

Why Should I Care? Family Old-Age Caregiving and Preferences for Family or Public Care Provision in France

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Abstract

The rapid ageing of the European population in recent years has brought a significant increase in old-age care needs. While families still constitute the main care provider in most European countries, their capacity to care has decreased in the face of intensified pressures, calling for a strengthening of public care services. In this context, the discussion on whether families or the public sector should be responsible for providing old-age care takes relevance, and the preferences of family caregivers appear fundamental to ascertain whether families will continue to carry the main weight or welfare states will need to step up. The present study addresses this issue by testing a causal link between providing family old-age care and preferences for family or public care provision, under the hypothesis that caregiver burden and its impact on well-being increase demand for public services. This hypothesis is tested with data from the Generations and Gender Survey for a 3-wave panel sample of 4587 respondents in France, which constitutes a prototypical case of explicit familialism in old-age care. Data are analysed through a causal mediation approach using linear within-between effects and propensity score weights. Results suggest that providing old-age care increases demand for public services among women but makes men more supportive of family provision.

Introduction

In recent years, European countries have experienced a significant increase in old-age care¹ needs due to sociodemographic changes, primarily the rapid ageing of the population and an increment in chronic illness (Da Roit et al., 2007; Theobald & Luppi, 2018). This increase has

¹ The term old-age care is preferred to elderly care given the ongoing debate about the negative connotations of the term “elderly” (Avers et al., 2011).

intensified pressures on families and the public sector and brought forward a discussion on which should be responsible for old-age care. Families, and within families most often women, continue to represent the main provider of old-age care in most European societies (Da Roit et al., 2007; Sowa-Kofta et al., 2021). Nevertheless, factors like the growth of paid employment among women aged between 40 and 65 and the higher occupational and residential mobility of adult children have reduced the capacity of families to care, calling for a strengthening of public provision (Da Roit et al., 2007; Theobald & Luppi, 2018).

The central role of the family in Continental, Southern and Eastern Europe is generally explained in the literature through institutional and cultural factors (Kalmijn & Saraceno, 2008). Institutionally, family care is either explicitly encouraged through policies such as cash-for-care payments and care leaves or implicitly supported by the absence of public care services (Leitner, 2003; Schmid et al., 2012). Culturally, it is generally assumed that norms of family responsibility are comparatively strong in Southern and, to a lesser extent, Continental and Eastern European countries, leading to higher family care rates than in the more individualistic Scandinavian cultures (Reher, 1998; Daatland & Herlofson, 2003). However, in a context of increasing old-age care needs and declining resources on the side of the family, normative aspects might not be enough to sustain public support for familialistic care systems.

In this scenario, the formation of individual preferences for family or public provision for old-age care has become a relevant research topic for social scientists. Previous studies on old-age care preferences have explored individual predictors like gender, partnership, number of children, labour market status, educational level or the respondent's experiences of care receiving (Mair et al., 2016a, 2016b, Daatland & Herlofson, 2003; Fang & Yang, 2023; Lu et al., 2021) as well as contextual variables like welfare state generosity, country-level gender equality and culture (Mair et al., 2016a; Janus & Koslowski, 2020). A considerable share of

these contributions focuses on the experiences and preferences of old adults in need of care (Mair et al., 2016b, Fang & Yang, 2023, Lu et al., 2021).

Less attention, however, has been given to the preferences of caregivers and how these might be affected by their caregiving experiences. In this line, Mair et al. (2016a) suggest that giving old-age care to a family member might cause caregiver burden when it becomes difficult to balance care with other professional and personal responsibilities, leading to demand for public services. However, no evidence has been provided of a causal effect of caregiving on preferences. Since the willingness of family members to care is essential to sustain a system of care provision which remains strongly dependant on the family, and given the constant increase in old-age care needs across European countries, understanding the experiences of family caregivers and whether these have an impact on their preferences for family or public provision becomes a fundamental task in order to ascertain the future of old-age care systems in Europe.

The present paper tackles this research gap by testing the existence of a causal link between family old-age caregiving and preferences for family or public provision of old-age care. The proper specification and test of a causal mechanism constitutes a relevant contribution to the field, given that there are solid theoretical reasons to assume that, while caregiving might lead to changes in preferences, preferences also explain caregiving choices and behaviour. To that end, the following research question is addressed:

RQ: Does giving old-age care to a family member affect preferences for family or public provision of old-age care?

Following Mair and colleagues' (2016a) suggestion that caregiver burden might lead to demand for public services, a mediation model is proposed in which giving care to an old-age parent or partner increases preference for public provision through its negative impact on the caregiver's well-being. Indeed, research has shown that those who give care to a family member often experience objective and subjective burden leading to psychological strain and a decline

in general well-being (Montgomery et al., 1985; Bastawrous, 2013; Schmid et al., 2012). Family caregivers are more likely to suffer from fatigue, stress and depression, experience role conflicts and a lack of work-life balance, and to face labour market and income risks. From a self-interest approach to preference formation, it is to expect that those who experience caregiver burden demand an increase in public old-age care provision in order to alleviate their own care duties.

The study employs data from the Generations and Gender Survey for a panel sample of 4587 French respondents in the years 2005, 2008 and 2011. The reasons to focus on the French case are both theoretical and empirical. From a theoretical point of view, the French old-age care system constitutes a prototypical case of explicit familialism in which the predominant role of the family as the primary caregiver is supported by the state via income-tested dependency allowances and only limited access to public services (Leitner, 2003; Schmid et al., 2012; Morel, 2007). At the same time, there is evidence that social support towards norms of family responsibility is comparatively lower in France than in other conservative welfare states (Kalmijn & Saraceno, 2008). Therefore, family caregivers in France should be particularly supportive of an increase of public care provision. In empirical terms, France is the only country in the survey with longitudinal data for the key variables in three different time points, allowing for the application of causal inference methods.

The data are analysed using Imai et al.'s (2010a) Causal Mediation Analysis approach. Causal effects are tested by means of linear within-between effects models. Propensity Score Weights are used to correct the non-random assignation of respondents to treatments (Olmos & Govindasamy, 2019; Zhou et al., 2020). The findings indicate that providing old-age care decreases support for family provision among female caregivers of a partner, while it increases it for male caregivers of a parent. The mediated proportion for these effects is very low, suggesting that well-being does not play a relevant part in the causal relation.

The next section provides a theoretical background on family care, care preferences and the concept of caregiver burden, and introduces the hypotheses and the particularities of the French case. Subsequently, the methods and results are presented. A discussion of the findings concludes the paper.

Theory

1. Family caregiving: motivators and preferences

In all European societies, the responsibility for old-age care provision is shared between families and the public sector (Daatland & Herlofson, 2003). However, the degree of responsibility assigned to each of the parts varies depending on institutional and normative factors (Kalmijn & Saraceno, 2008). Institutionally, it has been observed that some welfare states rely on and actively support the caregiving role of the family, while others try to alleviate family care responsibilities (Leitner, 2003; Schmidt et al., 2012). In this regard, Leitner (2003) classifies European welfare states in three groups, depending on whether and how they address the role of the family in old-age care provision. The first group, composed by Denmark, Finland and Sweden, is characterised by optional familialism, meaning that family responsibility is strengthened via transfers, care leaves and regulation of intergenerational obligations, but family burden is partially alleviated through public services. The second group, including Greece, Italy, Spain, Portugal and the Netherlands, is characterised by implicit familialism, meaning that policies do not explicitly support family care but neither offer alternatives through public services, and families remain the primary caregiver by default. Finally, a third group composed by France, Belgium, Luxembourg, Austria, Germany, Ireland and the United Kingdom is characterised by explicit familialism, meaning that family responsibility is strengthened through care leaves, cash-for-care benefits and legal obligations, but there is a lack of public services to alleviate family burden.

In normative terms, it has been argued that family care is commonly perceived as the natural alternative (Daatland & Herlofson, 2003) and individuals give old-age care to their relatives moved by social expectations and norms of family responsibility. The role of norms has been particularly stressed in the literature when it comes to intergenerational solidarity. Bengtson and Roberts (1991) argued that norms and expectations of individual obligations to the family have a great impact on the actual patterns of instrumental support and resource sharing. Indeed, several studies have provided evidence that strong norms of filial responsibility translate into actual support behaviour, both at the individual level (Silverstein et al., 2006; Hwang et al., 2022) and in aggregate terms (Kalmijn & Saraceno, 2008; Dykstra & Fokkema, 2011). However, that institutional setting and social norms lead individuals to give old-age care to their family members does not necessarily mean that family care is their preference. In contexts of scarce public provision and strong normative expectations of family responsibility, individuals might have no alternative but to take over the care needs of their old-age relatives. The difference is important, as it has implications for the social legitimacy of a familialistic social organisation of old-age care.

Scholarly research on the formation of preferences for family or public old-age care provision considers several individual factors. First, gender has been found to play a relevant part. There is evidence that women tend to be more supportive of public provision than men (Mair et al., 2016a), a finding that appears to be connected with the gendered division of care work. In terms of family composition, having children matters only conditionally to normative factors. Daatland & Herlofson (2003) observe that the number of children is positively associated with support for family care in familialistic countries but leads to a higher demand for public services in individualistic cultures, and suggest that parents' preference for public provision in countries with strong independence norms might have to do with a concern about the welfare of children. Moreover, individual labour market status, income and educational

level are also associated with old-age care preferences. Mair et al. (2016a) find evidence that employed respondents are less supportive of public provision than those who are unemployed or outside the labour market, while Fang and Yang (2023) find that support for public provision is negatively associated with family income but positively associated with educational level. Furthermore, receiving family care is associated with stronger support for family provision (Mair et al., 2016b; Daatland & Herlofson, 2003) although it is difficult to discern whether care experiences lead to preferences or previously held preferences crystallise into care.

From the perspective of caregivers, it has been suggested that caring for an old-age relative might increase support for public provision when the caring tasks generate incompatibilities with the caregiver's other professional and personal responsibilities, leading to objective and subjective caregiver burden and impacting their psychological well-being (Mair et al., 2016a). This argument aligns with the self-interest approach of preference formation, which posits that individual social policy preferences result from rational calculations of the potential benefits each individual can expect from the implementation of said policies (Meltzer & Richard, 1981; Blekesaune, 2007; Linos, 2003). In this sense, family caregivers can be seen as beneficiaries of the implementation of defamilialising care policies and programs that relieve their care responsibilities. In other words, when providing family old-age care leads to care burden, family caregivers might become more supportive of an strengthening of public provision to protect their well-being.

2. Caregiver burden

The term “caregiver burden” is well-established in the specialised literature (Montgomery et al., 1985; Bastawrous, 2013; Liu et al., 2020). In a systematic review of the concept, Liu et al. (2020) define caregiver burden as “*the level of multifaceted strain perceived by the caregiver from caring for a family member and/or loved one over time*”. As highlighted in the definition, caregiver burden entails a multiplicity of dimensions, which are generally grouped into

objective and subjective burden (Montgomery et al., 1985; Bastawrous, 2013). Objective burden includes the physical or instrumental provision of care and its interference with other aspects of the caregiver's life. In order to satisfy the care needs of care receivers, family caregivers must allocate a significant amount of time to caregiving tasks. As a result, caregivers often experience conflicts between their caregiving role and other familial, social and professional obligations, which lead to a decrease in the quality of their relationships with other family members, particularly spouses and children, a lack of social activities and consequent restriction of social networks, and negative financial and career impacts when the caregiver renounces to full-time employment to fulfil the care receiver's needs (Savundranayagam et al., 2011; Bastawrous, 2013). On the other hand, subjective burden refers to the emotional or psychological impact of objective burden on caregivers (Bastawrous, 2013). Indeed, there is evidence that providing care to a family member increases the likelihood of experiencing emotional stress and anxiety, and is associated with a decrease in emotional well-being (Savundranayagam et al., 2011; Casado-Mejia & Ruiz-Arias, 2016).

The extent to which family caregivers experience caregiver burden depends on multiple factors, the most prominent being the gender of the caregiver (Casado-Mejia & Ruiz-Arias, 2016). There is abundant evidence that in most contemporary societies the responsibility for family care falls disproportionately on the side of women (Schmid et al., 2012; Leitner, 2003; Silverstein et al., 2006). Women are not only more likely to become family caregivers than men, but usually take up more burdening roles as well. Schmid et al. (2019) find that while there are no important gender differences in terms of sporadic support across European countries, daughters provide intensive support to old-age parents much more often than sons, particularly in countries with familialistic care systems. This difference matters because while no link has been found between sporadic support and well-being, intensive caregiving is associated with mental and physical strain (Schmid et al., 2012). Similarly, Bastawrous (2013)

observes that male caregivers typically provide mainly instrumental support, while female caregivers are more likely to provide emotional support in addition to performing instrumental tasks. As emotional support has a greater impact on the psychological well-being of caregivers, women are more vulnerable to subjective caregiver burden than men.

A second characteristic that influences the likelihood of experiencing caregiver burden is the relation of the caregiver to the care receiver. Two types of kinship are particularly salient in the provision of family old-age care: adult children and partners (Pinquart & Sörensen, 2011; Bastawrous, 2013). While the latter are traditionally the first option to provide old-age care (Pinquart & Sörensen, 2011), it has been suggested that the role of adult children will become increasingly important due to population ageing (Bastawrous, 2013). Children and partner caregivers differ in relevant aspects. While partners tend to give care full-time, children are more likely to compatibilise care tasks with paid employment and other family and social obligations, leading to a higher degree of caregiver burden (Casado-Mejía & Ruiz-Arias, 2016). In a similar line, Bastawrous (2013) suggests that caregiver burden in adult children arises from the non-normative character of the role transition they experience when the parent becomes dependent on the adult child at a point when children have their own spousal and parental obligations. Nonetheless, the theoretical link between relation to care receiver and burden has not been fully supported by empirical evidence. In this sense, Pinquart and Sörensen (2011) concluded after a meta-analysis of 168 empirical studies that partner caregivers report greater psychological strain and financial burden than adult children.

In line with the theoretical considerations above, the following hypotheses about the causal relations between family old-age caregiving, well-being and preferences for family or public provision are proposed:

H1: Giving old-age care to a family member increases support for public provision of old-age care.

H2: Giving old-age care to a family member decreases well-being.

- a) The impact of providing old-age care to a family member on well-being is stronger on adult children than on partner caregivers.*
- b) The impact of providing old-age care to a family member on well-being is stronger on female than on male caregivers.*

H3: The impact of giving old-age care to a family member on support for public provision is, at least partially, mediated by well-being.

- a) The mediated impact of providing old-age care to a family member on support for public provision is stronger on adult children than on partner caregivers.*
- b) The mediated impact of providing old-age care to a family member on support for public provision is stronger on female than on male caregivers.*

These hypotheses are tested using panel data from the Gender and Generations Survey for France in the years 2005, 2008 and 2011. The case of the French old-age care system and its adequacy for this study are discussed below.

3. The French Case

Like most European countries, France has seen since the end of the past century a considerable increase of old-age care needs (Martin et al., 1998; Le Bihan & Martin, 2012). In 2015, there were between 0.4 and 1.5 million dependent people over 60 living at home (Brunel & Carrère, 2017). In response to this increase, since the 1990s long-term care policies have become a relevant issue for the French welfare state (Da Roit et al., 2007; Le Bihan & Martin, 2012), which has addressed the matter mainly through cash-for-care benefits and co-financing of care residential facilities (Boneschy & de L'Espinay, 2022, Or et al., 2023). Despite these developments, the family has remained the main provider of old-age care at home, as care policies have focused on supporting and complementing family caregivers rather than relieving

them from care responsibilities (Morel, 2007; Le Bihan & Martin, 2012), following a logic of explicit familialism (Leitner, 2003).

The French social insurance system does not explicitly consider the risk of long-term old-age care dependency, which is instead addressed via social assistance. The main benefit provided to dependent old-age people by the French welfare state is the *Allocation Personnalisée à l'Autonomie* (APA), which has been in place since 2002 (Da Roit et al., 2007; Kaufmann, 2018) and is available to all persons 60 years of age or older who have difficulty performing everyday tasks (Morel, 2007; Boneschi & de L'Espinay, 2019). The benefit, which is partially co-paid by the care receiver depending on their resources and level of dependence, is granted to finance a specific care package determined by a team of professionals according to the recipient's needs and can be used to pay for care at home or institutionalised care (Da Roit et al., 2007; Kaufmann, 2018). In this sense, Morel (2007) understands that the main idea behind the APA is to promote free choice for dependent persons while simultaneously fostering the creation of low-skilled, low-wage jobs in personal service. However, it is not clear that the APA has worked as a defamiliasing arrangement. First, despite an increase in the availability of long-term care services at home, there is still a shortage of specialised workers due to the low salaries and hard working conditions in the sector, which often leads to a poor coverage of care needs (Or et al., 2023; Le Bihan & Martin, 2012). Second, although it is not allowed to pay the APA to a spouse, other family members such as adult children can still be hired as caretakers (Da Roit et al., 2007; Kaufmann, 2018). Finally, since care needs are often not manageable by a single formal care provider, family members still tend to bear a significant amount of informal care work as well as supervise care activities and make care decisions (Da Roit et al., 2007; Le Bihan, 2018).

Other care policies put in place in the country have explicitly reinforced the responsibility of families for old-age care. In 2006, an unpaid care leave for informal carers was introduced,

allowing adult children to leave their work for 3 to 12 months to provide care to their old-age parents. This arrangement recognises the right of the family to care but it pushes caregivers outside of the labour market, putting them at financial risk (Da Roit et al., 2007). Moreover, France has institutionalised the obligation of parents, children, grandchildren and spouses to provide mutual assistance in case of need, either through instrumental help or economic contributions (Besnard et al., 2019; Le Bihan & Martin, 2012).

Morel (2007) points out that France's categorisation as a corporatist welfare state has been historically reflected in its care system, based on the principle of subsidiarity and the normative belief that the family is the best possible provider of care, along with the defense of a male-breadwinner model in which women are expected to care for children and the elderly at home. Similarly, Leitner (2003) classifies the French care system as a case of explicit familialism, in which transfers, care leaves and the regulation of intergenerational obligations support family responsibility. Le Bihan (2018) highlights that 8 out of 10 care receivers in France obtain at least some support from their relatives, with half of them being cared for only by an informal carer. All in all, informal family care remains the principal source of old-age care provision in France (Da Roit et al., 2007).

Finally, data from Besnard et al. (2019) shows that 64% of spouse caregivers and 45% of child caregivers in France declare at least one negative consequence on health, like feeling lonely, depressed or anxious, with women reporting negative consequences on their health considerably more often than men. In conclusion, old-age care provision in France matches the theoretical premises of this study, making of France an ideal case to test the research hypotheses.

Methods

1. Data Source and Sample

The study's hypotheses are tested using panel data from the three waves of the first Generations and Gender Survey² (GGS). The survey, which is part of the Generations and Gender Program³, offers two key advantages: First, the inclusion of detailed data on family old-age caregiving, along with elaborate information on family composition and questions on old-age care preferences and psychological well-being, allow for the joint measurement of all the study's key variables. Second, the panel format of the data enables the use of causal inference techniques to fulfil the purpose of this research.

The GGS constitutes an individual-level fixed panel which a target population composed by those individuals resident in the country where the interview takes place and aged 18-79 at the time of the first wave. Respondents are selected through probability sample and the sample size for each country in Wave 1 must be sufficiently high to achieve at least 8000 cases on Wave 3. These sampling criteria grant large sample sizes in each wave and country (Gauthier et al., 2018).

There are 19 countries which have been covered in at least one wave of the GGS I. Out of these, however, only France contains data on the key variables of these paper for all three waves. The data collection years for each of the waves were, respectively, 2005, 2008 and 2011. The sampling frame consisted of a combination of area and census information using names or dwellings as sampling units. Data were collected through computer-assisted personal interviewing (CAPI). The sample size in Wave 1 was 10079, with a balanced panel sample size of 5435 respondents after attrition. After eliminating missings for the key variables, the final sample used in the study includes 4587 respondents with information in all three time-points.

² For a complete review see Vikat et al., (2007)

³ For a detailed report see Gauthier and Emery (2014).

2. Variables and Operationalisation

The dependent variable, preference for family or public old-age care provision, is measured using a 5-point Likert scale asking whether care for older persons in need of care at their home should be a task for family or for society. The values range from 1, “*mainly a task for society*”, to 5, “*mainly a task for the family*”. Here, “*a task for society*” is taken as a proxy for public care services, as opposed to private family-based provision. In this sense, previous studies have used the same GGS item understanding “*society*” to mean “*the state*” (Daatland et al., 2009; Herlofson et al., 2011), but the term “*public provision*” used in this paper captures collective responsibility for old-age care in a broader way.

The main independent variable is family old-age caregiving on the side of the respondent. The GGS asks if respondents have given regular help with personal care to anyone in the last 12 months and what the relationship of the respondent is with up to 10 care receivers. As adult children and partners constitute more than three-quarters of family caregivers in France (Besnard et al., 2019) and as they are the ones who provide the most intense support and experience burden more often, a categorical variable was created indicating whether respondents had provided care to at least one parent or partner 60 years or older. Two additional indicators of care for a parent and care for a partner are used to evaluate differences between both caregiver groups.

The mediator in the causal model is psychological well-being. The GGS includes a battery of 7 questions asking respondents how often in the previous week they have experienced certain types of psychological strain, like feeling depressed, fearful or lonely. The values for each question range from 1, “*seldom or never*”, to 4, “*most of the time*”. The mean of all 7 items was taken as an index of psychological well-being. Cronbach’s alpha was 0.90, supporting the

internal consistency of the index. The variable has been inverted so that higher values reflect higher well-being.

The control variables in all models are age, health, activity status, partnership status, marital status, having kids and household income, as well as two time-invariant individual characteristics: gender and educational level in Wave 1.

3. *Modelling Strategy*

Using the *panelr* R package (Long, 2020), two sets of within-between effects linear models are independently estimated, one of which predicts the outcome (preference) based on the treatment (caregiving), mediator (well-being) and covariates, and the other of which predicts the mediator based on the treatment and covariates. An interaction between caregiving and gender is included in both cases to assess gender differences in the treatment effects. These models allow to test Hypotheses 1 and 2.

In order to test the mediated causal effect (Hypothesis 3), the Causal Mediation Analysis approach proposed by Imai et al. (2010a) is employed. This approach allows to use a wide variety of regression models and types of variables, offers an array of sensitivity analysis to quantify the robustness of results and is easily implementable in R through the *mediation* package (see Imai et al., 2010b). Since *mediation* does not support *panelr* models, inference was done on regular fixed-effects models using subsamples for each gender instead of a cross-level interaction. The estimates are robust with the within-between models.

As GGS data are observational, the assignment to treatment (caregiving) is significantly associated with factors that also affect the mediator and the outcome variables, like gender and age. To obtain robust estimations of the causal effects it is necessary to balance those confounders across treatment and control groups. To do so, propensity score weights have been estimated and used in the regression models (Antonakis et al., 2010). A different set of weights has been employed for each of the caregiving treatments described above. The specification of

the propensity score models is available in the Supplementary Materials. The weights have been obtained by means of the *PSweight* R package (Zhou et al., 2022). Overlap weights are selected as they lead to perfect balance of the potential confounders. These weights allow to estimate the average treatment effect among the population with the greatest degree of overlap between control and treatment groups. Complementary analyses using inverse probability weights are available in the Supplementary Materials.

Results

1. *Exploratory results*

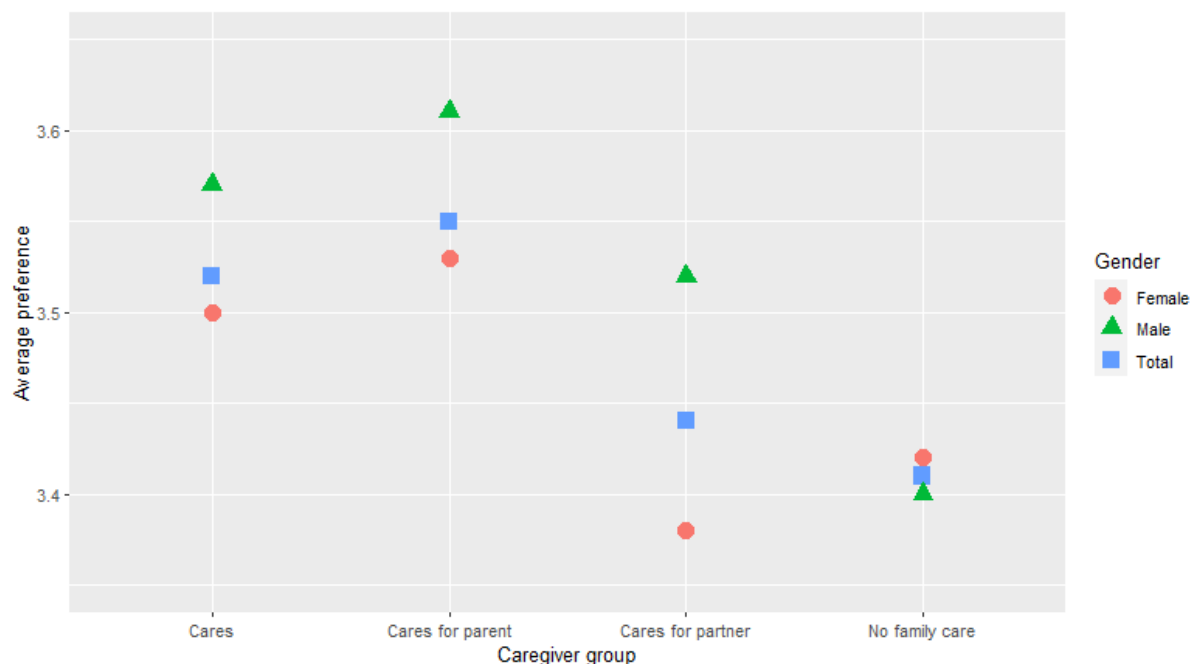
Table 1 reflects the distribution of family caregiving across genders and age groups. As expected, the bulk of old-age care (69 %) falls on women. The gender gap is particularly pronounced for those who provide care to an old-age parent, where three fourths of caregivers are women. When it comes to caring for an old-age spouse or partner, gender differences are smaller. In terms of age, practically all caregivers of the old-age are 45 years old or over. Among caregivers of old-age parents, almost two thirds are between 45 and 59 years old, whereas practically 9 out of every 10 caregivers of an old-age partner are 60 years old or over. The observed gender and age differences are consistent with previous theory.

Table 1: Distribution of caregiving across genders and age groups (pooled sample)

	Men	Women	Under 45	45-59	60 and over	N
<i>Cares</i>	0.31	0.69	0.05	0.47	0.47	476
<i>Cares for parent</i>	0.26	0.74	0.07	0.63	0.30	341
<i>Cares for partner</i>	0.45	0.55	0.00	0.13	0.87	135

3-Wave pooled sample (group sizes in right column)

Figure 1: Average old-age care preferences across genders and caregiver groups



Y ranging from 1: “Mainly a task for society” to 5: “Mainly a task for the family”

Regarding the distribution of the dependent variable across different caregiving groups (Figure 1), differences are small but suggest interesting patterns. While male and female respondents have practically identical average preferences when not giving care, the distances between them increase when caregiving, with male caregivers showing higher support for family provision. Moreover, female non-caregivers are on average less supportive of family provision than female caregivers of an old-age parent, but more familialistic than female caregivers of an old-age partner. In turn, male caregivers are on average more supportive of family provision than male non-caregivers, regardless of the relationship to the care receiver.

2. Causal inference

2.1 Caregiving and preferences for family or public provision

Table 2 shows the estimated coefficients for the within effects of caregiving, well-being and other covariates plus the between-effect of gender and its interaction with caregiving on

preferences for family or public provision of old-age care. The estimated causal effects of caregiving on preferences are reflected in Figure 2.

Table 2: Within-Between Models for Preferences

	M1	M2	M3
Within-Effects			
Treatment: Cares for parent or partner	0.13*		
	(0.06)		
Treatment: Cares for parent		0.15*	
		(0.07)	
Treatment: Cares for partner			0.10
			(0.07)
Well-being	0.01	0.00	0.05+
	(0.02)	(0.02)	(0.03)
Age	0.001	0.003	-0.004
	(0.003)	(0.003)	(0.003)
Health	-0.02	0.001	-0.05***
	(0.02)	(0.02)	(0.02)
Emp. Status: Not in paid employment	0.02	0.01	0.09
	(0.03)	(0.03)	(0.07)
Partnership: Co-resident partner	-0.24***	-0.15**	-0.55***
	(0.06)	(0.06)	(0.08)
Partnership: Non-resident partner	-0.18***	-0.26***	0.24***
	(0.05)	(0.05)	(0.07)
Lives with parents: Yes	0.44***	0.44***	-0.03
	(0.11)	(0.09)	(0.17)
Marital status: Married	0.17*	0.08	0.48***
	(0.07)	(0.06)	(0.10)
Has kids: Yes	0.22***	0.10*	0.49***
	(0.04)	(0.04)	(0.04)
HH Income 1500-3000	0.07*	0.12***	0.001
	(0.03)	(0.03)	(0.03)
HH Income >3000	-0.06	-0.04	0.05
	(0.04)	(0.04)	(0.05)
Between-Effects			
Intercept	3.26***	3.20***	3.28***
	(0.14)	(0.14)	(0.19)
Treatment: Cares (between)	0.16+	0.29**	-0.12
	(0.09)	(0.10)	(0.15)
Gender: Female	0.01	0.02	0.01
	(0.03)	(0.03)	(0.04)
Cross-Level Interactions			
Treatment:Female	-0.18*	-0.20*	-0.33***
	(0.07)	0.08	(0.10)
AIC	44725.71	41981.13	57775.72
Num. obs.	13761	13524	13041
Num. groups: individuals	4587	4508	4347

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

Note: Most between-effects are omitted for the sake of space. Full table is available in Supplementary Materials.

First and foremost, the models support the existence of a causal effect of caregiving on preferences, but the direction of the effect varies depending on the caregiver's gender and relationship to the care receiver. When observing the effects of giving care to an old-age parent or partner jointly (M1), caregiving significantly increases support for family provision in 0.13 (against H1). However, this effect is only visible for men, as there is a significant negative interaction effect for women, indicating that the real coefficient for female caregivers would be -0.05 . These results are consistent when considering exclusively the effects of giving care to an old-age parent (M2), with an increase of 0.15 in support for family provision for the male subsample, and again a significant negative interaction effect for female caregivers, whose support for family provision decreases in 0.05. When looking at the effect of giving care to an old-age partner (M3) the coefficient for male caregivers is not significant, and the negative interaction effect for female caregivers is highly significant and bigger than in the previous models, indicating that giving care to an old-age partner decreases support of female caregivers for family provision in 0.23.

According to Hypothesis 1, giving old-age care to a family member should reduce support for family provision. This expectation receives clear support in the case of female caregivers of an old-age partner (M3). For female caregivers of an old-age parent (M2) and the pooled sample of female caregivers (M1), a small decrease in support for family provision is also found⁴. In contrast and contrary to H1, men become more supportive of family provision after providing care to an old-age parent (M2), and their preferences do not significantly change after providing care to an old-age partner (M3).

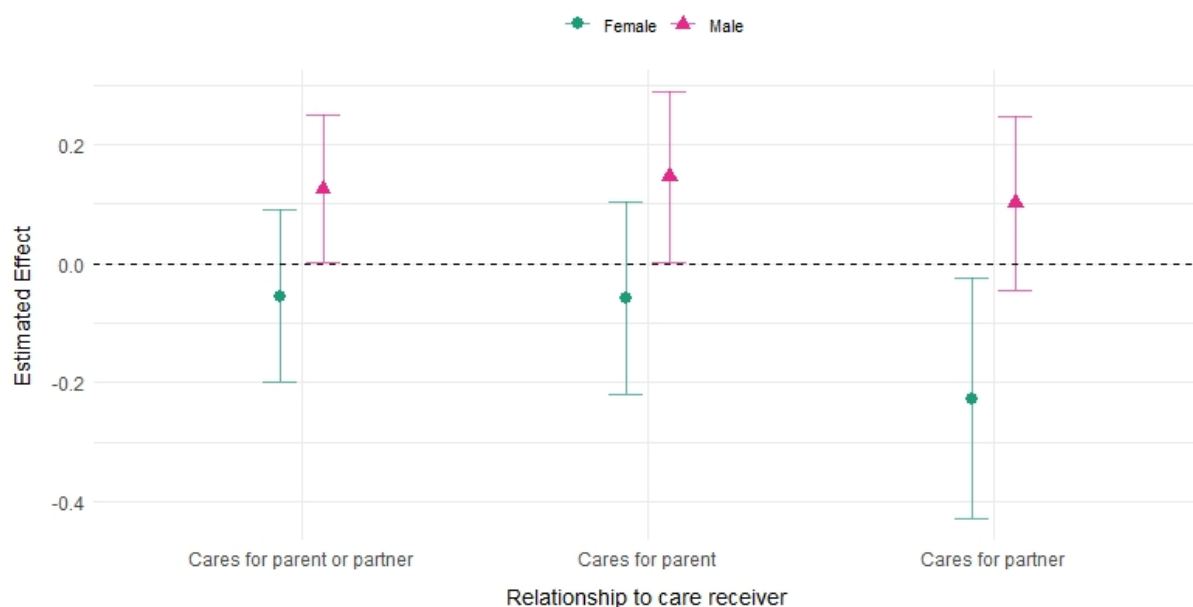
Moreover, the between-individual associations show that caregivers of a parent (M2) are significantly more supportive of family provision than non-caregivers. No significant

⁴ Both effects are statistically significant in the women-only samples employed for the fixed-effects models.

differences, however were found among caregiver of a parent and non-caregivers. These could suggest that caring for a parent is to some extent motivated by a previous preference for family provision, which is reinforced by the caregiving experience in the case of men, while caring for a partner might rather be motivated by non-attitudinal factors, like proximity or a lack of alternatives, increasing support for public provision in the case of women. It is also noteworthy that there are no significant gender differences in terms of preferences.

Figure 2: Estimated Causal Effect of Caregiving on Support for Family Provision

Comparison by Gender and Relationship to Care Receiver



Y ranging from 1: “Mainly a task for society” to 5: “Mainly a task for the family”

Regarding other variables in the models, well-being does not seem to affect preferences, although inconclusive evidence for a small positive effect on support for family provision is found in M3. Moreover, there is evidence that family characteristics play an important role in the formation of preferences. Having a partner decreases support for family provision in all models, except for non-resident partners in M3, where the effect is positive. Living with parents increases support for family provision in M1 and M2 (the models where caring for a parent is

considered), being married does the same in M1 and M3 (the models where caring for a partner is considered), and having children increases support for family provision in all models.

2.2 Caregiving and well-being

Table 3 shows the estimated coefficients for the within effects of caregiving and other covariates plus the between-effect of gender and its interaction with caregiving on well-being. The estimated causal effects of caregiving on well-being are reflected in Figure 3.

The results suggest that caregiving affects the caregiver's well-being, but only when the care receiver is an old-age partner (M3). When care is given to an old-age parent (M2), well-being is not significantly affected, regardless of the caregiver's gender. This finding directly contradicts H2a, which posits that the effect of caregiving on well-being should be stronger for caregivers of an old-age parent, and supports the conclusions of Pinquart and Sörensen (2011), who found that the psychological impact of caregiving was stronger for spouse caregivers than adult children. When focusing on caregivers of an old-age partner (M3), the expected negative causal effect on well-being (H2) is found, with size -0.12 . However, the effect is only negative for male caregivers, as indicated by the highly significant positive interaction with gender, which leads to a within-effect of 0.11 . In other words, caring for an old-age partner increases the well-being of female caregivers, a finding that contradicts previous research and the expectation that female caregivers would be more likely to experience caregiver burden captured in H2b. In sum, Hypothesis 2 only find supports for the group of male caregivers of a partner, with all expectations about the role of gender and relationship to care receiver being rejected.

Interestingly, the between-individual effects indicate that caregiving is associated with lower well-being in those models where no significant causal effect was found (M1 and M2), while no significant association is found in M3. Moreover, women consistently report lower well-being than men across all models.

Table 3: Within-Between Models for Well-being

	M1	M2	M3
Within-Effects			
Treatment: Cares for parent or partner	-0.03		
	(0.04)		
Treatment: Cares for parent		0.02	
		(0.05)	
Treatment: Cares for partner			-0.12***
			(0.03)
Age	-0.001	0.001	-0.01***
	(0.001)	(0.002)	(0.001)
Health	0.08***	0.11***	0.001
	(0.01)	(0.01)	(0.01)
Emp. Status: Not in paid employment	-0.04**	-0.05***	-0.003
	(0.01)	(0.01)	(0.02)
Partnership: Co-resident partner	0.32***	0.33***	0.32***
	(0.03)	(0.03)	(0.05)
Partnership: Non-resident partner	0.16***	0.18***	-0.02
	(0.03)	(0.02)	(0.05)
Lives with parents: Yes	-0.12**	-0.15***	-0.01
	(0.05)	(0.04)	(0.07)
Marital status: Married	0.04	0.04	0.08+
	(0.03)	(0.03)	(0.04)
Has kids: Yes	-0.02	0.01	-0.10***
	(0.02)	(0.02)	(0.01)
HH Income 1500-3000	4e-05	-0.01	0.02*
	(0.01)	(0.02)	(0.01)
HH Income >3000	0.003	-0.03	0.09***
	(0.02)	(0.02)	(0.02)
Between-Effects			
Intercept	2.42***	2.43***	2.47***
	(0.06)	(0.06)	(0.07)
Treatment: Cares (between)	-0.17***	-0.20***	-0.09
	(0.05)	(0.06)	(0.08)
Gender: Female	-0.19***	-0.19***	-0.20***
	(0.01)	(0.01)	(0.02)
Cross-Level Interactions			
Treatment:Female	0.05	-0.01	0.23***
	(0.04)	(0.05)	(0.04)
AIC	23897.46	23898.84	38059.49
Num. obs.	13761	13524	13041
Num. groups: arid	4587	4508	4347

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

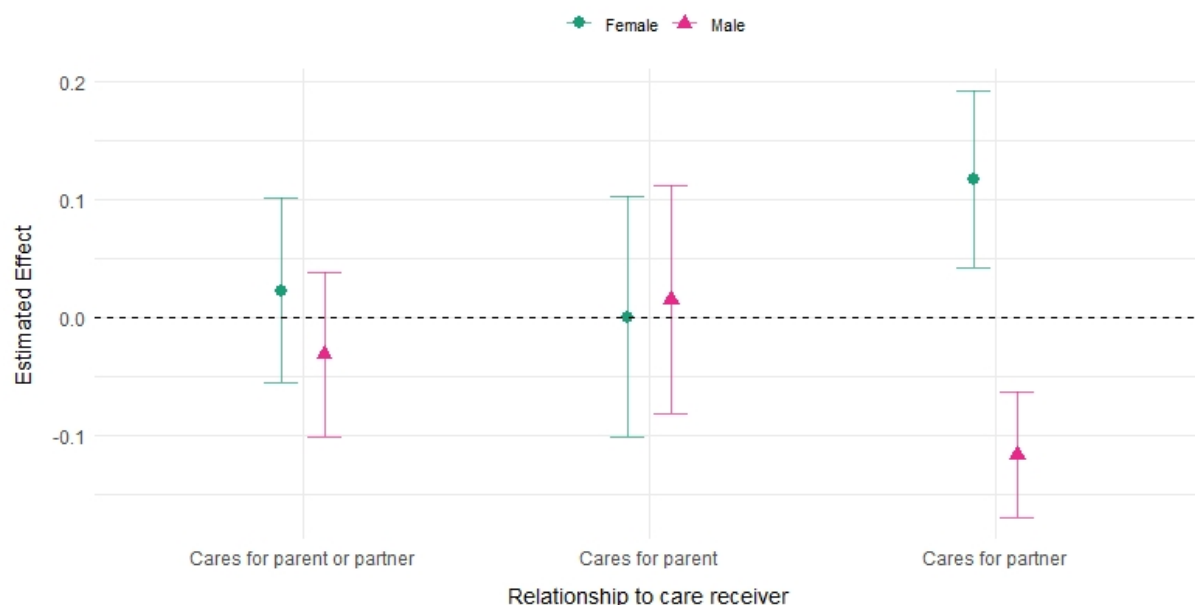
Note: Most between-effects are omitted for the sake of space. Full table is available in Supplementary Materials.

Concerning the rest of variables, health, having a job, having a partner and and not living with parents significantly increase well-being in M1 and M2 (the models where caring for a parent is considered), while a lower age, having a co-resident partner, not having kids and a higher

income significantly increase well-being in M3 (the model where only caring for a partner is considered).

Figure 3: Estimated Causal Effect of Caregiving on Well-Being

Comparison by Gender and Relationship to Care Receiver



Y ranging from 1: “Mainly a task for society” to 5: “Mainly a task for the family”

3. Causal Mediation

Table 5 shows the estimated Average Causal Mediation Effects (ACME) and Average Direct Effects (ADE) for each combination of gender and relation to care receiver. The ADE estimations indicate a clearer pattern than seen in the within-between models, where the effect of caregiving on support for family provision is always negative for female caregivers and positive for male caregivers. The coefficient sizes match those in Table 2, but statistical significance is higher.

Regarding the ACME, these are only significant for female caregivers of a partner and male caregivers of a parent. In the former case, the mediated effect of caring for a partner on preferences through well-being is 0.01, indicating that the growth in well-being experienced for female caregivers of a partner (M3 in Table 3) leads to a small increase higher support for

family provision. The ACME represents only a 6% of the total causal effect, which remains negative and significant. Therefore, the overall reduction in support for family provision among female caregivers of a partner is not explained by a decrease in well-being, but by other mechanisms not accounted for in this paper. In the case of male caregivers of a parent, the ACME is negative and significant, but very small (-0.004), representing only a 2% of the total effect, which remains positive and highly significant. Again, it can be concluded that the overall increase in support for family provision among male caregivers of a parent is not explained by a growth in well-being, but by other mechanisms not accounted for in this paper. Therefore, Hypothesis 3 is rejected.

Table 5: Causal Mediation Analysis

	<i>Female</i>			<i>Male</i>		
	<i>Cares</i>	<i>Cares for parent</i>	<i>Cares for partner</i>	<i>Cares</i>	<i>Cares for parent</i>	<i>Cares for partner</i>
ACME	-0.001	0.0001	0.01**	-0.003*	-0.004**	-0.002
ADE	-0.05*	-0.05+	-0.10**	0.12***	0.18***	0.08*
Total	-0.05*	-0.05+	-0.09**	0.11**	0.18***	0.08*
Proportion Mediated	0.02	-0.004	0.06**	-0.03*	-0.02**	0.02

3-Wave panel observations nested in individuals. n female sample = 2588, n male sample = 1920

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

Discussion

The purpose of this study was to test the existence of a causal link between providing informal care to an old-age parent or partner and preferences for family or public provision of old-age care, under the hypothesis that caregiving increases support for public provision due to its negative impact on the caregiver's well-being.

After analysing panel data from years 2005, 2008 and 2011 in France the results do not support the study's overarching argument. First of all, there is a causal effect of caregiving on preferences, but this is not always towards greater demand for public provision. Instead, the effect is conditional on the caregiver's gender and relationship to care receiver. As expected, women seem to become more supportive of public provision after giving old-age care, but the evidence is only conclusive in the case of caregivers of a partner. Conversely, men become more supportive of family provision after giving care, but the evidence is only conclusive for caregivers of a parent. A clear and relevant conclusion of this analysis is that caregiving affects the preferences of women and men differently.

Second, the causal impact of caregiving on well-being is limited to the group of caregivers of an old-age partner, with no effect on the well-being of caregivers of a parent. Furthermore, while giving care to an old-age partner reduces the well-being of men, it increases the well-being of women. This finding challenges the conclusions of previous studies which found the negative association between caregiving and well-being to be stronger for women. Nevertheless, both arguments are not necessarily contradictory given that these other contributions did not study within-individual causal effects.

Finally, the described causal effects of caregiving on preferences do not seem to be explained by changes in well-being. While significant average mediated causal effects were found for female caregivers of a partner and male caregivers of a parent, the comparatively small size of the coefficients and their negligible impact on the total causal effect suggest that other mechanisms explain the causal relation. Exploring these mechanisms constitutes a relevant task for future research on the matter.

The study's conclusions must be treated with caution in light of some limitations. First, the operationalization of the dependent variable is not ideal, as it cannot be assumed that "*society*" and "*public sector*" are equivalent terms. Nevertheless, it can be argued that "*a task for society*"

as opposed to “*a task for the family*” represents a sense of collective responsibility for care provision which is fulfilled by public old-care services. Furthermore, this limitation on the side of the dependent variable is compensated by the rich information that the GGS provides on the side of the covariates and by the availability of panel data. In this sense, the GGS represents the most appropriate dataset to test the article’s hypotheses. Finally, the analyses have been conducted on a representative sample of the French population, and their conclusions can therefore not be generalised to a wider context, although the theoretical argumentation of the paper is meant to apply as well in other European countries, once policy differences are controlled for.

Despite these limitations, the paper makes a relevant contribution to the field by providing the first test of the causal link between caregiving and care preferences and offering important insights on the different impacts of caregiving on women and men. The use of propensity score weights allows to study the relationship between caregiving and preferences without the influence of potential confounders, increasing the reliability of the results. Future contributions on the issue should aim to provide evidence from different national contexts and explore how different care policies and systems might shape the link between caregiving and care preferences, ideally through cross-national analyses.

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