Grandparents' Care and Assistance to the Elderly Parents:

Is There a General Tendency to Care?

Abstract Intergenerational help among members of the family is one of the important dimensions of contemporary welfare regimes. Recent research has indicated that a major part of this burden is placed on a middle-aged generation. The 'pivot generation' is expected to provide help to their partially dependent adult children and also to their elderly parents. It has been hypothesized that people helping their parents are discouraged from looking after their grandchildren, because they experience lack of energy and time. Using data from the four waves of the Survey of Health, Ageing and Retirement in Europe (SHARE), this paper analyzes the effect of providing help to aging parent on the likelihood and intensity of looking after grandchildren. The results show that helping parents does not lead to a less frequent and intense care of grandchildren. On the contrary, the positive association between caring responsibilities has been investigated. The highest tendency to care of grandchildren has been observed for people regularly helping to their parents. This effect holds after controlling for grandparents' characteristics and country effects. It is suggested that caring responsibilities tend to accumulate rather than compete between each other and therefore could represent a potential risk of overburden for those who have a general tendency to care.

Introduction

The intergenerational relationships in contemporary European societies have been considerably influenced by recent demographic changes. Firstly, the European populations are aging as a consequence of the increasing life expectancy and decreasing fertility rate (for example, Lutz, Sanderson and Scherbov 2008). The increasing proportion of elderly people induces more requirements on a public system of pensions and care services, but also on family members, who provide help and care to older

members of the family, first of all to their aging parents.

Secondly, most of the European countries face an increasing age at the first and subsequent births of children. Due to postponement of childbearing, not only the parents, but also the grandparents are older than in the past. Leopold and Skopek (2015) in this context talk about the postponement of grandmotherhood. At the same time, a period of the middle-aged generation's labor market participation is prolonging. Middle-aged adults therefore experience the challenge of balancing different and conflicting roles. They are required to support or care of their own parents and parents-in-law and also of their grandchildren. However, they also have to balance their roles within the family with their roles outside the family environment.

The current research on the middle-aged generation focuses primarily on a conflict between career and caring responsibilities for the children and grandchildren, elderly parents or disabled partner (for example, Bolin and Lundborg 2008; Crespo and Mira 2014; Ettner 1995; Gray 2005; Hochman and Lewin-Epstein 2013; Leopold and Skopek 2014; Wang and Marcotte 2007). There has been also a research on the 'sandwich generation': mostly women who care for an older family member and also for their own underage children. As has been shown, this term can be applied not only to parents with children under 18 years, but also to parents with adult children living with their parents in the same household or children not coresiding with their parents, but still demanding of support (Grundy and Henretta 2006). Young people frequently tend to postpone transitions to adulthood. These transitions include finishing of education, moving out from their parents' house, starting a first stable employment, getting married and starting their own family (Marini 1984). As a result of the difficult position of young people in the labor and housing market, adult children tend to stay at their parents' house for a longer time and prolong the period of dependency on their parents (Aassve et al. 2002;

Angelini and Laferrère 2011; Isengard and Szydlik 2012; Le Blanc and Wolff 2006).

Furthermore, children require their parents' help even after starting their own family. Previous research demonstrated that a high proportion of grandparents is involved in the care of their grandchildren (Guzman 2004; OECD 2012). As has been mentioned above, part of the research on grandparent-hood focused on the conflicting roles of grandparents since a considerable proportion of them is still employed. Nevertheless, little has been investigated about conflicting caring roles of grandparents. We can suppose, that people experiencing the responsibilities for assisting to their elderly parents can be discouraged from caring of their grandchildren, because they lack time, energy or other resources.

The following study focuses on a relationship between the probability of looking after grandchildren and helping to an elderly member of the family. It analyzes the panel data from the Survey of Health, Ageing and Retirement in Europe (SHARE) from 2004 to 2012 and it controls for 15 European countries and Israel. The macro level analysis in propensity and intensity of care of elderly parents and underage grandchildren is provided to show significant differences and clustering of European countries. In the subsequent section, an individual level multivariate analysis is conducted to test the influence of taking care for an older family member on the probability of looking after grandchildren on an occasional and regular basis. The individual-level analysis controls for the country since the common effect of welfare state arrangements and other macro characteristics on both grandchildren care and elderly people care is supposed.

Macro level determinants of informal help and care

Providing of informal care is in the interaction with the welfare state regimes in different countries, but also with cultural norms or labor market characteristics.

Regarding the European countries, the most striking variation has been found in a southnorth gradient, which can be applied both to the grandparents' and elderly care. From the grandchildren's care perspective, some authors indicate (Fokkema, ter Bekke and Dykstra 2008; Hank and Buber 2009; Ogg and Renaut 2006) that grandparents in the Scandinavian countries and Netherlands show a higher propensity of providing a care, but they are least likely to provide care on a regular basis. On the contrary, the southern countries (Italy, Spain and Greek) show the least proportion of caring grandparents, but grandparents who provide some care, tend to provide it on a regular basis. This variation is partially caused by different family settings, namely by various levels of coresidency of parents and their adult children and also by different family norms. The coresidency of parents and children is much more common in the southern countries (Albertini and Kohli 2013; Insengard and Szydlik 2012; Mandic 2008). At the same time, having a child decreases the probability of coresidency with parents (Hank 2007). Coresidency is, however, to some extent a norm in the southern countries and when parents and children are not living together, they substitute the shared housing with high intensity of other transfers (Albertini, Kohli and Vogel 2007). Hank and Buber (2009) also point out the potential differences in perceiving the intensity of care about which grandparents report.

A similar pattern has been observed also in the case of children taking care of their elderly parents. Some authors (Brandt, Haberkern and Szydlik 2009; Igel et al. 2009) distinguish between two forms of support from children to their parents: help and care. Help is characterized as a less demanding and it is more prevalent in the Northern European countries, on the contrary, care as a more demanding form of support is more common in the Southern European countries. The divide between the northern transfers regimes with a high proportion of people providing less intense support and southern transfers regime with a low proportion of people providing more intense support has been

suggested also by other authors (for example, Bonsang 2007; Ogg and Renaut 2006).

These distinctions are closely related to the welfare state and caring regimes in different countries. Public and private providers of care are complementary and can substitute for each other. This substitution is, however, not absolute and does not follow the crowding-out and de-familiarisation hypothesis. It has been shown that the pattern is more similar to crowding-in, because generous welfare states provide resources, which can be used for a family solidarity reinforcement (Brandt, Haberkern and Szydlik 2009; Künemund and Rein 1999; Motel-Klingebiel, Tesch-Römer and von Kondratowitz. 2005). A similar pattern has been described by Igel and Szydlik (2011), who analyzed the relationship between public expenditures for childcare and family infrastructures and propensity and intensity of childcare in different countries. According to their findings, strong welfare state motivates ("crowd-in") family members to help each other, but discourages them ("crowd-out") from a providing for a demanding care on a regular basis. The welfare state makes relationships within the family more independent and voluntary and tends to change characteristics of intergenerational solidarity rather than its strength (Daatland and Lowenstein 2005).

Individual determinants of informal help and care

Regarding basic sociodemographic characteristics, gender is one of the most distinct factors influencing the likelihood of grandparents' care. Women look after grandchildren considerably more often than men (Hank and Buber 2009; Tanskanen and Jokela 2011), but they are also more likely to be helped by their parents since the most invest maternal grandmothers, followed by maternal grandfathers, paternal grandmothers and paternal grandfathers (Coal, Hilbrand and Hertwig 2014; Euler and Weitzel 1996; Laham,

Gonsalkorale and von Hippel 2005). A capacity of men to look after grandchildren is greater if they are living with a spouse (Knudsen 2012). There is also a clear evidence about the influence of geographical proximity and contact of parents and children (Baydar and Brooks-Gunn 1998; Guzman 2004; Hank 2007; Hank and Buber 2009; Vandel et al. 2003).

Contradictory results have been obtained from the several studies considering a labor market status of the grandparents and parents. Guzman (2004) found that a higher percentage of employed grandparents provided care in comparison with unemployed and retired grandparents. This study however did not control for age and health status. Other authors suggest that working grandparents are generally willing to care equally as nonworking grandparents, but with a less intensity (Attias-Donfut, Ogg and Wolff 2005, Gray 2005, Hank and Buber 2009). Lakomý and Kreidl (2015) suggest that some grandparents tend to reduce their employment in order to provide care of their grandchildren. Education has also an influence since higher educated grandparents tend to care of their grandchildren more (Baydar and Brooks-Gunn 1998; Silverstein and Marenco 2001). The likelihood of the grandparents' care is, however, not formed only by a structure of grandparents' opportunities, but also by parents' characteristics. Grandparents tend to care more regularly if the mother is employed (Del Boca 2002; Del Boca, Locatelli and Vuri 2005). Women who are helped by the grandparents are more likely employed, they work more hours and also earn more (Gray 2005; Vandell et al. 2003). Nevertheless, it is not clear, if the grandparents provide more care when the mother is employed or if the mother is employed, because the grandparents help her with looking after children. Several authors also tested the relationship between grandparent-hood and early retirement and the results suggest that grandparents tend to retire earlier (Hochman and Lewin-Epstein 2013; Van Bavel and De Winter 2013).

Both grandparents' and grandchildren's age are important factors. Younger grandparents tend to look after their grandchildren more than the older ones and younger grandchildren receive more care from their grandparents (Coall, Hilbrand and Hertwig 2014; Luo et al. 2012; Silverstein and Marenco 2001). The age, however, interacts with employment status and health condition. Health limitations decrease the propensity of caring (Hank and Buber 2009). Some authors also suggest that older grandparents may be less involved in the care of their grandchildren, because they have to deal not only with their own health problems, but a part of them also care of their dependent elderly parents (Minkler and Fuller-Thomson 2000).

According to the studies on the intergenerational care of elderly people, a significant proportion of European and American population provides some kind of help to the older generation (Brandt, Haberkern and Szydlik 2009; Grundy and Henretta 2006). Individual determinants of elderly parents' caregivers are on a number of counts similar as determinants applying to the grandchildren's care. Also in this case, significantly more women than men provide some support to parents, assistance is provided by children living nearby, without health limitations, with higher education and the propensity of giving help decreases with the increasing age of the care provider (Bonsang 2007). Apart from the opportunities of children, the needs of elderly parents strongly influence the propensity of receiving some assistance (Silverstein, Gans and Yang 2006). As has been shown by Kalmijn and Saraceno (2008), the parents' needs interact with the level of familialism in a country. Children in the familialistic countries tend to be more responsive to the needs of their parents.

In sum, the characteristics of people providing care or help are shared both by people looking after grandchildren and assisting their elderly parents. They are usually middle-aged, women, without health limitations, with a rather higher education and living

nearby to their relatives. The next section provides information about previous findings on the 'sandwich generation' and defines hypothesis about possible conflict of caring roles.

Sandwich generation in four-generational approach

The sandwich generation is usually defined as a middle-aged generation (or 'pivot generation') of people who simultaneously care for their elderly parents or parents-in-law and underage children (Tebes and Irish 2000). This generation is not involved only in roles related to family, but they are usually also at the peak of their careers and for that reason they have to balance competing demands inside and outside the family (Riley and Bowen 2005). However, as has been shown by Agree, Bissett and Rendall (2003), the simultaneous care for parents and underage children is not very prevalent in a current society. For that reason, some authors (Grundy and Henretta 2006; Spitze and Logan 1990) are extending a definition of the sandwich generation also to parents with adult children who demand a support.

No matter how is the 'sandwich generation' defined, its investigation requires using a multigenerational approach to analyze how different family roles interact with each other. Some authors (Fingerman et al. 2011; Grundy and Henretta 2006) employ a three-generational approach: generation of children, middle-aged generation of parents and grandparents. Even a three-generational approach can, however, account for simplification since the current family is perceived as a multigenerational (Bengtson 2001). Relationships between grandparents and grandchildren are of a great importance, because they represent a substantial source of support for adult children. Grandparents looking after their grandchildren increase the probability that other child will be born and

also help to the greater working activity of mothers (Brewster and Rindfuss 2000; Del Boca 2002; Gray 2005; Hank and Kreyenfeld 2003; Vandell et al. 2003). The care provided by grandparents can be, therefore, perceived as a form of intergenerational support from parents to their children. The following analysis considers four generations: children, parents, grandparents and their elderly parents.

According to a research using the three-generational approach, recent findings suggest that parents tend to help more to their children than to their parents, but in the case of parental disability they support the parents more (Fingerman et al. 2011). This could indicate that support provided to dependent elderly parents represents a burden, which discourages people of middle-aged generation from supporting their children. Hiel et al. (2015) explored the effect of informal care on a caregiver's mental and physical health and their results indicate a negative influence of care on health after controlling for the most relevant socio-demographic and health-related factors. Similar results have been obtained also by others authors (Marks, Lambert and Choi 2002; Pavalko and Woodbury 2000), who examined the consequences of caregiving for the caregivers' health or general well-being.

It is, however, necessary to distinguish different levels of a support, e.g. a more demanding care of strongly dependent elderly parents and less demanding help such as assistance in household (Brandt, Haberkern and Szydlik 2009) and also various levels of frequency and intensity. Less demanding support does not take a lot of energy and time and therefore does not necessarily discourage from other activities and caring duties. In fact, there can be even positive relationship because providing of a support can represent an expression of a general willingness to support other family members. On the other hand, the effect of highly intense and demanding care of the elderly can prevent the grandparents from looking after their grandchildren, either due to a lack of energy or

time. For that reason, the following analysis is based on two separate models: the first for a general likelihood of providing a support, regardless the frequency and the second analyzing the probability that a regular support is provided.

Data and methods

Employing a four-generational approach requires using convenient data with a sufficient amount of information about all four generations. In view of the fact that the focus is on the middle-aged generation, using the data from the Survey of Health, Ageing and Retirement in Europe seems appropriate since this survey collects information about people aged 50+, which is the age, when a substantial part of people already have adult reproductive aged children and also have parents at retirement age or close to that. Data also contain information about respondents' parents and children, including basic questions about grandchildren. So far, a module on intergenerational support has been included in all four regular waves (except of retrospective survey SHARELIFE in 2008) in 2004-2012. The SHARE enables using a panel data for respondents participating at least in two waves and its international approach gives access to comparative information.

Dependent measures

The first dependent variable has been constructed as a dummy variable on the basis of a question about providing help with looking after grandchildren during the last 12 months. This variable does not distinguish different levels of intensity, but it only considers if any help has been provided. The second dependent variable differentiates between a regular

care (at least once a week) of grandchildren and occasional care (less than once a week). Two separate models with dummy dependent variables will be constructed. First model includes all respondents with at least one grandchild younger than 14 years and distinguish between those who provided any care of grandchildren and those who did not. The second model covers only those respondents who provided any care and investigates the factors affecting the probability of a regular care.

Independent measures

The main independent variable considers if a responded provided any assistance to one of his or her parents, stepparents or parents-in-law in a previous year. The operationalization of the variable is based on the following question¹:

Now I would like to ask you about the help you have given to others. In the last twelve months, have you personally given any kind of help [...] to a family member from outside the household, a friend or neighbor?

The help has been defined as one of the three kinds of assistance: personal care, practical household help and help with paperwork.

Furthermore, respondents were asked, how often they had been providing this help. The main independent variable was created on the basis of the question about frequency of the provided help to parents: never; daily; about once a week; about once a month; less often.

¹ This version applies only to the first two waves (2004 and 2006). Starting from 2010, respondents were not asked anymore, which type of help they have provided.

Models moreover control for many factors, which have been already identified by a previous research. First, characteristic of the main respondent (grandparent) were included: level of education (low, medium or high); labor market status (retired; employed or self-employed; unemployed; sick or disabled; homemaker); age (55 and less; 56-60; 61-65; 66-70; 71-80; 81 and more); marital status (married; divorced, separated or widowed; never married) and health status (excellent; very good; good; fair; poor). Furthermore, characteristic of children were controlled for: education; gender; geographical proximity (in the same household; in the same building; 1 to 25 kilometers; 26-100 kilometers; more than 100 kilometers); marital status; employment status. Age of the youngest grandchild belonging to a particular child has also been considered. Furthermore, the indicator of normative attitudes toward grandparents' obligations has been used as a control variable².

The data has a multilevel structure. The primary respondents are people aged 50 and more who were asked about their children. The first level of analysis are therefore children clustered by a family on the second level. The third level is a panel data component; data contain information about each child at least in two years. For that reason, the methods of multilevel data analysis have been employed. Since the dependent variables are coded as a binary indicator, the mixed-effects models for binary responses have been used. The final dataset is quite large and three level of analysis make it computationally demanding. Since the main focus of analysis lies in the fixed-effects estimates, the Laplacian approximation³ has been chosen for models estimation to increase the computational efficiency. Furthermore, data contain another level of analysis,

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² See the Appendix A for a detailed description of the indicator.

Laplace approximation is equivalent to one integration point and can be used as an alternative to multiple integration points if the emphasis is put on fixed effect estimates (StataCorp 2015).

which is a country. The number of countries is, however, too low (sixteen countries) for using the country indicator as another level of analysis and therefore country-level dummy indicators are used as a control variable on the first level of models⁴.

Findings

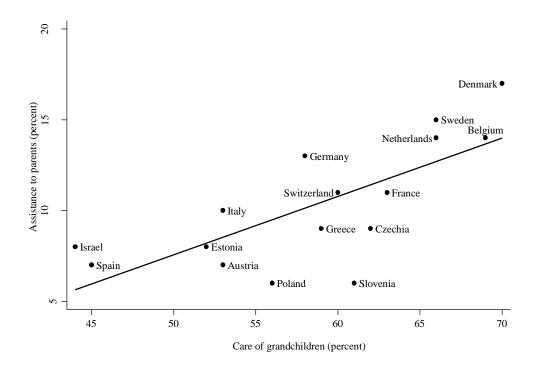
As has been mentioned above, previous research has suggested a general pattern of private caring regimes in different countries. As Figure 1⁵ shows, a clear south-north gradient exists for the probability of looking after grandchildren and any kind of assistance to elderly parents by people aged 50+. Recent investigations are extended here by adding more countries from the Eastern Europe. These countries (Estonia, Slovenia, Poland and Czech Republic) are similar to countries in the Southern Europe with a rather low proportion of people providing care to their elderly parents and a low engagement in grandchildren' care. The macro level analysis does not suggest a conflict between caring roles because countries with a relatively high proportion of people helping their elderly

Bryan and Jenkins (2015) suggest that minimal number for computing multilevel models is 25 countries for linear models and 30 countries for logit models. The authors also indicate that estimations of individual effects are correct if the number of cases within clusters is large. Since the presented analysis focuses on individual-level explanation, it is possible to rely on computations even when number of countries is small.

⁵ The Figure 1 and Figure 2 are based on four waves of SHARE survey; however, a random selection of only one year per respondent has been employed for respondents participating in more than one wave. Since some respondents participated only in one wave, their probability of providing help would be lower compared to respondents participating repeatedly. This procedure of respondents' selection applies only to the first part of analysis which investigates the differences between countries on an aggregate level.

parents show also a high proportion of people looking regularly or occasionally after their grandchildren.

Figure 1 Providing help to parents and looking after grandchildren



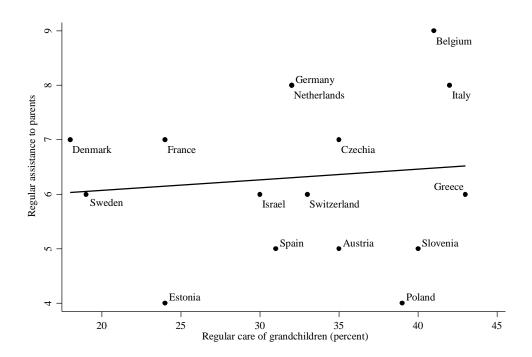
Source: SHARE 2004-2012; data for one wave per respondent; own calculation.

The first graph, however, does not take into consideration the frequency of a provided care. As has been shown, the southern countries (and expectably also the eastern countries) demonstrate a rather low proportion of people caring about their family members, but with a higher intensity than people from the northern countries. Figure 2 therefore displays an association between a regular care for grandchildren (daily or at least once a week) and a regular assistance to elderly parents. The result is clearly different in this case and the overall association has almost disappeared. The hint of south-north gradient is now opposite since the northern countries show the least

proportion of a regular help and care and the southern countries on the contrary have a higher proportion of both kinds of a regular support. The south-north gradient is, however, rather weak in this case, as well as the overall association. This might indicate that the regular help is usually connected with some acute needs of the receiver of help and the public provision of care is unequally spread in the European countries. While some countries secure equally both the childcare and older people care, in other countries might be the coverage of public care services different for young children and ageing dependent people and it is to different extent secured by family members. For that reason, the tendency to provide regular care of parents and grandchildren does not have to be in relation on an aggregate level. Nevertheless, it is still clear that there are significant differences between the southern and northern countries.

Differences between countries are likely connected with various caring and welfare regimes in European countries. The Scandinavian countries ensure services and financial benefits for both a childcare and elderly people care, the southern countries, on the contrary, keep most of the caring responsibilities within the family.

Figure 2 Providing regular help to parents and looking after grandchildren regularly



Source: SHARE 2004-2012; data for one wave per respondent; own calculation.

Figure 3 Descriptive statistics. SHARE 2004-2012: Grandparents' care and help to elderly parents.

Care of grandchildren	%	N
Yes	67%	3479
No	33%	1732
Regular care of grandchildren		
Yes	27%	1381
No	74%	3830
Help to parents		
Yes	12%	625
No	88%	4586
Subjective health		
Very good	26%	1350
Good	39%	2045
Fair	27%	1403
Poor	8%	413
Number of children		
1 child	10%	505
2 children	40%	2093
3 children and more	50%	2613
Country		
Austria	6%	312
Germany	6%	299
Sweden	11%	586
Netherlands	10%	512
Spain	6%	333
Italy	7%	381
France	7%	369
Denmark	6%	324
Greece	6%	290
Switzerland	5%	243
Belgium	12%	626
Israel	9%	449
Czech Republic	4%	219
Poland	5%	268
Total	100%	5211

To investigate the relationship between help provided to parents and care provided to grandchildren on the individual level, the mixed-effects models for binary responses have been created (See Figure 4). The resulting models show that the variation on the individual level cannot be explained only by differences across countries caused by different social policies. Model controls for country-level effects and there is still a sharp connection between caring responsibilities of grandchildren and helping to elderly parent.

The direction of the association is the same as for the macro level analysis. People who provide help to their parents also tend to look after their grandchildren more than their counterparts without helping responsibilities. At the same time, the tendency to help even increases with the increasing frequency of a provided help. The dependency is still present after controlling for age and a subjective health of respondents.

This pattern applies not only to any care (Model 1 in Figure 4), but it holds also in the model distinguishing between regular and occasional care (Model 2 in Figure 4), even though the effect is somewhat smaller in this case and it reaches the level of statistical significance only in case of a daily care⁶. Regular carers, who provide help to their parents daily, tend to look after their grandchildren on a regular basis; on the contrary, people who provide only occasional help to their parents also tend to look after their grandchildren rather sporadically. This negative effect is particularly strong for people who never provide any help to their parents since these people are the least prone to look after their grandchildren. We can therefore suppose that assistance provided to one family member generally does not discourage from help to other family members.

Other factors affecting the probability to look after grandchildren are similar for

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The number of observations is, however, lower in case of a regular care and for that reason the results are less significant, even though the odds ratios are not so much lower than in the first model.

both models and are in an agreement with previous findings. The likelihood of providing care of grandchildren is negatively associated with age (both grandparents' and grandchildren's), poor health, lower education and being employed or unemployed (in comparison with the retirement). Furthermore, employment status of children has also significant effect since children who are employed receive help from their parents more often than children currently unemployed or out of a labor market. The child's marital status does not affect significantly the probability of grandparents' involvement in grandchildren' care but it is obvious that never married children tend to obtain help from their parents on a regular basis more than children who are married or divorced. This probably refers to solitary parent households. Contradictory results have been obtained for the geographical proximity since coresidency of parents and adult children in the same household decreases the probability of providing help with looking after grandchildren in comparison with living in the same building. This could be, however, explained by the fact that respondents were asked only about looking after grandchildren without the presence of their parents, which can be less likely in a shared household. At the same time, this variable can partially explain a rather low level of grandparents' care in the familialistic southern countries, because these countries show a high level of coresidency. Analyzing of a frequency of contact could therefore lead to different results.

One of the most important factors is the indicator of normative attitudes toward grandparents' obligations. Respondents who tend to agree that grandparents are obligated to support their grandchildren tend to look after them sharply more often than grandparents who do think that it is grandparents' obligation. This effect is not surprising; however, the normative attitudes evidently does not explain the association between help provided to parents and care provided to grandchildren. The explanation might be therefore related to other factors such as emotional bonds between family members rather

than normative obligations or to the saturation of respondent' social needs.

The country effects show persisting significant differences across countries even after controlling for a lot of individual factors. Sweden, Netherlands, France and Denmark show the highest tendency to any care of grandchildren, but a lower relative tendency to the regular care. On the contrary, Italy and Greece are the countries with a highest probability of being involved in a regular grandchildren care.

 $\textbf{Figure 4} \ Likelihood \ of \ looking \ after \ grandchildren$

	Any care of grandchildren	Regular care of grandchildren
Help to parents (ref. Never)		
Less than once a month	1,336	1,135
Once a month	1,046	1,246
Once a week	1,463**	1,332
Daily	2,248***	1,590*
Age respondent (ref. 55 and less)		
56-60	1,134	0,998
61-65	0,755**	0,873
66-70	0,541***	0,761
71-80	0,172***	0,534**
81-100	0,026***	0,281***
Health status (ref. Very good)		
Good	0,806**	0,949
Fair	0,659***	0,880
Poor	0,347***	0,779
Employment respondent (ref. Retired)		
Employed	0,558***	0,501***
Unemployed	0,596**	0,611*
Sick or disabled	1,278	0,740
Homemaker	1,270*	1,079
Education respondent (ref. ISCED 0-1)		
ISCED 2-3	1,956***	0,965
ISCED 4-6	2,890***	1,132
Geographical proximity (ref. Same household)		
Same building	1,390	1,378
1-25 km	0,675*	0,279***
26-100 km	0,393***	0,030***
More than 100 km	0,245***	0,013***
Child's marital status (ref. Married)		
Separated/divorced/widowed	0,980	1,081
Never married	0,820	1,266
Age of youngest grandchild (0-3 y.)		
4-6 years	1,129	0,834*
7-15 years	0,802**	0,649***

Continued

Figure 4 continued

Child's employment (ref. Employed)		
Unemployed	0,943	1,000
Out of labor market	0,707***	0,812
Year of survey	0,993	1,024
Attitudes toward grandparents' obligations	1,670***	1,381***
Country (ref. Austria)		
Germany	1,212	0,803
Sweden	3,084***	0,269***
Netherlands	4,572***	0,688
Spain	0,668	1,336
Italy	1,058	3,689***
France	3,055***	0,433***
Denmark	3,801***	0,146***
Greece	1,865*	2,501**
Switzerland	1,768*	1,001
Belgium	3,292***	1,160
Israel	0,751	1,983**
Czech Republic	1,067	0,892
Poland	0,660	1,306
Observations	19991	10207
Number of families (parents)	5210	3887
Number of children	7978	5329
	Estimate	Estimate
Family RE	2,210	1,648
Individual RE (panel ID)	0,000	0,463

Source: SHARE 2004-2012. Mixed-effects models for binary responses: odds ratios.

^{*} Significant at 5%; ** Significant at 1%; *** Significant at 0.1%.

Discussion

The present analysis follows the findings from research on intergenerational relationships, suggesting the increasing demands on the pivot generation. A substantial part of middle-aged people provides help either to their adult children or elderly parents or both. Providing of an instrumental help is related to different structures of needs and resources. Unlike the resources of emotional closeness, the individual resources of time and energy are limited (Grundy and Henretta 2006). The resources can be therefore exhausted by supporting some family member, while other family members are deprived of help.

To investigate the hypothesis about competing caring responsibilities, the association between looking after grandchildren and providing help to aging parents has been examined. The results indicate that the association is rather opposite. Looking after grandchildren by people aged fifty or more with at least one grandchild younger than 15 years is much more frequent for people who also provide some help to their parents. The positive effect of providing an assistance to elderly parents persists even when a regular care has been considered. People who help their parents on a daily basis also tend to look after their grandchildren regularly. This association is not caused by the most relevant factors such as health status, employment status or age of respondents, because the positive relationship between two analyzed caring responsibilities is still clearly present after controlling for these confounding variables. Furthermore, controlling for attitudes toward grandparents' obligations does not diminish the association between helping to parents and caring of grandchildren.

The results suggest that instead of competing between different responsibilities, there can be some general tendency to care, which is based on factors not considered in

this analysis, such as emotional closeness between family members and the saturation of respondents social needs. The caring responsibilities can be therefore perceived from the cumulative perspective. Responsibilities of a specific group of people do not compete, but accumulate and can have negative consequences in different areas.

The individual behavior probably also interacts with public policies; whereas people who are generally trustful are willing to use formal caring services, if these are available, people who are less trustful tend to keep caring responsibilities within their family. The macro-level variations in welfare regimes or general levels of trust, however, does not explain all variations on the individual level since the relationships between caring responsibilities holds even after controlling for country-level effects.

Several questions for a future research can be developed. First, what is this general tendency to care and how is related to other individual characteristics? The presented analysis does not control for a full range of respondents' attitudes toward family norms and values, which are likely linked to his or her behavior and relationships with relatives. Second, how the multiple caring responsibilities interact with other demands outside the family and do they have any consequences for the providers of care? Providing a help to other people likely limits other activities of caregivers. Do people who simultaneously support more family members restrict their working activity? Does extensive helping to relatives influence their health condition? Thirdly, available data do not allow a detailed investigation of different intensity of care and help since SHARE researched a type of provided help only in the first two waves. However, the more demanding regular personal care of a dependent parent can have negative effect on a likelihood of looking after grandchildren. Future research should consider these distinctions. Finally, only a limited examination of country differences has been provided in this paper. It is not clear, how different welfare regimes and normative structures interact with multiple caring

responsibilities across European countries. Including more countries into the analysis and employment of multilevel approach could explain country-level differences in a more detailed way.

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APPENDIX A

The indicator of normative attitudes toward grandparents' obligations

The indicator has been constructed on a basis of a battery of questions on normative family obligations. The original battery consists of four statements: "Parents' duty is to do their best for their children even at the expense of their own well-being." "Grandparents' duty is to be there for grandchildren in cases of difficulty (such as divorce of parents or illness)." "Grandparents' duty is to contribute towards the economic security of grandchildren and their families." "Grandparents' duty is to help grandchildren' parents in looking after young grandchildren." Respondents were asked to what extent they agree with these statements: strongly agree; agree, neither agree not disagree; disagree; strongly disagree.

While the first item measures the parents' obligations, the remaining ones focus on the grandparent' role. For that reason, the first item has been dropped from the analysis and the other three items have been used for a construction of an index of family obligations as a mean of these questions. The Cronbach's alpha confirmed the reliability of the index since it is almost 0.9 for the aggregated data set and it is over 0.8 in most of the countries.

Attitudes toward grandparents' obligations

	Cronbach's alpha
Austria	0,9192
Germany	0,8505
Sweden	0,9178
Netherlands	0,9082
Spain	0,8861
Italy	0,9446
France	0,8839
Denmark	0,9490
Greece	0,8350
Switzerland	0,8714
Belgium	0,8923
Israel	0,8627
Czech Republic	0,7905
Poland	0,8759
All countries	0,8976
N	29430

Source: SHARE 2004 and 2006.