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Gender Differences on the Psychological Well-Being of Early Spanish Grandparents Caring for Grandchildren

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Abstract

Research supports that grandparents who care for their grandchildren are more likely to have better health than those who don't provide care, but it is unclear whether care has the same or different health benefits for grandmothers and grandparents. To assess whether health and well-being differs between caring grandmothers and grandfathers, a representative sample of people aged 65 or over were surveyed (n=2,535). Regular caring has positive health benefits than negative in both, grandmothers and grandfathers. Taken into account the gender differential effects in caring grandparents can help to improve the psychological well-being in elderly grandfathers and grandmothers.

Keywords: Grandparents; Grandchildren care; Psychological well-being; Gender; Loneliness

Introduction

There is consistent evidence that grandparents are becoming an increasingly important source of childcare, despite the recent changes undergone in family structure. Demographic shift to low fecundity and mortality in economically developed countries has altered the basic parameters of grandparental investment roles [1,2]. The increased life expectancy, social changes in female employment, improved health of older adults, changes in how aging is perceived and higher levels of divorce make that grandparents to play an increasingly significant role in family life [3,4]. Although grandparents have always been a family educational and social reference, these changes have allowed grandparents to recover the important role they play within the family, strengthening closeness with grandchildren, acknowledgement of their valuable social function as the direct effect of grandparents' involvement in the family economy and support network [5].

Grand-parenting is experienced by people in all cultures, but prevalence data of caring grandparents differs greatly from survey to survey, depending on the cultural context and type of living arrangements, ranging from "three generation households" (grandparents, their adult children, and their grandchildren) to "skipped-generation households" where the adult children are absent in a family headed by a grandparent [6-8]. From the industrial period, European countries, the USA and Australia have been characterized by promoting the independence of young parents, maintaining emotional closeness and support [9].

Despite grand-parenting may have different health consequences shaped by the social and cultural context, few studies have explicitly addressed the extent to which such cross-national variations are associated with national level differences in individual demographic and socio-economic distributions along with contextual, structural and cultural factors [10]. The European Health, Ageing and Retirement Survey estimates around 50% of European grandparents aged 50 and over provide some type of childcare at one point in time, with a mean of 4.6 hours per day [11]. The estimated prevalence of caring grandparents by country apparently contradicts the stereotype of grandparent care burden in Southern countries, with the Netherlands and Denmark showing the highest percentages over 50%, as Spain is the European country that offers less care (22.7%) preceded by Greece (28.6%). In contrast, findings from the 2004 survey of Health, Ageing, and Retirement in Europe estimated rates of 20% to 40% with the Southern countries tending to provide the higher percentages and Scandinavian ones to lowest [12]. The Spanish Aging Institute Survey found that 37.4% of Spanish grandparents provide care for grandchildren every day, 27%, several times a week and 15.1% once a week, with an average of 6 to 7 hours per day [13]. The differences in the frequency and intensity of the care provided between the North and the South depend on how rates were measured, the cultural context and family policies. Spain, where part-time employment is

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less common than in other European countries with limited state aids to families and to individuals with children and few public services for children, particularly for kids aged under three years, grandparents represent an essential resource to meet the youngest grandchildren's needs [14].

Research generally supports that grandparents play a significant economic, social and family role in looking after grandchildren [15]; but it remains unclear whether caring for grandchildren may come at the cost of grandparents' own health and well-being [7]. Caring for grandchildren may become a stressful and overloading task with physical and emotional health consequences, particularly for grandparents who provided extensive care [16], with little acknowledgement and limited time to undertake other activities and social relationships, factors that indirectly affect older peoples health [17]. However, others found higher quality of life in those most active in caring since provision of care were affirming and rewarding as grandparents may enjoy a closer relationship with their grandchildren [18,19].

Despite the growing number of grandparents involved in grandchildren care, issues of care role often have explicitly focused from the female perspective, likely is common that women provided more primary care than men [20,21]. Although important gender differents were found in care experience and health are different for men and women [22], both in quality and quantity [23], most studies tend to analyze grandparents as a whole, preventing us from finding out if there is a gender differential effect in the patterns of care and health. Furthermore, as many studies came from European Nordic countries, USA and more recently from Asian countries, where structure and function of social networks and the nature of care regimes in the Mediterranean region differs substantially from Non-Mediterranean countries [24], little is known about the health and well-being in caring grandparents from Mediterranean countries. This study aims to explore the gender differential effect in grandparent's well-being in a context where grandparents traditionally undertake the role of child care providers; and to provide new information of the interaction between care, living arrangements, economical and time investment on health and psychological well-being in caring grandmothers and grandfathers. Positive effects on both, grandmothers and grandfathers providing regular care, would be expected based on previous research. Instead, the interaction of life-care arrangements, time and economic investment may have a different effect on health and psychological well-being of grandmothers and grandparents.

Method

A representative sample of Spanish population aged 65 and over living in private family household was drawn from the Spanish Ageing Institute Survey database [13]. To calculate the required sample size, sex quotes parity, age stratified by years (65-69, 70-74, 75-79, 80 or over) and number of inhabitants by town (up to 5,000; 5,001-10,000; 10,001-20,000; 20,001-100,000 and over 100,000), distributed by the 17 regions that form Spain, were taken into account. Given that the sample is not proportional to the population size in each Spanish region, weights were calculated to assess the differential probability of inclusion of grandparents of the different Spanish regions. The study sample is made up of 2,535 people aged 65 or over who identified themselves as grandparents. Data were gathered through a telephone interview, according to a structured questionnaire. If there were more than one individual aged 65 or over living in the same household, the interview was conducted separately for each. After explaining the study purpose and requesting verbal consent, they were asked whether they had grandchildren, if they provided care to them, the frequency and intensity of the care provided, if caring entailed any restrictions for performing other activities or engaging in social relationships outside the family if they supported the family economicaly and the monthly amount invested, the type of living arrangements and socio-demographic characteristics. To asses grandparents' psychological well-being we chose four outcomes that are common in studies addressing older people health and well-being (self-perceived health, life satisfaction, loneliness and depressive symptoms).

Measures

Explicative variables: Frequency and intensity of care: caring grandparents were asked about the frequency of the care provided (daily, weekly) and hours spent in caring.

Economical support: we asked if they currently support family economically to meet the basic needs of their grandchildren; this variable was dichotomized: (0=No, 1=Yes) and the average amount of dollars invested per month was asked.

Time restriction: this question was formulated as if caring for grandchildren reduced the time available to perform other activities and establish social relationships outside the family. If the answer was "reduce time" it classified as=1 and otherwise as=0.

Living arrangements: four categories were considered: alone, with a spouse/partner, with a spouse/partner and children and with other relatives. Given that literature shows that older people who live alone have worse health than those living with a partner, we opted to include "living alone" and "living with a spouse/partner" to look more closely at the interaction between caring, living arrangements and physiological well-being.

Outcome variables: Self perceived health: was assess using the validated Spanish SF-36 version of self-perceived health component scores with a five-point scale (very good, good, fair, poor, very poor), creating a binary indicator that codes as 0 "very good" or "good" and 1 for "fair", "poor" or "very poor" health [25].

Life satisfaction: grandparents were asked whether they agreed or disagreed with four statements about life satisfaction (very satisfied, quite satisfied, somewhat satisfied and not at all satisfied). Very or quite satisfied was considered as "satisfied" and somewhat or not at all satisfied as "unsatisfied".

Loneliness: a simple question was asked to find out if they experienced feelings of loneliness in the last year, with three chose options: "no", "sometimes" and "often". Responds were classified as 0=no and 1=yes (sometimes or often).

Depressive symptoms: and finally questions about apathy, emptiness and psychological distress were required. If one or more symptoms were reported, they were coded as 1="depressive symptoms", otherwise as 0="no depressive symptoms".

Data analysis

To estimate the prevalence of Spanish elderly caring grandparents we examined data from those that identified themselves as grandparents. Demographic characteristics and psychological well-being among caring and non-caring grandparents were compared using the Chi Square test for categorical variables and the t-one-way variance for continuous. To assess whether the care provided to grandchildren differs on health and psychological well-being of

Table 1: Socio-demographic profile of Spanish grandparents aged 65 or over (n= 2,535)*.

	Non-caring grandparent (*n*=851)			Caring grandparents (*n*=1,677)		
	Men (*n*=426)	Women (*n*=425)	*p*-value	Men (*n*=850)	Women (*n*=827)	*p*-value
Age group						
65-69	114 (26.8)	74 (17.4)	0.001	251 (29.5)	191 (23.1)	<0.001
70-74	96 (22.5)	90 (21.2)		241 (28.4)	202 (24.4)	
75-79	114 (26.8)	116 (27.3)		197 (23.2)	207 (25.0)	
80 or older	102 (23.9)	145 (34.1)		161 (18.9)	227 (27.4)	
Marital Status						
Married	280 (66.4)	180 (42.5)	<0.001	735 (86.9)	421 (51.2)	<0.001
Widowed / divorced single	142 (33.6)	244 (57.5)		111 (13.1)	401 (48.8)	
Education						
Elementary or less	362 (87.4)	373 (92.8)	0.032	677 (81.8)	750 (95.7)	<0.001
Medium/ High school	38 (9.2)	23 (5.7)		102 (12.3)	24 (3.1)	
University	14 (3.4)	6 (1.5)		49 (5.9)	10 (1.3)	
Monthly household incomes						
<800 $	148 (40.1)	260 (71.6)	<0.001	272 (36.0)	570 (80.9)	<0.001
801-1,200 $	143 (38.8)	71 (19.6)		280 (37.0)	76 (10.8)	
1,201-1,600 $	45 (12.2)	17 (4.7)		105 (13.9)	30 (4.3)	
>1,600 $	33 (8.9)	15 (4.1)		99 (13.1)	29 (4.1)	

*Missing: n(%)= 7(0.3%)

grandmothers and grandfathers, logistic regression separated for each outcome were conducted. To improve the precision of the estimated effects and control for potential confounding, models were adjusted for age, married status, education and monthly family income, factors that could influence older people's health and well-being. Results are expressed as odds ratios (aOR) with 95% Confidence Interval (CI), using the IBM SPSS Statistics package (version 20.0).

Results

Table 1 shows the socio-demographic distribution of the sample's characteristics. Of the 2,535 participants, 66% reported caring for grandchildren, with similar rates for grandfathers (50.7%) and for grandmothers (49.3%). Grandmothers tend to be older, widowed or divorced, less educated and with lower incomes than grandfathers, whether caring for grandchildren or not. Of the 827 caring grandmothers, 27.1% live alone, while this percentage falls to 4.8% for caring grandfathers.

Table 2 presents the psychological well-being outcomes in caring and non caring grandparents. Overall, grandmothers regardless caring or not, report more feelings of loneliness and worse health that grandfathers. The vast majority of grandparents are very o quiet satisfied with life, without differences between grandfathers and grandmothers. However for caring grandmothers the percentages of depressive symptoms are significantly higher (7.9%) than for caring grandfathers (3.8%).

Table 3 gives the summary of frequency and hours devoted to caring, economical and time investment and living arrangements. Most grandparents provided daily care with an average of 23 hours per week, although grandmothers spend more time caring and provide more daily care, than grandfathers. Instead, grandfathers are more likely to support family economically (26.4%) that grandmothers (18.6%), even though the monthly amount invested is similar for both. More grandmothers (31.8%) than grandfathers (23.1%) reported that caring for grandchildren takes up time to enroll in other activities and to building social relationships outside the family.

The results of the regression analysis after adjusting by age, education, marital status and family incomes show that daily or weekly care has positive health benefits for both, grandmothers and grandfathers. Instead the effect of supporting family economically increases the likelihood of loneliness and life dissatisfaction, with the former being more pronounced in grandmothers (aOR=2.61) and the latter in grandfathers (aOR=3.78). The time spent on care affects negative grandmother's health (aOR=1.97), while in grandfathers leads to positive benefit (aOR=0.63). We also found that the interaction of care and living arrangements differs in grandparent's well-being. For caring grandfathers living with spouse has positive benefits, but living alone leads to the worst health and well-being outcomes, ranging from aOR=3.50 for loneliness to aOR=5.84 for depressive symptoms. Conversely, grandmothers living with a spouse are more than two times likely to report depressive symptoms (aOR=2.48), but the opposite if living alone (aOR=0.40) (Table 4).

Discussion

Of the 2,535 individuals surveyed who identified themselves as grandparents, 66% care for grandchildren, in contrast to the 22.7% estimated by the Share survey for Spain [11]. Different family policies, cultural and structural factors across Europe, as variation in female labor force participation, cultural attitudes and childcare provision, shape the extent to which grandparents provide childcare in European countries [26]. As in other European countries the financial crisis has an important public health impact with considerable consequences on the Spanish well-being state, trimming policies of attention to childhood and letting a high number of young parent's unemployed [27]. Taken into consideration that Spain is a country with poor developed family policies, little formal childcare and limited opportunities to work part-time, particularly for working mothers, young parent largely rely on grandparental support on an

Table 2: Psychological well-being in caring and non-caring grandfathers and grandmothers.

	Non-caring (*n*=851)			Caring (*n*=1,677)		
	Grandfathers (*n*=426)	Grandmothers (*n*=425)	*p*-value	Grandfathers (*n*=850)	Grandmothers (*n*=827)	*p*-value
Self-perceived health						
Very good/good	225 (54.9)	141 (34.5)	<0.001	507 (61.8)	287 (37.2)	<0.001
Fear / poor/very poor	185 (45.1)	268 (65.5)		314 (38.2)	484 (62.8)	
Life satisfaction						
Very/quite satisfied	364 (86.3)	378 (89.4)	0.16	778 (91.9)	757 (92.0)	0.92
Somewhat / not at all satisfied	58 (13.7)	45 (10.6)		69 (8.1)	66 (8.0)	
Loneliness						
No	185 (43.6)	127 (29.9)	<0.001	572 (72.2)	499 (62.4)	<0.001
Yes	239 (56.4)	298 (70.1)		220 (27.8)	301 (37.6)	
Depressive Symptoms						
No	404 (94.8)	395 (92.9)	0.24	818 (96.2)	762 (92.1)	<0.001
Yes	22 (5.2)	30 (7.1)		32 (3.8)	65 (7.9)	

p-values based on the Chi square statistic.

Table 3: Care intensity, economic support, time constriction and living arrangements in caring grandparents (n=1,677).

	Grandfathers (*n*= 850)	Grandmothers (*n*=827)	*p*-value
Caring intensity			
Daily	215 (51.4)	194 (59.0)	0.04
Weekly	203 (48.6)	135 (41.0)	
Hours per day*	5.15 (2.57)	6.16 (3.25)	0.001
Hours per week*	23.1 (19.4)	29.4 (24.3)	<0.001
Economic support			
No	611 (73.6)	659 (81.4)	<0.001
Yes	219 (26.4)	151 (18.6)	
Monthly investment (€)*	115.1 (55.3)	102.3 (49.2)	0.06
Time constriction			
No	632 (76.9)	547 (68.2)	<0.001
Yes	190 (23.1)	255 (31.8)	
Living arrangements			
Partner	501 (61.5)	308 (38.9)	<0.001
Alone	39 (4.8)	214 (27.1)	
Partner and children	195 (24.0)	103 (13.0)	
Other relatives	79 (9.7)	166 (21.0)	

Totals differ due to missing data
*mean±standard deviation (sd)
p-values based on the Chi square statistic.

almost daily basis. Since grandparents care role changes and adapts to the new family situations can explain this sharp increase number of Spanish grandparents that assume the role of grandchildren care [1].

Overall European grandparents take some type of grandchildren care at any one point in time, although intensive grandparental childcare varies considerably across Europe with an average of 12 hours per week and around 12% of grandparents providing more than 15 hours per week [28]. A previous study concluded that more resources are available for the care of grandchildren when the relationship of grandparents to grandchildren falls as a result of falling birth rates [29]. Spain is currently undergoing a demographic change where the proportion of elderly adults continues to increase with a life expectancy of 80.3 years for men and 85.6 for women and the birth rate has fallen from 10.4 in 2010 to 9.8 in 2014. However, the average number of grandchildren per family is 5.3 [30]. As other Mediterranean counties, Spain has larger families, more children in the household, and more exchange of assistance within, than in non Mediterranean countries [31]. Spanish families with more children are more likely to have more grandchildren, therefore the frequency and intensity of care may be greater than in countries with a low number of children per family.

The involvement of Spanish grandfathers in grandchildren care almost exceeds grandmothers, which differs from a previous study, where the 53% of European grandmother's provided childcare, either intensive or non-intensive, compared with 47% of grandfathers [32]. As grandfathers often start in the care role after retirement and Governments across Europe are seeking to retain in the labor market [33-35], wherein Spain retirement age is of 67 years or 65 when they are credited 38 years and 6 months of contribution can explain the high number of early caring grandfathers in our sample [36]. We also found that grandfathers are four times more likely to care for grandchildren if living with spouse than if living alone, while the proportion in caring grandmothers who live alone or with spouse is similar. This means that women are still being the driving force of grand-parenting.

Overall, results show a positive relationship between caring grandparents and well-being. The amount of hours spent providing care is not linked to poor reported health; therefore our results do not support that care intensity leads to poorer grandparents' health in contrast with those who invest less time in grandchildren's care. The difference between our results from those of the U.S. which shows a negative health impact is most likely as grandparents who are 'primary caregivers' for their grandchildren with the parents away from home [16]. Also evidence from China suggest that grandparents co-reside with their grandchildren and provided 15 or more hours of care per week are more likely to experience health declines [36]. Although custodial and primary care often came from disadvantages households, research doesn't find mayor widespread health effect ones socioeconomic and demographic characteristics are controlled [5]. However, this significant association between intensive care and

Table 4: Psychological well-being in Spanish elderly grandmothers and grandfathers caring for grandchildren (n=1,677): Logistic Regression Models.

	Poor self-related health		Life dissatisfaction		Loneliness		Depressive symptoms	
	aOR (95% CI)	*p*- value	aOR (95% CI)	*p*- value	aOR (95% CI)	*p*- value	aOR (95% CI)	*p*- value
Men (n = 850)								
Frequency								
Daily	0.86 (0.61-1.23)	0.08	0.56 (0.31-0.99)	0.04	0.66 (0.47-0.94)	0.04	1.40 (0.65-2.97)	0.16
Weekly	0.61 (0.42-0.88)	0.01	0.49 (0.27-0.89)	0.03	1.33 (0.92-1.91)	0.06	0.77 (0.30-2.01)	0.1
Economic support	1.44 (1.03-2.01)	0.02	3.78 (2.40-5.94)	<.001	1.63 (1.17-2.28)	0.008	0.47 (0.18-1.23)	0.93
Time constriction	0.63 (0.43-0.90)	0.008	1.62 (0.97-2.69)	0.52	1.58 (1.14-2.20)	0.006	0.46 (0.15-1.33)	0.15
Living arrangements								
Alone	4.05 (1.32-12.3)	0.01	5.67 (1.23-26.0)	0.03	3.50 (1.04-12.6)	0.02	5.84 (1.07-31.7)	0.01
With spouse/partner	0.24 (0.07-0.73)	0.02	0.14 (0.03-0.64)	0.01	0.27 (0.07-0.99)	0.04	0.18 (0.03-0.99)	0.05
Women (n = 827)								
Frequency								
Daily	0.89 (0.61-1.29)	0.31	0.60 (0.31-1.14)	0.48	0.61 (0.42-0.88)	0.03	1.39 (0.76-2.54)	0.62
Weekly	0.90 (0.58-1.40)	0.86	0.42 (0.18-0.98)	0.04	0.72 (0.47-1.12)	0.44	0.96 (0.44-2.09)	0.96
Economic support	1.25 (0.80-1.97)	0.97	2.33 (1.29-4.22)	0.03	2.61 (1.56-4.37)	0.02	1.47 (0.75-2.89)	0.2
Time constriction	1.97 (1.04-3.73)	0.04	1.21 (0.71-2.06)	0.16	1.15 (0.82-1.62)	0.7	0.79 (0.43-1.43)	0.23
Living arrangements								
Alone	0.84 (0.48-1.47)	0.85	3.03 (1.08-8.49)	0.02	1.91 (1.07-3.40)	0.01	0.40 (0.11-1.39)	0.15
With spouse/partner	1.25 (0.70-2.22)	0.43	0.25 (0.08-0.82)	0.03	0.48 (0.26-0.86)	0.03	2.48 (0.70-8.74)	0.31

Reference group: Non-caring grandparents
aOR: Odds Ratio are adjusted for age, education, marital status and household incomes
CI: Confidence Interval

health was found only for grandmothers, and not for grandfathers [10]. We found that caring grandmothers tend to be older, widowed or divorced, less educated and with lower incomes than caring grandfathers, this disadvantages may explain why grandmothers are more likely to perceived poor health than grandfathers.

Grandparents are older in Southern European countries with a median age of 70 years in comparison with the Nordic countries, where the median age of grandparents is around 66 years [28]. Some authors assert that as age increases the gap of differences in social roles of women and men are reduced [37,38], whereas we found that married grandfathers are significantly more likely to provide grandparental childcare, result we not found in elderly married grandmothers, confirming the results found by Knudsen [39].

Despite the tendency to change, grandmothers spent more hours in caring grandchildren than grandfathers, therefore they have less time to perform other activities and to promote social engagement [33]. Low quantity and quality of social relationships have a higher risk of poor health in older people [40], although the relationships with friends seems to protect against the declined health in Spanish older women, while not in Spanish older men [41]. Given that gender has been found to modify the independent effect of social relations on health and well-being help to explain why more grandmothers than grandfathers reported poor health [42]. Research show that economic restriction increases when caring grandparents are required to support family economically, affecting health and well-being [43]. We found that economic investment increases the likelihood of life dissatisfaction in both, grandmothers and grandfathers, although it should be noted that the retirement pension in Spain is one of the lowest in Europe after Ireland, with an average amount at 614.27 dollars per month [35].

The results of the interaction between care-living arrangements and grandparent's psychological well-being differ between grandparents. Living alone affects negative caring grandfather's health and well-being, but living with a spouse leads to positive benefits. Conversely for caring grandmothers living with a spouse increased the likelihood for depressive symptoms, but not if living alone. Married grandmothers play multiple roles as parent, spouse and grandparent and greater house loads at most extend than men [22]. Since the accumulation of roles could lead to marital strain and psychological distress [44], particularly when inequity is perceived in the way partners share the household tasks [37], may contribute to increase the likelihood of depressive symptoms in caring grandmothers.

Limitations and Strengths

Our study uses a database of older people that was not focused to assess grandparents neither caring grandparents; therefore several important limitations should be underlined. Also the causal direction of health can be two-way: providing care reduces health or poor health reduces prevalence and intensity of the care provided. As the demand of grandchildren's care may be different, we have not been able to ascertain whether the number and age of the grandchildren can influence health and psychological well-being of grandmothers and grandfathers. Despite all these limitations our study contributes to add knowledge in this research area, providing a detailed picture of grandparents' psychological well-being and its association with gender care roles in a national representative sample of elderly Spanish grandparents. Although our results show a trend reversal, where Spanish grandfathers increasingly look after their grandchildren, grandmothers continue to be more involved in care. Integrating sex and gender analysis is a requisite, as that the impact of science may not be equally beneficial for both men and women. Policy makers and social and health providers should be aware of the influence of gender

and gender expectations, recognizing different family roles played by grandparents to support both, grandmothers and grandfathers.

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