

# North, South and West: differentials in parent-child contacts among the older populations of Finland, France and Italy.

Cecilia Tomassini<sup>1, 2</sup>, Emily Grundy<sup>1</sup>, Stamatis Kalogirou<sup>1</sup>, Joelle Gaymu<sup>3</sup>, Pekka Martikainen<sup>4</sup>, Adrien Binet<sup>3</sup> and Antti Karisto<sup>5</sup>

<sup>1</sup> Centre for Population Studies, London School of Hygiene & Tropical Medicine, UK

<sup>2</sup> Social Demography Unit, Office for National Statistics, London, UK

<sup>3</sup> INED, Paris, France

<sup>4</sup> Population Research Unit, Department of Sociology, University of Helsinki, Helsinki, Finland

<sup>5</sup> Department of Social Policy, University of Helsinki, Helsinki, Finland

Contact Author:

Cecilia Tomassini

Email: [cecilia.tomassini@lshtm.ac.uk](mailto:cecilia.tomassini@lshtm.ac.uk)

Phone: +44-20-72994634, Fax: +44-20-72994637

**Abstract** In this paper we examine differences between and within three European countries in the proportion of elderly parents who have at least weekly face-face contact with a child. We use nationally representative survey data from Finland, France and Italy which includes information on availability of children and extent of contact, as well as on relevant parental characteristics. Results confirm the higher level of parent adult-child contact in Italy than in the more northern European countries, but the proportion of parents seeing a child at least weekly was high in all the countries we considered. Multivariate analysis showed that paternal divorce was associated with a reduced probability of frequent contact between fathers and children in all countries and in Finland maternal divorce had a similar effect on probability of frequent contact between mothers and adult children. Number of children and levels of education were also associated with variations in proportions with at least weekly contact. We also present for France possible future scenarios of contact with children that combine the observed effects of the explanatory variables with hypothetical changes in population distribution. Our results are consistent with other studies which have pointed to differences between Northern and Southern Europe in extent of family affiliation, although reasons for these differences are still poorly understood. However, our results also suggest that concerns about declining family networks among older people in Northern Europe may be overstated, given the observed high level of frequent contact between parents and adult children.

**Keywords** Intergenerational relations - Cross-national comparison - Older people  
Finland France Italy.

## Introduction

Marked increases, both achieved and projected, in the number and proportion of older people in Europe, have led to a growing debate about current and future extent of available family support. This debate is often presented in rather alarmist tones, partly on the evidence of rapid declines in intergenerational co-residence and large increases in the proportion of older people living alone. However, although such declines have been observed in a wide range of both European and non European countries, considerable diversity between European countries in the living arrangements of older people remains with generally higher proportions of older people living with a child in southern and eastern than in northern Europe (Pampel 1983; van Solinge 1994; Bartiaux 1991; Grundy 1996; Tomassini et al. 2004).

It has long been recognised that co-residence is only a partial indicator of family solidarity and support and that information on other types of exchange is also needed, and that a comparative approach may help elucidate important influences on such solidarity (Shanas et al 1968). There is now a burgeoning literature on other forms of intergenerational exchange based on analyses of data for single countries or regions within countries (Attias-Donfut 1995; Dewit et al. 1988; Grundy et al. 1999; Grundy and Shelton 2001; Kaufman and Uhlenberg 1998; Lawton et al. 1994). The number of comparative studies has also been increasing and these generally show that frequent family contact, as well as co residence, is more usual in southern than in northern Europe (Farkas and Hogan 1995; Glaser et al. 1998; Höllinger and Haller 1990; Murphy 1996; Reher 1998; Walker 1993). Not all of these studies have been able to take account of differences in the availability of children, an important limitation as there are wide variations in Europe in the proportions of childless older people (Grundy 1996; Prioux 1993). However even when these are taken account of, clear country differences persist (Murphy (2004). Lowenstein and colleagues (2003), for example, collected comparable data on intergenerational family solidarity in selected areas within four European countries and found that 90% of older Spaniards had weekly contacts with their children, compared with only 56% of their German counterparts.

These differences raise several important questions about possible explanatory factors and the evolution of family relationships in ageing European populations. The notion of the familistic culture has been advanced to explain apparently stronger family ties in southern than in northern Europe (Banfield 1958; Reher 1998) although this of course leaves the question of why cultural differences in family related behaviour evolved and have persisted. An alternative view might attach greater weight to differences in social and economic policies and living standards which may enable older people in some countries to have wider support networks, including provision of care, extending beyond the family (Daatland and Herlofson 2003). Partial support for this latter hypothesis comes from studies of differentials, generally within countries and particularly within the USA, which show that the most privileged groups with higher incomes and higher levels of education seem to have lower levels of family contact than the rest of the population. (Clark and Wolf 1992; Silverstein and Bengtson 1997, Grundy and Shelton 2001;

Henretta et al 2002). This raises the possibility that as these characteristics become more widespread, levels of contact and other indicators of family exchange may decline. Similarly the spread of characteristics which are currently very rare in Southern European older populations but more common in the North, notably divorce (and the underlying shifts which have resulted in divorce becoming more acceptable) may also be seen as a potential future challenge to family solidarity across a wider range of countries than is the case at the present as a range of studies have shown that parental divorce is associated with lower levels of contact and exchanges of support, particularly between fathers and children (Dykstra 1997; Barrett and Lynch 1999; Grundy 2005).

Here we use broadly comparable data from surveys undertaken in three European countries—Finland, France and Italy — to analyse variations in the proportions of older parents with at least weekly face-to-face contact with at least one child. All the data sets used include information how many children respondents have and our analyses are restricted to those with at least one child. We analyse socio-demographic differentials in this indicator of family exchange and use the results to estimate future scenarios for France under varying assumptions about changes in parameters associated with contact. This paper builds on an earlier one which included similar, but not strictly comparable, data from Great Britain and the Netherlands as well as Finland and Italy (Tomassini et al 2004).. The subsequent availability of comparable data for France allows us here to develop the earlier analysis and in particular to consider the French situation.

## **Data and methods**

We used data from recent surveys including relevant data from Finland, France and Italy. The geographic range thus includes countries from northern, western and southern Europe, but unfortunately we were unable to find comparable data from any eastern European country. As noted above for our outcome variable, we chose the proportion of parents aged 65 years or over with at least weekly face-to-face contact with a child. We counted those co resident with a child within the group with at least weekly contact as excluding these would have distorted results given large differences between countries in ages at leaving home. We included in our analysis parental characteristics known or hypothesised to be associated with variations in intergenerational ties or needs for support. These were parental age, gender, marital status, two indicators of socio-economic resources and status, educational level and home ownership, and health status. Age is obviously important both because older age may be associated with support needs which might prompt more frequent contact, and because the youngest of those in our age range might still have children at home (especially in southern Europe as age at leaving the parental home is high). Numerous studies have suggested a gender dimension to family contact with generally higher levels of contact between mothers and children than between fathers and children, and therefore we analysed data for mothers and fathers separately. As already noted, parental marital status and education are also known to be

important. Housing tenure is an indicator of wealth and socio-economic status, although it must be recognised that there are wide differences between European countries in predominant tenure patterns, and thus the meaning of owning a home is not the same in all the countries we consider. Finally, parent's health status is potentially important, as children may respond to parental poor health by increasing contact (conversely, however, parents in poor health may be less able to visit their children). Additionally we included in our analyses an indicator of number of living children as parents with more children clearly have a higher chance of seeing at least one frequently.

The French and Italian data used in this study are nationally representative and the Finnish data come from a Finnish region with similar characteristics to the country as a whole. Brief details of the surveys and used are given below, these include information on the derivation of educational and health status variables which varied from survey to survey.

The Finnish data come from the first round of the longitudinal Good Ageing in the Area of Lahti (GOAL) survey conducted in 2002. Participants were recruited in the Lahti region, an area about 100 km north of Helsinki. The main demographic, social and economic indicators for this region are close to the national average, so the data can be treated as fairly representative of the country. The population-based sample included men and women born in 1926–1930, 1936–1940 and 1946–1950. Altogether 2,815 men and women participated in the baseline survey in 2002. Level of education was operationalised as follows: low (primary education, i.e. 6 years of schooling), medium (intermediate or lower secondary, 7–9 years of schooling), and high (high school graduates and above). The health variable used was based on a question about self-rated health. We dichotomised this into those reporting poor or very poor health versus those reporting fair, good or very good health. The age of those in this survey differed slightly from the age groups included in the studies we use. For the purposes of this analysis, participants in the two oldest cohorts, who were aged 62–66 years and 72–76 years in 2002, were included. From a total of 1,908 respondents we excluded 19 who were not living in private households, 356 who had no children and 16 with missing values, leaving a sample of 1,517. This sample is rather smaller than the French and Italian ones we use which means that the statistical power of analyses based on the Finnish data will also be lower.

The French data come from The Handicaps-Incapacités-Dépendance (HID) Survey carried out by the French National Institute of Statistics (INSEE) in 1998 and 1999 (Désesquelles and Brouard, 2003). The total sample size is 15,000 people living in medical and social institutions and 17,000 people living in private households. The final sample included here comprised 5,421 parents aged 65 and over **living in private household**. The level of education was operationalised as follows: low (primary education), medium (secondary including high school diploma or baccalaureate), high education (beyond this level). The health variable used distinguished those facing difficulties (physical, sensory, intellectual or mental) in their everyday life from those without these impairments.

The 1998 Indagine Multiscopo sulle Famiglie e Soggetti Sociali is the source of the Italian data we use. This is a quinquennial social survey carried out by the National Institute of Statistics. The survey has a total sample of over 59,000 persons living in private household of whom 6,802 parents aged 65 years and over are included here. The Italian education variable distinguishes: high (general secondary education, up to age 18 years, and higher vocational education, college education, university education), medium (general intermediate education, up to 13 years old) and low (primary education or less). The health variable is based on a question on the presence of disability that limited daily activities.

For the descriptive analysis we used the weights provided by the data collectors to expand the results to the target populations. We used logistic regression to model variations in the proportion of parents with weekly contact with children

## Results

The characteristics of the samples used in the analysis are presented in Table 1. Because of the study design, the Finnish sample has a younger age distribution than the other two and the French sample is rather older than the Italian one due to **deliberate over sampling of the oldest old**. These differences should not influence the multivariate results unduly as in these we entered age as a covariate.

**Table 1:** Distribution of parents aged 65 and over (62-76 in Finland) by variables used in the analysis.

	Finland		France		Italy	
	M (n=750)	F (n=767)	M (n=2,203)	F (n=3,218)	M (n=3,061)	F (n=3,741)
<b>Age (years)</b>						
65–74 (62-66 for Finland)	54.3	55.9	51.6	46.1	63.5	58.6
75+ (72-76 for Finland)	45.7	44.1	48.4	53.9	34.4	41.1
<b>Number of children</b>						
1	8.7	19.3	23.4	26.3	25.7	25.7
2	40.8	41.1	32.1	30.8	38.7	36.6
3+	40.5	39.6	44.5	43.0	35.6	37.7
<b>Marital Status</b>						
Married	87.9	62.2	82.5	42.2	84.0	43.8
Single, separated, divorced	7.7	14.0	3.9	5.8	2.4	3.5
Widowed	4.4	23.9	13.6	52.0	13.6	52.7
<b>Education</b>						
Low	79.5	76.3	44.9	54.6	68.6	81.9
Medium	12.3	16.2	43.9	40.4	13.4	7.8
High	8.3	7.6	11.2	5.0	18.0	10.3
<b>Homeowner</b>						
Yes	88.8	86.8	78.6	66.5	80.1	72.8
No	11.2	13.2	21.4	33.5	19.9	27.2
<b>Disability (or bad health)</b>						
Yes	14.1	12.5	22.3	19.7	18.5	25.6
No	85.9	87.5	77.7	80.3	81.5	74.4
<b>Weekly contacts with children</b>						
No weekly contact	36.1	23.9	28.0	24.3	7.8	6.8
Weekly contact	63.9	76.1	72.0	75.7	92.2	93.2

The French sample has a higher proportion of older people with three or more children than the Italian or Finnish samples and Finland has the highest proportion of older people with two children. These differences reflect known variations in historic fertility patterns. France has among the highest fertility levels in Europe for cohorts born before 1930, (Grundy et al. 2004). France and Italy have a similar marital status distribution with high proportions of widowed women. The Finnish data show a high proportion of married and single/divorced older people and a low proportion of widowed people, mainly reflecting the younger age structure of the sample but also higher divorce rates.

All the countries have a high proportion of older people who are homeowners, ranging from 66% among French women to 89% among Finnish men. When education is considered, comparing the countries is difficult due to the different classifications used. Italy and Finland appear to have higher proportions of older people with low education than France. In Italy this is due to the late introduction of minimum compulsory schooling until age 14 years. In Finland compulsory elementary schooling was introduced early, but opportunities for higher education expanded only after the Second World War. France and Italy, but not Finland, show marked gender differences in education, with men being twice as likely as women to have higher levels of education.

It is not possible to compare levels of health due to the differences in the questions and classifications used, but in interpreting the results of the multivariate analyses presented below it should be borne in mind that the Finnish definition distinguishes a rather smaller proportion of people in poor health than is the case in the French or Italian samples.

When contact with children is considered, Italy has very high proportions of older people who have weekly contact with their children (over 90% for both mothers and fathers). In France the level of contact is lower, with 72% and 76% of fathers and mothers respectively seeing a child at least once a week. Weekly face-to-face contact with children is slightly lower still in the Finnish sample with 64% and 76% of older men and women, respectively, seeing a child at least once a week, in interpreting this the slightly younger age of the Finnish sample (and so slightly younger age of their children) should be remembered.

## **Results of multivariate analysis**

Tables 2 and 3 present the results of logistic regression analyses of variations in the proportions of older mothers and fathers with at least weekly face-to-face contact (including co-residence) with any child.

**Table 2** Results from logistic regression analysis of variations in the proportion of mothers with at least weekly face-to-face contact with a child. Coefficients and (standard errors).

	<b>Finland</b>	<b>France</b>	<b>Italy</b>
Intercept	1.29 (0.19)	1.52 (0.11)	3.31 (0.17)
Age (years; ref. 65–74)			
Aged 75+		0.28** (0.09)	0.00 (0.15)
Aged 72+	−0.11 (0.18)		
Education (ref. low)			
High	0.14 (0.35)	−1.02 (0.18)**	−0.31 (0.22)
Medium	0.00 (0.24)	−0.40 (0.09)**	−0.63 (0.21)**
Number of children (ref. 3+)			
1	0.32 (0.25)	−1.08 (0.10)**	−1.11 (0.17)**
2	−0.02 (0.19)	−0.57 (0.10)**	−0.42 (0.18)*
Marital Status (ref. married)			
Widowed	−0.26 (0.21)	0.45 (0.09)**	0.21 (0.15)
Single, separated, /divorced	−0.90 (0.24)**	−0.09 (0.18)	−0.35 (0.31)
Not home owner (ref. home owner)	0.47 (0.28)	0.10 (0.10)	−0.32 (0.15)*
Presence of disability (ref. not disabled)	0.12 (0.27)	−0.15 (0.10)	−0.16 (0.16)

\* $P < 0.05$ , \*\* $P < 0.01$



**Table 3** Results from logistic regression analysis of variations in the proportion of mothers with at least weekly face-to-face contact with a child. Coefficients and (standard errors).

	<b>Finland</b>	<b>France</b>	<b>Italy</b>
Intercept	0.87 (0.17)	2.79 (0.51)	3.32 (0.17)
Age (years; ref. 65–74)			
Aged 75+		0.01(0.10)	–0.21 (0.15)
Aged 72+	–0.13 (0.16)		
Education (ref. low)			
High	–0.64 (0.28)*	–1.01 (0.15)	–0.20 (0.19)
Medium	–0.36 (0.24)	–0.17 (0.11)	0.03 (0.21)
Number of children (ref. 3+)			
1	0.22 (0.23)	–1.14 (0.12)**	–1.04 (0.19)**
2	–0.01 (0.18)	–0.66 (0.12)**	–0.55 (0.18)*
Marital Status (ref. married)			
Widowed	–0.55 (0.37)	0.07 (0.15)	–0.12 (0.20)
Single, separated, divorced	–1.82 (0.33)**	–1.16 (0.23)**	–1.83 (0.29)**
Not home owner (ref. home owner)	0.286 (0.28)	0.14 (0.13)	–0.22 (0.17)
Presence of disability (ref. not disabled)	–0.25 (0.23)	0.13 (0.12)	–0.10 (0.18)

\* $P < 0.05$ , \*\* $P < 0.01$

Results show that in all countries men who were single, separated or divorced (most of whom were divorced) had much lower odds of at least weekly contact with a child than those who were married; in Finland this effect was also apparent among women. Widowhood was not significantly associated with contact with children except in France, where widowed women have higher odds of weekly contact with children than the married. This result is supported by previous longitudinal analyses (Delbès and Gaymu 2002) which showed that among 75 year olds, those widowed since the age of 62 had stronger links with children than those who still married.

Number of children is positively associated with mothers' and fathers' contacts with a child in France and Italy, this is understandable given that parents with more children will have higher opportunities for seeing at least one frequently. The association between level of education and contact with a child is statistically significant for fathers in Finland and for mothers in Italy and France: in all cases higher education is associated with a lower probability of having weekly contact with children. Age, tenure and health status were not significantly related to contact with children in any of the countries analysed.

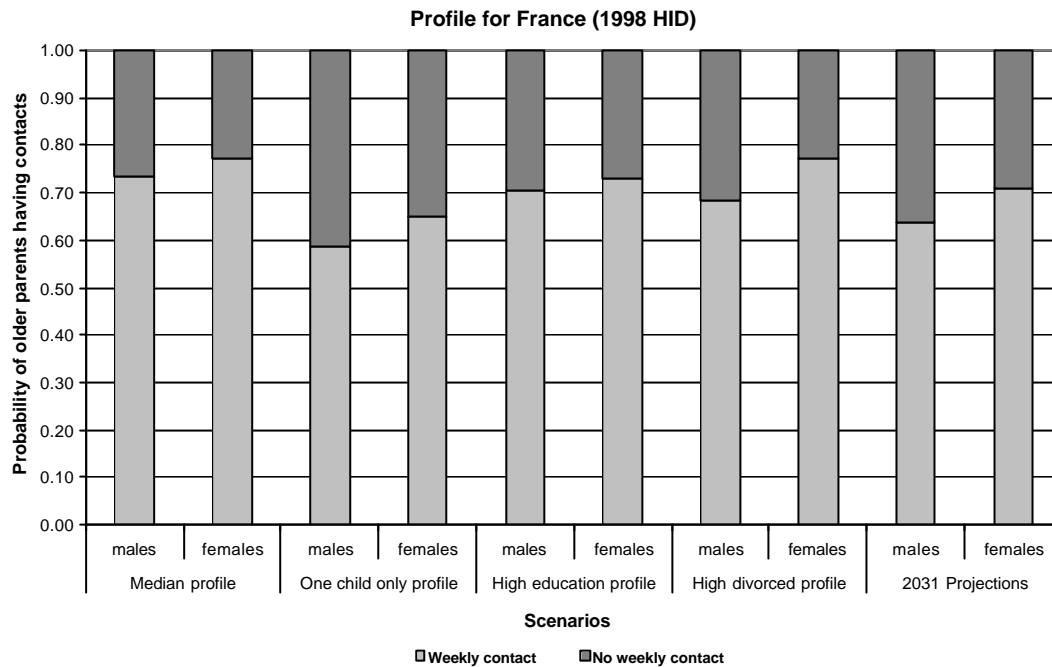
## Future scenarios

One way to illustrate, or project, the possible effect of changes in model parameters is to calculate the probability of the outcome, while keeping constant the effect of the explanatory variables (coefficients) and changing the mean values of the explanatory variables according to previous projection scenarios or specific hypotheses. Elsewhere we have presented alternative scenarios for Finland, Italy, Great Britain and the Netherlands (Tomassini et al 2004) based on five profiles. These were:

- *Median profile*: Median values for all explanatory variables.
- *One-child profile*: All parents have only one child.
- *High-education profile*: Twice the proportion of people with medium education, a doubling of the proportion of men with higher education and a fourfold increase in the proportion of women with this level of education.
- *High-divorce profile*: Proportion of those single, separated or divorced set to 25%.
- *2031 population projections profile*: Based on population projections by marital status (Murphy and Kalogirou 2004) and a doubling of the proportions in medium and high education.

Results showed very little effect for Italy – as levels of contact between elderly parents and children are so high that changing parameters has only a marginal influence- but a slightly greater effect for Finland and Great Britain. The 2031 population projection profile, for example, would result in the proportion of older British men who saw their eldest child at least weekly falling from 46% to 32%, which is quite a large and potentially important change. Here we present the same scenarios for France with one slight change in the high education profile assumptions involving an assumption that the proportion of those with medium levels of education would increase by 1.5, rather than 2. (This is because, as shown in Table 1, the proportions of older French people with this level of education are already quite high and considerably higher than in the other countries we consider). Results of this are shown in Figure 1.

**Fig. 1** Probability of older parents having at least weekly face-to-face contact with a child according to different future scenarios, France (base data 1998 HID survey).



Results show that the greatest difference between the current situation (median profile) and any projected scenario is under the one-child assumption. If all French parents had only one child and the other parameters we have estimated were held constant, then the proportion of older fathers who saw a child weekly would be 59% (compared with 72% in the 1998 HID) and the comparative change for older mothers would be to 65% from the current 77 per cent. This is an extreme assumption: analysis of the distribution of living children for parents aged 45 to 49 in 1999 (that therefore will be aged 75 and over around 2030) show that around 24 per cent of mothers and 28 per cent of fathers will have only one child. With these values the projected probability of meeting the children at least once a week will basically remain unchanged in France. We need to remember though that here we only consider *parents* and the proportions of older people in France (and elsewhere) who will have no children at all is also projected to increase, although not until 2030 (Murphy and Grundy 2003).

## Discussion

There are a number of limitations to these results. We have considered only one indicator of intergenerational solidarity – frequent face-to-face contact- and have taken no account of exchanges of help and emotional support, the provision of care or the quality of relationships. Nevertheless it seems reasonable to suppose that seeing parents or adult children regularly is an important part of a potentially supportive relationship and that there is some association between frequent contact and other behaviours perhaps of greater interest to policy makers, such as provision of help by elderly parents to adult children and provision of help, including care, by children to elderly parents with disabilities. In terms of the indicator we have used here, the results do, as previously noted, lend some further support to well documented accounts of a higher level of family interaction in Southern countries (here represented by Italy) and a lower level in Northern countries (exemplified here by Finland), with France lying in between. In both France and Italy, but not Finland, men and women tend to have similar frequency of contact with children. The result for Italy confirms previous studies on intergenerational exchanges in countries where strong ties are less likely to create privileged dyads between parents and children (e.g. mother-daughter; Tomassini et al. 2003). It is also possible that this finding partly reflects the fact that for married couples only one spouse was interviewed, and he/she may have attributed to the spouse the same level of interaction with children that he/she had.

When the determinants of the probability of having at least weekly contact with children were analysed, results showed that being divorced, separated or never married had a significant effect in lowering fathers' contact with children in all the countries considered. This result confirms previous studies on the topic (Cooney and Uhlenberg 1990; Kaufman and Uhlenberg 1998; Grundy 2005.) For mothers the effect of being divorced, separated or never married is significant only in Finland, possibly a consequence of greater gender equality (as evidenced by less disparity in levels of education). The number of children is significant for parents' contact in France and Italy but not Finland.

Since the majority of determinants that we considered show no significant effect on the probability of at least weekly contact with their children, our results suggest that contact is related to other variables that we have not been able to include in our analyses. Information on children's characteristics (such as geographical proximity, age, employment and marital status) would help to implement the models, but unfortunately not all the surveys considered included such variables. Even if it is true that in Finland a high proportion of highly educated parents combined with the significant effect of fathers' education helps to explain the low proportion of men having contacts with their children, this finding is marginal in the explanation of the differences between Finland and the other countries. However, it must also be remembered that some of the sample sizes available were relatively small, and therefore the power of the analyses may not be sufficient to identify relatively small effects. The limited number of common explanatory variables that we had in the surveys available is another important constraint.

Regarding future scenarios in intergenerational exchanges our results suggest that demographic and socio-economic changes that may occur in the coming decades have a limited effect on the probability of French parents having weekly contact with their children, *given* current propensities. Lower parity and more divorced or single parents and more education will decrease the probability of intergenerational contact but not in a remarkable way. An exception to this is that a move towards a one child family would have an effect large enough to be important for policy. We are unable to predict what if any changes in family solidarity may occur, but the few attitudinal data at European level show very little change in the sense of responsibility of young generations towards their parents (European Commission 1997). In terms of future research needed, clearly analyses which included a wider range of indicators of intergenerational exchange and solidarity would be valuable. Additionally, sub-national analyses of France and Italy, both of which are large countries with internal 'North' and 'South' divisions might through valuable light on the role of cultural influences on intergenerational exchange.

**Acknowledgements** The research reported here was conducted as part of the European Union project Future Elderly Living Conditions In Europe (FELICIE), European Union Fifth Research Programme Framework, Quality of Life). P.M. was supported by the Academy of Finland (70631, 48600). These results were presented at a workshop organised under the auspices of the European Association for Population Studies Working Group on Demographic Change and the Support of Older People held in Paris in xxx. The paper draws on an earlier version published in English (and including a different range of countries) in the European Journal of Ageing (Tomassini et al 2004).

## References

- Attias-Donfut C (1995) *Les solidarités entre générations*. Nathan, Paris
- Banfield E (1958) *The moral basis of a backward society*. Glencoe, New York
- Barrett AE, Lynch SM (1999) Caregiving networks of elderly persons: variation by marital status. *Gerontologist* 39:695–704
- Bartiaux F (1991) La composition des ménages des personnes âgées en Italie. *Eur J Popul* 7:59–98
- Clark RL, Wolf DA (1992) Proximity of children and elderly migration. In: AM Warnes (ed) *Elderly migration and population redistribution: a comparative study*-. Belhaven, London, pp 77–96
- Cooney TM, Uhlenberg P (1990) The role of divorce in men's relations with their adult children after mid-life. *J Marriage Fam* 52:677–688
- Delbès C, Gaymu J (2002) The shock of widowed on the eve of old age : male and female experiences, *Population-E* 2002, 57(6), 885-914.
- Desequelles A, Brouard N (2003), The family networks of people aged 60 and over living at home or in an institution, *Population –E* 2003, 58 (2), 181-206
- Dewit DJ, Wister A, Burch TK (1988) Physical distance and social contact between elders and their adult children. *Res Aging* 10:58–80
- European Commission (1997) *The young Europeans*. Eurobarometer 47.2. European Commission, Brussels
- Farkas JI, Hogan DP (1995) The demography of changing intergenerational relationships. In: Bengtson VL, Schaie KW, Burton LM (eds) *Adult intergenerational relations*. Springer, Berlin Heidelberg New York
- Glaser K, Hancock R, Stuchbury R (1998) *Attitudes in an ageing society*. Research sponsored by Age Concern England for the millennium debate of the age. Age Concern Institute of Gerontology, London
- Grundy E (2005) Reciprocity in relationships: socio-economic and health influences on intergenerational exchanges between Third Age parents and their adult children in Great Britain. *The British Journal of Sociology* 56, 233-255.
- Grundy E (1996) Population ageing in Europe. In: Coleman D (ed) *Europe's population in the 1990's*. Oxford University Press, Oxford
- Grundy E, Shelton N (2001) Contact between adult children and their parents in Great Britain 1986–1999. *Environ Planning A* 33:685–697
- Grundy E, Murphy M, Shelton N (1999) Looking beyond the household: intergenerational perspectives on living kin and contacts with kin in Great Britain. *Popul Trends* 97:19–27
- Grundy E, Kalogirou S, Tomassini C (2004) *The future of family networks and the support of older people in Europe: synthesised report for the FELICIE project*. London School of Hygiene and Tropical Medicine, London
- Höllinger F, Haller M (1990) Kinship and social networks in modern societies: a cross-cultural comparison among seven nations. *Eur Soc Rev* 6:103–124
- Kaufman G, Uhlenberg P (1998) Quality of relationships between adult children and their parents. *J Marriage Fam* 60:924–938

- Keilman N (1987) Recent trends in family and household composition in Europe. *Eur J Popul* 3:297–325
- Lawton L, Silverstein M, Bengtson VL (1994) Affection, social contact, and geographic distance between adult children and their parents. *J Marriage Fam* 56:57–68
- Lowenstein A, Katz R, Mehlhausen-Hassoen D, Prilutzky D (2003) A comparative cross-national perspective on intergenerational solidarity. *Retraite Societe* 38
- Lye DN (1996) Adult child-parent relationships. *Annu Rev Soc* 22:79–102
- Lye DN, Klepinger DH, Davis HP, Nelson A (1995) Childhood living arrangements and adult children's relations with their parents. *Demography* 32:261–281
- Murphy M, Grundy E (2003) Mothers with living children and children with living mothers: the role of fertility and mortality in the period 1911–2050. *Population Trends*, N. 112: 36–45
- Murphy M (1996) The dynamic household as a logical concept and its use in demography. *Eur J Popul* 12:363–381
- Murphy M, Kalogirou S (2004) Population projections of those aged 75 and over by marital status, age and sex for the nine Felicie countries over the next three decades: synthesised report for the FELICIE project. London School of Economics and Political Science, London
- Pampel FC (1983) Changes in the propensity to live alone: evidence from consecutive cross-sectional surveys, 1960–1976. *Demography* 20:433–447
- Prioux F (1993) L'infécondité en Europe. In: Rallu J-L (ed) *European population, vol 2: demographic dynamics*. Libbey Eurotext, Paris
- Reher DS (1998) Family ties in western Europe: persistent contrasts. *Popul Dev Rev* 24:203–234
- Solinge H van (1994) Living arrangements of non-married elderly people in the Netherlands in 1990. *Ageing Soc* 14:219–236
- Sundström G (1994) Care by families: an overview of trends. In: OECD (ed) *Caring for frail elderly people*. Organisation for Economic Co-operation and Development, Paris, pp 15–55
- Tomassini C, Kalogirou S, Grundy E, Fokkema T, Martikainen P, Broese van Groenou M, Karisto A (2004) Contacts between elderly parents and their children in four European countries: current patterns and future prospects *European Journal of Ageing*, N.1, pp. 54–63
- Tomassini C, Glaser K, Askham J (2003) Getting by without a spouse: living arrangements and support of older people in Italy and Britain. In: Arber S, Davidson K, Ginn J (eds) *Gender and ageing: changing roles and relationships*. McGraw/Hill, London, pp. 111–126
- Tomassini C, Glaser K, Wolf D, Broese van Groenou M, Grundy E (2004) Living arrangements among older people: an overview of trends in Europe and the USA. *Population Trends* 115:24–34
- Walker A (1993) Age and attitudes: main results from a Eurobarometer survey. Commission of the European Communities, Brussels
- Zunzunegui MV, Béland F, Otero A (2001) Support from children, living arrangements, self-rated health and depressive symptoms of older people in Spain. *Int J Epidemiol* 30:1090–1099 63