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Responsiveness to Parental Needs in Individualistic and Familialistic Countries

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**A comparative perspective on intergenerational support:
Responsiveness to parental needs in individualistic and familialistic
countries**

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Abstract

It has often been argued that Southern European countries are more familialistic in their culture than Western and Northern European countries. In this paper, we examine this notion by testing the hypothesis that adult children are more responsive to the needs of their elderly parents in countries with more familialistic attitudes. To test this hypothesis, we analyse the *Survey of Health, Ageing and Retirement in Europe* (SHARE). We focus on three indicators of need: (a) the partner status of the parent, (b) the health status of the parent, and (c) the education of the parent. Using Heckman probit models, we examine the effects of these variables on whether or not the parent receives instrumental support from children, thereby controlling for whether or not children live independently from their parents. We estimate effects of need on support and we compare these effects across ten European countries, using both graphic devices and a multilevel probit model where individuals are nested in countries. We find significant cross-level interactions of need variables and the degree of familialism in a country. Our analyses thereby provide more positive evidence for the hypothesis than earlier studies, which have focused largely on comparing aggregate levels of support among countries.

Introduction

The ageing of the population is causing an increasing demand for care, even if at later ages. This demand is addressed both to family members and to social services or to the market. Within the family, in addition (and in a second position) to spouses, adult children are the main family care providers. Due to population ageing, which includes also kinship ageing and an increasing likelihood of three and sometimes four generations families, two phenomena are becoming widespread. First, mature adults well in their fifties and sixties are now more likely than ever to have at least one parent still living and needing some kind of caring help because of frailty. Second, the phenomenon of co-ageing, by which two generations age together at least for some time is becoming widespread as well.

The incidence of these phenomena is not similar across countries, not even within Europe alone. Different patterns of fertility and of age at first birth, in the past as well as at present, together with different life expectancy durations, cause differences both in the age structure of the population and in the intergenerational structure of families and kinship (e.g., Ogg and Renaut 2006). Three and even four generation families are more common in Northern than in Southern European countries. In the SHARE survey on which we will base our analysis, for instance, 40-50% of respondents over 80 are members of a four generation family in most continental and northern Europe, compared to 20-30% in Austria, Switzerland and the Mediterranean countries.

These demographic differences notwithstanding, for elderly parents, children are an important source of support. Children can provide several types of support, including emotional and social support on the one hand, and practical and financial

assistance on the other hand (Silverstein and Bengtson 1997). Many studies have shown that throughout Europe, families are highly involved in providing care to older people. At the beginning of the 1990s, for instance, British studies estimated that about 15% of the adults population provided regular support of some kind to a sick or older person (Sinclair et al. 1990). According to Eurobarometer data (Alber and Kohler 2004), at the beginning of 2000s, about 17% of all adults in EU 15 took care of a frail elderly or disabled person not living with them and the same percentage did this for a person living with them. In the new members states and in three Candidate countries (Bulgaria, Romania and Turkey), the percentages were slightly higher: 18% and 23% respectively. Other, more detailed comparative studies on intergenerational exchanges confirm that intergenerational ties and solidarity remains strong across countries, irrespective of demographic and social differences (e.g., Daatland and Herlofson 2003, Attias Donfut, Ogg, Wolff 2005, Ogg and Renaut 2006, Grundy and Henrietta 2006).

The co-existence of high levels of family care provision with varying levels of public and market care provision for the frail elderly has prompted the development of the twin concepts of “social care” and of a “mixed economy of care” (e.g., Daly and Lewis 1998). In no country, in fact, family care is fully substituted for either from public or from market provision. Rather, care giving and care receiving constitute a package: the social care package comprising both formal and informal care, private and public, family and non-family provided. What differs across countries, as well as across social groups and individual families, is the internal balance of the package.

In this contribution, we compare European countries in the support that elderly parents receive from their adult children. Previous studies have largely focused on the overall level of support (e.g., Ogg and Renaut 2006; Attias-Donfut, Ogg and Wolff

2005, Motel-Klingebiel, Tesch-Roemer and Von Kondratowitz. 2005). These studies have found a north-south gradient in the proportion of those providing some kind of support, but an inverse pattern in the proportion of those providing it regularly. Studies of parent-child contact do find higher levels of face-to-face contact in more familialistic countries, but contact is not the same as support (Höllinger and Haller 1990, Tomassini et al. 2004).

A shortcoming, in our view, of previous analyses, however, is that they ignore the role of need. After all, the degree to which children support their parents is first of all a function of the needs that parents have for that support (Stroebe, Stroebe and Abakoumkin 1999). Hence, it is not only important to compare countries in the overall level of support, it is equally important to compare countries in the degree to which children respond to the needs of parents. We can expect that the effect of the needs of parents on the support received from a child will be stronger in countries that are more familialistic both in subjectively perceived intergenerational obligations and in implicit policy assumptions than in more individualistic countries on both levels. This comparative hypothesis might help shed some light on the meaning of the two opposite North-South gradients shown in the incidence and the intensity of support. If proven, it also might offer some ground to those who suggest that even the understanding of what is support and when one is actually receiving or giving support may differ cross-culturally.

We test this hypothesis by analysing effects of multiple indicators of parental need on the support that parents aged 65 and older receive from their children. We use data from ten European countries in the *Survey of Health, Aging and Retirement in Europe*. The effects of the indicators of need are compared across countries, using

both graphic devices and multilevel regression models which include cross-level interactions of country characteristics and indicators of need.

Background and previous research on intergenerational support

Comprehensive comparative studies on intergenerational support are fairly recent and have only started to explore the normative and value frameworks that shape individuals' and families' responses to older people's care needs. Three dimensions seem particularly relevant in these frameworks: (a) patterns of family formation and family living, (b) family norms concerning intergenerational solidarity, and (c) welfare state patterns.

With regard to the first dimension, countries, even within Europe, differ in the degree to which the “nuclearization” of the family has been achieved and particularly in the degree to which the elderly live by themselves either as a couple or alone. The European Quality of Life Survey, performed on 28 European countries in 2003, found that 25% of all people over 65 still had a child in the household in Italy, and over 30% in Malta and Poland. In Hungary, Spain, Slovenia and Cyprus and Greece this situation concerned about 20% of the elderly. But in Denmark, Sweden, France and Germany it did not reach 5% (Iacovou 2000, Saraceno, Olagnero and Torrioni 2005; Saraceno, forthcoming). A large part of these differences is due to differences in the age at exit from the parental household when young. But a small part is due to the incidence of extended or multiple households, where more than one couple live under the same roof. This incidence is minimal (around 2%) in “old EU 15” countries, although it is slightly higher in the Southern ones. It is around 10% in Central and Eastern European countries. Note that the presence of children in the household is not

per se an indicator of care provided by the adult children. Adult children may be living in the parental household in order to receive financial and even caring support from their parents. But undoubtedly, as parents age, the balance at least in caregiving may shift within the household.

The second dimension is cultural. Countries differ not only with regard to patterns of household formation. They also differ with regard to kinship traditions. Demographers and historians have long pointed out that differences between Southern European countries on the one hand and Western and Northern European ones on the other hand did not concern only, or even mainly, the incidence of the extended versus the nuclear pattern of household formation. It rather concerned the role of kinship. In the Mediterranean countries, irrespective of their structure (nuclear, stem, or extended), households have traditionally been embedded in a dense kinship network to a degree very different from Northern European households (Lesthaeghe and Meekers 1986; Reher 1998). These differences in turn have been interpreted as both the cause and the consequence of more familialistic versus more individualistic cultural attitudes and norms.

In most societies, there exists the norm that one should care for one's family members in times of need. Such norms are especially strong for one's own children; but norms to support one's own parents are only slightly less so (Lee, Netzer, and Coward 1994; Rossi and Rossi 1990). These norms are believed to be stronger, or to have a stronger back up, in familialistic countries than in individualistic countries. Next to norms about giving, there are norms about receiving. In most societies, older adults expect to rely on their adult children as sources of support and care in case of need (Rossi and Rossi 1990, Stein et al. 1998, Burr and Mutchler 1999). Yet, in contemporary Western Societies, somewhat in contrast to the norm of filial

obligation, there is also the norm that one should be independent and autonomous. Studies have shown that many elderly persons express a desire to remain independent as long as possible and to not be a burden to their children, even if and when they become frail (Silverstein and Bengtson 1994). Such norms of autonomy are probably stronger in individualistic than in familialistic countries.

The third dimension is institutional. The various countries have different institutional arrangements for support, not only with regard to the traditional items included in welfare state analysis (Esping-Andersen 1993), but also with regard to legal norms concerning intergenerational obligations and the provision of care services. The pioneering study by Anttonen and Sipilä (1996) indicated already in the early 1990s that the provision of services for the frail elderly (together with those for young children) distinguished welfare states in ways that only partly overlapped either with standard welfare state typologies or with family patterns and cultures typologies. Overall, however, the public provision of services for the elderly is higher both in the most individualistic and universalistic countries and in most of the continental ones, although in the latter subsidiarity plays a larger role. They are less well developed in countries where the welfare state relies more heavily on intergenerational solidarity, often enforced by legal norms, as in the case of Southern European countries. In individualistic countries, there is not only a longer standing tradition of nuclear households fending off for themselves largely independently from kin networks; there is also a more recent, but relatively well established, tradition of benefits and services targeted to the frail elderly as individual citizens that are not conditional on their family situation.

Previous comparative research has often focused on the complex relationship between the welfare state and the family. Conventional wisdom, often incorporated in

sociological theory, has for a long time assumed that the family and the welfare state substitute for each other. From this perspective, the development of a strong and universal welfare state weakens family solidarity, thus “crowding out” family support. (e.g., Cox 1987a, Cox and Jakubson 1995). This thesis, popular among economists, is also shared by those family sociologists who see in the development of the welfare state one of the causes of the weakening of the family (e.g., Donati 1999). The thesis was first challenged by feminist scholars who pointed out that, at least in the field of care, intergenerational family (time) transfers continue to play an important role also in the most developed welfare states (Lewis ed. 1998, Sainsbury 1996). Subsequently, the crowding out thesis was criticized by the first comparative studies on intergenerational exchanges. Künemund and Rein (1999), for instance, showed that “crowding in” effects were more evident than “crowding out” ones. In their data, there was more evidence of a good provision of services encouraging family help than discouraging it. Thus they argued that substantial formal services provision enables families to continue supporting their frail elderly members within an integrated and specialized framework of “mixed responsibilities”, rather than of a delegation of responsibilities. Similar conclusions were drawn by Kohli (1999) and then by others on the basis of the larger comparative data set provided by the SHARE study (Attias, Donfut and Wolff 2000; Attias, Ogg and Wolff 2005). Analyses of the ISSP (International Social Survey Programme) 2001 data also yielded this conclusion (Ogg and Renaut 2005).

On the basis of these findings, scholars have shifted attention to the demands’ squeeze experienced within ageing kinships by the so called sandwich generation, particularly by women aged 55-69 years caught in between demands from adult children (and young grandchildren) and demands from frail elderly parents (e.g.,

Grundy and Henretta 2006). Attention is also shifted to the risk that a weakening of the welfare state may not be compensated for by an increased family effort, due to the changing demographic balance within kinship networks (more frail elderly, less able bodied adults), and increasing women's labour market participation (Daatland and Herlofson 2003, Johansson, Sundstroem and Hissing 2003). Both these phenomena, in fact, shrink the traditional available pool of care-givers (Saraceno, Olagnero, Torrioni 2005, Wolf and Ballal 2006).

Using the findings from the OASIS (Old Age Autonomy: the Role of Service Systems and Inter-generational Family solidarity) study on five countries, Motel-Klingebiel, Tech-Roemer and Von Kondratowitz (2005) have tested three alternative hypotheses with regard to the relationship between intergenerational family solidarity and the welfare state - substitution, mutual encouragement, mixed responsibility. They too did not find any evidence of a substantial "crowding out" of family help by generous welfare states. They found instead support of the "mixed responsibility" thesis: in societies with well developed services, help from families and welfare state services act accumulatively, while in welfare regimes that rely more explicitly and heavily on family provision this does not occur.

All these findings, therefore, seem to point out that welfare regimes (and particularly caring regimes) make a difference not for the degree of involvement of family members and particularly children in the provision of care but for the degree to which it is indispensable in the absence of other resources. In this perspective, our focusing on the role of need may offer further insights in this direction.

A different strand of research has addressed the issue of the relationship between cultural norms concerning filial obligations and actual behaviour, within as well as across countries. Lowenstein and Daatland's (2006) findings, on the basis of

the OASIS seem to support our thesis that filial norms are more prescriptive in Southern (Spain and Israel in their study) countries than in the Northern ones, where intergenerational exchanges are more open to negotiation. Yet, other, previous, studies offer a less clear cut picture. While some studies have found direct associations between degree of perceived filial obligations and supportive behaviour (Lewis and Meredith 1988, Silverstein, Parrot and Bengtson 1995; Parrott and Bengtson 1999), others found that the particular relationship a child had with the parent was more important than the strength of normative filial obligations (Stein et al. 1998).

Obviously, many studies have also pointed to the importance of individual characteristics in explaining intergenerational support. Characteristics of the parent are important, in part because they determine the degree to which the parents want or need support. Characteristics of the child are important, because the support that the child can give depends on the financial and time resources of the child, as well as on his or her specific “moral career” within the family network (Finch and Mason 1993, Grundy and Henrietta 2006). Thus, although the large majority of care givers are women (Ogg and Renaut 2006), by no means all women, all daughters, provide help to the same degree. In a study on the UK and the USA, for instance, Grundy and Henrietta (2006) found that around a third of women aged 55-69 reported providing help both to their parents and children, while one fifth provided help to neither.

Data and methods

To test our hypothesis, we analyse the *Survey of Health, Ageing, and Retirement in Europe* (SHARE). SHARE is based on nationwide representative samples. In some countries, individuals were the sample units, in other countries, households were sampled. All persons aged 50 and over in a household were included in the sample. Household response rates are 55% on average. Respondents were interviewed with CAPI questionnaires at home. Descriptive analyses of the SHARE can be found in Börsch-Supan et al. (2005). The countries that we use in this analysis are Austria, Denmark, Germany, France, Greece, Italy, Netherlands, Spain, Sweden, and Switzerland.

For the current analyses, we examined the respondents of SHARE in their role as (potential) receivers. For that reason, we selected respondents aged 65 and over with at least one adult (21+) child who is not living at home. The age limit of 65 was chosen because parents in the age group 50-64 are less likely to need help. This yields a sample size of 6,409 older parents.

MEASURES

The unit of analysis is the parent-child dyad. The SHARE data have detailed background information on at most four children.¹ After selecting adult children living outside the household, the number of dyads with valid information on the support variable is 11,627. Because the dyads are not independent, the standard errors in the regression models are corrected for clustering of cases within families.

¹ If there were more than four children, the children who live closest to the parent were selected.

In the interview, the respondents were asked if they received any help from members outside the household with (a) household tasks, (b) personal care, or (c) administrative and financial matters. The time frame was the last 12 months. Subsequently, it was asked who gave that help and respondents could list up to three names. If a child was mentioned, we matched this information to one of the four children for which detailed demographic data were available (see above). It is possible that help was obtained from a child who is not included in the subset of four children for which there is detailed information. We checked this, and it turns out that 98% of the cases where children were mentioned in the support questions, the child was also included in the subset of four children.

Next to making a distinction between receiving help or not, we consider the frequency with which parents receive help. If parents received help from a person, they were asked to specify whether they received help ‘about daily’, ‘about weekly’, ‘about monthly’, or ‘less often.’ We recoded these categories to numeric scores representing the approximate number of times a child offered help per year, ranging from 0 (no help) to 365 (about daily). Following earlier analyses of contact and help patterns, we subsequently transformed this variable into the natural logarithm. We note that the resulting variable is very closely correlated to a simple coding from 0-4. Our approach has some degree of arbitrariness, but it is less arbitrary than a 0-4 coding scheme. We primarily focus on the results for the simple dichotomy (help or no help) and we add results for the linear dependent variable to check the robustness of our findings. With one exception, the two perspectives make little difference for the regression results.

We use three indicators of need. The first need variable is based on information about marital history and living situation. We make a distinction between

respondents living with a partner and respondents living alone. In more detailed analyses, we also make a distinction in whether or not the respondent was divorced/separated or widowed. Previous research confirms that parents who live alone receive more support from children, although these effects are clearest for widowhood and they are stronger for women (Barrett and Lynch 1999; Dykstra 1990; Eggebeen 1992; Roan and Raley 1996; Silverstein, Parrott, and Bengtson 1995).

The second measure of need of the parent (respondent) pertains to health. Two measures are used: (a) a subjective assessment of health by the respondent (ranging from 1 for 'excellent' to 5 for 'poor'), and (b) a scale of activities of daily living (ADL), which measures how many essential activities the respondent has difficulties in performing (e.g., getting out of bed, doing work around the house, showering). These are sometimes referred to as 'instrumental' tasks. Many studies have shown that such impairments are associated with increased support from children (Eggebeen and Davey 1998; Klein Ikkink, Van Tilburg, and Knipscheer 1999; Spitze and Logan 1990).

The third variable is the level of education of the parent. Education is coded by SHARE into the 1997 *International Standard Classification of Education* (ISCED-97). The coding is rank order, from 0 (for no education) to 6 (second stage of tertiary education). To obtain an interval order, the ISCED levels are recoded to percentile scores in each country. Hence, the variable indicates the relative position of each respondent in the educational distribution *within* a country. Education can also be regarded as an indicator of need in that it is associated with financial, cultural and cognitive resources. It can be assumed that higher educated parents have more resources and this will make them less dependent on their children. For instance, higher educated parents may have more money to buy household support (e.g.,

domestic or care work) on the market and they have more knowledge and information to arrange financial and other administrative matters. Education is also correlated with filial norms. Higher educated parents seem to be less likely to endorse the statement that children should take care of their parents (Lee, Netzer, and Coward 1994). This means that higher educated parents will ask for support from their children less often than lower educated parents.

We include several control variables. Since support is a dyadic phenomenon, we need to control for characteristics of both parents and children. The characteristics of the parents are the following: (a) the age of the parent (ranging from 65 to 99), (b) the sex of the parent, (c) how many children older than 21 are living at home. The last variables are included because support from outside children is less likely when there are already other (older) children living at home (Eggebeen 1992).

The characteristics of the child are the following: (a) whether the child is living with a partner, (b) whether the child has own children, (c) whether the child is employed, (d) the child's sex, (e) the child's age, (f) the child's education. The first three in this list indicate to what extent the child is able to provide support. It is expected that children who have their own family and who are working for pay will be less able to provide support to their parents (Ward and Spitze 1998). We also include the education of the child. Many previous studies have shown that education of parents and children has a strong negative effect on contact and a positive effect on geographical distance (Kalmijn 2006).

Finally, it is worthwhile to investigate the role of geographic distance. Proximity can have an effect on support, but it is also clear that decisions about how close to live to one another are motivated in part by the same factors that motivate

support. Hence, distance is endogenous and we therefore present two models, one with and one without distance.

In several more detailed models, we will explore interactions. In one model, we explore the effect of divorce versus widowhood. This effects will be interacted with the sex of the parent. It is known from past studies that divorced fathers receive less support from children than divorced mothers (Eggebeen 1992; Kalmijn, forthcoming; Pezzin and Steinberg Schone 1999). Another interaction is between the sex of the child and employment, because it can be expected that support is especially more difficult to give for women who are employed.

METHOD AND DESIGN

The analyses consist of two parts. In the first part, we analyse the ten countries simultaneously in order to examine effects of need on support. Because the support variable is not observed for children who are living at home, the data are analysed using Heckman's (probit) model for sample selection. This model consists of two equations. The first step is a probit model for whether or not the child is living with the parent (the selection equation). The second step is a probit model for whether or not the child supports the parent, while controlling for the (expected) probability of living with the parent (the substantive equation). To identify the model, one variable is needed that is in the selection equation and that is not in the substantive equation. The identifying variable is the age of the child. The age of the child may be associated with support giving, but this will largely be due to the correlated age of the parent or to the life course stage of the child. Since the substantive equation includes the age of the parent as well as information on the life course stage of the child, there will be no

net remaining effect of the child's age on support. To check if selection bias is important, we also present a regular probit model for support, without correcting for selection. We compare the results from the Heckman model and the one-step probit model. The standard errors in the probit model and the Heckman probit model are corrected for clustering of dyads within families.²

In the second part of the analysis, we focus on our comparative hypothesis. We first look at countries individually by estimating the probit model for each country. We explore how the effects of the need indicators vary among the ten countries. To see if there is a pattern in these results, we relate the effects graphically to value characteristics of the countries. These value characteristics of countries are obtained from answers to attitude questions about family support in the 1998 Eurobarometer survey. As will be seen below, these attitude questions can be used to measure the degree of "familialism" in a country. The graphs will give a first impression of whether effects of need vary with the degree of familialism in a country. Subsequently, we test the patterns observed in the figures with a multilevel probit model in which dyads are nested in countries. These models include interaction effects of the individual need indicators and the country-level degree of familialism. The interactions tell us whether effects of need depend significantly on the country's context. Note that we use multilevel models here in order to not overestimate the contextual effects. There are only ten contexts and if one would use regular (probit) individual regression models, the standard errors of the effects of contextual characteristics would be too low (e.g., Uunk, Kalmijn and Muffels 2005).³

² We use STATA to estimate all the regression models, including the multilevel models.

³ These models are not controlled for clustering of dyads within families since this was not possible in the multilevel probit model. A three-level probit model would be an alternative, but this is not available in STATA.

The main findings are based on the probit models, but we also estimate linear models where the frequency of help is the dependent variable. We replicate the regular probit model for Europe as a whole with a linear model. In addition, we also replicate the multilevel probit regression model with a multilevel linear regression model.

Results

DESCRIPTIVE RESULTS

In Table 1, we present descriptive information on the countries. Descriptive statistics are presented at the level of parents and at the level of children (dyads). For example, the first column presents the percentage of parents who have (at least one adult) child living in the household; the second column is based on dyads and represents the percentage of children who live with their parents. The two are directly related but the percentages for children will be lower than the percentages for parents.

We first see the expected differences in the prevalence of coresidence. Coresidence is quite common in Southern countries. For example, 35% of Italian parents and 39% of Spanish parents have an older child living at home. Coresidence is also common, albeit less, in German speaking countries. About 10% of German parents have an older child living at home. Another interesting feature is that in the Southern and the German-speaking countries, it is common that a child lives in the same building, although not in the same household as the parent. For example, 9% of the Austrian children and 14% of the Greek children live in the same building as their parent. We do not treat these cases as coresidence, but we will pay attention to the role of

geographic distance later on. Finally, we see that coresidence is rare in Northern countries such as Sweden and Denmark and also rare in the Netherlands.

The fifth and sixth column present figures on the support that children give to parents. The sample for these numbers is limited to parents with at least one independently living child, since (in the definition chosen here) support can only be given by outside children. In the analytical sample of parents, 21% received outside help from a child. At the dyad level, the number is lower. Of the children in the sample, 9% helped their parent in the last 12 months. Support patterns vary less systematically than coresidence patterns. Support is generally *not* more common in Southern countries than elsewhere. The exception is Greece, where support is the most common.

To explore cultural differences between countries, we look at attitudes about family support, using data from the 1998 Eurobarometer survey (Table 2). The first attitude item that we used is the statement that “working adults should care more for elderly parents in the future.” Two Southern countries are most in favour of this statement whereas Sweden and the Netherlands are least in favour of this statement. The second item concerns children’s coresidence with parents when the partner of the parent is no longer present. Coresidence receives very little support in Northern countries and in the Netherlands. Most support exists in Southern countries. The two German-speaking countries and France are in between. For attitudes about financial support of elderly parents, the results are more or less similar. In Southern countries, 24-30% say that children should pay for elderly parents, in Northern countries, virtually no one agrees with this. France and Germany take a middle position. The exception here is Austria, where financial support is as often approved of as in the south.

The three indicators reveal some differences in the specific position of each country, so that it is important to assess more systematically whether they are correlated. Correlations for the indicators are high: $r = .81$ ($p = .01$) for the first two indicators, $r = .61$ ($p = .08$) for the first and the third, and $r = .70$ ($p = .04$) for the second and the third. The number of countries is small, but the level of agreement across indicators is striking.

To summarize the cultural differences, we constructed an index which combines information from the three items. The index is the standardized sum of the three standardized items (so that each item gets the same weight in the index). The ranking of the countries, from most familialistic to most individualistic, is as follows: Greece, Spain, Italy, Austria, Germany, France, Netherlands, Denmark and Sweden. This ranking has considerable face validity. It has a North-South element, but it also points out the relatively familialistic position of the two German-speaking countries. Also noteworthy is that the Netherlands—which is usually denoted as a conservative welfare state (although skewed towards the elderly) —is as individualistic in its attitudes as the Northern countries.

REGRESSION RESULTS

Our discussion of the regression results starts with the model for all countries combined, presented in Table 3. Model I in Table 3 contains the effects on whether or not support is exchanged in the dyad, controlling for selection effects. The effects on the probability of being observed, i.e., being outside the household (the selection equation), are also presented. To ease the interpretation of the effects in the selection equation, the signs are reversed. Hence, the coefficients denote the effects on the

probability of *being at home* (rather than the effects on the probability of being outside the household).

All the indicators of need have the expected effect on support in Model I. Parents who live without a partner are more likely to receive support. Parents with poor physical health are supported more often, as are parents with limitations in their daily living capacities. Finally, we see that lower educated parents receive support more often than higher educated parents. All the effects are significant and in the expected direction. The effects of need are also present when we control for distance in Model II. In fact, the coefficients are virtually identical. There is one exception, however, which is that the negative effect of (higher) parental education on support disappears once one controls for distance. Hence, the fact that the lower educated receive more support from their children is largely due to the lower educated living closer to their children. Similar results have been observed for contact frequencies in other data sets (Kalmijn 2006). To check how useful it is to control for selection bias, we also look at the effects of need in a regular probit model, without controlling for selection bias (Model III). The four effects of need remain significant and are of the same size as in Model I. Hence, we conclude that selection bias does not alter the effects of need. Finally, we see that the need effects are also significant when the frequency of help is the dependent variable, rather than the probability of receiving any help (Model IV). In sum, we can conclude that the four need indicators have important and fairly robust effects on the help that parents receive from children.

When we look at the selection equation, we see more or less similar effects. A child is more likely to live with the parents when the parent is single and when the parent has limitations in his or her daily living capacities. The health status of the parent, however, does not affect the chances that the child lives with the parent.

Parental education has no effect on coresidence either. Although the overall evidence for coresidence is weaker, the effects do suggest that coresidence is also (partly) affected by the need of the parent.

Additional analyses were done to look at interactions with the gender of the receiver (i.e., the parent). To do this correctly, we make a distinction between divorce and widowhood (we can only make this distinction in the full European sample, not in the samples for the countries separately). We look at four groups: divorced fathers, divorced mothers, widowed fathers, and widowed mothers. The effects for these groups on support are presented in Table 4. The control variables are the same as in Table 3, but they are not presented in the table to save space.

Table 4 shows that gender differences interact with the marital status variable. Among mothers, divorce has a positive effect on support received whereas among fathers there is a negative effect (which is not significant). The difference between these two effects is marginally significant ($p = .08$), showing that divorce has a more negative or less positive effect on intergenerational support for fathers. This is consistent with what one would expect. For widowhood, the effects are more positive for fathers than for mothers and this difference (interaction) is significant. This is not consistent with some previous studies (Ha, Carr, Utz and Nesse 2006). Perhaps it has to do with the emphasis in the questionnaire on household help, which—as a consequence of the gender division of labour during marriage—is a form of support that older single fathers generally need more than older single mothers. The gender interactions on coresidence are also interesting. The effect of divorce is positive for mothers and strongly negative for fathers. The interaction is significant. This is in line with what one would expect. Finally, we see that widowhood has a positive effect on coresidence. This effect is stronger for mothers than for fathers. Hence, for

widowhood, the gender differences are unclear: Widowed fathers are better off in terms of outside support but widowed mothers more often live with the children.

We have seen that indicators of parental need have the expected effects. Because support is a dyadic phenomenon, it is also important to look at characteristics of the child. Table 3 shows that differently from parental (the receivers) characteristics, children's (the givers') characteristics have only weak effects on support. Children's education, family situation, and work situation do not affect the support that they give to parents. This suggests that support is primarily driven by demand rather than by supply. The results are somewhat stronger when we look at the frequency of help. For example, we find that the effect of gender is weak in the probit models (especially when sample selection is controlled), while it is significant in the linear model. Hence, daughters are not more likely to offer 'any' support, but they are more likely to offer support when the support is time demanding. A similar result is found for employment status. Employed persons less often support their parents, but this is only visible when the frequency of support is included in the dependent variable (Model IV). We also calculated interactions between employment and the gender of the giver in Model IV (not reported in the table). The effect of employment is $b = .023$ for sons and $b = -.090$ for daughters and this difference is marginally significant ($p = .07$). These findings are in line with expectations: For daughters, employment is more a restriction in the support they can give to parents than for sons.

Although child characteristics do not affect support, they clearly do affect coresidence. Higher educated children are less likely to live with their parents. In addition, we find strong effects of life course transitions. Children who are living with a partner and with children are less likely to live with their parents than children who are single. This is a well-known fact and shows that multiple-family households are

an exception in the part of Europe that we are considering. Finally, we find that children who are not employed are more likely to live with their parents. The age of the child has the strongest effect—the older the child, the more unlikely it is that he or she is still living at home.

These last findings are generally consistent with the literature on leaving home (Aassve, Billari, Mazzuco and Ongaro 2002; Baizan, Billari and Philipov 2001). An interesting insight that we add is that for coresidence, both child and parent characteristics are important, whereas for support from children outside the household, primarily parent characteristics are important. This suggests that coresidence is more a two-sided phenomenon than is support exchange. Coresidence also depends on the needs and opportunities of the children, and not only on those of the parent, as many studies, particularly on Southern European countries, have indicated.

When we compare the results of the probit models that control for selection bias (Model I) to the probit results that do not control for selection bias (Model III), we see that the effects are very similar. The coefficients change somewhat, but the changes are slight. Only one effect is different: The effect of cohabitation of the child is negative in the Heckman model, but not significant in Model I. We also need to check the country effects. When looking at the differences among countries, using the effects of the dummy-variables, we see very little change across models. We are therefore tempted to conclude that correction for selection bias, although important in principle, makes little difference in practice.

We now turn to our analysis of differences in the effects of need across country contexts. We re-estimated the multivariate probit model presented in Table 3 for each of the ten countries. We focus on the effects of parent's living status, health,

ADL capacity, and education. To see if the differences can be interpreted in light of our hypothesis, we plot the effects against the degree of familialism, as measured in the Eurobarometer data (Figure 1). For each indicator of need, we present a separate scatterplot. We add the best fitting straight line in the plot. For the effect of parental living status on support, the figure does not reveal any systematic pattern. For the effect of parental health, we do see a tendency of the effect being stronger in countries with higher levels of familialism. A somewhat stronger pattern is observed for the effect of ADL: The more familialistic the country, the stronger the effect of ADL on support. The last figure presents the effects of parental education. We see that the more familialistic the country is, the more negative (i.e., the stronger) the effect is. This is also in line with the hypothesis.

The results in Figure 1 are descriptive and should not be considered a test of the hypothesis. To test the hypothesis, we estimate a multilevel model in Table 5. In this model, individual dyads are nested within countries, and the predictors are at the individual level and at the country level (i.e., the level of familialism). We include interaction effects of the level of familialism with the four need variables. These interactions tell us whether the effects of the need variables are significantly stronger or weaker, depending on the level of familialism. Note that the familialism scale is standardized (the mean is 0), so that all the main effects of need in the interaction models can be interpreted as the effects of need in a hypothetical country with an average score on the scale of familialism. One model is presented for each interaction effect and the results are presented for both the probit regressions (top panel) and the linear regressions which include the frequency of support (bottom panel).

Model 1 confirms that the effect of the living status of the parent does not vary with the level of familialism. The interaction effect is not significant in the probit

specification. In the linear specification, the main effect is positive and the interaction is positive and significant, showing that living alone has a stronger effect on help received in more familialistic countries. This is in line with the hypothesis. The effect of health in Model 2 is positive, showing that parents in poor health receive more help. The interaction is positive as well and significant. Hence, the health effect on support is significantly stronger in more familialistic countries. This is true in the probit and the linear specifications. Model 3 shows that the main effect of ADL is positive and the interaction is positive and significant, in both the probit and the linear models. Model 4, finally, shows that the effect of parental education in an average country is negative. The interaction is negative and significant, showing that the educational effect is stronger in more familialistic countries. This interaction is also present, although somewhat less significant, in the linear model.

For a better understanding of the interaction effects, we present predicted probabilities in Figure 2. In these figures, we show how the probabilities of receiving support depend on a specific need indicator while holding all other variables constant at their means. We present predictions for the most individualistic and the most familialistic country, where both countries are assigned the same means for the other independent variables. Four figures are presented, one for each need indicator. The graphs show that parents in poor health receive slightly more support in individualistic than in familialistic countries. When health deteriorates, this changes. Parents with the poorest health receive substantially more support (in relative terms) in familialistic countries than in individualistic countries. The graph for ADL is simpler and clearer. At the lowest level of ADL (parents without any daily living limitations), there are no differences between individualistic and familialistic countries. The poorer the daily living capacity, however, the greater the difference.

For the most vulnerable parents, there is substantially more support from children in familialistic countries than in individualistic countries. The educational figure shows that the effect of education is almost absent in individualistic countries whereas it is clearly negative in familialistic countries. When focusing on the lower educated, we see that parents receive more support in familialistic countries than in individualistic countries.

Conclusion

Our paper has developed a more refined test of the notion that family support is stronger in familialistic settings than in individualistic settings. Rather than comparing overall levels of support, we compare effects of need on support across countries. More specifically, we examine whether children's responsiveness to the needs of their parents is greater in familialistic settings. To test this hypothesis, we focus on the effects of parental health, parents' partner status, and parents' education. We compare countries one-by-one and relate effects from multivariate probit models to the level of familialism in a country. The level of familialism is measured with data obtained from an external source and consist of an index which is based on three different attitude questions. We subsequently use multilevel models to test whether the individual need effects depend systematically on the contextual degree of familialism.

Our analyses reveal positive evidence for the hypothesis. For health, we find that parents who are more in need of their children's support, receive more actual support. More importantly, this effect is stronger in settings with more familialistic attitudes. Moreover, the interaction is present for two different indicators of health (an

overall rating of health and an indicator of daily living limitations). For education, we also find an effect in the expected direction. Lower educated parents receive more support than higher educated parents. In more familialistic countries, this difference is stronger, in line with the expectations. We note that parental education is a somewhat indirect indicator of need. Lower educated parents have fewer financial resources and have more difficulties in finding their way in formal care systems, but they may also have a stronger preference for autonomy. The last indicator of need—parental living status—reveals mixed support for the hypothesis. The effect of living alone on a support measure that includes the frequency is stronger in more familialistic settings but the interaction is not present when a simple contrast between support and no support is used.

Like the analyses of others, using the same data, as well as other data, our analyses do not reveal any systematic differences across countries in the overall level of support. Hence, the *aggregate* results do not fit the hypothesis that children are a more important source of assistance in more familialistic settings. Our conclusion is more positive for the hypothesis, however, because we find that the level of familialism is related to effects of need on support. In other words, children are more important in familialistic countries in that they respond more strongly to the needs of their parents in these countries. Thus, if the crowding out hypothesis once again is not proved, in so far high levels of support exist in the most generous welfare states, the suggestion offered by much recent research that in the Mediterranean countries the overall pool of supporters is more reduced than in the continental and Northern ones appears in need of qualification. On the one hand, in fact, we are considering only support provided by children living outside the parental household, who make up a different quota in the various countries. On the other hand, what emerges is that

children in the Mediterranean countries may be counted upon particularly when a parent is in serious need, possibly because they cannot rely on a mixed responsibility approach, given the weak level of social provision.

In comparing countries, we have taken a continuous approach. Many previous analyses in the social sciences have grouped countries, using for instance, welfare state typologies (e.g., Esping-Andersen 1993). Our view is that such typologies often lead to classification problems of specific countries. Moreover, groups of countries are often heterogeneous internally. For these reasons, typologies have also been criticized (e.g., Berthoud and Iacovou 2004). Some authors have solved these problems by focusing on specific countries that fit the typology. But this is not necessarily attractive because it essentially throws away information—data from ‘problematic’ countries are not used. An alternative solution to these problems is to treat the underlying concepts on which the typology is based as a continuous variable and to assign countries a score on this continuum. The continuous contextual variable can subsequently be used in both descriptive ways (using graphs) and in confirmatory ways (using multi-level models).

Our ranking of countries from familialistic to individualistic is based on external information obtained from surveys on the attitudes that people have about intergenerational support. We have shown that this yields a plausible ranking and we have shown that the different aggregate indicators are highly correlated. Although this strengthens our belief that the aggregate measure is valid, we want to emphasize that we did not (and cannot) separate the underlying theoretical mechanisms. Familialistic and individualistic countries differ for both cultural and institutional reasons, and these two dimensions are often correlated. We do not claim that the contextual variation we find is cultural in nature and not institutional—this would probably

require more dynamic micro-macro analyses. But we do claim that there is more evidence for systematic country-level differences in the importance of children for support to elderly parents than hitherto has been found.

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Table 1.- Intergenerational coresidence and support in Europe

	Parents with child in household		Children living with parent		Children living in same building as parent		Parents receiving support from child		Children giving support to parent	
	%	n	%	n	%	n	%	n	%	n
Italy	34.5	733	18.5	1436	9.7	1436	12.4	656	6.2	1170
Spain	38.6	803	18.6	1551	3.9	1551	14.1	729	7.3	1265
Greece	17.1	643	12.2	1027	13.7	1027	34.0	606	16.5	902
France	8.3	480	4.7	835	1.4	835	23.0	473	8.9	798
Sweden	2.1	889	1.0	1570	0.3	1570	21.0	885	7.7	1555
Denmark	2.9	453	1.0	748	0.7	748	24.6	451	11.7	745
Netherlands	5.4	698	2.6	1487	0.3	1487	16.1	695	6.1	1452
Switzerland	10.2	283	4.7	535	4.9	535	14.1	276	5.5	511
Germany	10.1	814	4.1	1403	7.7	1403	27.6	783	13.4	1353
Austria	16.0	613	7.6	1035	9.2	1035	23.2	585	10.3	960
All Units	15.5	6409	8.1	11627	5.1	11627	21.1	6139	9.2	10711
	parents		dyads		dyads		parents		dyads	

Note: SHARE data limited to parents 65 and over who have older children (21+). Support items further limited to parents with older children living independently.

Table 2.- Attitudes about upward intergenerational support in Europe

	Care more for elderly (1) %	Should live with family (2) %	Should pay for parents (3) %	Overall (4)	N
Italy	76	52	23	.43	1004
Spain	59	73	30	.55	1000
Greece	89	71	27	.78	1009
France	42	33	15	-.18	1002
Sweden	30	11	3	-.65	1000
Denmark	47	10	2	-.51	1010
Netherlands	38	14	7	-.49	1017
Switzerland	NA	NA	NA	NA	
Germany	49	40	10	-.11	1041
Austria	55	34	41	.28	1085
All	53	38	17	0	9168

(1) The exact phrasing is: In the future, working adults may have to look after their parents more than they do nowadays. Is this a good thing or a bad thing?

(2) The exact phrasing is: Suppose you have an elderly parent who lived alone. What do you think would be the best if this parent could no longer manage to live on his/her own?

(3) The exact phrasing is: Who should mainly pay for taking care of elderly parents?

(4) The standardized sum of the standardized items.

Source: Eurobarometer 50.1 (1998).

Table 3.- Alternative regression models for the help a child offers to parents, with and without correction for sample selection

	MODEL I (Heckman probit)				MODEL II (Heckman probit)				MODEL III (Probit)		MODEL IV (OLS)	
	Child offers help		Child at home (selection equation)		Child offers help		Child at home (selection equation)		Child offers help		Frequency of help	
	b	p	b	p	b	p	b	p	b	p		
Parent's age	.020	.00 *	.014	.01 *	.020	.00 *	.014	.00 *	.021	.00 *	.016	.00 *
Parent lives without partner	.247	.00 *	.273	.00 *	.256	.00 *	.274	.00 *	.233	.00 *	.142	.00 *
Parent poor health	.091	.00 *	.025	.37	.098	.00 *	.025	.10	.092	.00 *	.040	.00 *
Parent limited IADL	.076	.00 *	.058	.00 *	.078	.00 *	.058	.00 *	.072	.00 *	.090	.00 *
Mother versus father	.263	.00 *	.119	.03 *	.274	.00 *	.121	.00 *	.269	.00 *	.096	.00 *
Parent's education	-.244	.01 *	-.143	.16	-.144	.13	-.145	.01 *	-.238	.01 *	-.148	.00 *
Children > 21 at home	-.317	.00 *	.000	.00 *	-.346	.00 *	.000		-.326	.00 *	-.160	.00 *
Daughter versus son	.050	.18	-.233	.00 *	.061	.11	-.233	.00 *	.065	.08	.082	.00 *
Child's education	-.033	.66	-.371	.00 *	.101	.21	-.370	.00 *	-.020	.79	-.033	.44
Child cohabiting	-.132	.03 *	-1.169	.00 *	-.125	.04 *	-1.169	.00 *	-.048	.30	-.019	.45
Child has children	.006	.92	-.633	.00 *	-.033	.59	-.632	.00 *	.064	.20	.010	.67
Child employed	-.081	.11	-.344	.00 *	-.093	.07	-.345	.00 *	-.054	.28	-.063	.05 *
Child's age			-.036	.00 *			-.036	.00 *				
Distance child-parent (ln)					-.157	.00 *						
Austria (reference)	0		0		0		0		0		.000	
Germany	.207	.02 *	-.399	.00 *	.228	.01 *	-.401	.00 *	.232	.01 *	.137	.01 *
Sweden	-.103	.25	-1.077	.00 *	.004	.97	-1.076	.00 *	-.060	.50	-.079	.08
Netherlands	-.254	.01 *	-.559	.00 *	-.259	.01 *	-.557	.00 *	-.229	.01 *	-.138	.00 *
Spain	-.130	.18	.675	.00 *	-.227	.02 *	.675	.00 *	-.182	.06	-.053	.31
France	-.248	.02 *	.665	.00 *	-.339	.00 *	.666	.00 *	-.295	.00 *	-.104	.05 *
Italy	-.132	.18	-.454	.00 *	-.042	.69	-.451	.00 *	-.107	.28	-.021	.71
Denmark	.049	.63	-1.167	.00 *	.143	.18	-1.168	.00 *	.100	.32	-.020	.71
Greece	.219	.01 *	.339	.00 *	.178	.05 *	.340	.00 *	.205	.02 *	.177	.01 *
Switzerland	-.302	.01 *	-.421	.00 *	-.277	.03 *	-.417	.00 *	-.278	.02 *	-.122	.02 *
Constant	-3.008	.00 *	.201	.59	-2.741	.00 *	.201	.28	-3.237	.00 *	-.945	.00 *
N censored	941				902				nap		nap	
N uncensored	10686				9306				10711		10711	
Model Chi-square	435				583				416			

Source: Survey of Health, Ageing and Retirement in Europe (own calculations).

Note: Children age 21 and over, parents aged 65 and over. P-values corrected for clustering. For the selection equation, the signs were reversed so that effects are on child living at home.

Table 4.- Heckman's probit regression with selected gender interactions

	Child offers help		Child at home (selection equation)	
	b	p	b	p
Comparing fathers				
Divorced versus married	-.25	.31	-.72	.04 *
Widowed versus married	.48	.00 *	.17	.13
Comparing mothers				
Divorced versus married	.23	.04 *	.22	.17
Widowed versus married	.19	.01 *	.44	.00 *
Testing effects across gender (mother-father)				
Effect divorced	.47	.08 ~	.94	.01
Effect widowed	-.29	.01 *	.27	.03 *

Source: Survey of Health, Ageing and Retirement in Europe (own calculations).

Note: Children age 21 and over, parents aged 65 and over. P-values corrected for clustering.
For the selection equation, the signs were reversed so that effects are on child living at home.

Table 5.- Multilevel probit and linear regression including contextual effects and interactions with dyads nested in countries

Probit of child offers help (probit)	Model I		Model II		Model III		Model IV	
	b	p	b	p	b	p	b	p
Familialism context	.036	.77	-.189	.25	-.018	.88	.150	.25
Parent lives without partner x familialism context	.236	.00 *	.239	.00 *	.241	.00 *	.237	.00 *
Parent poor health x familialism context	.090	.00 *	.094	.00 *	.094	.00 *	.090	.00 *
Parent limited IADL x familialism context	.070	.00 *	.068	.00 *	.061	.00 *	.069	.00 *
Parent's education x familialism context	-.231	.00 *	-.234	.00 *	-.236	.00 *	-.261	.00 *
Constant	-3.338	.00 *	-3.347	.00 *	-3.335	.00 *	-3.345	.00 *
Number of individuals	10200		10200		10200		10200	
Number of contexts	9		9		9		9	
Model Chi-square	420		422		423		422	
Frequency of help (linear)	Model I		Model II		Model III		Model IV	
	b	p	b	p	b	p	b	p
Familialism context	.046	.08	-.114	.06	.046	.04 *	.152	.00 *
Parent lives without partner x familialism context	.157	.00 *	.157	.00 *	.160	.00 *	.154	.00 *
Parent poor health x familialism context	.043	.00 *	.047	.00 *	.048	.00 *	.043	.00 *
Parent limited IADL x familialism context	.087	.00 *	.085	.00 *	.074	.00 *	.087	.00 *
Parent's education x familialism context	-.141	.00 *	-.143	.00 *	-.143	.00 *	-.154	.00 *
Constant	-.988	.00 *	-.994	.00 *	-.984	.00 *	-.981	.00 *
Number of individuals	10199		10199		10199		10199	
Number of contexts	9		9		9		9	
Model R-square	.069		.070		.072		.069	

Source: Survey of Health, Ageing and Retirement in Europe (own calculations).
Controlled for independent variables listed in Table 3.

Figure 2.- Predicted probabilities of receiving support by need indicator and degree of familialism

