PROXIMITY AND CONTACTS BETWEEN OLDER PARENTS AND THEIR CHILDREN: A EUROPEAN COMPARISON

Karsten Hank*

MEA – University of Mannheim & DIW Berlin

Abstract: Using data from the 2004 'Survey of Health, Ageing and Retirement in Europe' (SHARE), this paper continues and extends recent cross-national research on proximity and contacts of older parents to their children. In addition to a brief description of the 'geography of families' in ten continental European countries, determinants of intergenerational proximity and contacts are examined. Even when microlevel factors are controlled for, the Mediterranean peoples continue to exhibit closer family relations than their northern counterparts. We also find noteworthy systematic differences in the effects of some explanatory variables between traditionally 'weak' and 'strong' family countries. When looking at the contemporary European picture as a whole, we find no indication for a 'decline' of intergenerational relations.

* MEA – University of Mannheim, L 13, 17, 68131 Mannheim, Germany. *Email:* hank@mea.uni-mannheim.de.

Often driven by concerns about the 'decline' of the family (e.g., Popenoe, 1993), a considerable amount of research dealing with proximity and contacts between older parents and their children has been conducted in the US (e.g., Greenwell & Bengtson, 1997; Lawton, Silverstein, & Bengtson, 1994; Wolf, 1994) and – more recently – also in a number of European country studies (see e.g., Lauterbach, 1998, for Germany; Shelton & Grundy, 2000, for Great Britain; Tomassini, Wolf, & Rosina, 2003, for Italy). Drawing on data from the 2004 'Survey of Health, Ageing and Retirement in Europe' (SHARE), this paper continues and extends recent cross-national research on the proximity of parents to their adult children and intergenerational contacts (e.g., Glaser & Tomassini, 2000; Kohli, Künemund, & Lüdicke, 2005; Tomassini et al., 2004).

Against the background of rapid demographic change, it is the primary purpose of our analysis to provide a snapshot of continental Europe's diversity right after the turn to the 21st century, both in terms of the *current state* of family relations at older ages and with regard to *future prospects* of intergenerational support. So far, studies based microdata suffered from the constraint to derive comparable information on parent-child relations from different national data sources, which not only limited the set of variables available for the analysis, but also the sample of countries to be considered. Our analysis, though, is based on a single set of truly comparable microdata for currently ten countries, ranging from Scandinavia to the Mediterranean, which provides rich information on a broad set of relevant individual-level variables for both parents *and* children. Moreover, while many studies either deal with proximity (e.g., Glaser & Tomassini, 2000; Lin & Rogerson, 1995) or with contacts (e.g., Grundy & Shelton, 2001; Tomassini et al., 2004), the present analysis considers both of these dimensions of intergenerational solidarity (see also Greenwell & Bengtson, 1997; Lawton et al., 1994).

Because the dividing line between 'younger' and 'older' parents is a fuzzy target that cannot be determined easily, we decided to include the 'gray area' of individuals in

their late middle-age years (50+) in the analysis (see also Börsch-Supan et al. 2005; Marmot et al. 2003). Given the substantial variation in children's age at leaving home across Europe (e.g., Aassve, Billari, Mazzuco, & Ongaro, 2002; Billari, Philipov, & Baizán, 2001), this implies that in some countries a notable share of parents in our sample will not yet have reached the 'empty nest' phase of the family life-cycle, whereas in others parents' offspring will often have progressed considerably further in the transition to adulthood. The focus of the analysis is on those parent-child pairs in a family that are characterized by the shortest geographic distance and the highest frequency of any kind of contact.

BACKGROUND

In the next quarter century it is likely that in western societies the proportion of elderly people with at least one child alive will be higher than in any preceding period – despite a substantial decline in fertility and as a result of decreases in mortality (cf. Murphy & Grundy, 2003). Still, demographic, social, and ideational changes in the second half of the past century have triggered increasing concerns about the ability and willingness of families to support the older generation (e.g., Himes, 1992; Ogawa & Retherford, 1997). A particular matter here is the substantial increase in the proportion of older people living alone (see Tomassini, Glaser, Wolf, Broese van Grenou, & Grundy, 2004, for an overview), because the availability of kin support largely depends on geographic accessibility and social contact.

While Parsons (1943) maintained that the amount of interaction between children and older parents would be substantially reduced with increasing geographic distance ('isolated nuclear family'), authors such as Litwak (1960), for example, suggested a significantly weaker association between distance and interaction in his 'modified extended family model'. Yet others argued that kinship interaction will occur despite a negative impact of the distance between parents' and children's households. This 'consensus perspective' thus acknowledges the adaptability of kin networks to greater

spatial dispersion, but also fully recognizes the negative impact of separation distance on interaction (see DeWit & Frankel, 1988; Smith, 1998: Section II, for reviews of this discussion). More recent studies have clearly shown that 'intimate but distant' intergenerational relationships still allow for high levels of affinity, which is an important precondition for current *and* future support and exchange (e.g., Silverstein & Bengtson, 1997).

Although reciprocity in parent-child relationships does not necessarily require coresidence, proximity and contacts constitute the basic *opportunity structure* for intergenerational interaction (cf. Bengtson, 2001: p. 8). This is likely to vary substantially across nations. Previous investigations have shown that northern Europeans, for example, are clearly less likely too live close to their parents or to have frequent contacts with the parent generation than their southern European counterparts (e.g., Kohli et al. 2005; Tomassini et al., 2004). Although this pattern presumably results from multiple factors, such as cross-country differences in parental needs or socioeconomic circumstances, the role of sociocultural forces in maintaining 'strong' or 'weak' family ties has been stressed in particular (e.g., Höllinger & Haller, 1990; Reher, 1998).

The next section reviews findings of previous studies (e.g., Clark & Wolf, 1992; Glaser & Tomassini, 2000; Lin & Rogerson, 1995; Tomassini et al., 2004) with regard to three major bundles of macro- and microlevel determinants of intergenerational proximity and contacts: sociocultural, demographic, and socioeconomic factors. Because the underlying causal mechanisms, such as parental or child needs, may not only vary in importance across different stages of the life-course, but also across countries, hypotheses about potential cross-level interactions are suggested.

DETERMINANTS OF INTERGENERATIONAL PROXIMITY AND CONTACTS

Sociocultural determinants. Two major sociocultural forces have been suggested to play an important role for the structuring of kinship and social networks (cf. Höllinger & Haller, 1990). First, family patterns rooted in pre-industrial rural society, which continue to exist until today (Reher, 1998). From a historic perspective, one may distinguish three broad European 'cultural areas' (Jordan, 1988): (a) northwestern and central Europe, where – as a consequence of the specific characteristics of the rural economy – family members lived at growing distances, (b) eastern and southeastern Europe, where complex family structures (including three-generation families) were more common, and (c) southern Europe, where family bonds were especially tight, although extended family patterns were not very common. Reher (1998: p. 203), who does not consider the Slavic language area, draws an even simpler dividing line – between the center and north of Europe on the one hand, and the Mediterranean region on the other hand – to distinguish "regions where traditionally the family group has had priority over the individual, and others where the individual and individual values have had priority over everything else." This corresponds with differences in cultural values and attitudes regarding, for example, support preferences or the desirability of close intergenerational bonds, which are likely to affect the mix by which families and welfare states eventually share responsibilities for supporting older people (e.g., Glaser, Tomassini, & Grundy, 2004; Motel-Klingebiel, Tesch-Römer, & von Kondratowitz, 2005).

Second, national cultural characteristics (Peabody, 1985), such as a higher or lower orientation towards 'public' or 'private' values, that is, more versus less permanent face-to-face contacts with kin and friends, are to be mentioned. While primary group ties (with kin) are closer in the more 'private' oriented nations of southern and eastern Europe, social networks with more secondary relations (friends, neighbors) have a higher prevalence in Europe's more 'public' oriented northwestern parts. This is consistent with differences in the degree to which, for example, the

Scandinavian and the Mediterranean welfare state regimes have provided generations with opportunities to establish independent relationships (e.g., Daatland & Lowenstein, 2005). Intergenerational solidarity in northern and southern welfare state settings has been suggested to vary in character more than in strength, though, and "primary-group relations in public-oriented nations have only lost their character as permanent face-to-face relations, but still maintain their function in providing affective and instrumental support; in private-oriented nations, however, primary-group relations still retain the character of permanent face-to face relations." (Höllinger & Haller, 1990: p. 107; see also Litwak & Szelenyi, 1969)

Demographic determinants. While parents and children usually coreside during the earlier phases of the family life cycle, proximity in later life is a consequence of migration decisions, reflecting changing needs and resources of both generations over time (see Lin & Rogerson, 1995, for a detailed life course model of intergenerational mobility). Thus, the relationship between age and the distance between older parents and their children has often been shown to be curvilinear. That is, the probability that parents live near a child declines for the 'young elderly' and increases again at higher ages. Children's age at leaving home, however, varies substantially across Europe and tends to be associated with different life-events in the North (entry into higher education) than in the South (family formation); see Billari et al. (2001). Delays in the transition to adulthood, particularly in the Mediterranean countries, should prolong the period, in which parents provide assistance to satisfy their *children's needs*. At older ages, however, greater *parental needs* for support, often resulting from declining health, are likely to gain dominance (e.g., Silverstein, 1995). This should trigger closer proximity to an adult child, prompt more frequent intergenerational contacts, or both (although parents with health problems may be less able to visit their children). Wolf (1994: p. 184) concluded from US evidence that "[a]mong the young-old, migrants are less likely than nonmigrants to live near a child, but by age 77 those who have moved

within the last 5 years are more likely to live near a child than those who have not migrated."

Marital status matters, as widows – especially those in poor health – are found to be more likely than divorced or separated women to live close to a child. Moreover, particularly divorced fathers have fewer contacts to their children than married parents (see Shapiro, 2003, for a recent investigation). Family size also has a significant effect on the likelihood that older individuals live near a child, in the sense that the chance of parents to live close to at least one child increases with the number of (living) children. The same line of argumentation holds for contacts. Last but not least, gender has been recognized as an important factor associated with kin contact and proximity. Generally, mothers exhibit higher levels of contact with children than fathers. Moreover, adult daughters are suggested to be under greater expectations than sons to live close to their parents and to visit and help them (e.g., Warnes, 1984).

Socioeconomic determinants. Housing tenure has been shown to be a relevant socioeconomic determinant of intergenerational propinquity (e.g., Shelton & Grundy, 2000). In some countries, such as Italy, parental 'housing assistance' (either through inheritance of property or financial contributions to purchase a home) "may provide […] parents with a greater say in where adult children live, and may be one reason why a high proportion of adult children live close to or in the same building as their parents" (Glaser & Tomassini, 2000: p. 732; see also Tomassini et al., 2003). In other countries, such as Germany, home-ownership is likely to be closely associated with social status and wealth, which is important with regard to social class differences in mobility. Although the strength of the relationship between social class and parent-child proximity may have diminished recently (e.g., Greenwell & Bengtson, 1997), middle-class parents are generally said to live further from their children than their working-class counterparts.

These social class differences are likely to operate through education and employment, which are key mobility factors. Both parents' and children's higher

educational attainment is negatively associated with proximity. Explanations for this clear correlation mostly refer to greater educational and occupational opportunities for children from families with more resources, whose realization will often be accompanied by longer distance migration (e.g., Kalmijn, 2006; Lin & Rogerson, 1995). Eventually this results in greater intergenerational separation and less frequent (face-to-face) parent-child contacts, particularly if universities are not geographically dispersed or if highly qualified workers are tied to a specific regional labor market (e.g., Büchel & van Ham, 2003).

Such structural factors also matter in the sense that people living in metropolitan areas have greater employment opportunities, and more adult children can find jobs within the area. Job markets in rural areas, though, are relatively small, and a significant share of younger generation adults may not get jobs locally. "As a result, the pooled distance between parents and adult children is likely to be shorter in urban areas than in rural areas, everything else being equal." (Lin & Rogerson, 1995: p. 311; see also Shelton & Grundy, 2000)

Finally, with regard to the *relationship between distance and contact*, it has often been suggested that the former is an exogenous determinant of the latter. Considering the increasing costs of contact – in terms of time and money – accompanying greater geographic distance, the frequently reported empirical finding of a strong negative correlation between distance and in-person or even telephone contacts was hence to be expected (e.g., Frankel & DeWit, 1989; Smith, 1998: Section III.3). Even though the supposition that distance is determined fully independent of contact has not remained undisputed, one may still "assume that, when measured at the same time, distance affects contact but not the reverse" (Greenwell & Bengtson, 1997: p. S19).

Although many of the possible interactions between, on the one hand, demographic and socioeconomic determinants of proximity (contact, respectively) and, on the other hand, families' geographic context are difficult to predict, we propose a set

of three specific hypotheses, which will be addressed in the course of our empirical examination:

- *Hypothesis 1*: Because preferences for close intergenerational bonds are suggested to be generally stronger in southern European countries, we expect an overall weaker significance of microlevel factors, such as health-related parental needs, in determining parent-child proximity and contacts here, than in the northern parts of Europe.
- *Hypothesis 2*: Because patterns of leaving the parental home in the north of Europe are very different from those in the south, we expect to find regional differences in the effect of factors related to children's transition to adulthood, such as age, in determining intergenerational relationships.
- *Hypothesis 3*: Because of a lower, culturally rooted, 'baseline' desirability of close intergenerational contacts and a greater commonness of parent-child relationships across longer distances, we expect a weaker correlation between proximity and (any kind of) contact in northern Europe than in southern Europe.

It is an empirical question, whether the distinction between 'north' and 'south', which we use as a conceptual frame for the hypotheses suggested here, is sufficient to describe and understand actual patterns and determinants of intergenerational relationships in contemporary Europe. Irrespective of whether a group of, say, in-between 'central' countries needs to be added, though, 'north' and 'south' are likely to represent in many ways the two extremes of a continuum of European family ties (Reher, 1998).

METHOD

The data for our study are drawn from the first public release version of the 2004 'Survey of Health, Ageing and Retirement in Europe' (SHARE; see http://www.share-project.org for more information). SHARE is modeled closely after the U.S. 'Health and Retirement Study' (HRS) and it is the first European data set to combine extensive

cross-national information on socioeconomics status, health, and family relationships of the elderly population (see Börsch-Supan et al., 2005). Release 1 of the data contains information on some 22,000 individuals aged 50 or older from 15,000 households in ten countries (Sweden, Denmark, Germany, the Netherlands, France, Switzerland, Austria, Italy, Spain, and Greece), representing Europe's economic, social, institutional, and cultural diversity from Scandinavia to the Mediterranean. Probability samples were drawn in all participating countries, but the respective institutional conditions with respect to sampling are so different that a uniform sampling design for the entire project was infeasible. As a result the sampling designs used vary from a simple random selection of households (in the Danish case, for example, from the country's central population register) to rather complicated multi-stage designs (as, for example, in Greece, where the telephone directory was used as a sampling frame). The weighted average household response rate is 62 %, ranging from 38 % in Switzerland to 74 % in France (a thorough description of methodological issues is contained in Börsch-Supan & Jürges, 2005).

Because financial variables are not included in our models, missing values (i.e., refusals or 'don't knows') are only a minor issue, affecting at most two percent of the observations in our sample, which we flag with indicator variables (see Acock, 2005, for a general discussion; Kalwij & van Soest, 2005, provide details on item non-response in SHARE). The *dependent variables* are derived from answers given by the so called 'family respondent', who is randomly selected in SHARE. To measure the respondent's *proximity* to his or her closest living child, the originally nine answer categories from the questionnaire are collapsed into: 'coresidence' (i.e., living in the same household or building), 'distance less than 25 km', and 'distance 25 km or more' (i.e., ≥ 15.5 miles). With regard to *contacts*, SHARE does not distinguish face-to-face, telephone or other modes of contact. Our analysis considers only that child, for which the highest frequency of contact during the twelve months preceding the interview is reported. Again, the original set of seven answer categories is collapsed into three

groups: ‘daily’, ‘at least once a week’, and ‘less than weekly’. Coresident parent-child pairs are excluded from the analysis of contacts, because the respective question is not asked if parent and child live in the same household. One possibility to quantify contacts for these cases would have been to assign daily contacts, for example, to all of them (e.g., Tomassini et al., 2004). The frequency of contact would then have been determined entirely by proximity, though. – If there is more than one child living at the same distance from the respondent or having the same frequency of contacts, one of these children is randomly selected for inclusion in the analysis.

The *explanatory variables* used in the multivariate analysis cover parents’ characteristics as well as characteristics of the (closest living or most contacted) child. The former include the respondent’s *age* (measured in four categories), *gender*, *partnership status*, binary measures of *health* (self-perceived health status, two or more chronic diseases, symptoms of depression in last month), *education* (three categories based on the International Standard Classification of Educational Degrees), *housing tenure* (owner of dwelling), *migration history* (an indicator of whether the respondent moved into the present town within the last 5 years), and a binary *rural-urban indicator*. The available information on the child covers her/his *age* (three categories), the number of *siblings* alive, *current activity* (four categories), *gender*, and *own parenthood* (binary indicator). For the analysis of parent-child contacts, we also use information on the child’s *proximity* to the parents (two distance categories). Table 1 provides descriptive statistics for these variables.

Given the nature of our dependent variables and following previous studies (e.g., Glaser & Tomassini, 2000; Shelton & Grundy, 2000), multinomial logistic models are estimated to assess the association between the covariates and the three categories of proximity and frequency of contact, respectively. Before presenting these multivariate results, we briefly update descriptive findings reported in Kohli et al. (2005), whose analysis was based on an earlier, non-public release of the SHARE data.

[Table 1 about here]

RESULTS

Descriptive findings

Proximity. The spatial pattern of proximity between older parents and their (nearest living) child exhibits a very clear north-south divide, with three distinct groups of countries (see Table 2). While coresidence is the predominant living arrangement in the three Mediterranean (or 'southern') countries (reported by 55 - 63% of the respondents), the modal distance in the other SHARE countries is 'less than 25 km', which accounts for 46 - 50% in the 'central' region (Austria, Germany, France, Switzerland) and as much as 57 - 64% of the parent-child pairs under consideration in Denmark, the Netherlands, and Sweden ('north'). The two Scandinavian countries also exhibit the lowest prevalence of coresidence (17%) and – with France – the highest proportion of parents living further than 25 km from their nearest child (close to 25%, versus less than 10% in Greece, Italy, and Spain). In total, 85% of parents aged 50 or older have at least one child with whom they coreside or who lives within a 25 km radius from their own residence. This share remains fairly stable across all age groups, although the role of coresidence decreases substantially in all countries (by about half on average) once the parents have reached age 60. The decline in coresidence at older ages (60+) is particularly pronounced in Denmark and Sweden, where – just as in the Netherlands – another peculiarity can be observed. In contrast to the generally small gender differences in rates of coresidence, in these three countries the proportion of fathers living in the same household or building with one of their children is 1.5 to 2.5 times higher than the respective proportion of mothers (details not shown in Table 2). This pattern may result from higher rates of repartnering among males (cf. Gierveld, 2004, for the Netherlands), which should be paralleled by a higher prevalence of younger children in the household.

[Table 2 about here]

Contacts. Turning to the frequency of parent-child contacts (see Table 3), we observe a similar north-south pattern as exhibited in the analysis of proximity, with less heterogeneity between the non-Mediterranean countries, though. Fifty-four to 62% of older parents in the 'northern' and 'central' SHARE countries report to have contact to a child 'at least once a week' (modal category). In Greece, Italy, and Spain, however, the 'daily' contact rate among non-coresident parent-child pairs is even as high as 57 - 61%. Interestingly, Sweden and the Netherlands show similarly low shares of 'less than weekly' contacts (both 7%) as the Mediterranean countries (4 - 7%). While the frequency of contact generally varies only little with the parent's age, daily contacts are in most countries somewhat less frequently reported by younger respondents (aged 50 - 59). Female respondents tend to report more daily contacts with the most contacted child than men (details not shown in Table 3).

[Table 3 about here]

A final descriptive finding refers to the relationship between proximity and contact (details not shown in the tables). Nearly 70% of the closest living children are also the most contacted ones (and vice versa). This share increases to 90%, if second most contacted (second nearest, respectively) children are also taken into account.

Pooled multivariate regressions for 'proximity'

To begin with, we estimate three multinomial logistic models for 'proximity' (see Table 4). *Model 1* includes parent characteristics only, which are complemented by child characteristics in *Model 2*. *Model 3* is finally supplemented by dummy variables representing the three 'close' southern countries of the Mediterranean region on the one hand, and the three 'distant' northern countries Denmark, the Netherlands and Sweden

on the other hand (with the four 'central' SHARE countries constituting the reference category).

The analysis shows that models of parent-child proximity, which account for parental characteristics only, are likely to be seriously misspecified. This becomes particularly clear, when the role of *parents' age* is considered. Model 1 suggests that the probability of parents to live further away from their children is significantly larger in the age groups 60 and over than for parents in their 50s, confirming our descriptive findings. The parental age coefficients, however, change dramatically, once we control for child characteristics – particularly the child's age – in Model 2. Parents' age becomes either insignificant (if the child lives 25 km or more apart) or the association between age and proximity even takes a different direction: respondents aged 70 or over appear to be more likely to coreside with the closest child rather than having that child living within a distance of no more than 25 km. The picture changes yet again and becomes unsystematic in Model 3, where regional dummies are entered into the regression. This indicates that the causal mechanism driving the relationship between parents' age and parent-child proximity may work differently in the various SHARE regions. Obviously, this issue needs to be addressed in greater detail (see below).

While our measure of *partnership status* appears to be irrelevant with regard to proximity, the relative risk ratios of *female* respondents living 'less than 25 km' or '25 km or more' apart from the closest child turn out to be significantly lower than 1 (in Model 2 and Model 3), suggesting that the propensity of mothers to coreside with offspring is higher than that of fathers. A poor self-perceived *health status* and *symptoms of depression* are also associated with a significantly higher probability of parents to coreside with a child. In Model 3, though, the effect of depression becomes statistically insignificant.

The coefficients for parents' *education* come out as expected. If the respondent obtained a lower degree (compared to the reference category 'medium'), he or she is more likely to coreside, whereas the probability to live at greater distances from their

children is highest for the most highly educated parents. The strength of this association increases with distance. With regard to *housing tenure*, the results of the first two models suggest a negative association between homeownership and the probability of parents and children to live apart. In Model 3, however, the respective relative risk ratios become insignificant or even significantly larger than 1. If parents *migrated* into their present town only recently, the probability of the nearest child to live outside the parents' dwelling, and particularly more than 25 km away, increases substantially. Parents in the SHARE age group apparently tend to move without their children (see Clark & Wolf, 1992, though). If the present residence is located in an *urban area*, the propensity of a parent-child pair to live close by each other, that is, within a radius of 25 km versus coresidence, increases, whereas the probability to live further apart remains unaffected.

Looking at *children's characteristics* shows that the probability of parents to coreside with the closest living child significantly increases with the *number of children* and decreases with the child's *age*. 'Minor' children (i.e., those younger than age 20) are most likely to live with their parents, but also children in their 20s exhibit a substantially lower propensity to live apart than their older counterparts, even when other individual characteristics are controlled for. A son's or a daughter's *current activity* matters greatly for the propensity to coreside with parents. Compared to children who are gainfully employed, all others are more likely to live in their parents' household or at least in the same building, supposedly as a consequence of a generally less favorable economic situation. The only group exhibiting no statistically significant difference to the employed is that of children who are in education still and live more than 25 km away. This exception is likely to be due to the limited availability of specific educational institutions in the parents' vicinity. Finally, coresidence is less likely for *daughters* – who tend to leave the parental home earlier than sons (cf. Billari et al., 2001: Table 2) – and becomes extremely rare if the closest living child has children of his or her own, that is, if the respondent is a *grandparent*.

The ‘Mediterranean’ *country indicator* in Model 3 takes the expected direction, clearly showing that older parents in Greece, Italy, and Spain are much more likely to coreside with a child than families in the reference group of countries (Austria, Germany, France, and Switzerland). In the ‘Nordic’ populations (including the Dutch), on the other hand, we find significantly higher probabilities of living apart than elsewhere. The relative risk ratios suggest that – in general – the main distinction to be made is between those not living with their children (irrespective of distance) and those who coreside.

[Table 4 about here]

Separate multivariate regressions for ‘proximity’, by region

In a second major step of analysis, we investigate into possible *regional differences in the strength and direction of the explanatory variables*, estimating Model 2 for each of the three country groups described above – ‘South’, ‘Central’, and ‘North’ – separately (see Table 5). A major concern here is to shed light on the somewhat confusing pooled regression results regarding the relationship between *parents’ age* and proximity. In the ‘southern’ SHARE countries as well as in Austria, France, Germany, and Switzerland, parents in their 60s do not differ from younger parents in their probability to coreside with a child, whereas their counterparts in Denmark, the Netherlands, and Sweden are significantly more likely to have their closest child living apart (no matter at which distance). This association remains fairly stable in higher age groups as well, but there is some indication that parents aged 70 and over living in the Mediterranean or ‘central’ countries may even seek to coreside (again) with a child.

In all regions, *female* respondents exhibit higher probabilities of coresidence with a child than men. Although the respective coefficients are insignificant in the ‘northern’ regression, the descriptive finding that Danish, Dutch, and Swedish fathers coreside more often than elsewhere is not corroborated by corresponding relative risk ratios in

the multivariate analysis. While a poor self-perceived *health status* tends to reduce the probability to live apart in Austria, France, Germany, and Switzerland, this is not the case in southern and northern Europe.

The northern countries exhibit the clearest association between coresidence and low parental *education*, which is not statistically significant in the Mediterranean region. Greek, Italian, and Spanish *homeowners*, however, are significantly more likely than others to have their closest child living within a 25 km radius of their own residence. Children's expectations to inherit the parents' dwelling for their own use, paralleled by parents' expectations that the potential heir will stay close by even after having formed a family of his or her own, for example, might be a possible explanation for this finding (cf. Tomassini et al., 2003, for a related discussion). The 'central' region turns out to be special with regard to the role of living in an *urban area*, which is unambiguously associated with greater distances between parent-child pairs. In the southern SHARE countries, however, an urban residence increases the probability of living up to 25 km away, but decreases the probability of living further away (the coefficients in the regression for 'North' have the same signs, but are insignificant).

Systematic variation is also found with regard to the probability of children younger than *age* 20 to live more than 25 km apart from their parents, which is significantly lower in the Mediterranean than in 'central' and 'northern' European SHARE countries. The role of the closest child's *current activity* or *gender* barely varies across regions (not accounting for unsystematic differences in the statistical significance of relative risk ratios). Also, if *grandchildren* are present, the propensity to live apart - rather within a range of 25 km than beyond, though – is very high everywhere. The magnitude of the coefficients, however, is largest in the Scandinavian countries and the Netherlands, particularly if Austria, France, Germany, or Switzerland are compared, where the probability of living outside the (grand-)parents' dwelling tends to be even lower than in the Mediterranean (see the concluding section for a detailed discussion of this finding).

[Table 5 about here]

Pooled multivariate regressions for 'contacts'

For the analysis of the frequency of contacts between (non-coresident) parent-child pairs in SHARE, we follow a similar strategy as in our investigation of the determinants of proximity, that is, we begin with a pooled sample. Because relative risk ratios turned out to be very stable across the different model specifications for the pooled regression, only the results of the full model (including parent and child characteristics, plus an indicator for 'southern' residence) are displayed in Table 6.

Considering first demographic characteristics of the respondents, we notice that the probability of having less than weekly contacts tends to decrease with parents' *age* (controlling for children's age). *Female respondents* as well as those living with a *spouse or partner* are less likely to report fewer than daily or even fewer than weekly contacts to their most contacted child. The role of self-perceived *health* in parent-child contacts is ambiguous. Suffering from chronic diseases, however, tends to increase the likelihood of daily contacts, whereas the reverse appears to be true if the respondent suffers from symptoms of depression. Parents with lower *educational degrees* are suggested to be the most likely to have daily contacts, while those with a higher than medium education rather have weekly than daily contacts with their most contacted child. Less than weekly contacts are more likely among parents who have recently *migrated*, whereas *homeownership* and an *urban residence* are associated with a significantly lower probability of having fewer than daily contacts to a child.

The probability of daily contacts also increases with the *number of children*, but decreases with *children's age*, particularly, if the most contacted child is aged 30 or older. The association between the child's *current activity* and parent-child contacts, however, is not very systematic in the pooled regression. While *grandparenthood* leaves

the frequency of contact unaffected, the most contacted child's gender does not: *daughters* are clearly more likely to contact (or to be contacted by) their parents.

As expected, *geographical distance* is very strongly correlated with the frequency of parent-child contacts. Particularly the probability of having fewer than weekly contacts increases drastically, if the distance between parent and child exceeds 25 km. Also significant is the dummy variable indicating residence in the *Mediterranean* area. Confirming our descriptive findings, the multivariate analysis shows that – even when controlling for individual characteristics – Greek, Italian, and Spanish parent-child pairs are clearly more likely to have daily contacts than those living elsewhere in Europe.

[Table 6 about here]

Separate multivariate regressions for 'contacts', by region

Finally, we compare the estimates of the separate regressions for the two distinct regions identified in the descriptive analysis, namely the Mediterranean countries ('south') and the non-Mediterranean countries ('central-north'; see Table 6). While southern European parents with *lower education* are more likely than the medium educated to be in touch with their children at least once a week or less often (versus having daily contacts), the reverse is true for their 'central' and 'northern' counterparts. This might be due to a selection effect, because we excluded coresident parent-child pairs from the analysis of contacts. Also, a recent *migration* experience increases the probability of 'rare' (i.e., less than weekly) contacts in the Mediterranean countries, but not significantly so elsewhere. The frequency of contact between parent-child pairs in the South remains unaffected, though, by the *number of children*, whereas fewer than weekly contacts in 'northern' and 'central' European SHARE countries are significantly less likely in larger families. While *activities* other than gainful employment tend to reduce the propensity of daily contacts in Greece, Italy, and Spain, the reverse is true in all other countries. And finally, the negative relationship between *distance*, that is,

living away 25 km or more, and the frequency of contacts is significantly stronger in Greece, Italy, and Spain than elsewhere.

DISCUSSION

Our analysis of spatial proximity and contacts between older parents and their children generally confirms the results of previous studies, but for a larger sample of ten European countries and on the basis of a unique set of cross-nationally comparable microdata, which provides rich information on both parents' and children's characteristics. *Demographic* and *socioeconomic variables* that are found to be significantly associated with both intergenerational proximity and contacts include: the respondent's sex, health status, education, recent migration history, and the number of children as well as the children's age and sex. Generally speaking, mothers and parents with poorer health, lower education, and no recent residential move as well as younger adult children with a larger number of siblings tend to exhibit the closest family bonds. Sons are more likely to coreside with older parents, whereas daughters and parents more frequently have daily contacts.

Concerning the role of *sociocultural (contextual) determinants* and the *current state of family relations*, an overall impression that can be derived from the study of the SHARE data is that of a generally intact opportunity structure for intergenerational support. Still, the Mediterranean peoples– independent of most of parents' and children's individual characteristics considered in the analysis – continue to behave differently from their counterparts living further north when making decisions about proximity and contacts, thereby reinforcing longstanding 'familistic' sociocultural patterns of intergenerational relations (e.g., Höllinger & Haller, 1990; Reher, 1998). While our *first hypothesis*, suggesting an overall lower relevance of microlevel factors in explaining proximity and contacts among southern European parent-child pairs, was not confirmed, we find some noteworthy systematic differences in the effects of some explanatory variables between regions:

(a) In addition to those regions in the north and south of Europe which are often described as ‘weak’ or ‘strong’ family countries, a distinct, geographically ‘central’ region – consisting of Austria, France, Germany, and Switzerland – can be identified, at least if intergenerational proximity is considered. While this region’s countries constitute a kind of ‘in-between’ category in terms of modal distance between parent-child pairs, it is difficult to find an appropriate ‘label’ once we look at correlates of proximity. With regard to the role of, for example, parental health or characteristics of parents’ residence (rural vs. urban), the ‘central’ SHARE region is different – in similar ways – from both northern and southern countries. Because the larger group of non-Mediterranean countries turned out to be very homogeneous group in the analysis of parent-child contacts, the specific findings concerning proximity in Austria, France, Germany, and Switzerland may not be primarily due to a common thread connecting these countries in terms of their ‘family culture’, but due to interactions between individual characteristics and specific institutions, at least in some of the countries. We lack sufficient knowledge of those, however, as to be able to identify potential causal mechanisms.

(b) The association of both parents’ and children’s age with proximity varies across regions. While the probability of Danish, Dutch, and Swedish parent-child pairs to coreside decreases significantly as parents’ age, this is not the case elsewhere (controlling for children’s age); rather, we find weak indication of a possibly reverse relationship in ‘central’ and Mediterranean countries. This pattern suggests that possible age-related parental needs (controlling for health) do not necessarily result in a reversal of the general trend towards greater geographic distance observed in mid-life (e.g., Lin & Rogerson, 1995). National cultural characteristics (Peabody, 1985), related to the desire to maintain a sense of *autonomy* in old age, as well as differences in the mix between welfare state services and family support for the elderly are likely to matter here. For example, a strong infrastructure of formal services provided by the welfare state, like in Scandinavia, clearly reduces parents’ dependency on support provided by

children (which is not to say that family help is crowded out; cf. Daatland & Lowenstein, 2005; Motel-Klingebiel et al., 2005). This is paralleled by greater protection against social exclusion at older ages (e.g., Ogg, 2005), which is also reflected in, for example, higher rates of volunteering among elders in 'public' oriented societies (e.g., Erlinghagen & Hank, 2006).

The lower probability of Mediterranean children younger than age 20 to live further apart from their parents partially confirms our *second hypothesis* and is consistent with comparative research on the transition to adulthood, which shows that the "Nordic countries are the most age-graded, and [that] there seems to be little space for individual choice in the age at leaving home. In contrast, in 'more traditional' Southern European countries leaving home appears to be much more subject to preferences and constraints." (Billari et al., 2001: p. 354) Studies suggest that social norms about age-appropriate behavior (cf. Settersten & Hägestad, 1996) interact with institutional settings, such as a country's labor market or educational system (e.g., Aassve et al., 2002), in shaping the transition out of the parental home. Substantial systematic cross-national variation in the association between specific child characteristics other than age – related to potential needs of the younger generation while being in education or after family formation – and intergenerational proximity (contacts, respectively) is not found, though. A noteworthy exception may be the somewhat counterintuitive finding of a relatively low propensity to live apart from one's parents, if the closest living child has children of his or her own in the 'central' SHARE countries. A likely explanation for this is our definition of coresidence, which includes 'living in the same building'. This living arrangement has been shown to be particularly popular in Austria and Germany (e.g., Kohli et al., 2005, p. 167), probably due to public subsidies supporting the construction of two-family-homes. Moreover, Hank & Kreyenfeld (2003) provide evidence for Germany, suggesting an important role of grandparents as potential providers of child care. This makes it very attractive for the young parent generation to live in the same building with the old parent generation.

(c) As proposed in our *third hypothesis*, the negative association between greater geographic distance and frequency of contact is more pronounced in the Mediterranean countries than in Scandinavia or the 'central' countries. An explanation for this result might be that living far away from each other in the South is correlated with a poorer quality of the parent-child relation, whereas in the non-Mediterranean countries living at greater distances is a more common arrangement, which is mostly unrelated to affection and thus has a somewhat weaker impact on contacts between older parents and their adult children (see Lawton et al., 1994, for a general discussion).

Although we acknowledge that the frequently applied rough north-south divide – even if it is supplemented by a group of 'in-between' countries such as France or Germany – tends to simplify a heterogeneous European experience (Glaser et al. 2004; Reher, 1998), we also think that a broader look at the *commonalities* rather than the *idiosyncrasies* of the countries in our study provides useful insights. When looking at the European picture as a whole, we find no indication at all for a 'decline' of intergenerational relations right after the turn to the 21st century. Eighty-five percent of parents aged 50 or older have at least one child with whom they coreside or who lives within a 25 km radius from their own residence and Sweden as well as the Netherlands show similarly low shares of 'less than weekly' parent-child contacts than, for example, Spain (all 7%). Our study, however, is limited to only two of the six dimensions of intergenerational solidarity put forward by Bengtson (2001: p. 8), namely 'structural solidarity' (i.e., geographic proximity) and 'associational solidarity' (i.e., frequency of contact). Unfortunately, SHARE does not allow us to consider the 'affectual', 'consensual', or 'normative' dimensions of solidarity, but a recent analysis of financial and time transfers in families (Attias-Donfut, Ogg, & Wolff, 2005) draws a picture of 'functional solidarity' which supports an optimistic perspective on the *future of intergenerational bonds* in Europe (see also Tomassini et al., 2004).

Still, the demographic foundation of families is in rapid transformation (e.g., Kohler, Billari, & Ortega 2002) and 'strong-family systems' appear to be more

vulnerable to the effects of demographic change than 'weak-family systems': "Where strong families prevail, the support children provide for their elderly parents is closely dependent on whether there are enough children to take care of their parents. […] In weak-family societies, this challenge will tend to be posed in terms of the society as a whole, and somewhat less so in terms of the family […]." (Reher 1998, p. 319)

Future studies should ideally address a number of further issues to turn the sketch presented here into a full painting of the cross-national diversity of intergenerational relationships. Like most studies, we restricted our analysis to the closest living and most contacted children (see Lin & Rogerson, 1995, for an exception). The inclusion of further children, however, would provide a more complete picture of the spatial density of family networks and could also improve our understanding of intra-family bargaining processes underlying children's residential choices, for example (cf. Konrad, Künemund, Lommerud, & Robledo, 2002). Also, the SHARE 'one-shot' question does not allow to analyze various modes of parent-child contact (like face-to-face versus telephone) and their differential connection to distance (cf. Frankel & DeWit, 1989). Related to this and as already mentioned above, additional information on the perceived quality of the relationship between parents and children would also be highly desirable (e.g., Kaufman & Uhlenberg, 1998). And finally, longitudinal SHARE data will allow a better understanding of relevant developmental factors than can possibly be achieved with the currently available cross-sectional information (e.g., Silverstein, 1995). Clearly, the 'longer years of shared lives across generations' (Bengtson, 2001) not only bring about manifold opportunities and challenges for families – but also for current and future generations of social scientists.

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Table 1: Pooled descriptive sample statistics, all countries (unweighted percentages)

	Proximity: closest living child	*Contact: most contacted child*[a]
Demographics & Health		
Age 50 - 59	36	31
Age 60 - 69	32	34
Age 70 - 79	22	24
Age 80+	10	11
Female respondent	56	56
Living with spouse/partner	69	67
Less than good health	39	40
Chronic diseases (2+)	42	44
Depression	25	25
Education & SES		
Low education	53	53
Medium education	30	29
High education	17	17
Owner of dwelling	63	61
Residence		
Migrated in past 5 years	4	4
Urban area	49	49
Child characteristics		
Number of siblings alive[b]	1.45	1.56
Age ≤ 20	10	2
Age 20 ≤ 30	26	23
Age > 30	64	75
Working	69	76
Unemployed	5	4
In education	9	6
Other activity	16	15
Daughter	48	56
Own children	53	63
Distance less than 25 km	--	68
Distance 25 km or more	--	32
N	*13,641*	*11,643*

Note: Author's calculations based on data from SHARE 2004 (Release 1).

[a] Coresident parent-child pairs excluded. [b] Absolute average value (unweighted).

Table 2: Proximity to nearest living child

	Total	*Age 50 - 59*	*Age 60 - 69*	*Age 70 - 79*	*Age 80+*
Austria (n=1,224)					
- coresidence	38.8	50.3	34.1	29.6	37.5
- less than 25 km	46.4	38.7	47.7	54.4	47.4
- 25 km or more	14.9	11.0	18.1	16.1	15.1
Denmark (n=1,028)					
- coresidence	16.6	31.4	8.1	3.9	6.6
- less than 25 km	60.9	46.7	71.6	72.6	65.2
- 25 km or more	22.5	21.9	20.3	23.4	28.2
France (n=1,013)					
- coresidence	26.9	46.9	17.3	9.8	18.7
- less than 25 km	49.8	34.1	54.6	63.0	61.2
- 25 km or more	23.4	19.0	28.1	27.2	20.1
Germany (n=1,696)					
- coresidence	35.1	50.6	24.7	29.5	33.4
- less than 25 km	46.2	32.0	53.4	54.0	49.6
- 25 km or more	18.7	17.5	21.9	16.5	17.0
Greece (n=1,308)					
- coresidence	56.6	80.9	54.9	41.1	34.5
- less than 25 km	33.9	12.8	35.6	47.6	51.9
- 25 km or more	9.5	6.3	9.6	11.2	13.7
Italy (n=1,562)					
- coresidence	63.0	84.7	56.2	48.1	50.7
- less than 25 km	30.9	12.2	36.9	44.3	40.2
- 25 km or more	6.2	3.2	7.0	7.6	9.1
Netherlands (n=1,706)					
- coresidence	24.7	47.2	13.7	6.7	2.6
- less than 25 km	63.3	42.2	74.3	81.3	81.2
- 25 km or more	12.0	10.6	12.0	12.1	16.3
Spain (n=1,565)					
- coresidence	55.7	74.9	50.7	41.7	42.7
- less than 25 km	36.5	18.5	40.7	49.7	48.9
- 25 km or more	7.9	6.6	8.6	8.6	8.4
Sweden (n=1,939)					
- coresidence	17.5	39.9	5.9	2.5	2.8
- less than 25 km	57.7	39.6	67.5	67.4	72.0
- 25 km or more	24.8	20.4	26.7	30.2	25.3
Switzerland (n=600)					
- coresidence	34.0	53.3	19.4	20.8	24.8
- less than 25 km	49.5	34.6	66.8	56.9	46.7
- 25 km or more	16.6	12.1	13.8	22.3	28.5
Total (n=13,641)					
- coresidence	42.0	60.4	33.8	30.4	32.0
- less than 25 km	43.3	27.2	49.4	54.3	52.7
- 25 km or more	14.8	12.4	16.8	15.2	15.3

Note: All values are weighted percentages. Author's calculations based on data from SHARE 2004 (Release 1).

Table 3: Frequency of contact to most contacted child, coresiding parent-child pairs excluded

	Total	*Age 50 - 59*	*Age 60 - 69*	*Age 70 - 79*	*Age 80+*
Austria (n=1,075)					
- daily	28.6	30.1	25.6	28.6	33.0
- at least once a week	54.4	52.4	59.2	53.8	58.0
- less than weekly	17.0	17.5	15.2	17.6	19.1
Denmark (n=985)					
- daily	30.5	31.6	27.0	31.2	33.7
- at least once a week	60.4	59.0	65.4	59.1	55.9
- less than weekly	9.1	9.4	7.7	9.7	10.3
France (n=912)					
- daily	30.9	26.4	30.6	33.8	37.0
- at least once a week	57.1	61.0	56.0	54.9	54.0
- less than weekly	12.0	12.7	13.3	11.3	9.0
Germany (n=1,482)					
- daily	25.7	20.0	29.3	25.4	28.4
- at least once a week	59.4	62.7	60.6	58.6	60.2
- less than weekly	14.9	17.4	15.1	16.0	11.4
Greece (n=907)					
- daily	58.5	53.6	65.0	55.4	56.4
- at least once a week	37.8	42.3	31.2	40.4	40.9
- less than weekly	3.8	4.0	3.8	4.2	2.7
Italy (n=1,100)					
- daily	60.3	55.2	60.7	64.0	59.0
- at least once a week	34.7	36.8	34.2	32.7	37.3
- less than weekly	5.0	8.1	5.0	3.4	3.7
Netherlands (n=1,560)					
- daily	34.4	34.1	40.0	31.7	27.6
- at least once a week	58.5	57.1	55.8	60.0	65.4
- less than weekly	7.2	8.8	4.2	8.4	7.1
Spain (n=1,254)					
- daily	57.8	56.9	57.9	58.9	57.3
- at least once a week	35.5	35.1	35.7	35.9	34.4
- less than weekly	6.8	8.0	6.4	5.3	8.2
Sweden (n=1,851)					
- daily	33.4	33.0	33.2	32.3	36.1
- at least once a week	59.4	59.6	60.2	60.6	55.9
- less than weekly	7.2	7.3	6.6	7.2	8.1
Switzerland (n=517)					
- daily	22.9	24.4	27.1	15.6	23.4
- at least once a week	61.6	61.8	57.4	68.0	57.7
- less than weekly	15.5	13.8	15.5	16.4	18.9
Total (n=11,643)					
- daily	39.3	34.0	41.1	41.8	41.3
- at least once a week	50.5	53.8	49.1	48.5	40.0
- less than weekly	10.3	12.1	9.8	9.7	8.7

Note: All values are weighted percentages. Author's calculations based on data from SHARE 2004 (Release 1).

Table 4: Multinomial logistic regression results for dependent variable 'proximity', pooled models (n = 13,630) – relative risk ratios (standard errors in parentheses)

	Model 1: Coresidence *vs.* …		*Model 2:* Coresidence *vs.* …		*Model 3:* Coresidence *vs.* …	
	… less than 25 km	… 25 km ore more	… less than 25 km	… 25 km or more	… less than 25 km	… 25 km or more
Demographics						
Age 60 - 69[a]	3.39**	2.98**	0.98	1.09	1.15*	1.28**
	(24.78)	(16.03)	(0.27)	(1.03)	(1.97)	(2.81)
Age 70 - 79[a]	4.91**	4.46**	0.80**	1.03	0.99	1.29*
	(26.67)	(18.46)	(2.71)	(0.26)	(0.15)	(2.28)
Age 80+[a]	4.23**	4.51**	0.68**	1.04	0.79*	1.21
	(18.16)	(14.11)	(3.80)	(0.31)	(2.18)	(1.39)
Female respondent	1.09*	1.04	0.75**	0.73**	0.72**	0.70**
	(2.10)	(0.76)	(5.83)	(4.98)	(6.12)	(5.38)
Living with partner	1.01	0.82**	1.07	0.92	1.06	0.91
	(0.29)	(3.00)	(1.27)	(1.20)	(1.03)	(1.26)
Less than good health	0.80**	0.82**	0.76**	0.77**	0.81**	0.84*
	(4.69)	(3.08)	(5.23)	(3.78)	(3.66)	(2.49)
Chronic diseases (2+)	1.18**	0.97	1.05	0.89	1.09	0.92
	(3.69)	(0.52)	(0.87)	(1.76)	(1.62)	(1.14)
Depression	0.77**	0.77**	0.87*	0.87	1.05	1.06
	(5.44)	(3.76)	(2.51)	(1.90)	(0.86)	(0.73)
Education & SES						
Low education[a]	0.73**	0.45**	0.65**	0.44**	0.90	0.65**
	(6.64)	(12.31)	(7.79)	(11.65)	(1.69)	(5.50)
High education[a]	0.93	1.44**	1.27**	1.88**	1.17*	1.72**
	(1.13)	(4.87)	(3.26)	(7.62)	(2.03)	(6.22)
Owner of dwelling	0.65**	0.82**	0.65**	0.80**	0.95	1.21**
	(10.12)	(3.36)	(8.91)	(3.60)	(0.95)	(2.78)
Residence						
Migrated, past 5 years	1.45**	2.89**	1.70**	3.64**	1.53**	3.23**
	(3.36)	(8.80)	(4.13)	(9.46)	(3.05)	(8.04)
Urban area	1.34**	0.97	1.50**	1.02	1.44**	0.99
	(7.32)	(0.60)	(8.97)	(0.27)	(7.43)	(0.22)

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Table 4 (cont'd.): Multinomial logistic regression results for dependent variable 'proximity', pooled models (n = 13,630) – relative risk ratios (standard errors in parentheses)

	Model 1: Coresidence *vs.* …		*Model 2:* Coresidence *vs.* …		*Model 3:* Coresidence *vs.* …	
	… less than 25 km	… 25 km ore more	… less than 25 km	… 25 km or more	… less than 25 km	… 25 km or more
Child characteristics						
Number of siblings			0.94**	0.65**	0.89**	0.60**
			(3.38)	(14.95)	(6.62)	(17.02)
Age ≤ 20[a]			0.05**	0.05**	0.03**	0.03**
			(18.63)	(14.47)	(20.10)	(15.78)
Age 20 ≤ 30[a]			0.34**	0.36**	0.36**	0.38**
			(15.65)	(11.25)	(13.86)	(10.12)
Unemployed[a]			0.43**	0.47**	0.49**	0.54**
			(8.64)	(5.48)	(6.82)	(4.29)
In education[a]			0.49**	1.05	0.44**	0.95
			(7.48)	(0.48)	(7.96)	(0.42)
Other activity[a]			0.63**	0.62**	0.72**	0.72**
			(6.34)	(4.95)	(4.20)	(3.15)
Daughter			1.24**	1.36**	1.29**	1.41**
			(4.64)	(5.13)	(5.12)	(5.52)
Own children			4.38**	3.15**	4.09**	2.91**
			(26.93)	(15.97)	(24.00)	(14.19)
Country group						
Greece, Italy, Spain[a]					0.36**	0.26**
					(16.39)	(15.44)
Denmark, Netherlands,					3.74**	3.85**
Sweden[a]					(19.23)	(16.93)
χ^2	1834.54		5279.44		6863.82	
df	28		46		50	

Note: Author's calculations based on data from SHARE 2004 (Release 1).

[a] Reference categories: age 50 - 59; medium level of education; child's age > 30; child is (self-) employed; all other countries. – Missing value indicator variables are not displayed.

* $p < .05$; ** $p < .01$.

Table 5: Multinomial logistic regression results for dependent variable 'proximity', separate models for 'South', 'Central', and 'North'[a] – relative risk ratios (standard errors in parentheses)

	South: Coresidence *vs.* …		*Central:* Coresidence *vs.* …		*North:* Coresidence *vs.* …	
	… less than 25 km	… 25 km ore more	… less than 25 km	… 25 km or more	… less than 25 km	… 25 km or more
Demographics						
Age 60 - 69[a]	1.04	1.26	1.03_n	1.18	1.61_s**	1.73**
	(0.27)	(1.16)	(0.24)	(1.20)	(3.12)	(3.19)
Age 70 - 79[a]	0.90	1.18	0.82_n	1.08_n	1.75_s*	2.40**
	(0.71)	(0.71)	(1.39)	(0.43)	(2.29)	(3.32)
Age 80+[a]	0.75	1.09	0.65*	0.95	1.13	1.86*
	(1.64)	(0.31)	(2.55)	(0.24)	(0.41)	(1.97)
Female respondent	0.69**	0.65**	0.70**	0.65_n**	0.89	0.92
	(4.08)	(3.06)	(4.02)	(4.05)	(0.99)	(0.64)
Living with partner	1.24*	0.79	1.00	1.04	0.85_s	0.70*
	(2.22)	(1.58)	(0.04)	(0.30)	(1.16)	(2.27)
Less than good health	1.00_c	1.07_c	0.66**	0.62_n**	0.86	1.01
	(0.03)	(0.47)	(4.68)	(4.34)	(1.08)	(0.08)
Chronic diseases (2+)	1.11	0.78	1.10	0.95	1.12	0.98
	(1.19)	(1.75)	(1.03)	(0.50)	(0.87)	(0.15)
Depression	0.95	0.84_c	1.18	1.42**	1.06	0.96
	(0.59)	(1.14)	(1.69)	(2.88)	(0.41)	(0.23)
Education & SES						
Low education[a]	0.96	0.86	0.83*	0.78_n*	0.70**	0.41_s**
	(0.35)	(0.83)	(2.02)	(2.05)	(2.71)	(5.87)
High education[a]	1.02	1.79*	1.32*	1.96**	0.93	1.36
	(0.09)	(2.41)	(2.49)	(5.32)	(0.47)	(1.88)
Owner of dwelling	1.24_c*	1.32	0.89	1.20	0.86_s	1.16
	(2.20)	(1.76)	(1.38)	(1.78)	(1.28)	(1.11)
Residence						
Migrated, past 5 years	0.59_c	2.52**	2.21**	3.77**	2.18_s**	4.92**
	(1.64)	(2.89)	(3.45)	(5.32)	(3.04)	(6.07)
Urban area	1.22_c*	0.67_c**	2.16_n *	1.45_n**	1.15	0.83
	(2.47)	(3.04)	(9.04)	(3.53)	(1.24)	(1.45)

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Table 5 (cont'd.): Multinomial logistic regression results for dependent variable 'proximity', separate models for 'South', 'Central', and 'North'[a] – relative risk ratios (standard errors in parentheses)

	South: Coresidence *vs.* …		*Central:* Coresidence *vs.* …		*North:* Coresidence *vs.* …	
	… less than 25 km	… 25 km ore more	… less than 25 km	… 25 km or more	… less than 25 km	… 25 km or more
Child characteristics						
Number of siblings	0.87**	0.62**	0.90**	0.61**	0.82**	0.55**
	(4.36)	(7.24)	(3.55)	(10.33)	(4.80)	(11.26)
Age ≤ 20b[b]	0.01**	0.43_c*	0.06**	0.01**	0.03**	0.03_s**
	(7.00)	(2.21)	(10.66)	(9.15)	(14.18)	(11.30)
Age 20 ≤ 30[b]	0.35**	0.49**	0.40**	0.38**	0.32**	0.34**
	(8.11)	(3.44)	(7.64)	(6.49)	(7.01)	(5.76)
Unemployed[b]	0.39**	0.46*	0.52**	0.67	0.70	0.63
	(5.00)	(2.47)	(3.81)	(1.86)	(1.49)	(1.56)
In education[b]	0.23**	1.49_c	0.35**	0.66*	0.51_s**	0.98
	(4.52)	(1.66)	(6.18)	(2.15)	(4.17)	(0.10)
Other activity[b]	0.85_c	0.73	0.58**	0.65**	0.75	0.79
	(1.46)	(1.61)	(4.21)	(2.66)	(1.29)	(0.93)
Daughter	1.09_c	1.20	1.62**	1.58**	1.30*	1.54**
	(1.02)	(1.43)	(6.01)	(4.68)	(2.36)	(3.47)
Own children	6.13_c**	3.22_c**	2.45_n**	1.69_n**	7.59**	6.48_s**
	(19.01)	(7.28)	(9.68)	(4.60)	(11.58)	(9.81)
χ^2	1621.30		1494.48		2502.20	
df	46		46		46	

Note: Author's calculations based on data from SHARE 2004 (Release 1).

[a] South: Greece, Italy, Spain; *n* = 4,433. Central: Austria, France, Germany, Switzerland; *n* = 4,525. North: Denmark, Netherlands, Sweden; *n* = 4,672. [b] Reference categories: age 50 - 59; medium level of education; child's age > 30; child is (self-) employed. [c] Coefficient significantly different from coefficient in 'Central' regression ($p < .05$; χ^2-test). [n] Coefficient significantly different from coefficient in 'North' regression ($p < .05$; χ^2-test). [s] Coefficient significantly different from coefficient in 'South' regression ($p < .05$; χ^2-test). – Missing value indicator variables are not displayed.

* $p < .05$; ** $p < .01$.

Table 6: Multinomial logistic regression results for dependent variable 'frequency of contact' (coresident parent-child pairs excluded), pooled model (n = 11,632) and separate models for 'South' and 'Central-North'[a] – relative risk ratios (standard errors in parentheses)

	Pooled model: Daily *vs.* …		*South:* Daily *vs.* …		*Central-North:* Daily *vs.* …	
	… at least once a week	… less than weekly	… at least once a week	… less than weekly	… at least once a week	… less than weekly
Demographics						
Age 60 - 69[b]	0.93	0.71**	0.86	0.62	0.96	0.74*
	(1.13)	(3.08)	(1.21)	(1.73)	(0.53)	(2.53)
Age 70 - 79[b]	1.05	0.78	0.95	0.61	1.11	0.85
	(0.71)	(1.95)	(0.39)	(1.62)	(1.24)	(1.18)
Age 80+[b]	1.03	0.54**	0.96	0.46*	1.07	0.56**
	(0.38)	(4.00)	(0.26)	(2.11)	(0.64)	(3.35)
Female respondent	0.87**	0.44**	0.83*	0.56**	0.88*	0.42**
	(2.99)	(9.99)	(2.16)	(2.99)	(2.30)	(9.47)
Living with partner	0.89*	0.42**	0.76**	0.48**	0.95	0.42**
	(2.16)	(10.12)	(2.83)	(3.63)	(0.82)	(9.06)
Less than good health	0.88*	1.32**	1.02	1.19	0.83**	1.31**
	(2.52)	(3.27)	(0.17)	(0.84)	(3.11)	(2.77)
Chronic diseases (2+)	0.89*	0.76**	0.86	0.94	0.90	0.73**
	(2.43)	(3.34)	(1.72)	(0.34)	(1.89)	(3.40)
Depression	1.00	1.29**	0.93	1.14	1.02	1.33**
	(0.02)	(2.80)	(0.80)	(0.68)	(0.33)	(2.77)
Education & SES						
Low education[b]	0.87**	0.85	1.30*	1.93*	0.80_s**	0.75_s**
	(2.68)	(1.81)	(2.04)	(2.26)	(3.89)	(2.97)
High education[b]	1.25**	0.94	1.09	0.45	1.28**	1.00
	(3.26)	(0.58)	(0.42)	(1.48)	(3.40)	(0.02)
Owner of dwelling	0.91*	0.59**	0.82*	0.63*	0.90	0.58**
	(2.11)	(6.61)	(2.07)	(2.40)	(1.87)	(6.07)
Residence						
Migrated, past 5 years	1.10	1.55**	1.14	3.73**	1.07	1.32_s
	(0.87)	(2.79)	(0.46)	(3.56)	(0.53)	(1.62)
Urban area	1.02	0.83*	1.28**	0.83	0.96_s	0.80*
	(0.58)	(2.52)	(3.04)	(1.08)	(0.75)	(2.57)

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Table 6 (cont'd.): Multinomial logistic regression results for dependent variable 'frequency of contact' (coresident parent-child pairs excluded), pooled model (n = 11,632) and separate models for 'South' and 'Central-North'[a] – relative risk ratios (standard errors in parentheses)

	Pooled model: Daily *vs.* …		*South:* Daily *vs.* …		*Central-North:* Daily *vs.* …	
	… at least once a week	… less than weekly	… at least once a week	… less than weekly	… at least once a week	… less than weekly
Child characteristics						
Number of siblings	0.97	0.91**	0.95	1.08	0.97	0.86_s**
	(1.88)	(3.32)	(1.61)	(1.38)	(1.49)	(4.25)
Age ≤ 20[b]	0.73	0.32**	0.43*	0.35	0.82	0.34**
	(1.75)	(3.73)	(2.04)	(1.57)	(0.98)	(3.13)
Age 20 ≤ 30[b]	0.89	0.63**	0.75*	0.71	0.94	0.62**
	(1.75)	(3.87)	(2.17)	(1.17)	(0.79)	(3.49)
Unemployed[b]	0.76*	1.13	1.04	1.62	0.69**	1.07
	(2.55)	(0.68)	(0.19)	(1.10)	(2.98)	(0.32)
In education[b]	0.96	0.93	1.20	2.43*	0.91	0.81_s
	(0.41)	(0.40)	(0.64)	(2.05)	(0.83)	(1.07)
Other activity[b]	0.86*	1.38**	1.07	2.00**	0.76_s**	1.20
	(2.32)	(2.85)	(0.58)	(2.89)	(3.33)	(1.41)
Daughter	0.69**	0.47**	0.65**	0.35**	0.70**	0.49**
	(8.47)	(9.81)	(5.09)	(5.36)	(6.83)	(8.22)
Own children	1.07	0.96	0.86	0.77	1.16_s*	1.01
	(1.38)	(0.51)	(1.50)	(1.21)	(2.38)	(0.13)
Distance ≥ 25 km[b]	2.69**	8.35**	3.22**	11.55**	2.51_s**	7.46_s**
	(19.69)	(26.50)	(12.24)	(13.20)	(15.42)	(22.18)
Country group						
Greece, Italy, Spain[b]	0.36**	0.33**				
	(20.26)	(11.10)				
χ^2	2356.75		481.99		1161.49	
df	50		48		48	

Note: Author's calculations based on data from SHARE 2004 (Release 1).

[a] South: Greece, Italy, Spain; n = 3,259. Central-North: Austria, Denmark, France, Germany, Netherlands, Sweden, Switzerland; n = 8,373. [b] Reference categories: age 50 - 59; medium level of education; child's age > 30; child is (self-) employed; distance < 25 km; all other countries. [s] Coefficient significantly different from coefficient in 'South' regression ($p < .05$; χ^2-test). Missing value indicator variables are not displayed.

* $p < .05$; ** $p < .01$.