## Extended Abstract

## Simultaneous Help to Parents and Children in Multi-Generation European Families

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This paper examines instrumental transfers among families with at least three living generations. The analysis focuses on the behavior of the middle generation and examines whether those who assist either their elderly parents or children - who are mostly young adults - are more or less likely to assist the other generation. Two specific research questions are addressed: 1) is there an association between helping parents and helping children and does that association vary across countries included in the Survey of Health and Ageing in Europe (SHARE)? 2) what characteristics of the parents, children, and the middle generation affect whether help is given to parents and children?

Increasing longevity at older ages in developed countries has produced more families with three, four, or more living generations. Grundy and Henretta (2006) note two possible outcomes. There may be competition for assistance from the middle generation, leading to a negative correlation between helping elderly parents and helping children as the middle generation uses its limited resources of time and money to help one or the other. Alternatively, family solidarity may produce a positive correlation as 'high exchangers' (Hogan, Eggebeen and Clogg 1993) help both generations and low exchangers help neither. Using data from the UK and USA, these authors found a positive correlation between helping parents and children. They also found some evidence that the number and characteristics of children affected the probability of providing help to parents.

Research in Europe has focused on help to parents or help to children separately. Help to children is more common in northern than in southern Europe but is more intense in southern Europe (Albertini et al. 2007; Hank and Buber 2009). Help to parents for such tasks as housekeeping is more common than care given for health limitations. Provision of help is more common in northern Europe but care is more common in southern Europe (Brandt et al. 2007). Still, because of the predominance of help for household tasks, it appears that both help to parents and help to children is more common in northern Europe. This paper extends the focus to the simultaneous provision of help upward and downward by the middle generation.

Based on previous research, the following research hypotheses are examined:

1. There will be a positive association between help to children and help to parents, and this association will be stronger in northern than in southern Europe;
2. The characteristics and needs of both elderly parents and children will influence whether the middle generation helps each of the other generations.

## Data and Research Approach

The analysis is based on middle generation married or partnered households in which at least one of the partners is aged 50-59 and who have one or more living children and one or more living parents. Data are from the 2004 SHARE. Respondents are asked four sets of questions about instrumental help: whether they gave money help of more than $€ 250$ to anyone in the past 12 months; whether they gave any type of time help (except grandchild care) to those outside the household; whether they provided personal care to anyone in the household; and whether they provided care for grandchildren. Data were aggregated at the household level to measure whether the husband and wife gave money help, time help, or care in the household to any parent or parent-in-law; and whether the husband and wife gave money help, time help, care in the household or grandchild care to their children.

Table 1 presents data for different kinds of care, but the later analyses combine all types of help to one generation together. This approach is chosen for two reasons. First, help to parents and children occurs in different currencies as will be shown in Table 1. Examining one at a time does not adequately characterize the overall pattern of helping ascending and descending generations by the middle generation. For example, money help is very common with children but rare with parents. Examining money help separately would not reveal much about help to parents. Second, different currencies can address the same needs. For example, parents may provide grandchild care or give their children money to pay for child care.

## Variables

In addition to help to parents and children, defined above, the analysis includes the following parents' characteristics: a) number of living parents of husband and wife; b) number of parents in fair or poor health; whether all living parents have a c) living male child and have a d) living female child other than the respondent household. Children's characteristics include the e) number of children, f) the number of grandchildren of the respondent household, and g ) the age of the youngest child. Respondent household characteristics include g) purchasing power-adjusted income of the household and three characteristics measured separately for husband and wife: h) the ISCED measure of schooling; i) health limitation in major activities; and j) current employment status.

## Results

Results are presented in Tables 1-4. Tables 1-3 present tabular analyses and are weighted using SHARE wave 1 weights. Table 4 presents a multilevel model for provision of help to parents and children. The implications of weighting in multilevel models are unsettled (Rabe-Hesketh and Skrondal 2006; Brumback 2010) and therefore results in Table 4 are unweighted.

The first column of Table 1 presents the proportion of households providing different types of help to parents and children. Help to parents is almost exclusively time help while help to children is a more complex combination of money, grandchild care, and time help. Help with personal care to a co-
resident of the same household is relatively rare for both groups. The second and third columns are restricted, respectively, to those households helping parents and those helping children. Among those helping parents, virtually the same proportion help children as in the entire population. Moreover, their division of providing time and money help to children is very similar. The same is true of those who help children; their probability of helping parents is nearly identical to the entire population. These results suggest the independence of helping parents and children, a topic that is examined directly in Table 2.

Table 2 presents the cross-classification of help to parents and help to children for each of the countries included in the analysis. The bottom panel of the table presents a log-linear analysis of the three dimensional table -- country by help parents by help children. Model 1 hypothesizes independence of the three factors and is a poor fit to the data. Model 2 allows the probability of giving to parents and children to each vary by country as has been shown in previous research (Albertini et al. 2007; Brandt et al. 2007; Hank and Buber 2009) but does not allow an association between helping parents and children. This model produces a large improvement in fit and is a good fit to the data. Model 3 allows the overall interaction of give to parents by give to children. This model results in a trivial improvement in fit $\left(\mathrm{X}^{2}=\right.$ $.49 / 1 \mathrm{df})$, indicating that giving to parents and giving to children are independent of each other. I conclude that model 2 provides the best fit to the data. There are two important conclusions from this analysis: first, there is no association between giving to children and giving to parents; second, while giving to parents or to children varies by country, there is absolutely no evidence that the association between giving to parents and giving to children varies across countries.

Given this finding of independence, tables 3 and 4 analyze predictors of giving to parents and giving to children separately. Table 3 presents bivariate statistics for the included variables, and Table 4 presents a multilevel model for providing help to parents and providing help to children. The model is a reduced form model that includes variables that influence provision of care to the other generation but not the actual provision of care. Helping the other generation is not included in either equation because the direction of causation is not clear. Moreover, as shown above, help to parents and help to children are independent (though, of course, that might not hold after adjusting for covariates).

The left panel of Table 4 presents a model for help provided to children. None of the parent measures is statistically significant. Among child measures, both number of children, number of grandchildren, and older age of youngest child increase the probability of providing help to children. The pattern of coefficients for number of grandchildren suggests that the birth of the first grandchild increase the probability of helping children but additional grandchildren do not increase that probability further. Increasing levels of help when the youngest child is older probably reflects the emphasis on measures of help outside the household and grandchild care in the SHARE data. Among the couple characteristics, more schooling of both husband and wife increases the probability of providing help, and a husband in poorer health reduces that probability.

Help to parents is more likely when more parents are living, more are in fair or poor health, and one or more of the parents is unmarried. The probability of the respondent household providing help is reduced if each living parent has another female child. Importantly, children's characteristics affect whether the respondent household will provide assistance to parents. Having more children and having two or more grandchildren reduce the probability that help will be provided. Among other variables, greater wife's education increases probability of providing help. In addition, a household with an employed wife is more likely to help. This last result is counter-intuitive.

## Discussion

The analysis presented in Table 2 demonstrates independence of giving to parents and giving to children. There is no overall association between giving to parents and giving to children. In addition, there is no evidence that the help parents by help children association varies by country. Hence there is no evidence to support the first hypothesis.

The key finding of the individual-level analysis is the asymmetry in the factors predicting help provided to parents and children. The characteristics of parents do not affect the provision of help to children. However, the characteristics of children affect provision of care to parents. Having more children and two or more grandchildren reduces the probability of providing help to parents. Hence the data are consistent with hypothesis 2 for the parent equation but not for the child equation. This finding may indicate the primacy of obligations to children.

## References

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Table1: Percent Respondent Households Providing Help of Different Types (SHARE2004 Respondents with One or

| More Living Parents and Children |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | Those | Those |
|  | All | Helping | Helping |
|  | HH | Parents | Children |
| Help of All Types to Parents | 40.4\% |  | 40.9\% |
| Time Help | 38.0\% |  | 39.5\% |
| Money Help | 2.8\% |  | 2.2\% |
| Help Co- |  |  |  |
| Resident | 0.8\% |  | 0.3\% |
| Help of All Types to |  |  |  |
| Children | 53.6\% | 54.3\% |  |
| Time Help | 14.7\% | 14.9\% |  |
| Grandchild |  |  |  |
| Care | 28.5\% | 25.1\% |  |
| Money Help | 29.1\% | 33.4\% |  |
| Help Co- |  |  |  |
| Resident | 2.2\% | 2.8\% |  |

Table 2: The Cross Classification of Give to Children by Give to Parents by Country (SHARE 2004 Respondents with One or More

Living Parents and Children)

| Country | Both | Children Only | Parents Only | Neither | N Households |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 21.2\% | 47.7\% | 6.2\% | 24.9\% | 124 |  |
| Belgium | 32.5\% | 33.4\% | 17.4\% | 16.6\% | 436 |  |
| Denmark | 38.1\% | 28.2\% | 21.2\% | 12.5\% | 206 |  |
| France | 21.9\% | 35.2\% | 17.4\% | 25.5\% | 412 |  |
| Germany | 28.3\% | 32.5\% | 16.8\% | 22.4\% | 234 |  |
| Greece | 15.2\% | 32.6\% | 16.3\% | 36.0\% | 410 |  |
| Italy | 12.1\% | 30.0\% | 20.9\% | 37.0\% | 194 |  |
| Netherlands | 27.7\% | 22.8\% | 27.1\% | 22.4\% | 315 |  |
| Spain | 6.3\% | 23.0\% | 17.0\% | 53.8\% | 121 |  |
| Sweden | 40.1\% | 29.4\% | 14.3\% | 16.3\% | 268 |  |
| Switzerland | 13.5\% | 26.7\% | 32.0\% | 27.9\% | 94 |  |
| Total | 22.0\% | 31.7\% | 18.5\% | 27.9\% | 2809 |  |
| Log-Linear Analysis With Eleven Countries |  |  |  |  | LR $\mathrm{X}^{2}$ | p. |
| 1. Independence (marginals of give to parents, give to children, and country) |  |  |  |  | 215.48/32 | <. 01 |
| 2. Allow give to parents* country and give to children*country interactions |  |  |  |  | 8.72 / 11 | 0.65 |
| 3. Allow give to parents*give to children interaction |  |  |  |  | 8.23 / 10 | 0.61 |

Table 3: Univariate Statistics (SHARE 2004 - Respondent
Couples with One or More Living Parents and Children ( $\mathrm{n}=2809$ )

|  |  | Percent | Mean |
| :---: | :---: | :---: | :---: |
| Give to children |  | 53.6\% |  |
| Give to parents |  | 40.4\% |  |
| Parent characteristics |  |  |  |
| Number living | 1 | 44.6\% | 1.81 |
|  | 2 | 33.9\% |  |
|  | 3 | 17.0\% |  |
|  | 4 | 4.4\% |  |
| Number in fair/poor health | 0 | 24.4\% | 1.12 |
|  | 1 | 47.1\% |  |
|  | 2 | 21.7\% |  |
|  | 3-4 | 6.8\% |  |
| Male child of each parent |  | 62.4\% |  |
| Female child of each parent |  | 58.6\% |  |
| Any parent unmarried |  | 80.2\% |  |
| Children characteristics |  |  |  |
| Number of children of R | 1 | 20.5\% | 2.29 |
|  | 2 | 46.4\% |  |
|  | 3 | 22.8\% |  |
|  | 4 or more | 10.3\% |  |
| Age of youngest child | under 18 | 21.4\% |  |
|  | 18-24 | 36.6\% |  |
|  | 25-34 | 38.7\% |  |
|  | 35 and older | 3.4\% |  |
| Number of grandchildren | 0 | 61.9\% | 0.98 |
|  | 1 | 14.8\% |  |
|  | 2-3 | 15.1\% |  |
|  | 4 or more | 8.2\% |  |
| Respondent couple |  |  |  |
| Male ISCED |  |  | 3.01 |
| Female ISCED |  | 8.2\% | 2.87 |
| Male-severe health limit |  | 19.8\% |  |
| Male-some health limit |  | 72.0\% |  |
| Male - no health limit |  | 6.0\% |  |
| Female- severe health limit |  | 22.9\% |  |
| Female - some health limit |  | 71.1\% |  |
| Female - no health limit |  | 67.8\% |  |
| Male employed |  | 55.2\% |  |
| Female employed |  |  |  |
| PP-adjusted income |  |  | 65,714€ |

Table 4: Logistic Multi-Level Models for Help Provided to Children and Help Provided to Parents (SHARE 2004 - Respondent Couples with One or More Living Parents and Children)

|  | Help Children |  |  | Help Parents |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coef. | Std. Err. |  | Coef. | Std. Err. |  |
| Parent characteristics |  |  |  |  |  |  |
| Number living | 0.013 | 0.069 |  | 0.144 | 0.062 | * |
| Number in fair/poor health | -0.061 | 0.061 |  | 0.271 | 0.057 | ** |
| Male child of each parent | -0.094 | 0.095 |  | -0.106 | 0.086 |  |
| Female child of each parent | -0.099 | 0.094 |  | -0.228 | 0.085 | ** |
| Any parent unmarried | -0.119 | 0.120 |  | 0.714 | 0.113 | ** |
| Child characteristics |  |  |  |  |  |  |
| Number of children of R | 0.234 | 0.054 | ** | -0.105 | 0.048 | * |
| Number of grandchildren |  |  |  |  |  |  |
| 1 vs .0 | 2.209 | 0.157 | ** | -0.036 | 0.126 |  |
| 2-3 vs. 0 | 2.228 | 0.160 | ** | -0.493 | 0.129 | ** |
| 4 or more vs. 0 | 1.998 | 0.211 | ** | -0.450 | 0.176 | * |
| Age of youngest chld |  |  |  |  |  |  |
| $18-24$ vs. under 18 | 0.676 | 0.126 | ** | 0.228 | 0.117 |  |
| $25-34$ vs. under 18 | 0.842 | 0.147 | ** | 0.069 | 0.135 |  |
| 35 and older vs. under 18 | 1.069 | 0.311 | ** | -0.013 | 0.257 |  |
| Respondent couple |  |  |  |  |  |  |
| Male ISCED | 0.078 | 0.038 | * | 0.054 | 0.034 |  |
| Female ISCED | 0.079 | 0.040 | * | 0.091 | 0.036 | * |
| Health limit |  |  |  |  |  |  |
| Male-severe vs. none | -0.436 | 0.179 | * | -0.248 | 0.161 |  |
| Male-some vs. none | -0.115 | 0.120 |  | 0.167 | 0.106 |  |
| Female- severe vs. none | 0.160 | 0.191 |  | -0.034 | 0.166 |  |
| Female - some vs. none | 0.215 | 0.112 |  | 0.096 | 0.101 |  |
| Male employed | -0.057 | 0.112 |  | -0.152 | 0.101 |  |
| Female employed | 0.171 | 0.101 |  | 0.210 | 0.092 | * |
| PPP-adjusted income | . 153 e-6 | . 316 e-6 |  | . 170 e-6 | . 244 e-6 |  |
| Intercept | -1.957 |  |  | -1.516 |  |  |
| Variance between country | 0.142 | 0.081 |  | 0.259 | 0.124 | * |

Notes:

* $\mathrm{p}<=.05$
** $\mathrm{p}<=.01$

