Fertility history and intergenerational exchanges in later life

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Introduction

An extensive literature has documented variations over time and space in the living arrangements of older Europeans and other indicators of intergenerational exchange (Grundy 1996; Palloni 2001; Pampel 1992; Sundström 1994; Tomassini et al. 2004; Wolf 1995). Coresidence, proximity and contact between parents and children may be regarded as vehicles for the provision of social and financial support and thus retain some value as indicators of family solidarity. For this reason, many studies have focussed on the determinants of living arrangements and other indicators of family exchanges. Demographic, socio-economic and cultural factors have all been advanced as important determinants of intergenerational transfers.

Many studies have shown a positive association between fertility indicators and family exchange, that is, older individuals with more children are less likely to live alone than those with fewer children and are more likely to have weekly contact with a least one of them (Mutchler, 1992; Wolf, 1994, Tomassini et al. 2004). In a macro perspective kin availability has been demonstrated to be an important predictor of changes over time in the pattern of solitary living among older women (Wolf, 1995). However, some studies that have examined the effect of smaller family sizes on co-residence with children in later life, have shown that reduced fertility has only a modest impact on living arrangements; (Knodel 1992) and research from England and Wales found no association between number of children and contact between parents in late mid life and frequent contact with a child (Grundy and Shelton 2000). It has been suggested that results such as these may be because the contribution children make towards support of their parents is modified by sibship size, i.e. only children or children with just one sibling contribute more than children from larger sibships.

Smaller families may result in postponement of residential independence among young adults both through a reduced influence of the 'crowding' effect on decisions to leave the parental home, and through greater access to parental resources (Grundy 1999). Parents may also invest more in their only child in order to keep him or her in close proximity. A study showed that parental housing assistance in Italy played an important role in later proximity between parents and children, and that the effect was reduced in larger families (Tomassini et al. 2003).

Given the growing concern about reduced fertility in some European regions and possible consequences for support to older people expressed by policy makers, the aim of this study is to explore the effects of fertility quantum and timing on

intergenerational exchanges in later life. This association will be investigated in three in different cultural contexts; Italy a "familistic" country where family support is the prevalent source of help for older people; the Netherlands (where the generous State provision of services may affect the strength of such an association), and England and Wales, which has a "liberal" welfare regime (where the interplay between family and public services may be more complicated). When possible analyses for both men and women will be included in order to explore different gender paths of fertility histories and their consequences for support in later life.

BACKGROUND

Children availability

Fertility declines occurred in developed countries have followed different patterns in terms of parity distribution. In some countries (e.g. Italy) low levels of fertility were not combined with high levels of childlessness but rather with most people have very small families. In other; countries with higher fertility levels, for example England and Wales, childlessness has been higher. In fact the proportion of childless women in Italy declined for the cohorts born between 1930 and 1955 from 13.7 to 11.1 per cent (Santini 1995, Eurostat 2006), while it increased in England and Wales from 13.0 to 17.3 per cent. As a consequence Italy is characterised by a high proportion of women with low parity. More than two thirds of women born in 1955 had one or two children compared with just over 50 per cent of women born in the same year in England and Wales. Conversely, the proportion of women with more than 2 children has declined substantially in Italy: the proportion of women born in 1955 with 3 or more children is around 22 per cent compared with 37 per cent for cohorts born in 1930. On the other hand the proportion of women with high parity has decreased only slightly in the selected Northern countries, with indeed an increase for cohorts born after 1950.

Recent demographic projections on the availability of children for selected European countries show an increased probability for an older woman to have a living child and this trend will continue for some decades to come (Murphy et al. 2006). Family projections using microsimulation techniques and the ISTAT projected fertility and mortality rates have shown how in Italy the number of women with one or two children is going to increase substantially between 1994 and 2050, while the number of childless women is going to increase just slightly, from 20.6 in 1994 to 23.9 in 2050 (Tomassini and Wolf, 2000).

Despite the fertility decline in Italy (as in other Southern European countries) low childlessness and concentration at low parities coexist with a high level of closeness between parents and children.

An additional common factor that is characterising the fertility patterns in developed countries is delayed reproduction. The timing of fertility (in particular, mean age at fertility and age of the mother at the first and last birth) determines to a large extent whether or not young adult children are still in the parental home when parents reach their 50s and 60s, although trends in home leaving are also important.

Coresidence

A very extensive literature has documented variations over time and space in the living arrangements of older Europeans (Grundy 1996; Palloni 2001; Pampel 1992; Sundström 1994; Tomassini et al. 2004; Wolf 1995). While coresidence does not in itself imply provision of support by adult children to elderly parents (and in some cases may in fact be indicative of support provided by elderly parents to adult children), coresidence may be regarded as a vehicle for the provision of social and financial support and thus retains some value as an indicator of family solidarity.

There has been a well-documented rise in the proportion of older people living alone throughout Europe, as well as in other industrialised countries, since the Second World War, and a correspondingly large decline in intergenerational coresidence (Sundström 1994; Tomassini et al. 2004). However, recent findings show how in the 1990s some countries showed a reversal of earlier trends toward solitary living among older women (Tomassini et al. 2004). For southern European countries, but also for the US, the decline in solitary living has been attributed to increases in the availability of kin with whom older people may co-reside, a result of the ageing of the baby boomers' parents (Macunovich *et al.*, 1995), coupled with increases in the age at leaving the parental home among more recent generations of young people due to longer education, later marriage and later age at establishing stable employment (Billari *et al.*, 2002). Nevertheless, while trends in industrialised countries show similar patterns, intergenerational coresidence continues to vary and is higher in southern Europe than in other industrialised countries.

Proximity

Recent findings on proximity using a truly comparable European dataset showed that 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 (Hank 2006). In Italy data from a national survey conducted in 2003 showed that, when considering a parent's closest child, 34 per cent were living with him/her, 14 per cent were living in the same block and 22 per cent within 1 kilometre, showing that 70 per cent of older parents had at least one child within a distance of one kilometre. It is possible that in Italy a shift from coresidence to close proximity may have occurred in recent years, especially when young couples find it difficult to purchase a new home and need parental assistance in order to get one. A relationship between parents helping their married children in purchasing a new home and proximity with the set of parents that has provided such help has been demonstrated in the literature (Tomassini et al 2003), suggesting a very strong relation between intergenerational transfers and closeness between parents and children.

Contacts

A number of comparative studies generally show that frequent family contact, as well as co residence, is more usual in southern than in northern Europe (Farkas and Hogan 1995; Höllinger and Haller 1990). 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 (Prioux 1993). A recent comparison of several European countries showed how the number of living children was associated with the probability of frequent contact between parents and children in all countries, but the effect was not as strong as expected. A simulation of possible future scenarios of contact with children that combine the observed effects of the explanatory variables with hypothetical changes in population distribution (as for example large increases in the proportion of parents with only one child), suggested that concerns about declining family networks among older people in Europe may be overstated, given the observed high level of frequent contact between parents and adult children and the small effects of the explanatory variables (Tomassini et al. 2004).

Data And Methods

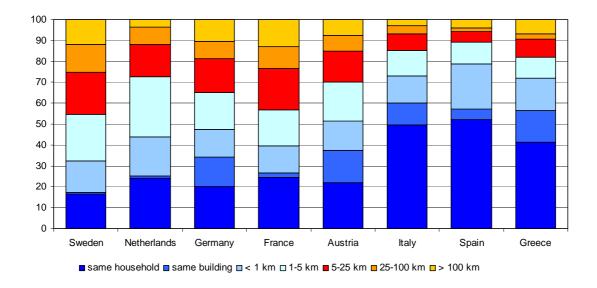
The data used in this section come from analysis of the 2003 Indagine Multiscopo (carried out by the Italian National Institute of Statistics). The full paper will include comparable analysis for England and Wales and the Netherlands using data from the ONS Longitudinal Study, which is based on linkage of micro-data from the 1971, 1981 and 1991, 2001 England and Wales censuses and the Dutch NKPS. The recent SHARE data have been used to provide an overview of the patterns of proximity and contact between older parents and their children.

The Indagine Multiscopo (IMF) survey is carried out every 5 years and is based on a nationally representative sample of the private household population. A wide variety of topics are covered in the survey, including questions on family history, family networks, health status and receipt of help. The 2003 IMF has a sample size of 9098 older parents.

The ONS Longitudinal Study, is a record linkage study initially based on 1% of the population enumerated in the 1971 Census of England and Wales (approximately 500,000 people). Sample members were selected on the basis of birthday and the sample has been maintained by recruitment of new births and immigrants born on LS birthdays. Record linkage has been used to add to the data set information from subsequent censuses (1981, 1991, 2001) and from vital registration, including births to sample mothers, death of spouse and death. In the 1971 Census marital and fertility history information was collected from ever-married women aged 16-59, so for this group near complete fertility histories are available.

Results from SHARE data

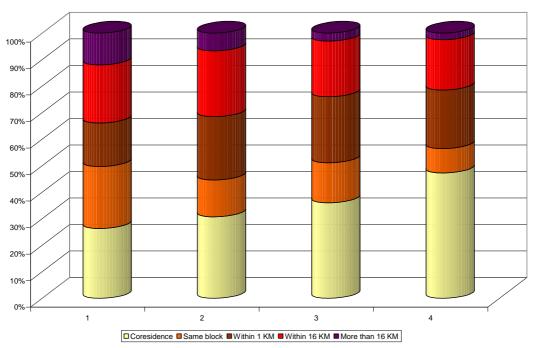
Figure 1 shows proximity between parents and children in selected SHARE countries. As widely known, Southern European older parents are more likely to coreside or to live close to their children when compared to Northern European countries. More than 85 per cent of older parents in Italy and Spain live within a distance of 25 kilometers from at least one of their children compared to 55 and 57 per cent of Sweden and France respectively. Clearly intergenerational distance is also determined by the width of the country that can explain the high proportion of Dutch parents living within 5 kilometers from their children.



Results For Italy

Figure 2 shows how proximity between parents and children follows the expected pattern when the number of living children is considered. Among fathers aged 65 and older the proportion of those still living with their children increases from 26 per cent if they have only one living child to 49 per cent if they have four or more living children. The percentages for mothers are 26 and 47 respectively. The proportion of fathers living more than 16 kilometres away from their children is 16 per cent when they have only one child and 3 when they have four or more (12 and 2 for mothers respectively).

Figure 2: Proportion of mothers aged 65 and over by parity and proximity – Italy 2003 $\,$



Source: Indagine Multiscopo 2003

When face-to-face contact is included, differences by number of children alive are less marked (Table 1): 89 per cent of older fathers have weekly contacts with their children against 95 of those with more than three children. The differences are even smaller among mothers with 92 and 96 per cent respectively.

Table 1: Proportion of parents aged 65 and over by parity and weekly contact with at least one child (including resident children) – Italy 2003

	<i>MEN</i>	WOMEN
1	89	92
2	93	94
3	95	96
4+	95	96

Source: Indagine Multiscopo 2003

Analysis for the influence of timing of fertility on proximity and contact has been run on women only. Having had a child before age 24 does not seem to influence proximity patterns, while having had a child after age 40 clearly increase the probability to coreside with a child.

A logistic regression run on the probability to coreside or to have weekly contact with children for non-coresident mothers shows very interesting results (Table 2).

The probability to coreside with a child is not significantly different for mothers with 1 or 2 children, while increases significantly if she has more than 3 children. Timing of fertility clearly influences the probability of living with a child. Mothers who had a child before age 24, have lower probability to coreside with a child, while having had a child after age 35 significantly increases it.

Table 2. Coresidence with children of mothers aged 65 and over and weekly contact with children for mothers with no coresident children, odds ratios. Italy 2003

	Coresidence	Contact with children
Age	0.976**	1.001
Education (ref. high)		
Low	1.238	-1.068
Number of children (ref. 1)		
2	1.072	
		1.452*
3	1.245*	
		1.586*
4+	1.934**	1.574

Marital Status (ref. married)						
Widowed	1.771**	1.077				
Single/ Sep./Div.	0.890	0.472*				
Not home owner (ref. home owner)	0.532**	0.943				
Presence of disability (ref. not disabled)	1.148	1.180				
Experienced death of a child (no dead children)	0.835	1.283				
Has adopted children (no adopted children)	0.852	0.884				
Had a child before age 23 (no early births)	0.832*	0.768				
Had a child after age 35 (no late births)	2.051**	1.034				

^{*} p<.05; ** p<.01

Reference categories are shown in brackets

When weekly contacts with children for parents with no coresident children are considered, having 2 or 3 children increases significantly the probability to have weekly contact with children if compared to mother of a lone child, but having 4 or more is not significantly different. Timing of fertility is not significantly associated with contact. For both models having experienced the death of a child or having adopted children are not associated with such indicators of family support. An additional model on weekly contact with children was run adding an indicator on mother's age when the last child left parental home and it was coded 1 when the mother was younger than 50 and 0 otherwise. This variable lowers significantly the probability to have weekly contact with children.

Conclusions

Large increases in the number of very old people in many developed societies will almost inevitably lead to greater requirements for assistance of various kinds, even if several United States studies show how age specific disability rates are falling (Freedman et al 2004). Currently families provide much of this care and despite falls in co-residence, levels of intergenerational transfers and support are still high. Our results show that the effect of parity on some indicators of family exchanges is limited in familistic countries. Low parity seems to have a limited effect on coresidence between parents and children in Italy where, the crucial factor for co-residence appears to be having at least one surviving child (Tomassini & Wolf 2000). Moreover, fewer children may result in greater postponement of residential independence among young adults through both a reduced influence of the "crowding" effect on decisions to leave the parental home, and greater access to parental resources. Another study (Tomassini & Grundy 2006) showed that Italian mothers of only children are older when their first child leaves home than are higher parity mothers. Two factors could account for this. First, only children may more often be late-born children and, second, only children

may be older when they leave home. In countries like Italy, where the proportion of women with just one child is increasing, this implies that extended coresidence could partly offset the reduced number of children, although it is important to remember that older parents may provide support to their children, rather than vice versa, and that the onset of health impairments which challenge solitary independent living is unusual before the age of 80.

Additionally it is important to stress how in the mid-term future a decreased proportion of elderly people will have no children (Kalogirou and Murphy 2006). Even in a context of fewer children available for an elderly parent, an important factor associated with family caregiving could be how decisions are made regarding which child provides care. If the *exchange model* is used to explain intergenerational support, the possibility that parents create a special tie with a child (for example in term of housing) may provide parents with a greater probability of receiving care in later life. Therefore even if having fewer children practically restricts the choice of the child with whom parents have privileged exchanges, coresidence and proximity do not seem endangered by reduced fertility. Additionally it is possible that for demographic, and possibly also social reasons, older people will be less able to call on the traditional supports of past generations: for example, never-married middle generation women and other family members (i.e. siblings, nephews and nieces). Third, it should be noted that declines in mortality mean that survival of children into their parents' old age increased considerably in the 20th century (Murphy and Grundy, 2003).

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