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Childlessness, geographical proximity and non-family support in 12 European countries

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Abstract

The number of relatives and geographical proximity between them affects informal support provided to older persons. In this study, we investigate whether (a) childless persons and parents living remotely from their adult children experience similar shortages in informal support, and (b) whether neighbours, friends and other non-family helpers compensate for these shortages. On the basis of Survey on Health, Ageing and Retirement in Europe (SHARE) data for 12 European countries, we estimate the probability and amount of informal non-financial support received by persons aged 65 and over who remain childless or live at different distances to their children. The contribution of non-family individuals is rather complementary to the help from family. Parents residing in the proximity of their children rely almost exclusively on family; as the geographical distance between adult children and older parents increases, the probability and amount of non-family support increase as well. But childless individuals differ from parents of remotely living children: the former rely on smaller support networks and resort more often to other relatives than the latter. Non-family individuals compensate for the scarcity of informal support only in the case of parents of distant children, but not in the case of childless individuals.

Keywords: intergenerational relations; cross-national comparison; older people; personal care; instrumental support; support networks; childlessness

Introduction

With the onset of disability and loss of autonomy, help provided by family significantly improves the wellbeing and quality of life of older persons (Chiatti *et al.*, 2013). As the number of kin and relatives as well as spatial proximity between them constitute the ‘opportunity structure for intergenerational relationships’ (Bengtson and Roberts, 1991: 857), older persons who do not have children – at all, or not in the vicinity – are most affected by shortages of help (Mulder and van der Meer, 2009; Kalwij *et al.*, 2014; Broese van Groenou and De Boer,

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2016). In the countries of Europe this potentially concerns approximately 10 per cent of adults aged 50 and above who have remained childless (Deindl and Brandt, 2017; Sobotka, 2017) as well as 15 per cent of adults at the same age who live remotely, at least 25 kilometres (km), from their nearest child (Hank, 2007).

For this reason, a growing number of studies focus on alternatives to family sources of support, such as neighbours, friends, fictive kin, present or former work-related acquaintances, *etc.* (Chappell, 1983; Jordan-Marsh and Harden, 2005; Voorpostel, 2013; Kalwij *et al.*, 2014), that is, neither kin nor in-laws (hereinafter referred to as non-family). Their role appears substantial (Boaz and Hu, 1997; Keating, 1999; Fast *et al.*, 2004): in Europe, they constitute 26 per cent of all persons providing instrumental support (Attias-Donfut *et al.*, 2005) and contribute to approximately 30 per cent of the hours of informal support (Kalwij *et al.*, 2014). But non-family individuals cannot easily and fully replace relatives living in close proximity: while help with household tasks does not require any strong emotional tie and can be provided, for instance, by neighbours (Barker, 2002), personal care is intense and involves a high degree of intimacy. Consequently, this kind of assistance is most often provided by professional carers or members of immediate family: spouses, children and siblings (Jacobs *et al.*, 2018; Litwak, 1985), whereas the engagement of alternative sources of support remains rare (Lapierre and Keating, 2013). Does it mean that the lack of immediate relatives – at all or in the geographical proximity – leads to similar deficiencies in support experienced by older persons?

In the analysis that follows, the stress is deliberately put on adult children as potential donors of help because, apart from spouses, they provide the largest share of actual support to older persons in general (Komter and Vollebergh, 2002; Verbeek-Oudijk *et al.*, 2014), and the largest share of support from beyond the household (Attias-Donfut *et al.*, 2005). We examine in this study how the availability of adult children as potential providers of help relates to the involvement of persons from beyond the family. In the research on informal help to older individuals, the focus is dichotomously put either on parents and childless individuals, or on parents living at different distances from their adult children (Matthews and Rosner, 1988; Stoller *et al.*, 1992; Litwin, 1994; Stern, 1995; Kiilo *et al.*, 2016). Following the most recent research (Albertini and Kohli, 2017; Albertini and Arpino, 2018), we distinguish between several categories of older persons, that is being childless or a parent and, for the latter, living remotely, closely to or co-residing with a child. By referring to the fact of being childless or a parent, and to the physical distance as dimensions of children's availability, we claim that in terms of informal (unpaid) support, parents not having children in the vicinity bear more resemblance to childless individuals than they do to parents with children living in close proximity.

With few important exceptions (Attias-Donfut *et al.*, 2005; Kalwij *et al.*, 2014; Mudrazija, 2014; Albertini and Kohli, 2017), most empirical research on informal support examines only its likelihood, usually operationalised by the proportion (frequency in a given population) of older respondents declaring having benefited from this kind of support within a certain period of time. Such a variable evidences only a dichotomous state of receiving/not receiving help, and not its amount,

intensity, and the fact that an older person receives help once a month does not necessarily mean that this help is abundant or sufficient. The probability and the amount are not identical indicators of informal support and two recent studies for Europe found that in countries where the frequency of informal support is high, its amount is low, and *vice versa* (Bonsang, 2007; Brandt, 2013). In the analysis that follows, we investigate both indicators of the employment of non-financial help: by studying its likelihood we refer to the whole population of older individuals, and not only to those who received non-family support, whereas by examining its amount we allow for the actual engagement of providers of help.

This study is based on the Survey on Health, Ageing and Retirement in Europe (SHARE) that concerns all types of informal and non-financial support, that is, personal care, household chores and paperwork. These three types of help depend on the geographical conditions between potential donors and beneficiaries, although to a different extent: while practical household help and personal care require face-to-face contacts, paperwork may be partially provided at a distance. But as we show further on, the latter contributes marginally to the overall help received by older persons, and therefore we do not exclude it from our study.

Availability of children, non-family support and the European context ***Children's availability and non-family support***

Proximity conditions affect the provision of informal support in different ways: while financial transfers seem to occur independently of the physical distance between donors and beneficiaries (Rapoport and Docquier, 2006), personal care and instrumental support require frequent face-to-face contact, and as such can be maintained in the regular manner only at manageable distances (Komter and Vollebergh, 2002; Fast *et al.*, 2004; Daatland and Lowenstein, 2005). Studies concerned with family help found different thresholds of distance, beyond which the regular support from relatives diminishes significantly. The results remain ambiguous, though: it is a distance exceeding 5 km (Phillipson *et al.*, 1998; Knijn and Liefbroer, 2006) or 20 km (Mulder and van der Meer, 2009), or a time of journey exceeding 30 minutes (Joseph and Hallman, 1998; Checkovich and Stern, 2002; Heylen *et al.*, 2012), one hour (Litwak and Kulis, 1987; Conkova and King, 2019) or three hours (Conkova and King, 2019). In respect to adult children as potential providers of personal care and instrumental support, two recent studies showed that as the geographical distance to older parents gradually increases, the amount of regular non-financial help diminishes significantly (Kalwij *et al.*, 2014; Conkova and King, 2019). In turn, a factor recognised as particularly conducive to the provision of help is the co-residence of relatives, which obviously entails a complete lack of physical remoteness (Chappell, 1991; Komter and Vollebergh, 2002; Fast *et al.*, 2004).

The relation between proximity of carers and the provision of support is yet not that straightforward. Several studies showed that adult children who live remotely continue to help their so-called 'left-behind' ageing parents (Østergaard-Nielsen, 2003; Toyota *et al.*, 2007). In transnational families constituting the extreme case of geographical dispersion of relatives, children manage to provide instrumental

support to their parents on a less-regular basis, for instance during extended return visits (Baldassar, 2007), compensate for the shortage of day-to-day help through additional financial transfers or 'behind the scenes' management, thus contributing to parents' wellbeing (King and Vullnetari, 2006; Knodel and Saengtienchai, 2007; Zimmer and Knodel, 2013; Gedvilaitė-Kordušienė, 2015). In European countries, as the distance to older parents increases, adult children are less likely to provide personal care and instrumental help, but more likely to provide financial support (Bonsang, 2007). The remittances may, in turn, be spent on private personal care, provided that such care arrangements are available (Bonsang, 2007), or on instrumental support both from other members of the family (Zimmer *et al.*, 2013; Krzyżowski and Mucha, 2014) and beyond (Biao, 2007; He and Ye, 2014; Kalwij *et al.*, 2014; Evans *et al.*, 2017). It is also common for providers of help to specialise in such a manner that remotely living children contribute financially, whereas locally living family members and non-family individuals help in a non-financial way (Zissimopoulos, 2001). This specialisation (or compensation) effect is never *complete*, though: even members of transnational families usually still provide non-financial help, though on a less-regular basis, whereas locally based relatives and non-family individuals tend to provide financial aid in addition to instrumental support (Zimmer *et al.*, 2013).

When the need for regular help becomes substantial, it may also trigger geographical rapprochement between family members (Smits *et al.*, 2010). Many studies found that adult children and ageing parents choose to co-reside, settle down or relocate to live in close vicinity of each other in order to facilitate the provision of help (Rogerson *et al.*, 1997; Mulder, 2007; Pettersson and Malmberg, 2009; Heylen *et al.*, 2012; Seltzer and Friedman, 2014; Stark and Cukrowska-Torzewska, 2018). By analogy, the availability of local persons willing to help encourages residence at a distance or even the undertaking of migration, as in the case of Romanian young adults, who appeared to be more likely to move abroad when they had a sibling living in the parental household or in its close proximity (Zimmer *et al.*, 2013).

In this context, childless older individuals are in a particularly vulnerable position for at least two reasons. First, as opposed to the 'left-behind' parents, individuals who do not have children at all cannot benefit from remittances, 'behind the scenes' management or the above-described specialisation effect which occurs when locally living persons and remotely living descendants provide different types of support. As a consequence, childless older individuals tend to compensate for the absence of help from children by extending the support networks to distant relatives, friends, neighbours, present or former work colleagues, *etc.* (O'Bryant, 1985; Albertini and Kohli, 2009; Albertini and Mencarini, 2014; Jacobs *et al.*, 2018; Deindl and Brandt, 2017). Second, such non-family local providers of support can act as substitutes for family help, especially with basic tasks: shopping, paperwork or household chores (Egging *et al.*, 2011; Deindl and Brandt, 2017; Conkova and King, 2019; Nocon and Pearson, 2000), but when an older person requires permanent, long-term care, the involvement of family members or the use of professional care services becomes essential (Dykstra, 2009; Egging *et al.*, 2011; Deindl and Brandt, 2017). Personal care is such an intense and intimate assistance that children cannot be easily replaced by non-family carers (Barker, 2002; Lapierre and Keating, 2013).

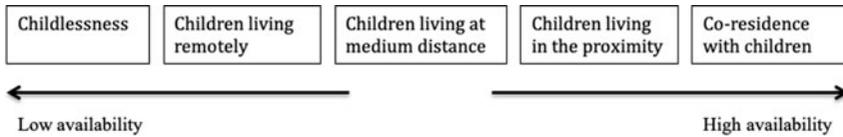


Figure 1. Degrees of children's availability.

Source: Own elaboration based on Albertini and Arpino (2018).

A certain analogy between childless individuals and parents living remotely from their children can be found: with the onset of old age, they both are more likely to receive non-family support and professional care services in comparison to parents living in the proximity of their descendants (Schnettler and Wöhler, 2016; Albertini and Kohli, 2017). Persons who do not have children – at all, or not within a short geographical distance – develop stronger ties beyond their immediate family (Bernard *et al.*, 2001; Albertini and Kohli, 2009; Schnettler and Wöhler, 2016) and rely more on non-family helpers than parents living close to their children (Choi, 1994; Larsson and Silverstein, 2004; Gray, 2009; Grundy and Read, 2012; Albertini and Mencarini, 2014; Deindl and Brandt, 2017). Still, however, childless individuals and remotely living parents experience significant shortages of support (Choi, 1994; Larsson and Silverstein, 2004; Dykstra, 2009; Gray, 2009; Grundy and Read, 2012; Deindl and Brandt, 2017), which means that childlessness and geographical distance both translate into fewer opportunities of receiving informal support.

The objective of this study is therefore to investigate whether childlessness can be inscribed in the continuum of conditions that underlie children's availability to older persons. Most empirical research reduces the family configurations that encourage informal support to a series of dichotomies: married or unmarried (Boaz and Hu, 1997; Fast *et al.*, 2004), childless or with children (Deindl and Brandt, 2017), co-residing with family members or living alone (Chappell, 1991; Komter and Vollebergh, 2002). In this study, we put forward a continuum of availability conditions, with the co-residence of parents and adult children signifying the highest availability, close and remote geographical distances to the nearest child representing intermediate degrees of availability, and childlessness meaning the lowest availability (Figure 1).

Informal support in Europe

The growing body of research stresses regional differences in family relations in Europe (Chiatti *et al.*, 2013; Solé-Auró and Crimmins, 2014; Verbeek-Oudijk *et al.*, 2014): in northern and western countries of Europe, middle- and old-aged parents live at more remote distances (Jordan, 1988; Reher, 1998), co-reside less often and maintain less-frequent contact with their children than in Mediterranean countries (Attias-Donfut *et al.*, 2005; Hank, 2007; Bordone, 2009). In western and northern Europe, we see young adults gaining independence at a relatively early age, whereas the Mediterranean countries and eastern Europe are characterised by a relatively high prevalence of multi-generational households (Kuijsten, 1996; Billari, 2004).

This intra-European variation is caused by persistent and long-lasting cultural, institutional and historical legacies dating back to the latter part of the Middle Ages, when it was usual for young adults in northern Europe – contrary to their counterparts elsewhere – to leave parental households at a young age to work as agricultural servants (Laslett, 1965, 1972; Wall, 1983). In the following centuries, the prevalence of services contributed partially to the emergence of two distinct demographic regimes (Hajnal, 1983, 1965) and intergenerational arrangements on the European continent (Goody, 1983; Reher, 1997): the family bore the entire responsibility for the wellbeing of older relatives in the east and south, where co-residence of older parents with children or rotation between offsprings' households was a common practice. By contrast, in the north, family support to older persons was only complementary to support from the local community (Anderson, 1977; Laslett, 1984, 1989; JE Smith, 1984; RM Smith, 1984). These arrangements were reinforced by country-specific legal systems (Reher, 1998) and religious doctrines (Goody, 1983), and underlaid the development of distinct systems of welfare state (Saraceno and Keck, 2010).

Indeed, public policies introduced in European countries provide different incentives for institutional care services, and the availability of formal home care may affect the provision of informal family and non-family support. Several typologies were proposed to describe this intra-European variety, such as the distinction between the 'Bismarck' model in the western part of the continent and 'Beveridge' model in the Nordic countries (Cremer and Pestieau, 2003), or between liberal, conservative and social democratic regimes of welfare capitalism (Esping-Andersen, 1990). Saraceno and Keck (2010) proposed three ideal types of care relations: (a) based almost exclusively on the family ('familialism by default') in southern and, to some extent, eastern Europe; (b) based on the family but complemented by external institutions, either public or private ('supported familialism') in western Europe; and (c) based predominantly on non-family institutions ('de-familialisation') in northern Europe. Empirical studies showed that in the Mediterranean countries, public policies favour familial support (Bonsang, 2007; Bolin *et al.*, 2008), whereas in the North and the West of the continent they provide more incentives for institutional care services or migrant care workers (Jacobzone, 1999; Broese van Groenou *et al.*, 2006; Verbeek-Oudijk *et al.*, 2014). These care arrangements remain in line with different cultural norms existing in Europe, in particular the perception that the family is obliged to support older individuals seems to be more predominant in southern than northern Europe (Haberkern and Szydlik, 2010). Recent research confirms the regional variation in preferences (Eurobarometer, 2007) and in actual care relations (Cuyvers and Kalle, 2002; Hank, 2007) along the South/North-West axis, at least when the amount, and not the frequency of help is studied (Brandt *et al.*, 2009; Brandt, 2013).

Similar research for eastern Europe remains inconclusive, though. With some important exceptions (Conkova and King, 2019; Pesando, 2019), this region is rarely included in international comparisons and its definition differs from one study to another, depending on criterion in use: geographical (thus, including also Austria and Germany) or political (thus, including only post-communist countries). Institutional services of care are less available in the post-communist countries where during the transitory period of the 1990s and 2000s the level of welfare

expenses remained considerably lower than in other parts of Europe (Boenker *et al.*, 2002; Vihalemm *et al.*, 2017; European Commission, 2018). This translates into strong support received from the family (Saraceno and Keck, 2010; Litwin and Stoeckel, 2014; Fernández-Carro and Vlachantoni, 2019), but not necessarily into low involvement of non-family individuals. In the study concerned with resorting to advice and help when looking for a job, nationals of different east European countries appear to develop both the strongest and the weakest non-family ties of informal support in Europe (Conkova *et al.*, 2018), meaning that the interrelation between different sources of support follows not a single, but various country-specific patterns. Thus, persistent cultural and ideational factors contribute to 'societies' own historical trajectories' (Reher, 1998: 221) and to different models of intergenerational solidarity in European countries (Kuijsten, 1996; Billari, 2004).

Characteristics of support and the availability of potential helpers

In general, the involvement of non-family individuals depends both on the characteristics of support – whether it requires face-to-face contacts, frequency, intimacy, *etc.*, and the availability of other helpers, such as children, further relatives and providers of care services. Obviously, potential providers of help differ with regard to the degree of affectivity towards an older person, possibility of long-term commitment and geographical proximity. The task-specific model (Litwak, 1985; Litwak and Szelenyi, 1969) focuses on these two dimensions of support, that is its nature and structural features of helpers, as essential to explain the configurations of support networks of older persons. Against this background, several studies show that geographical proximity is one of the crucial factors affecting the match between a person providing support and characteristics of a given care task, as well as the efficiency of that help (Peters *et al.*, 1987; Feld *et al.*, 2004; Stuijbergen *et al.*, 2008; Tolkacheva *et al.*, 2011; Allen *et al.*, 2012). Thus, while relatives, in particular a spouse and other co-resident kin, may be best suited to handle long-term and intimate commitments such as personal care, neighbours and locally living friends efficiently help in urgent situations requiring their presence at an older person's place. Also, whenever support requires specialised skills and intense effort, resorting to formal care is the most effective strategy (Feld *et al.*, 2004; Conkova *et al.*, 2018).

According to the task-specific model, providers of help with similar structural properties are to a limited extent 'functionally substitutable' (Litwak, 1985), that is, they can replace each other in the provision of certain types of support. In the present study, we argue that non-family individuals may to some extent replace adult children in the provision of support to older persons. In order to incorporate childless older persons, we re-interpret the task-specific model and replace geographical proximity with the continuum of conditions describing the availability of adult children (Figure 1). With so-defined degrees of children's availability – co-residence, close and remote geographical distances to the nearest child, and childlessness – the hypothesis is:

- The lower the availability of children, the higher the probability and the amount of informal support provided to older parents by individuals from outside the family.

That is, childless individuals and parents of remotely living children receive more often and more help from non-family individuals than parents co-residing or living in the proximity to their nearest child. Obviously, being childless or a parent and geographical distance only approximate the actual availability of children, as the latter depends also on children's labour market activity, own family status, health conditions, cultural norms and context, which varies between European countries. Selected studies examined different characteristics of potential carers (Brandt *et al.*, 2009; Mulder and van der Meer, 2009; Heylen *et al.*, 2012; Kalwij *et al.*, 2014), but did not inscribe these characteristics into one coherent continuum graduating the availability of support. In this study, we examine whether such a gradation could be established with reference to two dimensions of availability, that is being childless or a parent and geographical proximity.

The mechanism of substitution between providers of help with similar structural properties – children, other family members and non-family individuals – is additionally mediated by the social context. The existing research suggests that familialistic practices of intergenerational relations prevail particularly in the countries of eastern and southern Europe, which implies that in these regions, apart from the availability degree of adult children, there is a less pertinent need for compensatory non-family support than in the countries of northern and western Europe. In the empirical analysis that follows, we investigate the intra-European heterogeneity of non-family support and we examine whether the country-specific patterns of family relations reinforce or weaken the relationship between availability of children and non-family support. Also, we allow for the characteristics of a beneficiary: marital status, household composition, age and dependency status that remain the most important factors defining the necessity of help and the availability of other helpers.

Analytical framework

Data

The empirical analysis is based on the second wave of the SHARE study conducted in 2005/2006. This is the last wave that includes detailed information both on the frequency and the amount of non-financial support, whereas subsequent SHARE editions refer only to the former and do not allow for quantification of the aggregate support received by an older person from all donors. For several reasons, we limit the results of SHARE to individuals aged 65 and over, that is persons who can be considered as old. Our intention is to concentrate on individuals who are in a completely distinct – as compared to younger individuals – lifecourse phase that translates into specific labour market status and sources of income, different family and partner relations, social networks and constellations, support needs, opportunities for functioning in social life, vulnerability (*e.g.* social and economic exclusion), *etc.* Other studies showed that around this age or not much later, people are starting to rely on regular instrumental support (Boaz and Hu, 1997; Barker, 2002; Fast *et al.*, 2004; Chiatti *et al.*, 2013; Kalwij *et al.*, 2014) and receive such support out of necessity and not in exchange for their own contribution, *e.g.* in exchange for caring for grandchildren. Individuals living in nursing homes are excluded from our study. The second wave of SHARE and our analysis include

12 countries that we group into four geographical regions that differ with regard to intergenerational relations and welfare systems (Brandt, 2013; Verbeek-Oudijk *et al.*, 2014; European Commission, 2018):

- (1) Eastern Europe: Czech Republic and Poland.
- (2) Northern Europe: Denmark, The Netherlands and Sweden.
- (3) Southern Europe: Italy and Spain.
- (4) Western Europe: Austria, Belgium, France, Germany and Switzerland.

The presented analysis is conducted at the level of households, on the sample of 9,577 households of persons aged 65 and more, of who 2,730 benefited from non-financial informal help. The sample was slightly reduced due to missing data, which was relatively equal across all variables, and the econometric analysis included 2,293 households, of which 797 (due to missing data, 673 in the model) were informally supported by persons from outside the family.

Dependent and independent variables

Participants of the second wave of SHARE provided information on the composition of their families and households, their professional and financial status, and the financial and non-financial support received in the last 12 months (Börsch-Supan and Jürges, 2005; Börsch-Supan *et al.*, 2013). The analysis concerns the informal, non-financial help received from individuals not belonging to the family and living outside the household. The first independent variable, describing the fact of receiving the non-financial support, is based on responses to the question:

Thinking about the time since the last interview [for a respondent participating in SHARE for the second time]/the last 12 months [for a respondent participating for the first time], has any family member from outside the household, any friend or neighbour given you or your husband/wife/partner any kind of help in: personal care (*e.g.* dressing, bathing, eating, getting in or out of bed, using the toilet), practical household help (*e.g.* with home repairs, gardening, transportation, shopping, household chores) or help with paperwork (such as filling out forms, settling financial or legal matters)?

Each participant of SHARE was allowed to indicate up to three persons providing the support and to specify the relationship to the donors, which allows for a clear distinction between family and non-family source of each support. For respondents who admitted having received such informal help from non-family individuals, the first independent variable, that is the probability of receiving, equalled 1. The second independent variable, that is the amount of non-family support expressed in number of hours of instrumental help, was estimated based on responses to two questions:

In the last 12 months altogether how often have you received such help from this person?

and

About how many hours altogether did you receive such help (on a typical day/in a typical week/in a typical month/in the last 12 months) from this person?

In order to approximate the average number of hours of help received in the last 12 months from non-family individuals, for each respondent we multiply the frequency of help by the corresponding number of hours, and sum by all non-family supporters:

Average number of hours of non-family help received in last 12 months = (frequency of help in the last 12 months \times typical amount of hours of help) from non-family individual No. 1 + (frequency of help in the last 12 months \times typical amount of hours of help) from non-family individual No. 2 + (frequency of help in the last 12 months \times typical amount of hours of help) from non-family individual No. 3.

In the next step, we calculate the average number of hours of help for different groups of respondents (co-residing, living at short distance from the nearest child, *etc.*), including also individuals who did not declare having received any help. Our analysis concerns childless individuals and parents and, with regard to the latter, we distinguish between different geographical distances to the nearest child. In accordance with the SHARE questionnaire, six broad categories are proposed: co-residence, distance up to 1 km, 1–24 km, 25–99 km, 100–500 km and over 500 km (Table 1). Since previous studies did not identify one single threshold beyond which family support diminishes significantly, we keep in our analysis all possible distances provided by the SHARE study.

Apart from the geographical distance to the nearest child and childlessness, two other explanatory variables help to verify whether the non-family individuals compensate for possible shortages of help: the average amount of non-financial support from family members (expressed as number of hours of help during the last 12 months) and the average amount of financial transfers received during the last 12 months from family (expressed in euros). The control variables consist of the age, sex, marital status (single or in couple), level of education and place of residence (locality and country). Much information is missing from the second wave of SHARE on formal (paid) help received by respondents; therefore, in order to approximate the access to formal support we use public spending on long-term care (expressed as the percentage of Gross Domestic Product) in a given country derived from the Organisation for Economic Co-operation and Development (2019). We allow also for the index of activities of daily living (ADL) and instrumental activities of daily living (IADL) to control for possible problems with personal care and independent living, but since the dependent variable refers to help provided to the respondent *or* their spouse/partner, in the case of persons living in a couple we take the maximum ADL and the maximum IADL declared for these two persons. Unfortunately, the dataset does not provide information on the amount of help regularly received from other members of a household, which may affect the provision of help from outside the household.

Table 1. Descriptive statistics of the research sample

Individual characteristics	All	Distance to the nearest child (km) or childless						Childless
		Co-residing	<1	1–24	25–99	100–500	>500	
Average age (years)	76.46	76.71	76.54	76.21	76.75	76.43	74.70	76.81
Average education (years)	9.25	7.34	8.67	9.70	10.21	10.52	10.17	9.83
Average number of ADL	0.81	1.48	0.91	0.70	0.60	0.50	0.81	0.62
Average number of IADL	1.41	2.29	1.63	1.17	1.16	0.94	1.30	1.18
Female (%)	67	71	68	65	71	64	59	66
In couple (%)	36	32	42	39	34	45	54	15
Number of observations	2,730	264	833	974	184	117	27	331
Percentage of observations	100.00	9.67	30.51	35.68	6.74	4.29	0.99	12.12

Notes: km: kilometres. ADL: activities of daily living. IADL: instrumental activities of daily living.

Source: Authors' own elaboration based on the Survey on Health, Ageing and Retirement in Europe (SHARE) Wave 2, release 6.0.0.

Methods

We conduct our analysis for all respondents aged 65 and over (not only beneficiaries of support) and incorporate a two-part regression model; in the first step, we estimate the probability of receiving non-financial support from non-family individuals, whereas in the second step, for those who received such support, we estimate its amount depending on children's availability and other explanatory variables mentioned above. In this model, all respondents receiving non-financial support are initially included and estimators allow for the fact that the independent variables affect both the likelihood of non-family support and its amount. Alternatively, if the amount was modelled separately from the probability, the coefficients would be estimated only for the group of persons receiving non-financial support from non-family individuals and, therefore, most probably would be biased. The bias would be due to the fact that the effect of having a child close by is probably different for all older people who receive non-financial support (a joint, two-step model) than for older people who receive non-financial support from non-family (separate models). In our study, several specifications of the two-step model were established; we present here one specification that includes the most important (for our study) independent variables and is characterised by relatively good fit parameters.

Results

Descriptive findings

The great majority of the overall sample of older individuals consists of parents (88%), primarily those who live with their children in the same household or no further than 24 km from their nearest child (76% of the sample; Table 1). The proportion of persons living with or close to children is higher in eastern and southern Europe, mostly due to the relatively high prevalence of co-residence, and lower in northern and western Europe (Table A1 in the Appendix).

Almost three out of ten individuals declared that they had received non-financial, informal support from outside the household. This on average translates into 556 hours of help per year, *i.e.* approximately 1.5 hours every day. Members of family not living with respondents contribute most of the support: 487 hours per year on average, *i.e.* 88 per cent of all help. Their role is essential for parents co-residing or living at a distance of less than 1 km from the nearest child, but as the geographical distance increases, the contribution of family providers of help diminishes (Figure 2A). At the same time, the amount of non-family help – in absolute terms and relative to the overall support – increases as the geographical distance widens and adult children become less and less available (Figure 2B). Childless individuals do not, however, resemble parents of remotely living children: while the amount of non-family help is comparable for both categories of older individuals, the amount of family help is considerably higher for the former. Childless persons receive more family support and, consequently, more overall support even than parents living at a distance of 1–24 km from their nearest child, which means that other family members can effectively compensate for lack of help from progeny.

A considerable part of all hours of informal support (58%) refers to practical household help: home repairs, gardening, transportation, shopping, *etc.*, and is

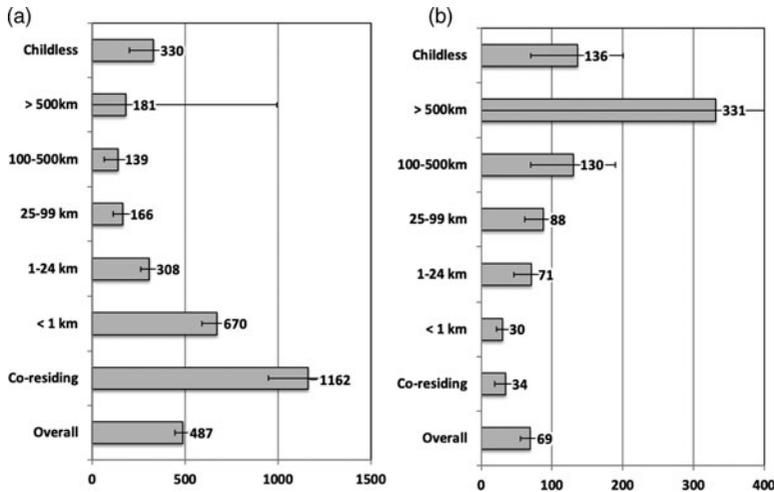


Figure 2. Annual amount (in number of hours) of informal help¹ from persons not living in the household: (a) family members and (b) non-family individuals.

Note: 1. Significance level of 0.95 indicated by horizontal lines. km: kilometre.

Source: Authors' own analysis based on the Survey on Health, Ageing and Retirement in Europe (SHARE) Wave 2, release 6.0.0.

almost entirely (90%) provided by non-family individuals. Personal care represents 24 per cent of all hours of help from outside the household, but in this case the involvement of non-family is marginal (11% of hours of personal care). In turn, help with paperwork constitutes the remaining 18 per cent of all support from outside the household, therein 32 per cent is provided by non-family individuals. Thus, individuals from outside the family contribute in the first place to practical household help, whereas their role in other forms of support is less pronounced.

Non-family help providers are mostly neighbours (55%) and friends (25%), with the former contributing relatively often to practical household chores and personal care, and the latter relatively often helping with paperwork. Overall, non-family individuals providing support constitute 29 per cent of all helping persons, but their involvement is lower for parents co-residing or living in close proximity to their children, and higher for parents living remotely (Figure 3): as distance between parents and adult children increases, non-family persons provide a higher share of the overall support and constitute a higher share of all supporters. Childless individuals, however, do not depend on non-family helpers as much as parents of remotely living children.

In the entire sample, including both beneficiaries and non-beneficiaries of non-financial help, the average number of persons who provide the support is 1.54. This value is similar for all categories of parents, ranging from 1.50 to 1.62, and significantly lower for childless individuals: 1.32. Thus, even though childless persons receive more help (as expressed in number of hours) than parents living remotely from their children, their networks of support are smaller and less diversified, mostly due to the lower non-family component discussed above. It is possible that childless persons rely more often on so-called primary arrangements of help, which by definition consist of one person only.

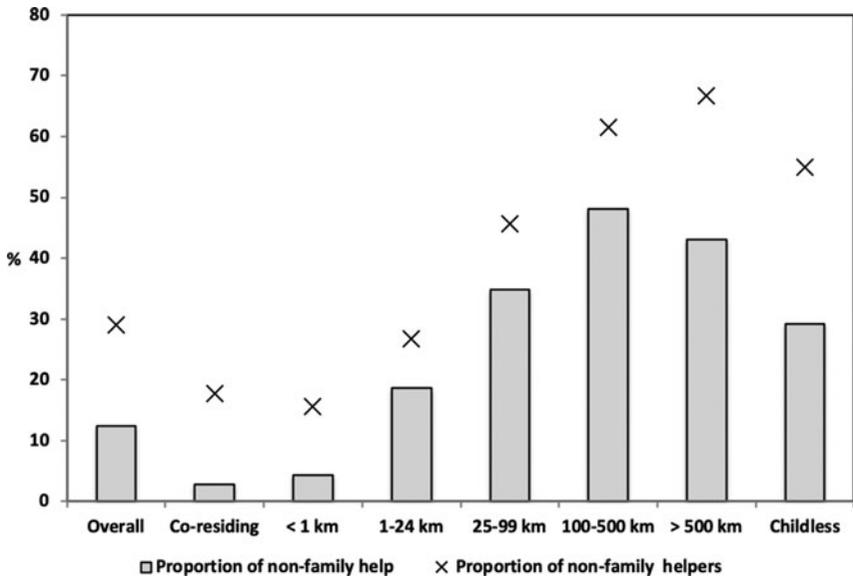


Figure 3. Proportion (%) of non-family help in the overall informal help and of non-family helpers among all helpers.

Note: km: kilometre.

Source: Authors' own elaboration based on the Survey on Health, Ageing and Retirement in Europe (SHARE) Wave 2, release 6.0.0.

The amount of informal support varies across European countries. On the one hand, more overall help is provided in the Czech Republic, Italy, Poland and Spain (more than 600 hours per year) than in other countries under study (less than 500 hours) except for Austria where the amount of help is on average 603 hours annually (Table A1 in the Appendix). In general, the amount of support from non-family constitutes 12 per cent of total support, but this percentage varies across Europe, from less than 7 per cent in two eastern European countries and Spain, to more than 20 per cent in Denmark, France and Switzerland. Several observations can be made that contradict the division between South/East and North/West European regions; for instance, the share of non-family support is similar in Belgium, Germany and Italy, as well as in France and The Netherlands. The proportion of non-family among all supporters is relatively low in the Czech Republic, Poland and Spain (less than 20%), but except for Denmark, The Netherlands and Sweden where this share exceeds 30 per cent, no clear regional clusters can be easily distinguished.

Two-step regression model: probability and amount of non-family support

The two-step regression shows the determinants of the probability and of the amount of support received from non-family helpers (Table 2). Childless individuals and parents with children living at least 25 km away are more likely to benefit from non-family support than older persons co-residing with at least one child. The result for parents living within a distance of 25 km from the nearest child, however,

Table 2. Coefficients in the two-step regression model for probability and amount of informal support from non-family care-givers

Determinants of non-family support	Probability (Probit IV)	Amount (hours) (OLS)
Hours of informal support from family	-0.340***	0.022
Financial support	0.0156	-0.032
Child's availability (km) (Ref. Co-residence):		
<1	-0.102	0.894**
1-24	-0.049	0.787**
25-99	0.350**	1.021***
100-500	0.757***	0.858**
>500	1.002***	0.780
Childless	0.430***	0.555
Single (Ref. In couple)	0.255***	0.607***
Age	-0.286	1.884***
Education in years	-0.124*	-0.077
Female (Ref. Male)	-0.049	-0.065
ADL limitations ¹	0.128*	0.408***
IADL limitations ¹	0.221***	0.389***
Public expenditures on LTC ²	-0.750*	2.672***
Country effects (Ref. Italy): ³		
East:		
Czech Republic	-0.505	2.422***
Poland	-0.657**	1.799***
North:		
Denmark	-0.075	-1.320***
Sweden	0.595	-3.614***
The Netherlands	0.634**	-3.491***
South:		
Spain	-0.987***	1.067
West:		
Austria	0.041	0.063
Belgium	0.061	-0.689**
France	-0.147	-0.445
Germany	0.088	0.592*
Constant	3.090	-8.743**
Number of observations	2,293	673

(Continued)

Table 2. (Continued.)

Determinants of non-family support	Probability (Probit IV)	Amount (hours) (OLS)
Place of residence effects	Yes	Yes
Pseudo- R^2	0.348	
Adjusted R^2		0.191

Notes: Controls are transformed with inverse hyperbolic sine function (age, education years, numbers of activities of daily living (ADL) and instrumental activities of daily living (IADL)). Dummies for gender, being single or in couple, place of residence (large city, suburbs or outskirts of large city, large town, small town, rural area), and country. 1. For persons in a couple, ADL and IADL limitations refer to maximum limitation of two persons living in the household. 2. Public expenditures on long-term care (LTC) are expressed as the percentage of Gross Domestic Product. 3. The country effect for Switzerland is not included as this is the reference country for another country-specific variable (public expenditures on LTC). OLS: ordinary least squares. km: kilometres. Ref.: reference category.

Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Source: Authors' own analysis based on the Survey on Health, Ageing and Retirement in Europe (SHARE) Wave 2, release 6.0.0.

is not statistically significant. The probability of receiving non-family help diminishes, as the amount of family rises: each additional hour of family help decreases the likelihood of non-family support by 34 per cent. In addition, being single increases the probability of receiving non-family support by 25 per cent as compared to persons living in a couple. Similarly, having problems with daily life activities prompts the likelihood of non-family support, by 13 per cent for each additional ADL limitation and by 22 per cent for each additional IADL limitation. Country effects are significant only for Poland and Spain, where the probability of non-family support is lower than in Italy, and for The Netherlands, where this probability is higher. Although other country effects remain statistically insignificant, we can distinguish a group of countries in northern and western Europe – Austria, Belgium, Germany and Sweden – where the probability of non-family support is higher than in Italy.

As for the amount of non-family support received, it is significantly higher for parents living at a distance of less than 1–500 km from the nearest child than for co-residing parents. The results are statistically insignificant for a distance above 500 km (most likely due to the low number of observations) and for childless individuals. This indicates that persons not belonging to the family compensate for the absence of children only to a limited extent. The amount of non-family support seems not to depend on the amount of family support, although the latter was critical for the probability of the former. One way to interpret this result is that non-family individuals make decisions on giving (or not) the support according to the needs of older persons, but the amount of support is dictated by other factors, such as age, marital status, activity limitations and other characteristics relating to the helper. Indeed, the amount of non-family support increases with age (by 1.8 hours with each additional year) and number of ADL and IADL limitations (by 0.4 hours with each additional limitation), it is also higher for single individuals than those in a couple. Interestingly, financial support received by adults aged 65 and over has no impact on the probability or the amount of non-financial support from non-family individuals, so even if remotely living children provide remittances to their older parents, this does not lead to a greater provision of help from non-family members. Consequently, we do not observe the substitution effect

between remittances sent by remotely living family members and help provided by non-family.

As for country effects, we find that older individuals living in Belgium, Denmark, The Netherlands and Sweden receive less non-family support, whereas older individuals in the Czech Republic, Germany and Poland receive more non-family support than their counterparts in Italy. On the basis of existing research, we presumed that in the North and the West non-family helpers are more involved in the help for older persons than in the South and the East due to cultural legacy, but our analysis shows the opposite. Informal support, whether provided by family members or non-family individuals, is simply more common in the eastern and southern countries, and this effect persists even if we control for the health status of older persons or public expenditures on long-term care.

As for the availability of public care services, approximated by the long-term care public expenditures, our results remain inconclusive. Better access to public care services adversely affects the probability of non-family support, but it also favours its amount within the group of older persons benefiting from non-family support. Wherever shortages of public services provided to older persons exist, persons from beyond the family compensate for the lack of support, but their involvement is lower than in countries with higher expenditures on long-term care.

Conclusions and discussion

Like other studies (Attias-Donfut *et al.*, 2005; Verbeek-Oudijk *et al.*, 2014), our analysis shows that family members act as the main providers of instrumental help, whereas the contribution of non-family supporters remains secondary. When adult children are unavailable due to geographical distance, the probability and the amount of non-family support increase and the proportion of non-family providers of help become greater. Consequently, help from neighbours and friends improves to some extent the wellbeing of those older individuals who have limited access to their children. This result is in line with other studies concerning the engagement of non-family providers of help (Boaz and Hu, 1997; Egging *et al.*, 2011; Schnettler and Wöhler, 2016), particularly neighbours, who by definition live in proximity to the persons in need (Barker, 2002; Lapierre and Keating, 2013).

Childless persons, however, bear little resemblance to parents of remotely living children: the former receive relatively more help in general, and relatively more help from family in particular. Their networks of support are on average smaller and comprise a lower proportion of non-family helpers as compared to parents with remote children. Being childless implies a higher probability of receiving non-family help, but the result concerning the amount of non-family help remains statistically insignificant. We interpret these results by referring to other studies (Dykstra and Hagestad, 2007; Dykstra and Keizer, 2009; Albertini and Arpino, 2018) that show that being childless or having children *per se* is less important than the different life trajectories that lead individuals to become childless in old age, including previous relationships, health conditions and the ability to establish stable social ties. In their lifetime, childless persons seem to create and maintain social networks and, in older age, networks of support in a different way than parents; they may establish diversified social relations, but in terms of support they

strongly rely on one person from within the family. Whether single or in a couple, childless persons 'replace' non-existent children with next-in-line kin, such as siblings and their children (thus, nephews/nieces), who are usually involved in providing instrumental help (Albertini and Kohli, 2009) and financial support (Hurd, 2009). Qualitative studies show that this is an adaptive strategy undertaken long before childless persons reach old age (Wenger, 2009). Accordingly, the reason why childless older individuals rely more on (fewer) relatives is most probably their long-term engagement in selective, but strong family relations. This does not apply to personal care, however: relatives provide this kind of help to childless older persons only in 'emergency' situations (Jerrome and Wenger, 1999) and, therefore, childless older persons resort sooner (Wenger, 2009) and more often (Albertini and Kohli, 2017) than parents to formal care, whether private or public.

But the lack of children does not lead to the same deficiencies in informal support as the lack of children in geographical proximity. For many reasons, older parents living a long distance away from their children do not form relations with relatives in the same way; for instance, a child or a parent might have moved away relatively recently, or parents may be counting on their child(ren) to support them later on, that is, when their need for care becomes urgent. Thus, as for our hypothesis regarding the relation between the availability of children's support and the non-family support provided to older parents, we accept it only in reference to the geographical distance: the greater the latter, the stronger the involvement of non-family helpers (expressed both as the probability and the amount of non-family support). The results for childless individuals remain, however, inconclusive: they have more chances to receive, but not necessarily to receive *more* non-family support than older parents co-residing with their children. Older individuals act in a completely different way to parents of remotely living children and, consequently, childlessness cannot be straightforwardly inscribed in the continuum of availability conditions based primarily on geographical distance. If such a continuum is proposed and examined in future research, it should refer only to older parents and be based rather on geographical conditions and, for instance, children's economic activity, marital status or health.

Our analysis shows that the probability and the amount of non-family support are lower in selected countries of western and northern Europe than in countries of eastern and southern Europe. In the West and North, older persons receive less informal support from family, but the possible shortages are not compensated by the involvement of persons from outside the family. The proportion of non-family among all helpers is higher in the West and the North, but they provide, at least in three northern countries and in Belgium, significantly less help than their counterparts in Italy and two eastern European countries. Consequently, older persons in the western and northern countries receive less informal support overall, both from family and non-family, than in the eastern and southern countries. Also, persons from beyond the family appear not to compensate for potential scarcity of public care services in countries where the public expenditures on long-term care are relatively low. These results should be interpreted cautiously as the number of observations in each country and for each category of older persons characterised by different availability circumstances of adult children is relatively small.

The main contribution of the present study is the distinction between the internal (the amount) and external margin (the probability) of support provided to older persons in Europe. Most existing literature focuses on the external margin of help only, but the frequency and the amount are not identical indicators of the employment of non-financial help. While frequency shows whether an individual received any kind of support or not, the amount of help reflects its *intensity*. To our knowledge, this study is based on the most actual data, on the data that is available for a relatively large group of European countries, and the only study that approximates the amount of non-financial help provided to older individuals living in private households regardless of family status, that is, whether co-residing with other adults or not, whether being parents or childless, *etc.* In spite of the secondary role of non-family helpers, we evidence several regularities underlying their involvement in help: their contribution is rather complementary to the help from family and even if they compensate for the scarcity of support, this applies only to informal help (and not public care) and rather to older parents than childless individuals.

We find three main limitations of this study that stem mostly from the specificity of SHARE data. First, we do not control for the amount of help received from other persons living in the same household. The intra-household support may to some extent imply a lower engagement of persons from outside the household. Other studies show that intra-household help cannot be easily conceptualised and operationalised because domestic duties fulfilled for the wellbeing of all household members (cleaning, cooking, shopping) are difficult to distinguish from assistance provided uniquely to the older person (Ironmonger, 2001). Thus, the amount of support received from housemates remains theoretically intangible and, as such, seems to be underestimated in social surveys (Kalwij *et al.*, 2014). Instead, in our analysis, we allow for the fact of being single, which approximates the probability of receiving additional support from the household, and for the numbers of ADL and IADL that capture the need for daily assistance.

Second, we cannot control for all factors leading to the two-way causal relationship between the dependent and the independent variables in our model. As a matter of fact, the non-family support received by older persons may depend on the availability of children – possible providers of help – but the geographical distance between children and older parents may also depend on the support the latter can count on: in some families the need for regular help and the impossibility of help from non-family triggers geographical rapprochement between family members (Heylen *et al.*, 2012). The instrumental variables approach usually used whenever the two-way causal relationship is possible was not implemented in this study because variables approximating unobserved preferences towards geographical rapprochement, such as feelings of emotional closeness and intimacy between family members, would bring collinearity in the model and bias of the obtained estimates. In turn, other methods disentangling a possible two-way causal effect, such as the generalised structural equation modelling (Heylen *et al.*, 2012), do not allow for two-step, unbiased modelling of both likelihood of non-family support and its amount.

Last but not least, due to incomplete data our analysis is focused on the geographical distance between older persons and their adult children, without defining

whether the family members are dispersed in the same country, or between different countries. Although internal and international migration differ with regard to the constraining factors involved in crossing borders and settling down abroad, the importance of these factors becomes marginal in the Schengen Area encompassing all countries under our study. However, we cannot exclude the possibility that the exchange of help between family members living in the same country differs from that occurring at the international level, and allowing for such a distinction in future studies may improve our understanding of the compensation mechanisms employed in the provision of help.

Data

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Author contributions. All authors read the paper and agreed to its submission.

Conflict of interest. The authors declare no conflicts of interest.

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Appendix

Table A1. Selected characteristics of residential arrangements and instrumental support to individuals aged 65 and over, by country of residence

Region/country	Amount of overall support ¹ (hours)	Amount of family support ¹ (hours)	Amount of non-family support ¹ (hours)	Non-family support in overall support (%)	Proportion of non-family helpers (%)	Proportion of co-residing (%)
Overall	556.2	487.2	69.0	12.4	29.1	9.7
East:						
Czech Republic	670.6	626.8	43.8	6.5	19.5	9.9
Poland	1,056.0	990.8	65.2	6.2	16.1	29.3
North:						
Denmark	142.9	96.4	46.5	32.6	33.8	2.3
Sweden	222.5	198.1	24.4	11.0	37.9	2.2
The Netherlands	177.0	137.7	39.3	22.2	44.9	2.0
South:						
Italy	976.3	795.3	181.0	18.6	22.9	19.6
Spain	1,559.4	1,516.3	43.1	2.8	13.9	26.3
West:						
Austria	603.2	533.3	69.9	11.6	26.9	9.7
Belgium	380.8	309.2	71.6	18.8	31.0	5.1
France	462.3	355.5	106.8	23.1	29.2	9.4
Germany	472.1	393.0	79.1	16.8	34.2	5.1
Switzerland	251.4	171.9	79.5	31.6	45.0	3.0

Note: 1. Within the last 12 months.

Source: Authors' own elaboration based on the Survey on Health, Ageing and Retirement in Europe (SHARE) Wave 2, release 6.0.0.