

Support Networks of Childless Older People in Europe:
An Analysis with the Data of the Survey of Health, Ageing and Retirement in Europe
(SHARE)

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Abstract

Western societies age rapidly. Today people do not only live longer, they also have fewer children. These developments exert considerable pressure on pension and health systems. Children have usually been the mainstay of old age support, especially when there is no partner. We thus face new challenges: On which support networks can childless elders rely? (How) can the lack of children be compensated? Who provides help and care? What role does the state play? We assess the support networks of childless Europeans aged 50 and over in 12 countries based on the Survey of Health, Ageing and Retirement in Europe (SHARE). When comparing support networks of elders without children to those of elders with children, we focus on the importance of the extended family and of public services. Our analyses show that informal help for childless elders is often taken over by the extended family, friends and neighbors. Intense care tasks, however, are more likely provided by public providers. The family and especially intergenerational relations play an important role for support in old age. In the absence of children vital support for older persons has to be taken over by public providers in many cases. In countries with low social service provision, childless older people are thus likely to experience a lack of help, especially when depending on vital care.

Introduction

In times of rising childlessness (e.g., Hayford 2013, Rowland 2007; for a critical view see Herlofson and Hagestad 2011) and life expectancy (Oeppen and Vaupel 2002) we still know surprisingly little about what childlessness entails for the individual in old age. Childless people may be a very heterogenous group (see next sections), but they surely have one thing in common: They cannot rely on their children for support in old age. Even though fertility trends are not completely clear (and depend on cohort, country and age group see, e.g., Murphy, Martikainen and Pennec 2006) and the debate about “failure of success” and the “compression of morbidity” is still ongoing (e.g., Crimmins 2004, Crimmins and Beltrán-Sanchez 2011), we know that with rising age people rely more and more on their (close) support convoy (e.g., Antonucci and Akiyama 1987). A plethora of comparative studies has been published on the exchange of financial transfers, help, and care (including care for grandchildren), as well as emotional closeness and proximity between adult family generations (e.g., Attias-Donfut, Ogg and Wolff 2005, Brandt and Deindl 2013, Hank 2007, Igel and Szydlik 2011). These studies have found that most help within the family (in kind or emotionally) is transferred between parents and their children. Older parents are actively involved in intergenerational transfers and – at least when still “young-old” – give more than they receive (Deindl and Brandt 2011). The “decline of the family” thus seems to be a myth (Bengtson 2001). On the contextual level, public spending enables parents and children to support each other financially and with hands-on-help (Kohli 1999). Overall, state and family were shown to work together, taking over different, complimentary tasks for people in need of assistance (e.g., Attias-Donfut and Wolff 2000, Brandt 2013).

In times of population aging, new challenges are likely to arise (see Herlofson and Hagestad 2011 for a discussion of the potential micro level outcomes of different macro level developments):

How can the (growing) support needs of (rising numbers of) frail childless older people be met?

Existing studies on childlessness mainly deal with three different aspects: reasons for childlessness, wellbeing of childless people and consequences of childlessness for individual networks (Albertini and Mencarini 2012, 2). Studies find mixed results regarding the differences between people with and without children in terms of health, wealth, and social resources – and it remains to be seen whether and how childless people compensate for the lack of children in older age within different social policy contexts. Our research questions thus are: (How) is the lack of children in the support network compensated in older age? Who provides support? Which role do social policies play and how are informal and formal support linked? We therefore assess the support networks of childless older people in different European welfare states based on the Survey of Health, Ageing and Retirement in Europe (SHARE). We compare childless elders to parents in regard to informal support from social network members and the links to the availability and usage of formal support in terms of public services.

The remainder of the article is structured as follows: We give an overview of recent research and empirical results to derive our hypotheses before introducing the data. Our analyses focus on the links between informal and formal support of older Europeans with and without children. The article then concludes with a discussion and future research prospects.

Research background

Lack of support of childless elders

In Western societies people today do not only live longer but also healthier – at least to some extent and depending on the indicators we select (Crimmins and Betrán-Sanchez 2011).

However, independent of the fact that frailty might not rise as much as mortality declines (see above), getting older often links to higher needs for support with (instrumental) activities of daily living ((I)ADL). Especially support with intimate needs such as body care is usually taken over by close network members (Antonucci and Akiyama 1987, Kahn and Antonucci 1980) – in most cases the spouse or children (e.g., Finch and Mason 1990). Childless older people might not only lack informal support due to the absence of children, but also because childlessness is often associated with being single (e.g., Keizer, Dykstra and Poortman 2010). Two things may compensate for this: One is greater informal support from extended social network in which childless people appear to be more engaged in (Dykstra 2006) and the other is greater use of formal support from health care and social services (Larsson and Silverstein 2004). Before looking into this, however, we need to assess if parents and childless people differ in important other characteristics, that is if selection into childlessness is linked to support needs and the availability of informal and formal support later on – and thus (which) confounding variables might be drivers for differences in support networks between parents and childless elders.

Reasons for childlessness and differences to parents

Childlessness may result from a free decision or be the involuntary consequence of not having a partner or of experiencing biological problems (for detailed discussions see, e.g., DeOllos and Kapinus 2002, Hagestad and Call 2007). Abma and Martinez (2006) found that in the U.S. voluntary childlessness is more prevalent than involuntary childlessness. Yet, in the age group between 35 and 45, people without children represented a minority of only seven percent. They also found that childless women had more work experience and that higher educated women delayed childbearing. For more religious women, childlessness was less of a voluntary decision. “Pathways of the childless were more often characterized by late starts in independent living,

education, and marriage” (Hagestad and Call 2007, 1358), and in some cases childlessness also resulted from a priority given to working life (DeOllos and Kapinus 2002). People who were voluntarily and involuntarily childless accordingly also differed in later life well-being (McQuillan et al. 2012).

Research has provided mixed results regarding differences in individual characteristics of parents and childless people partly depending on the cultural background and the specific samples (cohort, age, gender). Differences in social and personal resources were often very small (e.g., Keith 1983a), and partly due to other factors related to childlessness such as partnership histories (e.g., Keizer, Dykstra and Poortman 2010). According to data from the Netherlands, fathers between age 40 and 59 had higher incomes than childless men, but their higher well-being was based on their partnerships (Dykstra and Keizer 2009). Both childless women and men in the Midwestern U.S. were also not disadvantaged in terms of the availability of social support (Keith 1983b). We thus see relatively little differences between parents and childless people in regards to their economic, psychological, or social well-being (e.g., Hank and Wagner 2013) – but, in any case, social networks are composed differently, as will be seen in the next paragraph.

Support networks of parents and childless people

The existing literature focuses on three aspects of childlessness and later life social networks: general differences in the structure of social networks (such as size, composition, etc.), childless people as support givers, and as receivers of support. Albertini and Kohli (2009) found that networks of childless elders in Europe were more complex and consisted of more non-kin and extended family members than parental networks. Even though lifetime childless people seemed to be more engaged in peer networks, they were “at a greater risk for social isolation in late life

than parents” (Dykstra 2006, 762-763), with smaller networks on average (due to missing children or the death of peers in older age).

Although financial transfers of childless people to their social network were less likely and less generous in Europe, they still gave substantial private financial transfers (Albertini and Kohli 2009). In the U.S. childless elders gave more money to parents, relatives, friends, and charities (Hurd 2009, 1224). In addition, there are indications that childless elders are more involved in voluntary and charity work (Albertini and Kohli 2009) – however, this does not seem to hold everywhere (e.g., childless men in the Netherlands, Dykstra and Keitzer 2009).

Most studies agree that childless elders are at higher risk of unmet support needs, not only because of lower and faster declining availability of informal support (for Britain: Gray 2009, for Sweden: Larsson and Silverstein 2004; for the contrary from a Midwestern US state see Keith 1983b), but also because of “substantial qualitative differences” (Johnson and Catalano 1981, 617) of support and care even if missing kin is compensated within the network. For example, childless women in England “were more likely than mothers to receive help from friends but even so had lower odds of receiving help from any informal source” (Grundy and Read 2012, 742). Childless people seemed to subjectively lack support in times of illness more than parents, however, they were not more likely to use social services than their counterparts when controlling for other important predictors such as availability of information about informal support (Choi 1994). Support deficits were not even compensated by formal public services in a developed welfare state like Sweden (Larsson and Silverstein 2004).

Links between formal and informal support?

Based on recent research we expect that support networks of childless elders entail significantly more friends and extended family members than the support networks of parents. However, it can

be doubted that these social ties are able (and willing) to compensate for *all* necessary support tasks, and especially the more intense ones. It is first and foremost the close ties such as partners and children who help with regular and intense tasks. Moreover, when support involves medically demanding body care or the regular provision of meals and so forth, professional providers are likely to come into play.

On a macro level, formal support by professionals might substitute for informal network support and thus *crowd out* private support in developed welfare states where more support is provided – and covered – by public or publicly sponsored agencies (e.g., Reil-Held 2006). Others might object that “there is more to receiving than needing” (Künemund and Rein 1999) and private support is *crowded in* due to reciprocal, emotional, and altruistic reasons when more (public) resources are available for redistribution – and empirical evidence accordingly suggests that more formal support is linked to more informal support (e.g., Deindl and Brandt 2011).

The two contradicting hypotheses of crowding in and crowding out can be unified by applying the “complementarity”, “mixed responsibility”, or “specialization” theses (e.g., Brandt 2013, Daatland and Herlofson 2003, Igel et al. 2009, Motel-Klingebiel, Tesch-Römer and von Kondratowitz 2005): The state and the family seem to work together complementarily. Studies which considered different support tasks or separated the likelihood and the intensity of support found that state providers typically took over the more demanding, intensive, regular support, while children took over more sporadic, less intensive support in these cases (for an overview of recent studies see the discussion in Brandt and Deindl 2013) – and thus *sporadic* informal support was crowded *in*, but *intense* informal support was crowded *out*. Formal service providers often took over regular, demanding tasks such as for example body care. Children then provided sporadic additional help such as help with gardening, errands and so on; especially when there

was no spouse who typically takes over the more regular and intense support tasks (e.g., Brandt, Haberkern, and Szydlik 2009).

These mechanisms can possibly also be applied to the broader social networks of childless elders in comparison to parents: (Single) childless elders are then expected to use formal services more than parents to compensate for the lack of close network relations. Moreover, support intensities are expected to be lower in terms of informal support for childless elders whereas formal and combined support is expected to encompass more hours than in the case of parents. The hypothesis on the micro level thus is: Childless elders receive less intense informal and more (intense) formal support than parents and therefore compensate for the lack of children by (a) receiving more sporadic informal support by less close relations such as the extended family, neighbors and friends, and (b) using more intense formal support than parents who receive intense support more likely by their children (and partners). Moreover, on a macro level we expect informal support to be more likely but less intense in countries with higher service provision, where the individual uptake of formal support is expected to be higher. We will assess these hypotheses comparatively for representative samples of Europeans aged 50 and over, focusing on individual use of formal support and the availability of services in different countries. We will in a first step describe informal support networks and the use of formal household help, meals-on-wheels, and care before focusing on the mix of formal and informal support of older childless people and parents.

Methods

Data

Our research is based on the second wave of the Survey of Health, Ageing and Retirement in Europe (SHARE), a cross-national dataset of the population aged 50 and over from 12 European

countries (for details see Börsch-Supan et al. 2013), including two Scandinavian (Sweden and Denmark), six Continental European (the Netherlands, Belgium, France, Germany, Austria and Switzerland), three Mediterranean (Spain, Italy, and Greece) and one Post-socialist country (the Czech Republic).¹ We restricted our analysis to the second wave of SHARE because our dependent variables are only available for this wave. Wave 2 added three new countries and refresher samples in the original wave 1 countries. The attrition rate for individuals who already participated in wave 1 is around 28 percent and therefore comparable to other panel surveys (Börsch-Supan et al. 2013). There is no indication of a biased sample due to panel drop outs (for a more detailed analysis see Börsch-Supan et al. 2008). Sample statistics (restricted to people with (I)ADL limitations) can be found in Table 1.

Dependent variables and samples

Informal support. – The first part of our dependent variable is the occurrence of help from outside the household: “*Thinking about the last twelve months, has any family member from outside the household, any friend or neighbour given you or your husband / wife / partner any kind of help listed on this card?*”

Help listed consisted of three different types: personal care, practical household help, and help with paperwork. All three were here considered informal support (for a differentiation of different support types see, e.g., Brandt, Haberkern and Szydlik 2009). The support questions were answered by a “family respondent” providing answers about him- or herself and the partner. In the case of couples the values were transferred to both partners.

Formal support. – The second part of our dependent variable indicated whether respondents had received any formal care: “*During the last twelve months, did you receive in your own home any of the kinds of care mentioned on this card?*”

The list included professional, paid nursing, or personal care, professional or paid home help for domestic tasks that one could not perform herself due to health problems, and meals-on-wheels. Every individual was asked separately. We restricted our sample to respondents who reported at least one difficulty with (I)ADL² since the use of formal support (health care services) is necessarily linked to such a need. The sample consisted of 12,243 respondents (see Table 1 for details). Drawing on the information of informal and formal support we distinguished between respondents who received no support, only informal support, only formal support, or a mix of both formal and informal support.

In a second step, we considered the intensity of these different support types by recording the hours per week respondents received informal support, formal support, and combined informal-formal support. Therefore the analysis of the support-intensity was restricted to those (I)ADL limited respondents who had received support, restricting the analytic samples to 3,227 observations for informal support, 1,466 for formal support and 647 for combined support.

Independent variables

In our analyses respondents were defined as childless if they had no living children, without distinguishing further between respondents who never had children and respondents who outlived their children (roughly 3 percent of childless elderly) as we are not concerned with the reasons for (not) having children but only with the availability of children in the network.

The socio-economic status was measured by income, wealth, and education. We used indicators of country specific purchasing power adjusted equivalent income and wealth quartiles based on the mean of five imputed values in Euros. Education was categorized into three International Standard Classification of Education (ISCED) groups: low (ISCED 0, 1, 2), medium (ISCED 3, 4), and high (ISCED 5, 6). Important demographic variables were age and gender. Health was

measured via self-rated health ranging from excellent to poor (1-5) and the log of doctoral visits during the last year. The existence of family ties (siblings, parents, partner within the household) was introduced by separate indicator variables.

The countries in our study can be categorized in three clusters in terms of assistance for citizens in need (Brandt 2013): Southern and Eastern Europe with comparably low assistance, Continental Europe with medium social expenditure and service supply, and the Scandinavian countries offering the most comprehensive public support to people in need. Social service provision was operationalized as the percentage of employees in health and social services in 2004 according to the third revision of the International Standard Industrial Classification (ISIC) sector N (United Nations 2012), retrieved from the OECD (Organisation for Economic Co-operation and Development 2007) to be comparable between countries. This measure is the best contextual complement of informal support as measured in SHARE which is available for all countries under study (also see, e.g., Brandt and Deindl 2013).

#Table 1 about here#

The following multivariate analyses to assess the links between informal and formal support adjust for non-independence of observations on the country-level by using multilevel estimations (for methodological details see, e.g., Hox 2002, Snijders and Bosker 1999).

Results

One could assume that childlessness is not particularly wide spread among the current older population – however, every tenth person in the SHARE sample of people aged 50 and over has no children as can be seen in Figure 1. This ranges from six percent (in the Czech Republic) to 15

percent (in Switzerland). Childlessness is lower in the Northern countries whereas the rest of Europe is close to the ten percent mean.

#Figure 1 about here#

Table 1 displays the differences between (I)ADL limited parents and childless older people in regards to the socio-economic characteristics discussed above. Similar to other studies, we find relatively little differences between the two groups. Significant differences only exist for higher education, age, the number of (I)ADL limitations, and for social networks (partner, parents, siblings). The (however small) educational bias can be explained by the fact that better career chances and higher labor market attachment of better educated are linked to lower investments in family life as other studies have shown. At first glance it might thus be astonishing that we did not find income differences between the two groups, especially since many studies report changes in wages after parenthood (e.g., Kmec 2011, Koslowski 2011, Kühhirt and Ludwig 2012). In terms of equivalent household incomes, however, different income trajectories of men and women equal out at least in the second half of life: While fathers tend to work and earn more than their childless counterparts, mothers tend to earn less than non-mothers. As previous research showed, social networks of childless people differ from parental networks. The most important difference is a lower likelihood of having a partner living in the household when being childless.

Informal support

Figure 2 displays the support received from different network partners during the last year. Roughly 30 percent of the SHARE respondents received some kind of informal help.

Surprisingly, childless elders received a little more informal support than parents (but: we cannot say anything about the intensities / tasks this entailed yet) – thus, compensatory mechanisms suspected in other studies seem to work, at least in regards to the likelihood of receiving sporadic help. When looking at the composition of the support network, we found that children were the main source of support for their parents – as a plethora of studies have shown before (most recently, e.g., Brandt 2013). Over 60 percent of the help received came from children, underlining the function of children as a safety net in older age. For childless elders, siblings, the extended family (aunts, uncles, etc.), friends, and neighbors compensated for the absence of children and took over support. We do not know, however, if this support met requirements and if the more challenging tasks, like body care for example, were also taken over by those less close relations. In the following we check this by also looking at the support intensities and linking informal support patterns to formal support receipt, which is in many cases directed to those more intense, medically demanding, regularly scheduled tasks – and which even children might leave to formal providers if possible (e.g. Brandt, Haberkern and Szydlik 2009).

Formal support

The use of professional services included three different aspects: care, help with household task, and meals-on-wheels. Figure 3 offers two basic insights: Public services were not commonly used (between 2 and 15 percent depending on task and group) and childless elders used them more often than parents. The differences were greatest for help and meals-on-wheels, where the usage of formal support was twice as likely for childless older people; but also for care we found significant differences, even though such services were also relatively often used by older parents.

#Figure 3 about here#

Links between informal and formal support

Figure 4 displays the different support mixes received (no support, informal support, formal support and combined formal and informal support). Childless older people used formal support and a combination of informal and formal support more often than parents whereas the differences regarding informal support between parents and childless elders were not significant. However, according to Figure 5 informal support for parents entailed significantly more hours per week, whereas childless elders received more hours of formal support. Such differences in intensities could not be found for the mix of formal and informal support.

#Figure 4 and 5 about here#

The next – multivariate – step will show, what the factors behind these differences are. Are they due to different characteristics in terms of resources of childless people and parents, what do the differences in network composition account for, and how are formal and informal support linked across Europe controlling for all these micro-level factors?

In order to answer these questions, we predicted the probabilities of receiving informal support only, formal support only, or a combination of both – compared to not receiving support at all.

The multinomial multilevel model presented in Table 2 shows that household income mattered only for the usage of formal support: Respondents with an income in the third quartile were more likely to use formal support than respondents in the first quartile – presumably because they were able to finance it. To the contrary, higher wealth was linked to a lower likelihood of formal as well as combined support – which could at least partly be interpreted as reverse causality: The

more support you already had to pay for, the lower your wealth. Respondents with lower education were more likely to receive informal support.

Not surprisingly, with higher age all forms of support became more likely. Men tended to be less likely to receive formal and combined support than women – presumably for purely demographic reasons: Men tend to live shorter lives and have younger partners, who first take over help and care as long as they can. Moreover, poor health in terms of self-assessment and more doctor visits led to a higher likelihood of support (informal, formal, and combined).

Respondents living with a partner were less likely to receive all different support forms – as informal support asked for help from *outside* the household only, both forms of support are less needed by couples. Having siblings had no significant influence on support received. When parents were still alive the likelihood of formal and combined support was also higher – which might be due to the fact that being there for older parents also led to a support need in the helper's household or that respondents were better informed because they organized formal support for their parents (e.g., Choi 1994) and saw the benefits of this in the parental household. Controlling for all these factors, childless older people in need of help were more prone to use formal support and a combination of formal and informal support – thus, formal services seem to play a significant role compensating for the lack of children, presumably especially when it comes to intensified support needs.

On the country level, a higher social service supply led to a higher likelihood of individual support in all cases, hinting to a crowding in of – at least sporadic, additional – informal support, and naturally, to a higher take-up of formal and combined support. Thus, also looking at broader social networks (and not only intergenerational support as most studies mentioned above did), private and public support seem to work hand in hand.

#Table 2 about here#

Support intensities

According to the linear multilevel models in Table 4, income had an influence on the intensity of support measured in terms of weekly hours of support received, and was linked to less informal and formal support hours. As in the multinomial models the same accounted for wealth.

Accordingly, the lower educated received more informal and combined support hours. Being older not only meant to receive more of all support types but also significantly more hours. No differences could be found for gender – once support was received the hours for men and women did not differ. People in poor self-perceived health received more hours of informal and combined support.

The existence of social network partners had no influence on the intensity of support – except in the case of parents: people with parents alive did not only receive formal support more likely but also more hours. Last but not least, childless older people received less hours of informal and more hours of formal support.

On the macro level, we found a crowding out of social support hours on the micro level by public social services. In more generous welfare states, informal support was more likely (see above), but encompassed less hours. The same was true for combined hours, and formal support hours, hinting to the fact that if all support providers work hand in hand, intensities (hours) given by each single help provider are diminished. Thus, when state providers take over more intense support forms, while social networks provide more additional and less intense (and maybe also irregular) support, all have to invest less.

#Table 3 about here#

Conclusion and discussion

In Europe today, the number of childless older people already amounts to around a tenth and is – at least in some scenarios – expected to rise considerably in future (e.g., Rowland 2007). Older parents receive most of informal support (from outside the household) from adult children.

Childless elders compensate for the lack of close ties with children with their extended family, friends, and neighbors. However, when becoming frail and dependent on support, these network ties cannot satisfy intensifying support needs. This is when formal support comes into play.

Overall, childless older people use more formal and a mix of formal and informal support than parents. Interestingly, there are no differences in the likelihood of informal support received between childless people and parents (and this is presumably the reason why other studies find mixed results), but parents receive more hours of informal support. Although childless older people have a working support network, they are more likely to experience a care gap when becoming frail – especially when there is no formal support provision to compensate for the lack of children.

These support differences between parents and childless elders remain stable in multivariate models. Even when controlling for a variety of important covariates, childless older people receive less informal support than parents, but more formal support. This is especially the case in countries where social service provisions are higher.

So far much has been written about crowding in and crowding out and the complementarity between the family – or more precisely: intergenerational relations – and the state. Based on our results, the discussion on crowding in, crowding out, and specialization can be extended to the complementarity between informal support within the broader social network and formal support by public providers: Within the social network, the lack of children is compensated via sporadic

less intense support taken over by the extended family, neighbors and friends. Formal services typically come into play when support needs are higher, presumably taking over the more challenging tasks for frail older persons. Thus, generally, informal and formal support seem to work hand in hand – and there is even evidence that this might be beneficial for public spending: A generous welfare state goes hand in hand with more informal support, and thus less intense public support is needed because responsibilities are shared between formal providers and informal social networks.

However, more evidence is needed when it comes to the specific task these different providers take over – unfortunately, the low number of observations (childless people depending on help and receiving different forms of support as assessed in SHARE) does not allow for reliable analyses here. We were also not able to assess developments over a longer period of time, and causalities cannot easily be determined, especially when it comes to the macro-micro-links: How do social networks react to changes in service provision and how did service provision evolve based on the underlying support culture? Moreover, and even though we did assess individual formal service uptake directly, we could only provide contextual evidence based on a very broad indicator of the general provision of services. As soon as more comprehensive social service indicators become available for a larger set of countries, more detailed characteristics of social service regimes can be assessed – maybe even for a larger set of SHARE countries if the survey continues to add countries. Last but not least, we would like to further assess if support needs were (un-)met by a specific arrangement in order to better qualify our conclusions, but unfortunately the SHARE data do not provide information about support sufficiency (yet). These issues provide no argument, however, to generally doubt our main conclusion: It is necessary to develop formal services to compensate for a future lack of informal support by a

diminishing number of younger people who are willing and able to take over support for a relatively higher number of frail elders, especially when they are partner- and childless.

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Notes

1. Ireland and Poland did not provide all necessary information for our analyses and were therefore dropped.

2. The following (I)ADL limitations were asked in SHARE: 1. Dressing, including putting on shoes and socks, 2. Walking across a room, 3. Bathing or showering, 4. Eating, such as cutting up your food, 5. Getting in or out of bed, 6. Using the toilet, including getting up or down, 7. Using a map to figure out how to get around in a strange place, 8. Preparing a hot meal, 9. Shopping for groceries, 10. Making telephone calls, 11. Taking medications, 12. Doing work around the house or garden, 13. Managing money, such as paying bills and keeping track of expenses.

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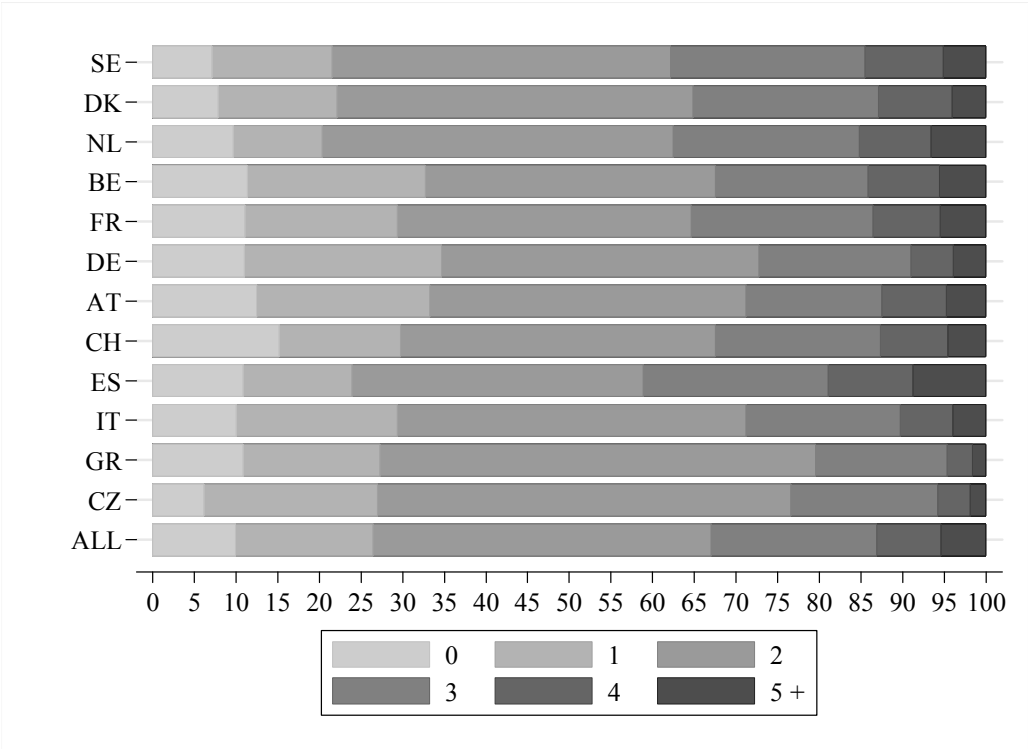
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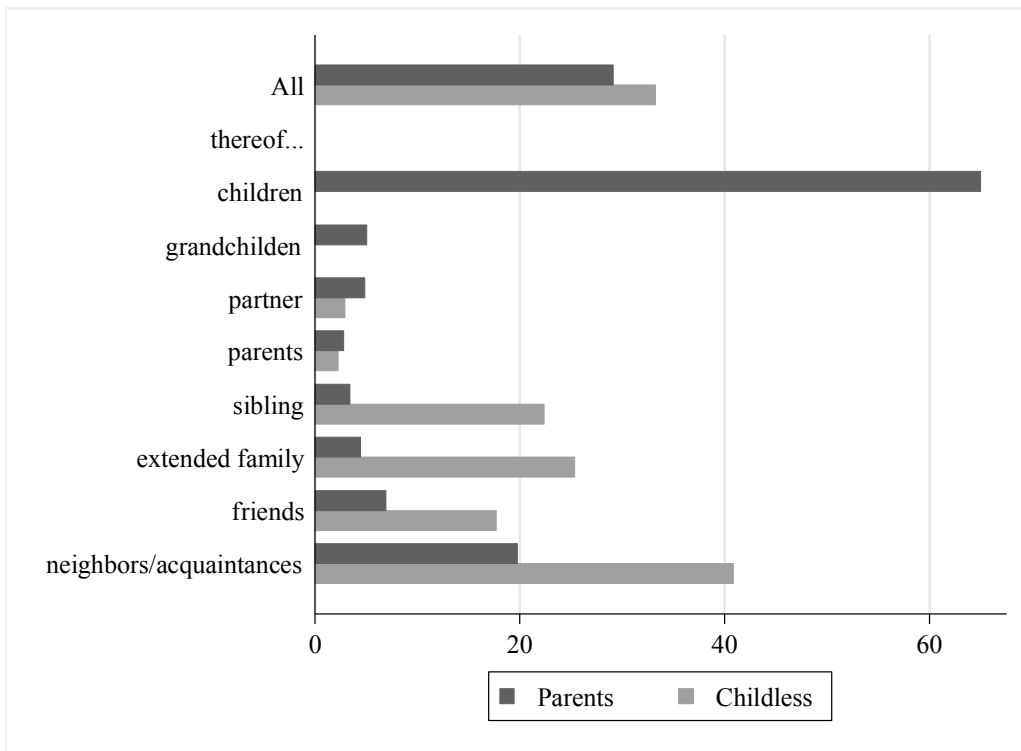
Figures and Tables

Figure 1: Number of children in Europe, % of respondents



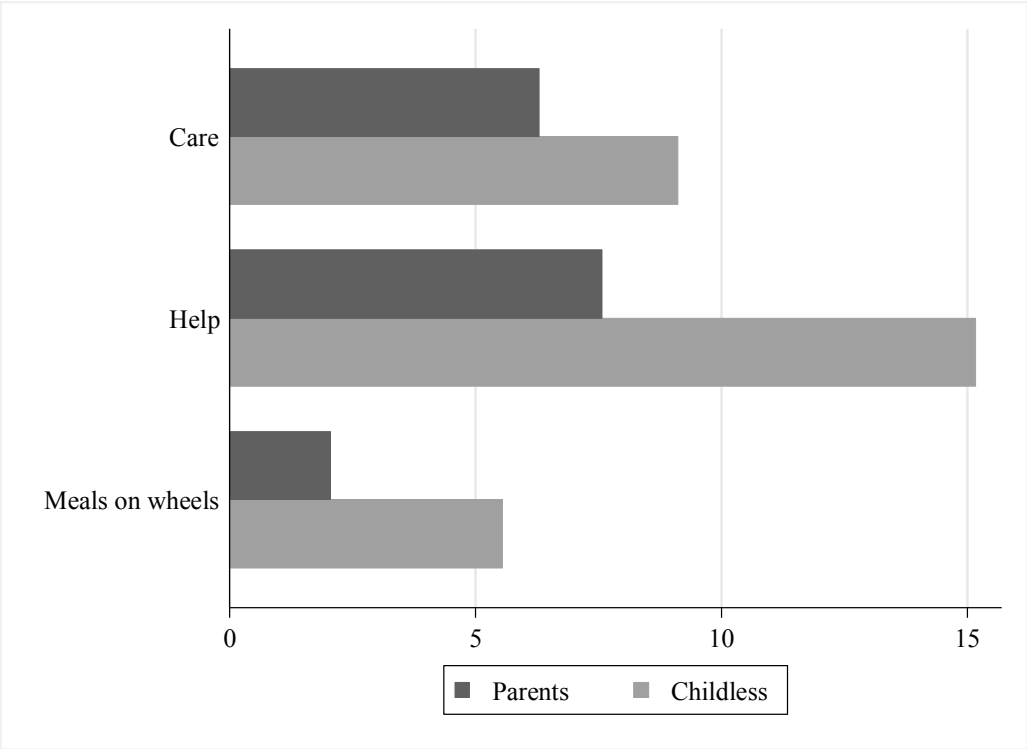
SHARE Wave 2, n = 26,791.

Figure 2: Informal support received



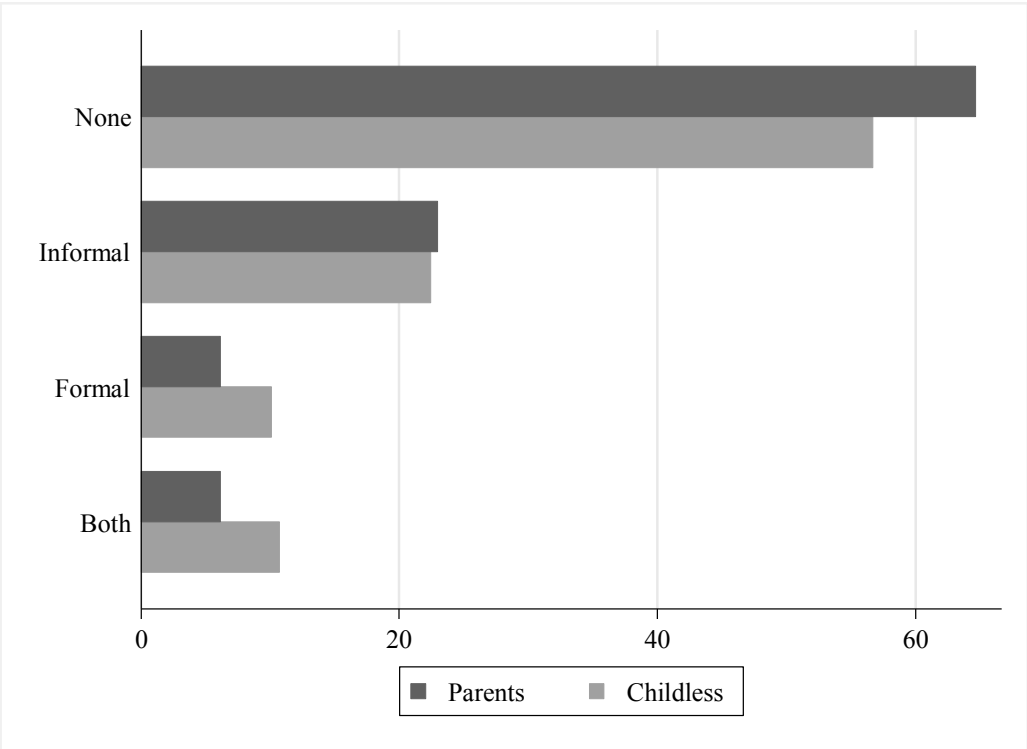
SHARE Wave 2, n = 12,243; only (I)ADL limited; χ^2 -difference test: All: $\chi^2 = 8.5495$, df = 1, p = 0.003; Partner: $\chi^2 = 2.9205$, df = 1, p = 0.087; Parents: $\chi^2 = 0.4938$, df = 1, p = 0.482; Siblings: $\chi^2 = 241.5860$, df = 1, p = 0.000; Extended family: $\chi^2 = 247.5045$, df = 1, p = 0.000; Friends: $\chi^2 = 54.0918$, df = 1, p = 0.000; Neighbors: $\chi^2 = 91.5802$, df = 1, p = 0.000.

Figure 3: Formal support received



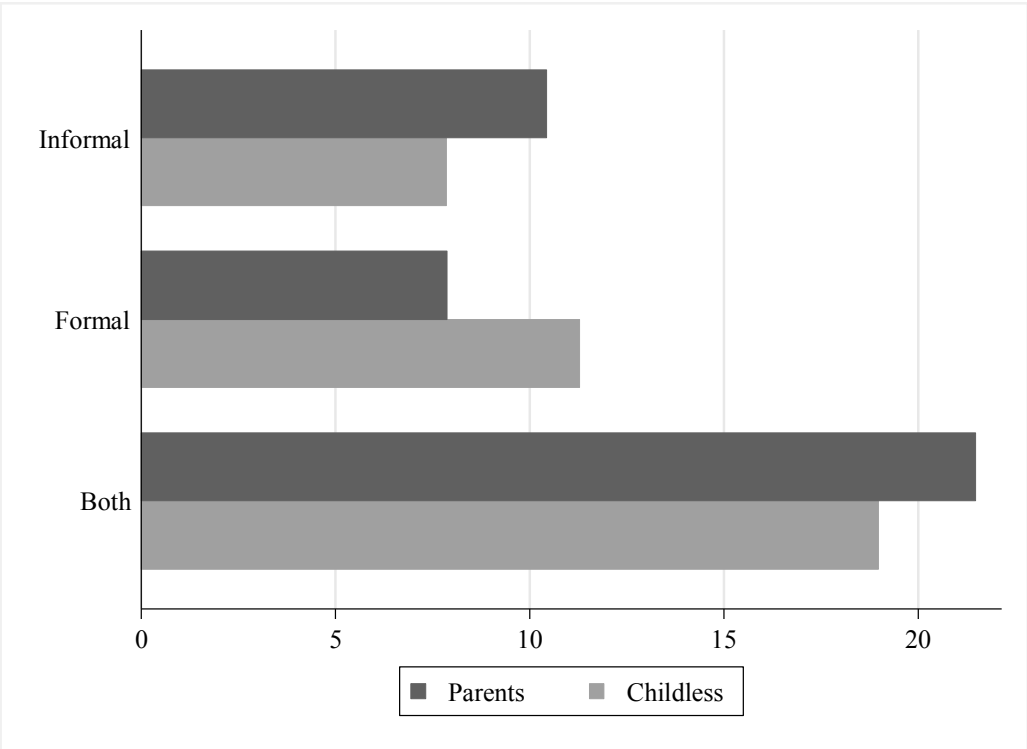
SHARE Wave 2, n = 12,243, only (I)ADL limited; χ^2 -difference test: Care: $\chi^2 = 14.0445$, df = 1, p = 0.000; Help: $\chi^2 = 81.7947$, df = 1, p = 0.000; Meals on wheels: $\chi^2 = 57.1582$, df = 1, p = 0.000.

Figure 4: Informal and formal support received



SHARE Wave 2, n = 12,243, only (I)ADL limited ; χ^2 -difference test: None: $\chi^2 = 30.0422$, $df = 1$, $p = 0.000$; Informal: $\chi^2 = 0.1889$, $df = 1$, $p = 0.664$; Formal: $\chi^2 = 27.5166$, $df = 1$, $p = 0.001$; Both: $\chi^2 = 37.2169$, $df = 1$, $p = 0.000$.

Figure 5: Intensity of informal and formal support (average hours per week)



SHARE Wave 2, n (informal support) = 3,227, n (formal) = 1,466, n (both) = 647, only (I)ADL limited; T-test: informal: $t = 1.9087$, $df = 3,225$, $p = 0.0564$; formal: $t = -2.2193$, $df = 1,464$, $p = 0.0266$; both: $t = -0.6029$, $df = 645$, $p = 0.5468$.

Table 1: Characteristics of parents and childless

	Full Sample	Parents	Childless	Differences
Income	21705.32	22105.68	18,044.76	t ^a : 1.01
Wealth	272,492.8	275,175.9	247,960.5	t: 1.10
Education				
Low	.60	.60	.58	χ^2 ^b : 1.38
Medium	.27	.27	.27	χ^2 : 0.05
High	.13	.13	.15	χ^2 : 4.05*
Age	68.84	68.68	70.26	t: -5.01**
Men	.37	.37	.39	χ^2 : 1.69
Self-rated health				
Excellent-very good	.12	.12	.11	χ^2 : 1.51
Good	.33	.33	.33	χ^2 : 0.10
Fair-poor	.55	.54	.56	χ^2 : 1.22
Doctoral visits	9.34	9.30	9.72	t: -1.20
# (I)ADL limitations	4.10	4.05	4.52	t: -3.89**
Partner in HH	.68	.71	.38	χ^2 : 529.93**
Siblings	.72	.73	.63	χ^2 : 49.80**
Parents	.18	.18	.14	χ^2 : 10.84**
Childless	.10			
n	12,243	11,036	1,207	

Source: SHARE Wave 2; only (I)ADL limited; ^a=df: 12247; ^b=df: 1; *p < .05; **p < .01.

Table 2: Formal and informal support (multinomial multilevel models)

	Informal vs. non	Formal vs. non	Both vs. non	Informal vs. non	Formal vs. non	Both vs. non
<i>SES</i>						
Income						
1 st quartile	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
2 nd quartile	-.04 (.06)	.11 (.11)	-.09 (.11)	-.04 (.06)	.11 (.11)	-.09 (.11)
3 rd quartile	-.04 (.07)	.35*** (.11)	.07 (.12)	-.04 (.07)	.35*** (.11)	.07 (.12)
4 th quartile	-.09 (.07)	.23* (.12)	-.00 (.13)	-.09 (.07)	.23* (.13)	-.00 (.13)
Wealth						
1 st quartile	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
2 nd quartile	.03 (.06)	-.23** (.11)	-.18* (.11)	.03 (.06)	-.23** (.11)	-.18* (.11)
3 rd quartile	.03 (.07)	-.25** (.11)	-.27** (.12)	.03 (.07)	-.26** (.11)	-.28** (.12)
4 th quartile	-.10 (.07)	-.24** (.12)	-.31** (.13)	-.10 (.07)	-.23* (.12)	-.32** (.13)
Education						
Low	.16*** (.06)	-.09 (.10)	-.14 (.10)	.12** (.06)	-.07 (.10)	-.17 (.11)
Medium	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
High	.00 (.08)	-.03 (.14)	-.18 (.15)	-.00 (.08)	-.03 (.14)	-.19 (.15)
<i>Demographics</i>						
Age	.02*** (.00)	.07*** (.00)	.11*** (.01)	.02*** (.00)	.07*** (.00)	.11*** (.01)
Men	-.04 (.05)	-.20** (.09)	-.19** (.10)	-.05 (.05)	-.20** (.09)	-.19** (.10)

Table continues on next page.

<i>Health</i>						
Self rated health						
Excellent-very good	.05 (.08)	-.33* (.18)	-.47** (.20)	.04 (.08)	-.34* (.18)	-.46** (.20)
Good	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Fair-poor	.30*** (.05)	.71*** (.10)	.89*** (.10)	.32*** (.05)	.73*** (.10)	.90*** (.10)
Log(#) doctoral visits	.21*** (.03)	.51*** (.05)	.62*** (.06)	.22*** (.03)	.49*** (.05)	.63*** (.06)
<i>Social Networks</i>						
Partner in household	-.76*** (.05)	-.54*** (.09)	-1.41*** (.10)	-.75*** (.05)	-.54*** (.09)	-1.42*** (.10)
Siblings	.06 (.05)	-.05 (.09)	-.01 (.09)	.07 (.05)	-.03 (.09)	-.01 (.09)
Parents	.08 (.07)	.31** (.14)	.43** (.18)	.06 (.07)	.31** (.14)	.42** (.18)
Childless	-.11 (.08)	.35*** (.12)	.25** (.12)	-.10 (.08)	.35*** (.12)	.24** (.12)
<i>Context</i>						
Social services				.02*** (.01)	.16*** (.02)	.17*** (.02)
Model						
Respondents		12,243			12,243	
Countries		12			12	
LL		-10,341			-10,324	
AIC		20,801			20,774	

SHARE, Wave 2, OECD; only (I)ADL limited; *p < .10; **p < .05; ***p < .01.

Table 3: Intensity of formal and informal support

	Informal	Formal	Both	Informal	Formal	Both
<i>SES</i>						
Income						
1 st quartile	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
2 nd quartile	-1.58 (1.101)	-2.49* (1.450)	0.03 (3.679)	-1.59 (1.098)	-2.74* (1.450)	-0.25 (3.689)
3 rd quartile	-2.65** (1.183)	-3.54** (1.504)	-2.59 (4.058)	-2.71** (1.177)	-3.84** (1.502)	-4.15 (4.078)
4 th quartile	0.47 (1.278)	-1.21 (1.656)	4.02 (4.506)	0.49 (1.278)	-1.64 (1.661)	2.96 (4.528)
Wealth						
1 st quartile	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
2 nd quartile	-2.47** (1.096)	1.88 (1.411)	0.96 (3.654)	-2.53** (1.091)	1.82 (1.411)	-0.37 (3.674)
3 rd quartile	-2.28* (1.176)	0.59 (1.526)	3.26 (4.066)	-2.38** (1.167)	0.30 (1.522)	2.11 (4.083)
4 th quartile	-3.03** (1.309)	2.68 (1.639)	-3.40 (4.613)	-2.99** (1.289)	2.58 (1.645)	-3.49 (4.595)
Education						
Low	2.63** (1.143)	0.83 (1.415)	8.48** (3.601)	2.56** (1.048)	0.45 (1.356)	8.77** (3.571)
Medium	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
High	-0.05 (1.506)	0.10 (1.868)	5.61 (5.220)	0.09 (1.500)	0.20 (1.866)	6.56 (5.246)
<i>Demographics</i>						
Age	0.25*** (0.049)	0.15** (0.062)	0.51*** (0.172)	0.25*** (0.048)	0.15** (0.062)	0.54*** (0.172)
Men	-0.85 (0.913)	-0.37 (1.181)	-4.72 (3.278)	-0.88 (0.913)	-0.32 (1.177)	-4.35 (3.289)
<i>Health</i>						
Self rated health						
Excellent- Very good	1.49 (1.578)	-2.36 (2.663)	-1.33 (7.694)	1.56 (1.563)	-2.22 (2.653)	-0.55 (7.717)
Good	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Fair-poor	3.25*** (0.987)	1.12 (1.359)	6.71* (3.682)	3.50*** (0.975)	1.17 (1.358)	6.67* (3.693)
Log(#) doctoral visits	0.84* (0.501)	-0.17 (0.653)	2.17 (1.763)	0.63 (0.500)	-0.40 (0.693)	-0.30 (1.850)
<i>Social Networks</i>						
Partner in household	-1.03 (0.954)	-1.21 (1.235)	-2.23 (3.440)	-0.83 (0.955)	-1.25 (1.241)	-1.60 (3.437)
Siblings	-0.54 (1.018)	-1.85* (1.115)	-1.36 (3.039)	-0.27 (0.970)	-1.60 (1.158)	2.51 (3.049)
Parents	2.08 (1.415)	2.59 (2.172)	11.97* (6.705)	2.06 (1.397)	2.60 (2.166)	12.07* (6.729)
Childless	-2.27* (1.366)	2.73* (1.516)	-3.72 (4.020)	-2.20* (1.334)	2.64* (1.510)	-3.13 (4.030)

Table continues on next page.

<i>Context</i>						
Social services				-1.12***	-1.55***	-3.25***
				(0.145)	(0.212)	(0.444)
<i>Model</i>						
Respondents	3,227	1,466	647	3,227	1,466	647
Countries	12	12	12	12	12	12
LL	-14,731	-6,495	-3,241	-14,719	-6,491	-3,233
AIC	29,502	13,030	6,523	29,480	13,023	6,508

SHARE Wave 2, OECD; only (I)ADL limited, *p < .10; **p < .05; ***p < .01.