(2): 139–173.
- Heyma A (2004) A structural dynamic analysis of retirement behavior in the Netherlands. *Journal of Applied Econometrics* 19(6): 739–759.

- Honig M (1996) Retirement expectations: Differences by race, ethnicity, and gender. *The Gerontologist* 36(3): 373–383.
- Honig M (1998) Married women's retirement expectations: Do pensions and social security matter? *American Review of Economics* 88(2): 202–206.
- Igel C and Szydlik M (2011) Grandchild care and welfare state arrangements in Europe. *Journal of European Social Policy* 21(3): 210–224.
- Kaufman G and Elder GH (2003) Grandparenting and age identity. *Journal of Aging Studies* 17: 269–282.
- Kim S and Felman DC (1998) Healthy, wealthy or wise: Predicting actual acceptance of early retirement incentives at three points in time. *Personnel Psychology* 51(3): 623–642.
- Kohli M and Rein M (1991) The changing balance of work and retirement. In: Kohli M, Rein MA, Guillemard M and Gunsteren HV (eds) *Time for Retirement: Comparative Studies of Early Exit from the Labor Force*. Cambridge: Cambridge University Press.
- Kubicek B, Korunke C, Hoonakker P, et al. (2010) Work and family characteristics as predictors of early retirement in married men and women. *Research on Aging* 32(4): 467–498.
- Kuhlthau K and Oppenheim-Mason K (1996) Market child care versus care by relatives: Choices made by employed and unemployed mothers. *Journal of Family Issues* 17(4): 561–578.
- Larsen M and Pedersen PJ (2008) Pathways to early retirement in Denmark 1984–2000. *International Journal of Menpower* 29(5): 384–409.
- Lazear EP (1979) Why is there mandatory retirement? *The Journal of Political Economy* 87(6): 1261–1284.
- Lazear EP (1986) Retirement from the labor force. In: Ashenfelter O and Layard R (eds) *Handbook of Labor Economics*, vol. 1. Amsterdam: Elsevier.
- Lewin-Epstein N, Stier H and Braun M (2006) The division of household labour in Germany and Israel. *Journal of Marriage and the Family* 68(5): 1147–1164.
- Lowe-Vandell D, McCarthey K, Trech Owen M, et al. (2003) Variation in childcare by grandparents during the first three years. *Journal of Marriage and the Family* 65(2): 375–381.
- McGarry K (2004) Health and retirement: Do changes in health affect retirement expectations? *Journal of Human Resources* XXXIX(3): 624–648.
- Mead GH (1967) *Mind, Self, and Society from the Standpoint of a Social Behaviourist*. Chicago, IL: University of Chicago Press.
- Moen P, Huang Q, Plassmann V, et al. (2006) Deciding the future: Do dual earner couples plan together for retirement? *American Behavioral Scientist* 49(10): 1422–1443.
- Mueller MM and Elder GH (2003) Family contingencies across the generations: Grandparent–grandchild relationships in holistic perspective. *Journal of Marriage and Family* 65: 404–417.
- Mutchler JE, Burr JA, Pienta AA, et al. (1997) Pathways to labor force exit: Work transition and work instability. *Journal of Gerontology B* 52B(1): 4–12.
- Noone J, Alpass F and Stephens C (2010) Do men and women differ in their retirement planning? Testing a theoretical model of gendered pathways to retirement preparation. *Research on Aging* 32(6): 715–738.
- OECD (2011) *Pensions at a Glance 2011: Retirement-income Systems in OECD and G20 Countries*. Paris: OECD Publishing Available at: http://dx.doi.org/10.1787/pension_glance-2011-en
- Reher DS (1998) Family ties in Western Europe: Persistent contrasts. *Population and Development Review* 24(2): 203–234.
- Riphahn R (1997) Disability retirement and unemployment: Substitute pathways for labour force exit? An empirical test for the case of Germany. *Applied Economics* 29(5): 551–561.
- Rubin DB (1987) *Multiple Imputation for Nonresponse in Surveys*. New York: Wiley.
- Saraceno C and Keck W (2010) Can we identify intergenerational policy regimes in Europe? *European Societies* 12(5): 675–696.
- Siegrist J, Morten W, Von dem Knesebeck O, et al. (2006) Quality of work, well-being, and Intended early retirement of older employees: Baseline results from the SHARE study. *European Journal of Public Health* 17(1): 62–68.
- Sprey J and Matthews SH (1982) Contemporary grandparenthood: A systemic transition. *Annals of the Academy of Political and Social Sciences* 464: 91–103.

- Stryker S and Burke PJ (2000) The past present and future of identity theory. *Social Psychology Quarterly* 63(4): 284–297.
- Sutinen R, Kivimaki M, Elovainio M, et al. (2005) Associations between stress at work and attitudes towards retirement in hospital physicians. *Work and Stress* 19(2): 177–185.
- Szinovacz ME and Deviney S (2000) Marital characteristics and retirement decisions. *Research on Aging* 22(5): 470–498.
- Teuscher U (2010) Challenge and persistence of personal identities after the transition to retirement. *International Journal of Aging and Human Development* 70(1): 89–106.
- Thiele DM and Whelan TA (2008) The relationship between grandparent satisfaction, meaning, and generativity. *International Journal of Aging and Human Development* 66(1): 21–48.
- Treas J and Bengston VN (1982) The demography of mid- and late-life transitions. *Annals of the American Academy of Political and Social Science* 464: 11–21.
- Van Bavel J and De Winter T (2011) Becoming a grandparent and early retirement in Europe. *European Science Foundation, Social Science Research Network TransEurope*, working paper no. 28.
- Wang Y and Marcotte DE (2007) Golden years? The labor market effects of caring for grandchildren. *Journal of Marriage and the Family* 69(5): 1283–1296.
- World Bank (2011) Available at: <http://data.worldbank.org/indicator/SP.DYN.TFRT.IN>