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# European grandparents' solicitude: Why older men can be relatively good grandfathers 

Knud Knudsen

University of Stavanger, Norway


#### Abstract

The mechanisms linking grandparental gender and involvement with grandchildren are probably more complex than previously understood. Grandmothers are likely to benefit from their central role as kin-keepers in their provision of care, while grandfathers in their older years benefit more from having a partner at their side. A basic argument here is that this indirect advantage for grandfathers dampens the general age-related reduction in their capacity for caring, making them better grandfathers than they otherwise would. Our reasoning rests primarily on normative explanations emphasizing the relevance of social roles and institutionalized expectations. However, rational choice theory represents an alternative theoretical strand that incorporates partly overlapping empirical implications. We provide a simple theoretical framework for exploring mechanisms behind grandmothers' and grandfathers' solicitude, and for assessing the credibility of the two main alternative arguments, while keeping an eye on evolutionary theory. We use data from the Survey of Health, Ageing and Retirement in Europe (SHARE), Release 2.3.0, waves I and 2. The empirical results are to a certain extent in line with predictions from normative explanations as well as rational choice theory. However, in regard to predicted consequences from living/not living with a partner, the main findings are consistent with the former but at odds with the latter. Having a partner in one's older years increases individual capacity for involvement with grandchildren most notably in the case of grandfathers. On a more general sociological level, the empirical pattern thus supports the idea that (older) men benefit more from the marriage institution or similar partnership arrangement than women do.


## Keywords

grandchildren, grandfathers' and grandmothers' solicitude, grandparents' care, grandparental involvement, normative explanations, marital status, marriage institution, rational choice theory

## Introduction

Recent trends in demographic ageing and family formation have led to a greater focus on multigenerational bonds, with a growing interest in the role of grandparents (Bengtson, 2001; Bengtson and Lowenstein, 2003; Clarke and Roberts, 2004; Fischer, 2011). Thanks to advances in longevity, the potential for sustained grandparent-grandchild relations has become greater than ever before, and the period of shared lives for generations has expanded significantly. Today, many adults experience additional years as grandparents, and the social salience of grandparenting is on the increase (Hank and Buber, 2009; Friedman et al., 2008; Szinovacz, 1998).

Although the women's role as 'kin-keepers' in modern societies has been recognized in existing research (Hagestad, 1986, 2006), studies further exploring gender differences in grandparental involvement with grandchildren are few in number. The idea of grandparent is often implicitly synonymous with grandmother (Harper, 2005), and men have frequently been considered in terms of some kind of 'deficit model' (Mann et al., 2009; Morgan, 2004). Notably, researchers have paid little attention to the different personal and social settings in which female and male grandparents typically find themselves over the years, largely as a result of the fact that women tend to outlive their husbands. Although older grandfathers normally have a spouse at their side, grandmothers of the same age often live alone, in most cases as widows (Kerr, 2006). Such contextual differences in later years are likely to affect the grandparent's ability to stay involved in family life and provide care for grandchildren.

This article is among the first to systematically analyse the link between grandparents' gender, partnership status and ageing, on the one hand, and their caring for grandchildren, on the other. Our main reasoning rests on normative explanations in which such solicitude is seen as influenced by prevailing norms and social roles (Friedman et al., 2008). From this, grandmothers are expected to be more involved with grandchildren as part of their central position in the family (Hagestad, 1986). Drawing on the literature on spouses' complementary roles (Kerr, 2006), we argue that having a life partner at one's side enhances one's potential as a care provider. However, it is grandfathers who more often enjoy this advantage; hence, an indirect influence of gender, via marital status on grandparental solicitude, is hypothesized. Contending that men in their involvement with the family are more dependent on a life partner than women, I furthermore argue that the impact of having/not having a spouse is more consequential for grandfathers' caring than for grandmothers' caring.

A different strand of argument within sociology has emerged from rational choice theory - one asking why grandparents should invest in their grandchildren. An answer provided by existing research is that they do so in order to reduce fundamental uncertainties towards the end of life, i.e. not knowing one's fate in the late phase (Friedman et al., 2008). The rational choice logic too postulates that grandmothers should be more involved than grandfathers. However, from such assumptions, one would hypothesize that grandparents without a life partner are more likely to invest in their grandchildren than are grandparents with a living spouse. Extending this logic, one could also argue that being a female grandparent and living alone implied additional incentives for involvement, suggesting that grandmothers without a partner are extra eager care providers. Yet these latter postulates could be at odds with expectations from normative approaches. A systematic empirical investigation may provide relevant clues for judging alternative arguments without overlooking the complementary character of these main theoretical strands.

In exploring the primary postulates about variations in grandparental caregiving, I use data from the Survey of Health, Ageing and Retirement in Europe (SHARE), Release 2.3.0, waves 1 and 2. ${ }^{1}$ The principal advantage of applying SHARE data is a richness of information enabling the researcher to take account of a wide range of potential confounding factors. In the empirical analyses, I concentrate on grandparents who are 60 to 85 years old, thus covering the central period of the grandparental phase for most grandparents and resulting in a sample of 5449 individuals from 11 different European countries.

The current article contributes to the research literature on grandparent involvement with grandchildren in three ways. First, it presents a simple causal model for examining the mechanisms behind grandparental solicitude as linked to gender, partnership status, age and other influences. It focuses on empirical
implications from two alternative theoretical strands - normative explanations and rational choice approaches (Friedman et al., 2008) - which in part predict similar influences of gender; nevertheless, they also postulate different consequences for grandparental caregiving from being without a life partner. Using this analytical framework, I assess which of these two alternative arguments appears the more credible, while also reviewing recent studies in evolutionary psychology (Bishop et al., 2009; Danielsbacka et al., 2011).

Secondly, the article builds on and extends previous conceptualizations of grandparents' participation (Danielsbacka et al., 2011; Hank and Buber, 2009; see also Hildbrand et al., 2009) regarding our analyses as part of a larger cumulative endeavour. Combining relevant items from the SHARE data it constructs a refined measure that reflects the frequency of grandparental care. The use of standard OLS regression also gives straightforwardly interpretable results within a multivariate framework, thereby avoiding some of the pitfalls inherent in alternative statistical procedures (Allison, 1999; Mood, 2010).

Thirdly, a step-wise procedure is employed in order to trace postulated paths from central explanatory variables - notably grandparental gender and marital status. This allows for a nuanced assessment of the different levels of involvement of grandfathers and grandmothers, with or without a life partner. In the statistical analyses, the article makes full use of the richness and broad cross-national basis of the SHARE data, taking into account a wide array of potentially confounding factors, including attitudes of grandparents as well as their country background.

The aim is to demonstrate the existence of more complex mechanisms linking grandparental gender and solicitude than has hitherto been understood. Grandmothers are likely to benefit from their central role as kin-keepers in their involvement with grandchildren, in line with basic arguments from different theoretical strands. Thus, conditions otherwise being equal, a clear gender effect is expected. Meanwhile, the article argues that grandfathers enjoy an advantage from still having a partner at their side. This indirect advantage is likely to become increasingly important in later years, slowing down the inevitable age-related reduction in their care capacity. In this way, grandfathers' relative involvement, compared to that of grandmothers, could gradually improve, resulting in more equal levels of care.

## Gender, marital status and grandparental solicitude: Theoretical considerations

Supplementary and partly competing explanations for differential grandparental care have been offered in the research literature. One fundamental strand is evolutionary theory based on assumptions about kin selection mechanisms (Euler and Weitzel, 1996). The idea is that becoming a grandparent marks a change in reproductive strategy, subsequently helping one's child in his/her reproductive efforts (Bishop et al., 2009; Daly and Wilson, 1980; Danielsbacka et al., 2011; Symons, 1979). It follows, for instance, that maternal grandparents are expected to care more for the grandchild than paternal grandparents. This is so because of biases in caregiving to the maternal line, given mothers' greater need for help (Euler et al., 2001: 149) as well as greater grandparental uncertainty about genetic relatedness. Such mechanisms are predictive of grandmothers investing more in grandchildren than grandfathers do and more attention given to daughters' children. A certain ordering according to the level of involvement should follow, with maternal grandmothers typically providing more care and paternal grandfathers less (Euler and Weitzel, 1996: 41). Any strong empirical test of evolutionary theory against competing alternatives in the social sciences is a challenging task, as predictions overlap (Danielsbacka et al., 2011: 8); such a test is beyond the scope of the present article. Nevertheless, my findings in light of evolutionary arguments are elucidated in the discussion section at the end of this article.

In the sociologically oriented literature, two principal types of reasoning are particularly relevant: rational choice theory and what is often summarized as normative explanations. In rational choice theory, grandparental involvement with grandchildren is typically regarded as indirect investment in children. Hence, explanations of parental investment in children are also seen as key to understanding the
relationship between the grandparent and the grandchild. Such investments may be understood as a form of insurance policy (Henretta et al., 1997).

In their efforts to develop a coherent set of hypotheses from rational choice theory, Friedman et al. (2008) postulated that grandparents were more likely to invest in the grandchildren of female than of male children, and in the grandchildren of children geographically closest to them. Moreover, by linking investment (in a general sense) in coming generations to grandparents' age differences, Friedman et al. (2008) further postulated that grandmothers were more involved with grandchildren than grandfathers were. This gender difference partly stems from the fact that the majority of women can expect to outlive their husbands. Therefore, women - more than men - must turn elsewhere if they are to reduce fundamental uncertainties as the end of life approaches. Friedman et al. (2008: 46), furthermore, hypothesized that grandparents without a life partner were likely to invest more in their grandchildren than those with a spouse. In the same vein, one could argue that being a grandmother without a partner (typically widowed) would create particularly high uncertainties. Following rational choice assumptions, women are expected to be more involved than men, widowed grandparents to be more involved than those with a living partner, and widowed grandmothers to be notably more involved than grandmothers with a spouse. The last-mentioned may imply that the impact of marital status should be especially consequential for female grandparents as compared to male grandparents.

A different theoretical approach in sociology comes from normative explanations, mainly regarding grandparents' solicitude as influenced by social roles and prevailing norms (Gauthier, 2002; Mason et al., 2007; see also Settersten and Angel, 2011). Such reasoning suggests that the established female family role may account for gender-lineage bias in grandparental attention (Chan and Elder, 2000; Dubas, 2001 Hagestad, 1986). These mechanisms could also explain greater caregiving by female grandparents: A grandmother is more supportive than a grandfather because she has been socialized into, and identifies with, the institutionalized model of a mother and a mother's mother. The social construction of gender roles, together with the process of internalization of norms, further suggests that fulfilling such expectations has its own rational logic (Waerness, 1996). Nevertheless, from assumptions about the grandmother's central role within the larger family, we postulate an influence of gender on care, as reflected by the upper arrow in the simple causal model in Figure 1. As noted, this prediction follows from rational choice theory as well, and even from evolutionary assumptions.

Based on similar logic, the typical spouse plays a supportive role in keeping up the family life and social activities in later years (Kerr, 2006). Although marriage traditions vary across cultures and have changed markedly in Europe over the past generation, I argue that having a partner is salient for older individuals' participation in family life. During the life cycle, spouses are socialized into complementary roles within the context of a couple. For the individual grandparent who is 60 years old or older, a spouse at one's side normally means having expectations from the other, ensuring the availability of practical help and regular mental training, exchanging normative views, providing the possibility of sharing and specialization in daily activities, as well as keeping up social routines and external contacts (see, for instance, Matras and Caiden, 1994). Hence, individual capacity for interacting with the larger family and caring for grandchildren should be higher within the framework of a couple or pair.

However, male and female grandparents on average will find themselves in a different position, as grandfathers more often have a spouse at their side than grandmothers (Kerr, 2006: 25-26). The main reason behind this pattern could be traced to traditional marriage customs together with a different life expectancy for the two genders. In short, women tend to marry men a few years older than themselves, while on average living longer than men. Such demographic essentials will have consequences in later years for grandparents still living. Indeed, although a grandfather in his seventies often has a younger partner at his side, a grandmother of the same age is frequently a widow or has an older spouse to take care of (Peters and Liefbroer, 1997). Therefore, grandfathers may gain a relative advantage in their capacity for involvement with children and grandchildren, although the ageing process naturally decreases the general abilities of both genders. Based on this understanding, I hypothesize an indirect impact of grandparents' gender on involvement via marital status (see Figure 1). In short, having a


Figure I. Grandparents' solicitude: The relevance of gender and a life partner in alternative explanations
partner positively affects caregiving. Hence, as grandmothers increasingly find themselves alone in later years, their initial advantage from their central family role gradually reduces. Keeping in mind that rational choice arguments suggest that being without a spouse should increase fundamental uncertainties and hence lead to higher grandparental involvement, it follows that the two main theoretical logics may suggest different empirical implications.

Such arguments from normative reasoning regarding grandparental gender and the relevance of a life partner could be further differentiated. Given the grandmother's role as kin-keeper, with stronger ties to family members and family friends at large, we expect marital status (i.e. still having/not having a partner) to be less consequential for her involvement. In other words, grandfathers may be seen as more vulnerable to being without a partner than grandmothers (Buber and Englehardt, 2008; Carr and Moorman, 2011; Kerr, 2006: 26; Peters and Liefbroer, 1997; Van Grootheest et al., 1999), although widowed men in some instances receive more support from their family (Delbès and Gaymu, 2002). Hence, we postulate an interaction effect of gender and marital status on grandparents' grandchild care. In Figure 1, this interaction is illustrated by the arrow from gender onto the arrow between marital status and care. Assuming that women are relatively less dependent on spousal support in the later years, we expect the effect of marital status to be less for grandmothers than for grandfathers. As previously noted, rational choice arguments suggest that being without a partner could be more consequential for grandmothers, thus again pointing to possible different empirical implications from these two theoretical strands.

From normative explanations, we here expect grandmothers to be more involved with grandchildren than grandfathers are. Moreover, an additional gender influence in the opposite direction could be mediated by marital status, as grandfathers more often have a life partner. Therefore, grandparental gender may work in two opposite ways: Being a male grandparent implies lower involvement (see Figure 1), whereas grandfathers' higher likelihood of having a spouse indirectly increases their participation. In addition, I argue that an interaction effect of gender and marital status exists: Having a partner should be more consequential for male grandparents than for females.

The general prediction of higher female involvement also follows from alternative theoretical approaches - notably rational choice theory and even evolutionary psychology (Danielsbacka et al., 2011). However, our further postulates from assumptions about social roles and norms differ from what is implicated by rational choice theory (see Figure 1). As noted, the rational choice logic predicts more involvement without a partner and, if anything, extra involvement for grandmothers with no spouse. It further follows that, where our main reasoning postulates a narrowing or even reversing of involvement between grandmothers and grandfathers in older years, rational choice logic could suggest the opposite. Without taking the difference between these two main explanatory strategies too far, they nevertheless provide a relevant backdrop for empirical investigations.

## Data and method

The data analysed in this article come from the second public release of the Survey of Health, Ageing and Retirement in Europe (SHARE; see Börsch-Supan et al., 2005, 2009), waves 1 and 2, originally collected in 2004-2007. The data applied contain information from more than 23,000 individuals, aged 50 or above, and from more than 16,000 households. The analyses reported in this article are based on available surveys from Austria, Denmark, France, Greece, Germany, Italy, The Netherlands, Sweden, Switzerland, Spain and Belgium. Together, these 11 countries represent continental Europe's basic economic, social, institutional and cultural diversity. ${ }^{2}$ In the present analysis I concentrate on actual grandparents (at least one grandchild) among individuals 60 to 85 years old, based on the assumption that these years constitute the central period of the grandparental phase in life. ${ }^{3}$

The main dependent variable in the following analyses is labelled LOOKAFTER. This can be seen a measure of grandparental participation (Danielsbacka et al., 2011; Hildbrand et al., 2009), reflecting how frequently the individual is involved in caring for the (selected) grandchild. All grandparents were first asked if they had looked after any grandchildren, without the presence of parents, during the preceding 12 months. If the answer was yes, the respondent was then asked how often that happened on average. If one of them reported having looked after grandchildren of more than one child, the analysis was restricted to the child for whom the greatest frequency of caregiving was reported. In cases where this procedure did not secure an unambiguous selection criterion, the youngest child with the highest frequency of care was selected. Following previous contributions, I concentrated on grandparents with at least one grandchild under the age of 16 (Gray, 2005). Moreover, I built on and extended earlier analyses (Danielsbacka et al., 2011; Hank and Buber, 2009; Hildbrand et al., 2009) when constructing the dependent variable - in our case, by combining two basic questions in one variable. In this way, a variable ranging from 0 (Not looking after at all) to 4 (Looking after almost daily) was constructed. This ordinal measure was treated as an approximate metric variable in the OLS regression analysis, thereby providing results that are straightforward to interpret, especially when comparing more detailed results from subgroups (Allison, 1999; Mood, 2010), as reported in the Appendix.

The central independent variables examined were GENDER, AGE and SPOUSE (marital status) as well as relevant interaction terms. GENDER was assigned the value 0 for males and 1 for females. AGE was measured in years; the variable for the regression analyses was entered as years above 60 , meaning that a 60 -year-old has the value of 0 while an 85 -year-old has the value of 25 . Experimenting with dummy variables for age groups or including age squared did not add significantly to the interpretations. SPOUSE is a dummy variable indicating marital status; 1 was assigned if the respondent was living together with a spouse or partner, otherwise 0 was assigned. More refined versions, including indicators for divorced or remarried as well as length of widowhood, did not increase explanatory power or affect main interpretations; hence, this simple binary variable was retained in the analyses (see also Hank and Buber, 2009). Based on these three central explanatory variables, three interaction terms were constructed: GENDER $\times$ AGE, GENDER $\times$ SPOUSE and SPOUSE $\times$ AGE. Initially, SPOUSE $\times$ AGE was included simply as a control variable, as no specific hypothesis was postulated for this link. In the earlier
rounds of analyses, no interaction was detected for this term; therefore, it was removed from the final version of the regression analyses.

A number of supplementary independent variables were included, mainly as controls, in order to avoid possible confounding influences related to demographic characteristics, availability, health and attitudes (Attias-Donfut et al., 2005; Baydar and Brooks-Gunn, 1998; Guzman, 1999, 2004; Hank and Buber, 2009; Kuhltau and Mason, 1996; Presser, 1989; Silverstein and Marenco, 2001; Vandell et al., 2003). Among those were gender of the selected child (male $=0$, female $=1$ ), allowing for tracing lineage patterns; distance to the selected child, ranging from same household (0) to more than 500 km away (8); educational level of the selected child (from none/little $=0$ to higher university level $=6$ ); whether the selected child had a partner/spouse (1) or not (0), as well as the selected child's age in years above 25 . Originally, more than 20 per cent had missing data on this last variable; hence, those with missing values were given estimated values based on regressions applying parents' and grandparents' age. In addition, household size and number of grandchildren were included. The questions used for measuring individual attitudes regarding perceived obligations for grandparents, as well as the life satisfaction variable, were responded to in an additional self-completion questionnaire or a vignette answered by approximately three-fourths of the respondents in our sample. In the reported multivariate analyses, those who did not answer were given mean values in order to keep a maximum number of respondents in the applied sample. This option was chosen partly because it is usually considered a conservative solution, and partly because more sophisticated approaches do not add to or change the basic results.

The SHARE data are collected in a number of countries as part of a major European cooperation. In this article, we focus on social mechanisms of a general character linked to gender, the family institution and demographic essentials assumed to operate fairly independently of the national context - at least within the European setting. It seems reasonable to expect limited cross-national differences in resulting patterns (see also Danielsbacka, 2011; Hank and Buber, 2009). Still, a number of dummy variables were included in the multivariate analyses in order to control for possible country variation in the general level of looking after grandchildren, as well as to assess the overall expectation of limited cross-national variations. Austria was chosen as reference category in the regression models. For the regression analysis, shown in Table 2, country effects were estimated but not reported for reasons of simplicity. However, in the Appendix, where separate results for grandmothers and grandfathers are given, all countries' fixed effects are reported. In total, the applied sample adds up to 5,449 individuals from these 11 European countries after excluding respondents with missing or inconsistent information on central variables.

## Analysis

## Descriptive results

Descriptive results for male and female grandparents are reported in Table 1 for the total pooled and nonweighted sample. Keeping in mind that we are investigating living individual grandparents 60 to 85 years old, with women making up 57 per cent, these results provide an informative pattern consistent with previous findings in the literature (Hank and Buber, 2009; Mann et al., 2009).

A striking difference is the seemingly unequal likelihood of having a life partner in later years. Grandfathers more often live together with a spouse.

Figure 2, illustrating relevant descriptive characteristics, displays the proportion of grandfathers and grandmothers who have a life partner at their side according to the age group $60-85$ years. In their early sixties, a clear majority of male as well as female grandparents have a partner, although grandfathers more often live within the context of a couple. However, by their later sixties a growing divergence develops, with women clearly less often having a spouse. ${ }^{4}$

In the older age groups, there is a substantial and increasing difference between the two genders. For male grandparents, more than 80 per cent still have a life partner, slightly decreasing over the years until their late seventies. Even in their early eighties, more than half of grandfathers have a living spouse.
Table I. Descriptive statistics. Grandparents (60-85). Means and standard deviations for men ( $\mathrm{N}=2450$ ) and women ( $\mathrm{N}=2909$ )

|  | Gender ( Male=0, Female $=1$ ) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male |  | Female |  | Total |  |
|  | Mean | SD | Mean | SD | Mean | SD |
| LOOKAFTER: How often look after grandchild (from Never=0 to Almost daily=4)** | 1.12 | 1.38 | 1.22 | 1.45 | 1.17 | 1.42 |
| AGE in years (ns) | 68.93 | 6.11 | 69.02 | 6.36 | 68.98 | 6.24 |
| SPOUSE: Living with spouse/partner (1) or not (0)** | 0.79 | 0.41 | 0.48 | 0.50 | 0.62 | 0.48 |
| ADL (no limitations $=0$, I or more limitations $=1$ )** | 0.10 | 0.30 | 0.13 | 0.34 | 0.12 | 0.32 |
| SELF-PERCEIVED HEALTH, from excellent (0) to poor (4)** | 2.11 | 1.06 | 2.26 | 1.04 | 2.19 | 1.05 |
| EDUCATIONAL LEVEL (none/little $=0$, higher university $=5$ )** | 2.46 | 1.56 | 2.06 | 1.46 | 2.25 | 1.52 |
| WORKING (working=1, not working=0)** | 0.14 | 0.34 | 0.08 | 0.27 | 0.11 | 0.31 |
| ATTITUDES: Grandparents duty to help/contribute (strongly agree $=4$, not agree $=0$ )* | 2.85 | 0.79 | 2.80 | 0.79 | 2.82 | 0.79 |
| LIFE SATISFACTION (low=0, high=4)** | 2.37 | 0.61 | 2.26 | 0.64 | 2.31 | 0.63 |
| DEPRESSION SCALE (from not at all $=0$ to highest $=12$ )** | 1.84 | 2.03 | 2.64 | 2.33 | 2.27 | 2.24 |
| DISTANCE TO SELECTED GRANDCHILD, from same household (0) to more than 500 km away (8)** | 3.74 | 1.75 | 3.64 | 1.79 | 3.69 | 1.77 |
| GENDER of SELECTED CHILD ( $0=$ male, $\mathrm{I}=$ female) ( ns ) | 0.51 | 0.50 | 0.49 | 0.50 | 0.50 | 0.50 |
| NUMBER of GRANDCHILDREN** | 4.31 | 3.06 | 4.77 | 3.36 | 4.56 | 3.23 |
| HOUSEHOLD size** | 2.00 | 0.75 | 1.70 | 0.80 | 1.84 | 0.79 |
| NUMBER of CHILDREN* | 2.49 | 1.49 | 2.39 | 1.58 | 2.43 | 1.54 |
| AGE of SELECTED GRANDCHILD** | 7.20 | 4.41 | 7.87 | 4.35 | 7.56 | 4.39 |
| AGE of SELECTED CHILD (ns) | 40.58 | 3.77 | 40.63 | 3.92 | 40.61 | 3.85 |

Note: $*$ Significant difference at 0.05 level. $* *$ Significant difference at 0.01 level or higher. ns $=$ not significant difference at 0.05 level.
Table 2. Grandparents looking after grandchild: A step-wise regression analysis ( $\mathrm{N}=5449$ )

|  | Model |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  |
|  | Unstandardized coefficients B | t | Unstandardized coefficients B | t | Unstandardized coefficients B | t | Unstandardized coefficients B | t | Unstandardized coefficients B | t |
| (Constant) | 1.12 | 42.35 | 1.57 | 42.33 | 1.07 | 20.01 | 0.85 | 12.74 | 1.12 | 6.91 |
| GENDER | 0.10 | 2.66 | 0.11 | 2.84 | 0.27 | 6.95 | 0.60 | 8.70 | 0.83 | 9.73 |
| AGE |  |  | -0.05 | -16.98 | -0.04 | -13.76 | -0.04 | -14.16 | 0.00 | -0.39 |
| SPOUSE |  |  |  |  | 0.53 | 12.87 | 0.83 | 12.51 | 0.62 | 9.11 |
| GENDER $\times$ SPOUSE |  |  |  |  |  |  | -0.48 | -5.74 | -0.41 | -5.28 |
| GENDER $\times$ AGE |  |  |  |  |  |  |  |  | -0.03 | -5.54 |
| ADL |  |  |  |  |  |  |  |  | -0.12 | -2.14 |
| SELF-PERCEIVED HEALTH |  |  |  |  |  |  |  |  | -0.03 | -1.43 |
| EDUCATIONAL LEVEL |  |  |  |  |  |  |  |  | 0.02 | 1.59 |
| WORKING |  |  |  |  |  |  |  |  | -0.11 | -1.98 |
| ATTITUDES |  |  |  |  |  |  |  |  | 0.21 | 7.78 |
| LIFE SATISFACTION |  |  |  |  |  |  |  |  | 0.04 | 1.08 |
| DEPRESSION SCALE EURO-D |  |  |  |  |  |  |  |  | 0.00 | 0.40 |
| DISTANCE TO SELECTED GRANDCHILD |  |  |  |  |  |  |  |  | -0.24 | -22.97 |
| AGE of SELECTED GRANDCHILD |  |  |  |  |  |  |  |  | -0.08 | -19.40 |
| GENDER of SELECTED CHILD |  |  |  |  |  |  |  |  | 0.39 | 10.98 |
| EDUCATIONAL LEVEL, SELECTED CHILD |  |  |  |  |  |  |  |  | 0.01 | 1.63 |
| SELECTED CHILD HAS A LIFE PARTNER |  |  |  |  |  |  |  |  | 0.33 | 8.44 |

[^0]

Figure 2. Grandparents: Proportion living with a Spouse/Partner by age and gender ( $\mathrm{N}=5499$ ).

However, a typical grandmother, in addition to a lower initial level, tends to lose her life partner in a more dramatic manner over the years.

Thus, Figure 2 illustrates a striking difference in the personal and social environment for ageing male and female grandparents, with likely consequences for their individual capacity to provide care for grandchildren. A typical grandfather in his early seventies lives his life within the social context of a couple (i.e. with a partner at his side). A typical grandmother at the same age lives alone. This pattern for European countries is similar to what can be inferred for US data (Kerr, 2006: 26; see also Manning and Brown, 2011: 197).

Figure 3 reports how often grandparents on average look after the selected grandchild by gender and age. A telling pattern emerges. Female grandparents in their sixties show a marked higher level of involvement compared to male grandparents at the same age. However, the relative pattern gradually changes in later years. For the oldest age groups, grandfathers are ahead of grandmothers in their provision of care. All in all, the descriptive statistics in Table 1 together with the preliminary age-related patterns in Figures 2 and 3 provide a relevant introduction to our multivariate analysis.

## Multivariate analysis

Table 2 reports results from a step-wise multiple OLS regression. Separate and more detailed regression analyses for each gender are given in the Appendix.


Figure 3. Looking after grandchildren by age and gender Grandmothers and grandfathers 60-85 years. $\mathrm{N}=5449$.

In the first step, a significant but still moderate gender effect occurs. On average, grandmothers more often look after the grandchild than grandfathers do. However, although statistically significant, a difference amounting to less than one-tenth of a standard deviation may not be considered large. This step basically reflects the same average gender difference already observed in Table 1. In the second stage, age is added as an independent variable. A strong negative impact of age is indicated for grandparents looking after a grandchild, again emphasizing that growing older than 60 years of age gradually limits grandparents' potential for involvement. In step three, having/not having a spouse is added to gender and age. There is a clear-cut effect of spouse, indicating that those grandparents who still have a life partner at their side more often look after the grandchild than those living alone. On average, having a spouse compared to living alone - increases the score on the dependent LOOKAFTER variable by 0.53 . Meanwhile, there is a marked increase in the positive effect of gender ( 0.27 versus 0.11 ) compared to the preceding round. In other words, for equal marital status and age, grandmothers appear substantially more involved than grandfathers.

Looking at steps two and three together, the observed effect pattern implies that the small gender difference initially observed must stem from gender affecting grandparental involvement along two paths in opposite directions. A positive direct effect (i.e. female grandparents scoring markedly more for same marital status) is reflected in the gender effect of 0.27 in the third step, while there is an indirect influence in the opposite direction, with female grandparents scoring lower as they more seldom have a life partner (see Figure 1). In other words, a negative covariance exists between gender (female) and marital status (spouse), together with the positive effect of having a spouse at one's side, thereby resulting in a negative
combined indirect effect. It follows that for models not taking spouse/partnership into account the effect of gender for these age groups would be underestimated. In the same way, the effect of marital status would be underestimated if gender was not included in the equation (see, for instance, Hildbrand et al., 2009). Although parallel indirect influences from age could be traced, these turn out so far to be relatively small and are not commented on further here.

In the fourth step, a term capturing the interaction between gender and marital status (spouse or not) was added to the existing independent variables in the regression model (see Figure 1). Several points should be noted, keeping in mind that the lowered intercept or constant term ( 0.85 ) now stands for the expected value for male grandparents at the age of 60 without a partner. First, the regression coefficient for gender is larger than before, implying that grandmothers' involvement appears even higher when the gender-spouse interaction is taken into account. Secondly, the impact of having a spouse comes out more strongly than during the preceding step. This pattern suggests that having a spouse implies an especially large difference among grandfathers: On average, those with a spouse score 0.83 higher than those without on the LOOKAFTER variable - a difference amounting to more than 60 per cent of a standard deviation. Thirdly, the value of the interaction term GENDER $\times \operatorname{SPOUSE}(-0.48)$ indicates how much less the estimated impact of a spouse is for grandmothers, demonstrating that the original spouse effect (for men) is more than halved for women. Fourthly, it is important to note that the inclusion of this interaction term does not change the main conclusion regarding the effects of gender and marital status. We also noted in this step that the explained variance ( R -square) is close to 9 per cent (8.5), indicating a fairly powerful model at the individual level, albeit with substantial variance unexplained.

In the fifth step in Table 2, we added an interaction term for GENDER $\times$ AGE, together with a larger number of relevant explanatory variables as controls. These include health indicators, educational level, labour market participation, individual attitudes on grandparent obligations, level of life satisfaction and possible depression, distance to selected grandchild, and age and gender of selected child, together with the selected child's education, marital status, number of children and household size. A set of dummy variables reflecting respondents' country background was also included, although not reported in this table. (For further details, see the Appendix.) There is a clearly significant effect of the GENDER $\times$ AGE interaction, with a negative sign, demonstrating that the impact of ageing on involvement is more dramatic for women than for men. However, most importantly, the inclusion of a large number of control variables still does not alter any of the main conclusions about the impact of gender and marital status.

Adding all these independent variables markedly improved the regression model's explanatory power from around 9 per cent in the fourth step to more than 27 per cent (27.2) in the fifth, suggesting a powerful model at the individual level by conventional standards. All in all, these results are consistent with previous findings in the literature (Hank and Buber, 2009). Furthermore, adding dummy variables for country background (not shown) in this last stage raises explained variance by just 0.7 percentage points, from roughly 26.5 to 27.2 per cent. However, with only dummy variables for country background included as independents, the explained variance was not more than 1.0 per cent. Together, this means that only a few of the differences in grandparental care can in fact be linked to national background in one way or another (see also the Appendix), although some interesting cross-national patterns can be traced (Danielsbacka et al., 2011; Hank and Buber, 2009).

The most telling characteristic of the results from the full model is that basic conclusions from the preceding step remain. Even with a large number of control variables taken into account, together with relevant interaction terms, there is still a substantial gender difference. Moreover, having a life partner at one's side affects one's ability to be involved, although the impact of a spouse is clearly greater for grandfathers than for grandmothers.

Compared to the simple bivariate (total) gender effect at the outset, I interpret the resulting pattern as suggestive of direct as well as indirect influences, further differentiated by an interaction effect between gender and marital status (spouse or not). Thus, conditions being otherwise equal, female grandparents are obviously more involved than males, as postulated by various theoretical approaches. Meanwhile, having a life partner seemingly increases the capacity to look after one's grandchild. Men at these age
levels more often have a life partner at their side; thus, their otherwise lower capacity for caring is seemingly enhanced. In this way, the gender effect on grandparents' care is partly mediated by marital status (as suggested in Figure 1). There is also an interaction between gender and marital status that further differentiates this conclusion. In short, the negative consequence of being without a spouse - compared to having one - appears more serious for grandfathers than for grandmothers when it comes to involvement with grandchildren.

Moreover, the effect of age for men practically disappears in the last step, indicating that the previously observed direct (negative) influence of getting older for them must now be mediated through one or several of the added control variables. This is an important finding in itself that will be followed up in later research. ${ }^{5}$ Preliminary analyses, however, indicate that gender of selected child together with age of grandchild are important mediating factors. The direct effect of age for female grandparents was more than double that of males in the foregoing step, which is also in line with expectations from gender-age biological arguments. Grandmothers' larger age effect is also clearly reduced and mediated in a parallel manner with controls included, although not so much that it becomes insignificant. Thus, for grandmothers, age-linked factors still exist, reducing their capacity, over and above the influence of those factors included in the full model. Further results for each gender are given separately in the Appendix (see Tables A1 and A2). As is evident from the data, these more comprehensive results do not change the main conclusions drawn from Table 2.

Taken together, our analyses suggest that (still living) older European men seemingly doing relatively well as grandfathers can be traced back partly to traditional marriage customs and demographic realities. As they more often have a life partner at their side, and because having a partner for them makes a substantial difference in care capacity, their involvement is on average higher than otherwise would have been the case. Although grandmothers are clearly more involved for equal marital status, they do not experience the same dampening mechanism that many grandfathers do in later years, partly because they are quite often without a life partner.

## Summary and discussion

Going back to the two main competing arguments for explaining grandparental involvement, some findings are consistent with rational choice theory as well as normative approaches. Typically, both theoretical strands - and even evolutionary theory - predict that grandmothers are better care providers than grandfathers. The SHARE data further confirm this, in line with various previous contributions (see Danielsbacka et al., 2011; Friedman et al., 2008; Hank and Buber, 2009; Kerr, 2006). However, concerning consequences from being without a partner, rational choice logic - based on assumptions of grandparents' uncertainty reduction efforts - postulates that those without a spouse should be more eager care providers. The pattern in Table 2 is obviously inconsistent with such expectations. This same can be said for extended rational choice implications postulating the increased effect of marital status for grandmothers. Meanwhile, the regression analysis results suggest that being without a partner decreases grandparents' involvement with grandchildren and that being alone (without a spouse/partner) appears more consequential for grandfathers. In this area, our findings do not support rational choice theory. However, the observed patterns are at least consistent with postulates from normative explanations, thereby making such reasoning more credible.

Although my analyses should be seen as a strong test, the results reported in this article could be understood more in support of classical sociological role theory than of rational choice arguments. The findings suggest that grandparental gender and solicitude are linked in a fairly complex manner. As expected, grandmothers benefit from their traditional kin-keeper role in their greater involvement with grandchildren. Grandfathers, nevertheless, enjoy a certain advantage from more often having a living partner at their side. In later years, this indirect advantage becomes essential, dampening the age-related decrease in their capacity for caring. Grandfathers' involvement, relative to that of grandmothers, thus gradually improves, leading to a reversed ordering in levels of care. In short, older men can be relatively good grandfathers, as
they frequently live within the context of a couple. This interpretation emphasizes the fact that male and female grandparents often find themselves in quite different personal and social settings; grandfathers living together with a spouse, grandmothers living alone or with an older husband. The relevance of this nuanced picture for understanding grandparents' more complex situation seems to have been overlooked in some previous research. Furthermore, it has to be kept in mind that our findings also imply that (fewer) grandfathers without a partner constitute the group with the lowest involvement level. On a more general sociological level, the empirical pattern thus supports the idea that (older) men benefit more from the marriage institution or similar partnership arrangements than women do.

Still, the interpretations of our overall findings should not be seen as backing only one type of theoretical reasoning while excluding the other. In line with Friedman et al. (2008: 56), we regard normative and rational choice approaches as supplementary explanations, contending that grandparents may have different kinds of incitements to be involved with grandchildren.

These results could also be viewed from the standpoint of the grandchild. Obviously, most care will be provided when both grandparents are alive. If one were to lose one of the two, it is better to lose one's grandfather. In reality, this is also the more typical sequence, as men have a lower life expectancy and marry later. Since grandmothers tend to be less affected from being without a life partner, the decrease in care provided by them in such a case is less than for grandfathers in the same situation. In addition, to receive maximum care from one's grandfather, it seems important that his partner stays alive too.

It is appropriate to compare results from our analyses with predictions about preferential investment based on evolutionary psychology (Euler and Weitzel, 1996: 41). By combining coefficients for grandparental gender and parental gender in our data, it is possible to infer levels of care for maternal grandmothers, maternal grandfathers, paternal grandmothers and paternal grandfathers while controlling for other factors. When this is done for grandparents with a partner (Bishop et al., 2009), we find the same expected ordering in our analyses as in recent contributions from evolutionary psychology (Danielsbacka et al., 2011). This pattern could thus in fact be predicted from three alternative strands: evolutionary theory, rational choice arguments and normative explanations. However, when analysing grandparents without a partner, the middle ordering is reversed, a pattern that should not necessarily follow from evolutionary arguments (Danielsbacka et al., 2011: 18), while still being in line with normative explanations and my main arguments presented herein. Nevertheless, I concur with comments in previous contributions that a strong test for deciding between social science explanations and potentially competing evolutionary arguments is a challenging task (Danielsbacka et al., 2011: 8; Pashos, 2000). Thus, I leave this for future research.

The main interpretations in this article are based on analyses of cross-sectional data, which may pose certain challenges for drawing causal inferences. The problem of selection mechanisms cannot be totally ruled out, even after controlling for a broad array of potential confounding factors. It could be that especially good grandfathers live markedly longer than others, or that grandmothers increase support for their still living husbands' family involvement in later years. Such patterns could lead to biases in my main estimates. For the larger SHARE project, an important ambition is to provide panel data of high quality gradually, even within a wider cross-national framework than provided to date. This effort is under way. Future research will then provide a better foundation for assessing and handling possible selection biases. Finally, real couple data - with information from both spouses in the pair (while still alive) could have enriched the empirical basis for my statistical analyses. However, such data are not available from SHARE.

## APPENDIX

Table AI. Grandfathers looking after grandchild ( $\mathrm{N}=2450$ )

|  | Model |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I |  |  | 2 |  |  | 3 |  |  |
|  | Unstandardized coefficients B | Standardized coefficients Beta | t | Unstandardized coefficients B | Standardized coefficients Beta | t | Unstandardized coefficients B | Standardized coefficients Beta | t |
| (Constant) | 1.400 |  | 29.114 | 0.643 |  | 8.783 | 1.117 |  | 5.008 |
| AGE | -0.031 | -0.139 | -7.088 | -0.024 | -0.105 | -5.488 | -0.004 | -0.020 | -0.973 |
| SPOUSE |  |  |  | 0.871 | 0.257 | 13.393 | 0.772 | 0.228 | 10.101 |
| ADL |  |  |  |  |  |  | 0.007 | 0.001 | 0.080 |
| SELF-PERCEIVED HEALTH |  |  |  |  |  |  | -0.010 | -0.007 | -0.370 |
| EDUCATIONAL LEVEL |  |  |  |  |  |  | 0.015 | 0.017 | 0.836 |
| WORKING |  |  |  |  |  |  | -0.160 | -0.040 | -2.131 |
| ATTITUDES |  |  |  |  |  |  | 0.218 | 0.105 | 5.789 |
| LIFE SATISFACTION |  |  |  |  |  |  | 0.076 | 0.028 | 1.533 |
| DEPRESSION SCALE EURO-D |  |  |  |  |  |  | 0.008 | 0.012 | 0.595 |
| DISTANCE TO SELECTED GRANDCHILD |  |  |  |  |  |  | -0.236 | -0.286 | -15.630 |
| AGE of SELECTED GRANDCHILD |  |  |  |  |  |  | -0.083 | -0.264 | -13.750 |
| GENDER of SELECTED CHILD |  |  |  |  |  |  | 0.388 | 0.134 | 7.828 |
| EDUCATIONAL LEVEL, SELECTED CHILD |  |  |  |  |  |  | 0.009 | 0.014 | 0.799 |
| SELECTED CHILD HAS A LIFE PARTNER |  |  |  |  |  |  | 0.183 | 0.060 | 3.195 |
| NUMBER of GRANDCHILDREN |  |  |  |  |  |  | -0.018 | -0.039 | -1.845 |
| NUMBER of CHILDREN |  |  |  |  |  |  | 0.054 | 0.059 | 2.687 |
| HOUSEHOLD size |  |  |  |  |  |  | -0.170 | -0.092 | -3.976 |
| GER |  |  |  |  |  |  | 0.231 | 0.045 | 1.901 |
| SWE |  |  |  |  |  |  | -0.076 | -0.019 | -0.668 |
| NL |  |  |  |  |  |  | 0.064 | 0.014 | 0.564 |

Table AI. (continued)

|  | Model |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I |  |  | 2 |  |  | 3 |  |  |
|  | Unstandardized coefficients B | Standardized coefficients Beta | t | Unstandardized coefficients B | Standardized coefficients Beta | t | Unstandardized coefficients B | Standardized coefficients Beta | t |
| ESP |  |  |  |  |  |  | -0.205 | -0.044 | -1.689 |
| IT |  |  |  |  |  |  | -0.242 | -0.049 | -1.968 |
| FRA |  |  |  |  |  |  | -0.031 | -0.006 | -. 261 |
| DEN |  |  |  |  |  |  | 0.123 | 0.023 | 0.968 |
| GRE |  |  |  |  |  |  | 0.144 | 0.028 | I. 155 |
| CH |  |  |  |  |  |  | -. 303 | -. 043 | -2.045 |
| BEL |  |  |  |  |  |  | 0.276 | 0.070 | 2.582 |

Note: Dependent variable: LOOKAFTER: How often look after grandchild (from Never=0 to Almost daily=4).
Table A2. Grandmothers looking after grandchild ( $\mathrm{N}=2909$ )


[^1]
## Notes

1. This article uses data from SHARELIFE release 1, as of 24 November 2010 or SHARE release 2.3.1, as of 29 July 2010. The SHARE data collection was funded primarily by the European Commission through the 5th framework programme (project QLK6-CT-2001- 00360 in the thematic programme Quality of Life), the 6th framework programme (projects SHARE-I3, RII-CT- 2006-062193, COMPARE, CIT5-CT-2005-028857, and SHARELIFE, CIT4-CT-2006-028812) and the 7th framework programme (SHARE-PREP, 211909 and SHARE-LEAP, 227822). Additional funding from the U.S. 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 www.share-project.org/t3/share/index.php for a full list of funding institutions). I thank Karsten Hank for his kind help during the initial stages of this project and Acta's two anonymous referees for their careful reading and many constructive suggestions about an earlier version of the article.
2. The data from these earlier rounds have been upgraded several times and are considered of high quality.
3. Expanding the age span (Danielsbacka et al., 2011) and using dummy variables for age groups (Hank and Buber, 2009) does not change the basic assessments of our results. The chosen age range covers central years of grandparental care for both genders. However, for the demographic reasons noted, grandmothers on average will experience a longer grandparental period than grandfathers.
4. In our data, two-thirds of the grandmothers without a partner were widows; this holds for only half of grandfathers living alone.
5. In addition, the marked lineage effects should be analysed in more detail than there is place for in this article.

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[^0]:    Notes: Dependent variable: LOOKAFTER: How often look after grandchild (from Never=0 to Almost daily=4)
    In the fifth step a number of additional explanatory variables were included, however not reported on in order to save space. These variables are educational level of selected child, If selected child has a life partner or not, Age of selected child, Number of grandchildren, Household size, as well as Country (Dummy-variables).

    Explained variance in step I: I. 0 per cent; in step 2: 5.2 per cent; in step 3: 7.9 percent; in step 4: 8.5 per cent; in step 5: 27.2 per cent.

[^1]:    Note: Dependent variable: LOOKAFTER: How often look after grandchild (from Never=0 to Almost daily=4).

