The Relevance of Norms for Understanding Intergenerational Relationships

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Abstract

Demographic and socio-economic changes that have been taking place in Europe since the second part of the twentieth century enhance the relevance of understanding what is hidden behind different levels of intergenerational relationships in ageing societies. In the attempt to explicate the concerning European divide, the vague concept of "culture" is frequently used. Following a theoretical framework based on both economic and sociological approaches, this chapter aims to highlight a shaded area and brings norms back in the study of contact between adult children and their elderly parents, net of the effect of family values. The empirical analysis applies multilevel ordered logistic regression models to cross-country data from the *Survey of Health, Ageing and Retirement in Europe* (SHARE). The three-level structure considers the adult-child, the respective parent (aged 50 or more), and the country (ten European countries). The normative division of labour between family and state in terms of elderly care is considered as the macro-level indicator, based on Eurobarometer data. The results suggest a strong association between social norms and intergenerational contact, explaining a large part of the remaining between-country differences in the frequency of such a type of child-parent solidarity. This work concluding the volume aims at shedding light on the need to consider individual behaviours as part of a certain cultural-contextual structure, interacting with the individual and family structures.

1. Introduction

Traditional expectations about families and ageing in industrialized societies have changed in the past fifty years because of the widespread increased longevity and decreased fertility, but also due to a rising diversity in family forms, norms and behaviours (Cherlin and Furstenberg, 1986; Uhlenberg, 1978).

Population ageing brings about several changes, both at the macro and at the micro level, in such diverse fields as the labour market, pension system, and more generally intergenerational transfers. In terms of social policy on public care or pension policies implications, it is mainly the cohort

relationship to be under concern; while, in line with the preceding two chapters, this work focuses on the co-existence of and the interaction between members of the family belonging to different generations as located in a system of ranked descent (Hagestad and Herlofson, 2007).

Intergenerational relationships between parents and children imply spending an important (and scarce) economic resource such as time. At younger ages, parental time is used to care for the child in a decreasing amount as the child grows adult. However, as parents age, the time transfer for care inverts the flux direction in order to offer elderly care. This mechanism works as long as there is a sufficient "supply" of children. In the long term, however, the costs of intergenerational solidarity might also involve more costly forms of support.

The study of intergenerational relationships developed first in the USA (e.g. Sussman and Burchinal, 1962) and then in Europe (e.g. Pitrou, 1977; Willmott and Young, 1957/1986). Over the past two decades the research in this field notably increased, developing from the area of "social network theories", where quantity and quality of networks are explored (e.g. Antonucci and Akiyama, 1987). In particular, the focus has more and more shifted towards the relationship between elderly parents and adult children. Older people tend to rely on a small number of long-time relationships (Morgan, 1988). Spouses, children, and siblings dominate, therefore, the social network of the elderly (Connidis and Davies, 1990; Hall and Wellman, 1985). However, the partner and siblings, generally having about the same age and lifestyle, might fail to provide some main forms of help (Antonucci, 1990) and intergenerational relationships become the first source of support in old age.

Some scholars (e.g. Popenoe, 1993) raised the concern about demographic trends, geographic mobility, and socio-cultural changes posing a threat to family support towards the elderly. As a result of increased longevity and decreased fertility, families are becoming thinner and longer (Bengtson, 2001), with fewer horizontal ties within generations and increased duration of family ties. Demographic changes and interrelated changes in family behaviours over the last decades (decreasing marriage and multigenerational co-residence and increasing divorce rates, number of

singles, childlessness, and low fertility) have been interpreted as both symptoms and pathologies of the weakening family ties process (European Commission, 1995; Kohli, Kuenemund, and Ludicke, 2005), linked to major societal changes such as the increase of women's independence, the larger participation in higher education, the declining influence of the church, and the spread of more individualistic values (Blossfeld, 1995; Lesthaeghe and Meekers, 1986). However, the lengthened duration of the parental and child role increases the importance of mutual obligations to provide support. The family has changed its structure or even its meaning; however, it might have not lost its central role for the family members (Luescher and Schultheis, 1993; Nave-Herz, 1989; Stacey, 1996). Indeed, evidence confirms Bengtson´ interpretation (2001; Bengtson and Roberts, 1991) of the family extension across generations as an extension of family functions of support across time. Intergenerational relationships maintain a profound "sense of family" across generations (Bengtson, 2001) all over Europe (Blome, Keck, and Alber, 2009; Bordone, 2009; Fokkema, ter Bekke, and Dykstra, 2008; Hank, 2007), even in a standard family constellation of "multi-locality" extended family (Bertram, 1991).

Although no crisis of the family has been found in European countries, cross-country differences in intergenerational relationships remain evident. Yet, no previous international comparison has attempted to trace family associational solidarity directly back to cultural-contextual factors.

In light of previous research, I propose a theoretical discussion of the normative context within which these dyadic relationships take place, net of the effect of family values. I also conduct an empirical study of contact between elderly parents and their adult children. Indeed, child-parent contact is the basic opportunity for support. A frequent contact makes children and parents more aware of each other's needs. This, in turn, increases other forms of intergenerational support. Although contact does not necessarily coincide with the quality of the parent-child tie (Silverstein and Bengtson, 1997), the analysis of contact could give us some important hints about such a relationship. Not only a positive correlation between contact frequency and perceived quality of the relationships has been previously shown (Kalmijn and Dykstra, 2006); but also, a strong positive

relationship has been found between contact frequency and intergenerational support exchange (Silverstein, Parrott, and Bengtson, 1995).

In agreement with Saraceno (2008: 10), "the focus on solidarity and support, whatever definition used, […] has the merit of documenting how intergenerational relations within families also maintain an important solidaristic role in increasingly individualized and welfare-state societies".

The remainder of this chapter is structured as follows. Firstly (Section 2), I provide a review of the existing literature. Moreover, in a field calling for theories, I propose a conceptual framework which encompasses the role of micro and macro levels in shaping individual behaviours of solidarity. Based on the theoretical background derived from the disciplines of economics and sociology, I formulate the specific hypotheses to be tested in this study. The next section (3) is dedicated to the data used in the empirical analyses (from the Survey of Health, Ageing and Retirement in Europe) and the methodological approach adopted. After reporting the results from both descriptive and multilevel ordered logistic analyses (Section 4), I discuss them in the concluding section 5.

2. Background: A theoretical framework to explore intergenerational solidarity

The wide range of research on intergenerational relationships from several fields (sociology, demography, anthropology, and so forth) worked as an obstacle to the development of a uniform definition of support (see, for example, Barrera, Sandler, and Ramsay, 1981; Cobb, 1976; Cohen and Syme, 1985; Gottlieb, 1978; House, 1981; Weiss, 1974). Still, the "gold standard as a measurement model for assessing intergenerational relationships" between parents and children (Silverstein *et al.*, 2010: 1007) is the framework of intergenerational solidarity suggested by Bengtson (Bengtson, 2001; Bengtson and Roberts, 1991). This comprehensive *paradigm* describes sentiments, behaviours, attitudes, values, and structural arrangements in parent-child relationships. In the Bengtson tradition, family relationships are distinguished between six dimensions. This study gives attention to the dimension of associational solidarity. *Associational* solidarity is the type and

frequency of contact between intergenerational family members, operationalised in the frequency of child-parent contact.

Before the empirical application, I try to answer the calls for linking different perspectives together in order to explain intergenerational relationships in ageing contexts (see Hagestad and Dannefer, 2001 for a discussion) with the development of a comprehensive theoretical framework that encompasses economic and sociological approaches. Over the last decades, several authors have indeed expressed alarm about the "atheoretical and descriptive" social science work on ageing (Hagestad and Dannefer, 2001; Maddox and Campbell, 1985; Myers, 1996).

In economic terms, individual choices are affected by *constraints* and *benefits*, given specific *preferences*. The economic rationality approach has been often used beyond the conventional economic issues (e.g. Becker, 1976; Green and Shapiro, 1996; Hogarth and Reder, 1987; Radnitzky and Bernholz, 1987; Swedborg, 1990) to answer the new challenges of modern societies. Becker and colleagues, for example, developed the principal family theory in this framework to investigate on fertility (Becker 1981; Becker and Barro 1988).

Adapting this idea to the study of intergenerational relationships, we could use the more sociological terms "opportunities" and "needs". In Szydlik´s definition (2008), *opportunity structures* reflect enabling or preventing resources for social interaction. For example, child's educational attainment increases personal aspirations in the labour market to find a good job (even at higher distances from the parents). Education is therefore an opportunity that tends to prevent parent-child structural solidarity. *Need structures* stem for health problems or emotional lack as well as for necessity of support of financial nature. Marital disruption suffered by the adult child might, for example, lead to an increase of phone calls to the mother in order to get some emotional comfort.

As a consequence of the ideational approach known as "Second Demographic Transition" (SDT), the recent social science approach to ageing is giving more and more attention to psychological characteristics of the individuals also in macro interactions (Hagestad and Dannefer, 2001). Yet,

intergenerational relationships are principally dyadic and each of the two persons involved (the child and the parent) have specific opportunity and need structures.

In order to explain the type and level of intergenerational relationships, socioeconomic and demographic characteristics of the child and the parent and geographical differences are used as covariates in the majority of the analyses. Based on previous studies, we could expect that children might require help when they have own children and themselves become the driving force to closeness (Malmberg and Pettersson, 2007). Moreover, the presence of siblings might be crucial: Michielin and Mulder (2007) show that having a sister has a positive effect on the propensity of an adult child to live far away from parents. By looking at parental needs, separated and divorced parents have been shown lower frequency of contact with the children compared to married parents. Empirical results consistently find women more engaged in kin-keeping roles, as both mothers and daughters (Gerstel and Gallagher, 1993; Kaufman and Uhlenberg, 1998; Nauck, 2009; Rossi, 1993). However, the frequency of parent-child contact differs not only between individuals and families, but also according to the specific contextual conditions under which it takes place (Lowenstein and Ogg, 2003). Comparative studies (e.g. Bordone, 2009) show that both needs and opportunities of the recipient and of the giver, influence the transfers of support in a similar way in Northern and Southern European countries. However, the diversity of intergenerational relationship from country to country remains significant within Europe (for a wider review, see also Hank, 2007; Tomassini *et al.*, 2004), pointing to the need of considering contextual determinants to explain the cross-country variance (Bengtson, 2001).

In the attempt to explicate the concerning North-South European divide adopting a macro lens, the vague concept of "*culture*" has been frequently used (e.g. Glaser and Tomassini (2000: 736) argued that " in Italy, parent-child proximity may reflect a *cultural preference* regardless of need"; Hank (2007: 170) suggested then that "*national cultural characteristics* [...] are likely to matter" in order to explain differences within Europe). However, over time, *culture* has been interpreted in several ways by different scholars. In the past, it has been given some emphasis to the role of welfare

regimes in explaining different family forms across Europe (Esping-Andersen, 1990). The most common explanation on the macro level for between-country differences still refers to "cultural" reference frames identified as weak versus strong family societies (Reher, 1998). Thus, in Northern Europe, familial care is complemented to a large degree by publicly supported services. At the opposite, in Southern European countries most care is provided at home and almost exclusively by family members. Still, problems in the definition of typologies of welfare states are evident, for countries such as the Netherlands (Murphy, 2008). An extension to previous studies on intergenerational relationships is the work by Murphy (2008). He proposes to include several country-indicators, such as GDP per head, life expectancy at birth, Human Development Index, level of corruption, and geographical factors in the analysis of kin contact, in order to assess cross-country variations.

A comprehensive framework in which intergenerational support behaviours can be explained requires a more Durkheimian orientation to social context. Hereby, three levels of analysis should be distinguished. These are the individual, the family, and the society. In general, *Cultural-contextual factors structures*, with roots lying far back in history (Burguiere, Klapisch-Zuber, Segalen, and Zonabend, 1997), could be identified as socio-economic conditions, tax system, welfare system, labour and housing market as well as social norms within which intergenerational relations develop (Szydlik, 2000; 2008).

The political economy perspective (e.g. Minkler and Estes, 1991; 1998) accentuates structural factors. In a related approach, the concept of life course has been elaborated as a social institution, constituted by the market and the nation-state (Esping-Andersen, 1997; Kohli, 1986; Kohli and Meyer, 1986). Because of the focus on welfare production, most cross-national comparative research on intergenerational relations taking into account the social context in later life has focused on helping and care (e.g. Brandt, Haberkern, and Szydlik, 2009; Broese van Groenou, Glaser, Tomassini, and Jacobs, 2006) rather than on emotional cohesion between generations. The labour market and the educational system, the housing conditions and housing policy, and the welfare

regime are of substantial importance to explain country-specific (and sometimes even regional) behaviours of social support. However, I would argue that these contextual factors would play a key role when dealing with forms of intergenerational solidarity such as residential choices – and therefore child-parent proximity – (Mandic, 2008; Saraceno and Keck, 2008). "Besides the willingness to help and emotional ties, attachment of the two generations living together reflects [...] the necessity of help and actual living conditions" (Synak, 1990: 336).

In contrast to the other forms of support, contact could be seen mainly as a voluntary form of intergenerational solidarity (Heylen and Mortelmans, 2009; Tomassini *et al.*, 2004), still partly motivated by a normative obligation (Kalmijn and De Vries, 2009; Rossi and Rossi, 1990).

For a long time sociologists (e.g. Durkheim, 1859/1983; Merton, 1968; and Parsons, 1937), demographers (e.g. Lesthaeghe, 1980; Montgomery and Casterline, 1996; and Oppenheim Mason, 1983) and even economists (e.g. Dosi, Marengo, Bassanini, and Valente, 1999; Elster, 1989) have viewed social norms (together with rationality) as major explanations for regularities in social behaviour. "Norms are prescriptions or proscriptions about behaviour in the form of should and should not; [and] they are supported by consensus" (Settersen and Mayer, 1997). The debated element of sanctions which enforces norms through various mechanisms of social control is not included in the definition of norm adopted in this study. Indeed, an overview of the existing definitions of norms (Gibbs, 1981; Horne, 2003) shows that this aspect is not common to most definitions.

Despite the calls of social scientists to study how larger social structures regulate emotional expression (Thoits, 1989), it seems that researchers have been neglecting the importance of social norms in the last decades (Liefbroer and Billari, 2010) and little is known about the association between societal norms and intergenerational contact. It is acknowledged that the individualisation process (Lesthaeghe, 1995; Lesthaeghe and van de Kaa, 1986; van de Kaa, 1987) reduced the importance of social norms in shaping choices in post-industrial societies (Buchmann, 1989). As a result, family relationships are less often economically and normatively motivated, while more

often guided by affective and individual concerns (Beck and Beck- Gernsheim, 2002; Brueckner and Mayer, 2005). Nevertheless, culturally prescribed notions about duties and obligations keep a role in family relationships and are endorsed even by highly educated and secularised people (e.g. Billari and Liefbroer, 2007; Billari and Liefbroer, 2008; Liefbroer and Billari, 2010; Settersen and Hagestad, 1996a; 1996b). Recent studies document the importance of values and norms at the societal level in explaining country-specific patterns of other dimensions of intergenerational solidarity (e.g. Heylen and Mortelmans, 2009 on proximity). Based on the fact that "to accept a social norm as a motivational mechanism is not to deny the importance of rational choice" (Elster, 1989: 102), differences in norms can also be expected to play an important role in intergenerational contact behaviours.

2.1 Research question and hypothesis

Based on the theoretical constructs developed in this chapter, I build the empirical analyses pursuing a micro-macro approach in order to answer the following research question:

"*Should we bring norms back in* to explain between-country differences in the frequency of intergenerational contact between older parents and their adult children?" In particular, I wonder "*how much does the normative structure about elderly care count in decreasing the unexplained variance at country level?*".

Taking a multilevel perspective, this study focuses on the role of macro-level traits for a micro-level action (contact). In this work, I question the neglected role of social norms in current socio-demographic studies on intergenerational solidarity. If the individualisation (or de-institutionalisation) hypothesis suggested by the SDT is correct, I should not find evidence of an association between social norms and intergenerational relationship in Europe.

From the theoretical background illustrated above, I however derive my hypothesis as follows. Although the nature and content of norms might have changed over time, I expect the normative

contextual factors at the society level to still have a significant role in explaining between-country differences in the amounts of child-parent contact in post-modern societies.

The literature mainly refers to the crowding-in and crowding-out hypotheses when dealing with the offer of services from the family and the state. The state might indeed displace family services ("crowding out"), stimulate family support ("crowding in") as well as work in "complementarity" with the other sources of support (Daatland and Lowenstein, 2005; Motel-Klingebiel, Tesch-Roemer, and von Kondratowitz, 2005). Although this work does not speculate about the labour division between the two institutions of the family and the state, in providing elderly care, it explores the normative beliefs about this aspect. Sociologists tend to confirm that affection and a sense of obligation provide motives to continue giving support. I expect that in societies with normative beliefs more oriented towards the family and the traditional division of roles between the family and the state, associational solidarity is higher even in families with less traditional values. This should largely decrease the unexplained variance at country level.

3. Data and method

3.1 Data sources, selection of the sample and construction of the variables

The empirical analysis applies to cross country data from the *Survey of Health, Ageing and Retirement in Europe* (SHARE). SHARE is a multidisciplinary and cross-national database of micro data on health, socioeconomic status, and social and family networks, representative of people aged 50 plus in Europe (Boersch-Supan and Juerges, 2005). To now, SHARE counts two waves, respectively from 2004 and 2006. For this work I use the data on the countries with a panel database, combining the respondents from the first wave and the refresher sample from the second wave. Each respondent in the sample used for the following analyses is therefore interviewed once.

The sample under study includes 19,975 adult children and their respective 9,685 parents from Denmark and Sweden (from Scandinavia), Austria, Belgium, Germany, France, and the Netherlands (Central Europe), and Greece, Italy, and Spain (the Mediterranean)[1].

Contact between the adult child and the respective parent is the (ordinal) *dependent variable*, based on the question "*During the past twelve months, how often did you have contact with {child name}, either personally, by phone or mail?*". The categories of answer range between a "totally absent" contact (never) to a "daily contact" (1 to 5). In this study, I select the sample of children by considering only those children who are not living together with the parents[2].

Although SHARE interviews people over the age of 50 and their respective partners, the SHARE CAPI main questionnaire is designed in such a way that the couple's first person interviewed serves as the family respondent, who answers the questions about children, on behalf of the couple. In the following analyses, the information on the family level refers to the parent who answered the questions about the children.

In terms of *independent control variables*, I distinguish between individual variables related to the child (*gender*, *being the youngest*, *marital status*, *education*, *number of siblings*, *having own children*, *age at nest leaving*) and those related to the parent (*gender*, *age*, *marital status*, *education*, *being homeowner*, *depression*, *disability*, *religion*). An indicator of normative *values* within the family is then used to measure the propensity of the family towards traditional versus "modern" values. The questions used to construct such indicator relate to the opinion of the interviewed parent about grandparents duty ("whether or not grandparents´ duty is to help grandchildren's parents in looking after grandchildren") and elderly parents´ support ("whether it is mainly the family, mainly

[1] According to welfare state research, these countries represent three different welfare regimes or clusters of family policy (e.g. Ferrera, 1996; Esping-Andersen, 1990): (1) the Scandinavian social democratic countries (DK, SE), (2) the conservative countries (AU, BE, DE, FR), and (3) the familialistic regimes in the Mediterranean (ES, GR, IT). The Netherlands has been categorised as hybrid between liberal, conservative, and social democratic, depending on the focus of study. SHARE collected data also in Ireland and Israel. However, these countries are not considered for the following analyses in order to keep the focus on the possible four clusters mentioned above.

[2] It has been controlled also for the presence of at least one sibling living with the parents (Results not shown).

the state or both who should provide financial support, help with household chores, and personal care for older people who are in need"). The scale is constructed by the Cronbach Alpha (Cronbach, 1951), which determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability. The items considered have relatively high internal consistency, as the alpha coefficient for the four items is about 0.71.

The *macro-indicator* used as *independent explanatory variable* of interest covers social norms on elderly caregiving. Data for the society attitude towards elderly care provided by the family versus the role of the state in such a duty are obtained from the *Eurobarometer* (2007) question "*Imagine an elderly father or mother who lives alone and can no longer manage to live without regular help because of his or her physical or mental health condition. In your opinion, what would be the best option for people in this situation?*". The possible answers are "they should live with one of their children; one of their children should regularly visit them; public or private service providers should visit them; they should move to a nursing home". An average value for each country is calculated and used as an explanatory macro variable.

The structural context of institutions (meant as the interactions between family, state, and market) might of course interplay with the normative context and with rules and values at the family level (Hagestad and Dannefer, 2001). The possible interaction between the two macro-dimensions, structural and normative, which is the result of an historical evolution of societies, can be captured by individual needs and opportunities, other than by the dimension of residential choices, which is directly shaped by the structural contours of the society.

3.2 Estimation strategy

It is clearly unrealistic to assume that people in one country would be completely independent on each other as they are subject to specific social frameworks (Rabe-Hesketh and Skrondal, 2005). Even harder would be to believe that children within the same family behave independently on each

other for what it concerns family relationships. The effect of using a one-level regression model and including multi-level covariates would be to estimate inconsistently the standard errors as such traditional approach assumes the independence of all cases, even if they belong to the same cluster. This problem could be solved by using a multilevel approach, taking the perspective of the child as the level 1 unit of analysis. Individuals (the adult children) are clustered in their families which are then clustered in the countries.

While previous studies accounted for context by including country indicators to the regression models (e.g. Hank, 2007; Kalmijn and De Vries, 2009), I test the effect of social norms in a multilevel analysis of child-parent associational solidarity in Europe. This type of methodological analyses has usually been used on family levels, such as grandparents, parents, and grandchildren (Geurts, Poortman, van Tilburg, and Dykstra, 2009) or living parents, adult children, and the couple they are part of (Nazio and Saraceno, 2008). Although the impact of the social sphere is a quite central topic of discussion in the field of intergenerational solidarity (as suggested by Daatland, 1997; Heylen and Mortelmans, 2009; and Lowenstein and Ogg, 2003), the existing evidence is limited to some explorative works on the functional dimension of solidarity. Brandt, Haberkern, and Szydlik (2009), for example, focus on the possibility that the state displaces or rather stimulates family support showing the importance of considering the country-level.

The reasons to make use of multilevel regression are manifold. First of all, multilevel analysis allows combining predictors located on different levels of analysis to account for variation in a dependent variable (Gelman and Hill, 2007). Simultaneous effects of explanatory variables located on different levels of analysis can therefore be tested empirically, controlling for compositional effects. A second advantage of multilevel over logistic regressions can be identified in unbiased parameter estimators. Third, the standard errors are correctly estimated. The fourth advantage of using multilevel models consists in the fact that the total variation can be subdivided into the various levels (Guo and Zhao, 2000). The potential drawback of increased complexity is paid off by the creation of more realistic models which take into account group-level variation.

The use of three levels (child, parent, and country) rather than two (parent and country) is quantitatively justified by the significant output of the log-likelihood ratio test run on the empty models with two and three levels respectively. The dependent variable, contact, is ordinal. Therefore, the estimates use ordered logistic models, specified as follows (Snijders and Bosker, 1999):

$$y^*_{ijk} = \theta_{ijk} + \varepsilon_{ijk},$$

where y^*_{ijk} is the latent response variable for level-one unit *i* in level-two unit *j* in level-three unit *k*; y_{ij} is the observed categorical variable related to y^*_{ijk}; and $\theta_{ijk} = \beta_{0jk} + \sum_{p=1}^{P} \beta_p x_{pijk}$.

In the absence of explanatory variables and random intercepts, and assuming the distribution of the error term ε_{ijk} to be logistic, the cumulative logit model can be written as:

$$\log\left[\frac{P_{ijk(c)}}{1-P_{ijk(c)}}\right] = \log\left[\frac{\Pr(y_{ijk} \le c)}{\Pr(y_{ijk} > c)}\right] = \gamma_c - \theta_{ijk}, \; c = 1, \ldots \text{C-1}$$

with (C-1) strictly increasing model thresholds γ_c (i.e. $\gamma_1 < \gamma_2 \cdots < \gamma_{C-1}$), for category $c = 1, ..., \text{C-1}$. The observed categorical variable y is therefore related to y* via

$$y = \begin{cases} 0 & if \; y^* \le \gamma_0 \\ 1 & if \; \gamma_0 < y^* \le \gamma_1, \\ r & if \; \gamma_{r-1} < y^* \le \gamma_r \quad (r = 2,...,c-2), \\ c-1 & if \; \gamma_{c-2} < y^* \end{cases}$$

with the values for the ordered categories defined as 0, 1, C-1 and C is the number of categories. Adding explanatory variables, the level-1 random intercepts model becomes

$$\log\left[\frac{\Pr(y_{ijk} \le c \mid x_{ijk}, \beta_{0jk})}{1-\Pr(y_{ijk} \le c \mid x_{ijk}, \beta_{0jk})}\right] = \gamma_c - \left(\beta_{0jk} + \sum_{p=1}^{P} \beta_p x_{pijk}\right).$$

The model can therefore be written as˘

$$y^*_{ijk} = \beta_0 + \sum_{p=1}^{P} \beta_p x_{pijk} + V_{00k} + U_{0jk} + R_{ijk}.$$

The intercept is allowed to vary randomly across countries. The random effects are assumed independent. The slope is not assumed to vary randomly as the literature on intergenerational contact suggests that the micro-level indicators work in the same way on shaping the regression results in the various countries considered. The *gllamm* command in STATA with a minimum of eight integration points allows three-level models with an ordered logistic framework (Rabe-Hesketh and Skrondal, 2005).

The comparison between the models with and without the macro-indicator is based on changes of country-level variance, likelihood-ratio tests, and two measures of fit (the *Akaike´s Information Criterion* (AIC) and the *Bayesian Information Criterion* (BIC)[3]).

Country differences in the mean level of child-parent contact may be attributable to contextual influences or to differences in the individual composition of the countries in terms of demographic and socio-economic characteristics. By adjusting for individual characteristics, I take into account (part of) the compositional differences and explain some of the country variance detected in the empty model. The *proportional change in variance* (PCV) calculates the percentage reduction from the estimated variance in the Empty-Model as a result of incorporating a new factor in the model (Merlo *et al.*, 2005; Gelman and Hill, 2007). The PCV equation is:

$$PCV_{country} = (V_{country\text{-}EmptyModel} - V_{country\text{-}model}) / V_{country\text{-}Empty\ Model}$$

where $V_{country\text{-}EmptyModel}$ is the estimate of the initial variance at the country level before adjusting for any contextual factor in the model; $V_{country\text{-}model}$ is the country level residual variance after adjusting for covariates.

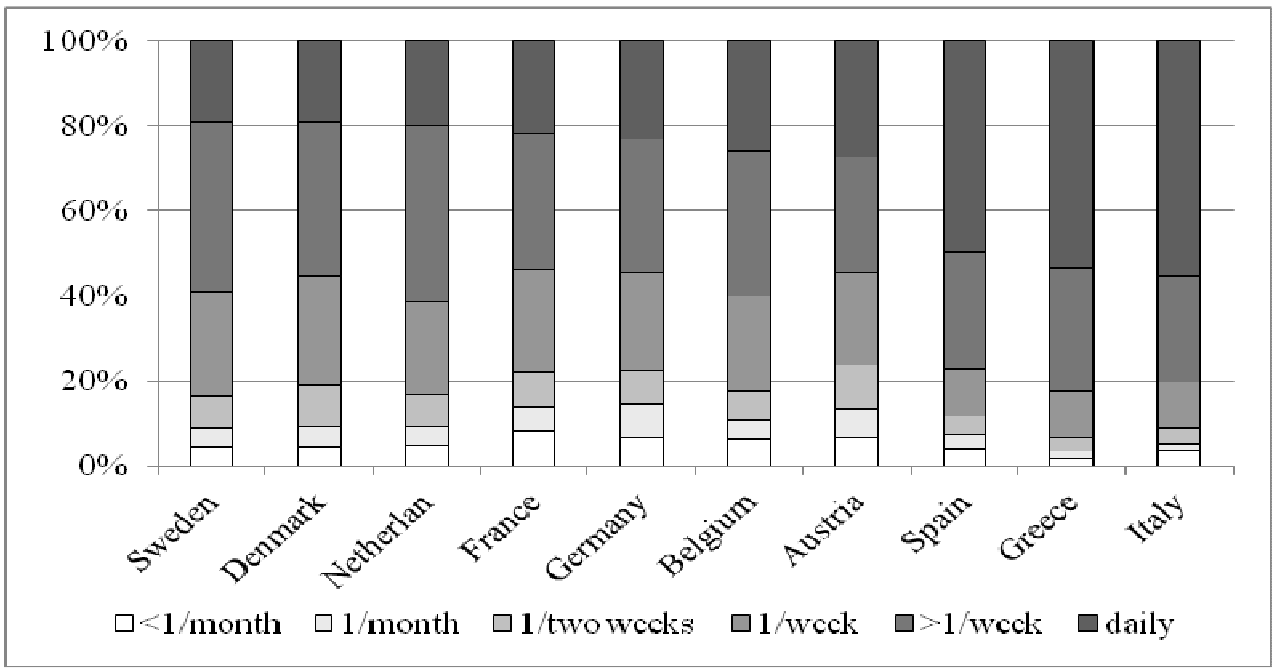
[3] Both the AIC (Akaike, 1971; 1974) and the BIC (Schwarz, 1978) are measures of the goodness of fit of an estimated model used for model selection between parametric models with different numbers of parameters. AIC and BIC are calculated as follows: $AIC \equiv -2\log(L) + 2(k)$; $BIC \equiv -2\log(L) + k\log(N)$, where L is the maximum likelihood for the estimated model, *k* is the number of independently adjusted parameters within the model, and N is the number of data-points used in the fit. Given several competing models, AIC and BIC allow a ranking. Models with smaller deviance, AIC, and BIC should be preferred over other models. Whereas the deviance which is -2 times the log likelihood can simply be reduced by adding a new predictor to the model, the AIC and the BIC penalise for adding new predictors to the model with BIC being more conservative than the AIC (Gelman and Hill, 2007: 524-525).

4. Results

4.1 Descriptive findings

Descriptive results show that the highest levels of contact between children and parents are registered in Southern European countries, with about 80% child-parent dyads having more than one contact per week in Greece, Italy, and Spain. Although Denmark, Sweden, and The Netherlands have the lowest percentages reporting a daily contact, in all the countries considered, more than 3/4 of the sample had at least one contact per week with the parents over the twelve months preceding the interview (Figure 1).

Figure 1. *Child-parent contact (%) during the 12 months preceding the survey interview*.



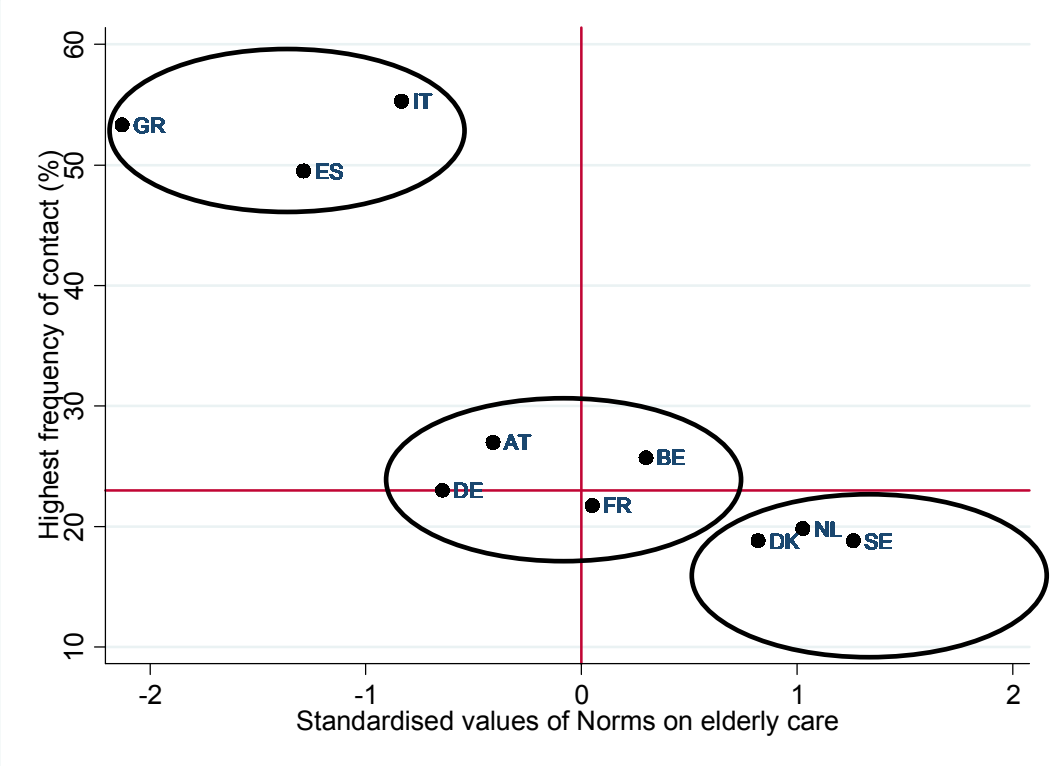
Note: Countries in ascending order of proportion with "Daily" frequency of contact. Parent-child couples living in the same household are not included.

Source: SHARE, 2004 (wave 1); 2006 (refresher sample from wave 2). Author´s calculations.

Figure 2 gives a descriptive overview of the highest frequency of child-parent contact in the countries under consideration here, and, furthermore, illustrates the bivariate association between the proportions of child-parent dyads having daily contact and the macro-level indicator in the study. The scatter diagram is divided into four quadrants, which are defined by the median values of the Y (proportion of children with daily contact to the parent) and the centre of the standardised value of the X (social norms scale) variable.

During the twelve months before the interview, about 50% of the child-parent dyads in the Mediterranean countries had daily contact. At the opposite, below 20% of the children in Denmark, Sweden, and the Netherlands had a daily contact with the parents. A clear regional pattern characterises therefore the European countries, with the Central European ones scoring between Northern and Southern countries (between 20% and 30%).

Figure 2. Bivariate associations between frequency of child-parent contact and selected macro-level indicators.



Source: SHARE, 2004 (wave 1); 2006 (refresher sample from wave 2); Eurobarometer, 2007. Author's calculations.

The pattern of the bivariate association between frequency of contact with the parents (aggregated at country level) and the macro indicator about norms used in this study, tends to show that at higher levels of "normative modernisation" corresponds a lower frequency of intergenerational contact. Indeed, Greece, Italy, and Spain are located in Quadrant IV; while Denmark, the Netherlands, and Sweden are found in Quadrant II. Austria, Belgium and France are at the crossing between the two axes, confirming the hypotheses formulated above of an association between intergenerational contact behaviour and social norms on the division of elderly care labour.

4.2 Multivariate results

When trying to relate the different levels, it results a strong correlation between the macro indicator considered in this study and the probability of higher levels of child-parent contact (r = - 0.783). Multilevel models with robust standard errors are estimated, in order to test the association between contextual factors and individual choices of intergenerational relationships.

The following multivariate analysis makes use of ordered logistic thee-level regression models. In a first step, the empty random-intercept model not including any independent variable is performed (EMPTY-Model). In a second step, the covariates relating to first and second level (the child and the parent), are added to the model (BASE-Model). Finally, the macro-level indicator is included (MACRO-Model). Since the evidence from prior research is quite homogeneous, the underlying hypotheses related to individual and family characteristics will not be further discussed in this chapter (results shown in Table A1).

Table 1 shows the odds from the third-level analyses (those referring to the macro-level explanatory variable) and it additionally includes model characteristics, variances, and measures of fit of all the

regression models performed. By considering the country-level variable, my expectations are confirmed. Individuals living in societies with more traditional social norms tend to have more frequent contact with their parents. The multilevel analysis over 10 countries, considering the norms defining whether the state or the family should assume the role of caregiver of the elderly people clearly shows the relevance of the cultural contextual factor in explaining cross-country variation of associational solidarity.

Not only the macro-indicator is highly statistically significant, but all the measures of fit calculated point to the significant improvement in the model once norms are considered. The Intra-Class correlation is reduced from 0.1 of the EMPTY-Model to 0.05 of the MACRO-Model. Bringing back norms about elderly care, explains a larger part of the between-country differences in child-parent frequency of contact. Although the country variance attributed to compositional factors seems to be relatively small and it remains a little fraction of the variance still unexplained, the contextual factor selected for this work makes it possible to explain up to 50% more of the between-country variance as compared to the EMPTY-Model regression. This value is the PCV of the model including norms about family roles in the analysis of 10 European countries (as compared to the EMPTY-Model in the same framework).

Table 1. Analysis of CONTACT (excluding parent-child co-residing) on 10 countries: Odds ratios and respective standard errors of the Level 3 indicators, model characteristics, variances, and measures of fit.

	EMPTY Model	**BASE Model**	**MACRO-model with Social Norms**
			Elderly care (Family vs. State)
Macro-level indicator	/	/	0.639***

			(0.050)	
IntraClassCorrelation countries	0.097	0.058	0.049	Model characteristics
n child-parent relationship (Level 1)		19,975		
n parents (Level 2)		9,685		
n countries (Level 3)		10		
Level 1		π^2 / 3		Variances
Level 2	2.284 (0.151)	2.491 (0.193)	2.478 (0.189)	
Level 3	**0.600** (0.085)	**0.355** (0.054)	**0.299** (0.032)	
AIC	58021.31	52383.09	52349.25	Measures of fit
BIC	58076.63	52620.15	52594.22	
Log-likelihood	-29003.655	-26161.543	-26143.62	
LR Test, Prob > Chi2				
(Ref. Empty)	/	0.000	0.000	
(Ref. BASE)	/	/	0.000	
PCV (Ref. Empty)	/	41%	50,00%	

Significance: $^{+}$ p<0.10 * p<0.05; ** p<0.01; *** p<0.001.

Source: SHARE 2004 (wave 1); 2006 (refresher sample from wave 2); Eurobarometer (2007). Author´s calculations.

5. Discussion

The study of intergenerational relationships has mostly considered the characteristics of the child and the parent. In the same way in which it is not possible to consider siblings as completely independent from each other because they belong to the same family, it would not be correct to assume that families within the same society are not sharing some commonalities. In this work I have therefore attempted to investigate child-parent associational solidarity as a contextual phenomenon. A three-level multilevel model has been performed first including child and parental characteristics and adding then a country-level indicator of the society's norms about the division of elderly care duties between the family and the state.

Already the descriptive results confirmed my expectations of a close association between social norms and choices of contact between adult children and their parents. The ten countries under analysis are characterised by a mixed normative framework, characterised by a higher frequency of child-parent contact the more traditional are norms shared by the society.

Although individual characteristics and child-parent proximity largely explain the variation in frequency of contact between adult children and their older parents within a country, an important further explanation to between-country differences seems to lie in the normative context. The norm-indicator chosen in this study results to significantly contribute to the explanation of the North-South European divide in child-parent contact. Societies in which it is normatively accepted to delegate elderly care to public or private services tend to register the highest frequency of contact with a lower probability. This result might suggest a possible crowding-out of intergenerational relationships under circumstances of more relaxed norms as forecast by the overlapping ideas of individualisation and the STD.

Vice versa, individuals clustered in societies where it is normatively expected that the child will take care of the elderly parents in need, maintain with their parents a higher frequency of contact. Being associational solidarity the basic opportunity of other types of support, this result seems to point towards an intergenerational pact in societies more normatively guided. Children maintain

higher contact with the parents over the life course, in this way they are aware of their parents´ needs. We could speculate that, in case of necessity, they can provide additional forms of support, possibly sharing the same roof as the normative context suggests.

When working on micro and macro levels, it is important to avoid falling in the so-called "ecological fallacy". Often the literature has indeed tried to explain macro-aspects with micro-indicators (Diez Roux, 2002). This study, however, is based on a methodological approach that controls for micro-level beliefs in order to explore macro-level norms. The inclusion of family values in the regression has controlled for individual opinions and measured the effective impact of social norms. Therefore, from the analyses performed above, it can be concluded that individuals in traditional societies tend to have higher levels of parent-child associational solidarity, even within families where values tend to the "modern"-type.

It is likely that the mechanism behind the association between social norms and intergenerational contact is rather circular and that social norms and individual preferences tend to reinforce each other. Indeed, the behaviour of associational solidarity between children and parents might be explained (ex post) with a detachment from the traditional view of the family which reflects also on the abandoning of the traditional vision of women's roles. Based on Schooler´s (1996) well-reasoned treatise affirming that social structural and cultural factors are more likely to influence psychological processes than the reverse, I interpret these results as a first important step in the study of intergenerational relationships.

This study contributes to the existent literature by suggesting a plausible answer to cross-country differences in child-parent relationships by bringing back the role of social norms in the analysis of individual choices. Norms are found to be still important in nowadays societies, supporting the idea recently raised by Liefbroer and Billari (2010). Moreover, relative to most previous work in this field, I have adopted one innovation in that I examine contact behaviours for each child separately. This allows me to draw descriptions and construct explanatory models which include not only the

characteristics of the parent and one selected child, but also of the various children within the family.

Given the explorative nature of this work, the results do not reveal all features on the societal level accounting for differences in the frequency of intergenerational contact in Europe. I rather aim to bring a contribution by suggesting the need to take into account the social context and the role it plays in shaping intergenerational relationships in ageing societies. In order to understand the various mechanisms at work and expand this strand of research, different sets of social norms should be widely considered. Further developments of this study would require the availability of life course data tracing beliefs over time to investigate the causal direction of the association social norms – individual behaviour. Moreover, institutional factors might be included in future analyses, in order to provide answers to the possible interactions between normative and structural dimensions of the contextual level, as well as between different levels.

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Appendix

Table A.1. *BASE Model: Odds ratios and respective standard errors of the control variables in the estimation of CONTACT on 10 countries (excluding child-parent co-residing). Level 1 (Characteristics of the child) and Level 2 (Characteristics of the family).*

Variable	**BASE-Model**	
Gender: Daughter (Ref.: Son)	2.324*** (0.065)	Child characteristics
Age difference parent-child	0.995 (0.008)	
Youngest child (Ref.: Other)	0.989 (0.032)	
Married (Ref.: Not)	0.915^{+} (0.048)	
Education: middle (Ref.: Low)	1.261*** (0.084)	
High	1.364*** (0.116)	
Number of siblings (Ref.: 0)	0.751***	

	(0.014)	
Own children (Ref.: Not)	1.034^{+} (0.020)	
Age at nest-leaving	1.066*** (0.009)	
Gender: Female (Ref.: Male)	1.560*** (0.087)	Parent characteristics
Age	1.033*** (0.009)	
Marital status: other (Ref.: Married)	0.904*** (0.015)	
Education: middle (Ref.: Low)	0.943 (0.063)	
High	1.013 (0.060)	
Homeowner (Ref.: Not)	1.096 (0.129)	
Depressed (Ref.: Not)	1.000 (0.000)	
Physical limitations (Ref.: Not)	0.977 (0.030)	
Pray: Daily or more than once a day (Ref.: Never)	1.267** (0.100)	
Once or twice a week	1.099^{+} (0.057)	
Less than once a week	1.126^{+} (0.077)	
Other / Missing	1.471*** (0.145)	
Proximity	2.244*** (0.111)	
Family Values (Ref.: More traditional)	0.947*** (0.010)	

Significance: $^{+}$ p<0.10 * p<0.05; ** p<0.01; *** p<0.001.

Source: SHARE 2004 (wave 1); 2006 (refresher sample from wave 2); Eurobarometer (2007). Author´s calculations.