The Structure of Intergenerational Exchange in the UK^{*}

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Abstract

In this paper, I analyse recent survey data on the exchange of practical support and assistance between adult children and their noncoresident parents. Using latent class analysis, three types of exchange relationship are identified: (1) those who rarely exchange assistance with their parents (low-level exchangers), (2) those who regularly exchange assistance with their parents (high-level exchangers), and (3) those who mainly give support to their parents (givers). Since lowlevel exchangers account for three fifths of the sample, it is fair to say that, in contrast to previous research, the overall level of intergenerational exchange in contemporary UK is rather modest. However, the associations between latent class membership and other covariates are broadly consistent with previous research. Finally, members of all three latent classes report substantively similar level of subjective well-being and overall social support received. This suggests that low-level exchangers and givers are able to find substitutes from other types of personal ties for practical and emotional support.

1 Introduction

How strong are the ties between adult children and their parents in contemporary UK? Do they regularly exchange practical help of various kinds with

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each other? Who are more likely to be involved in such exchange? And what are the implications of intergenerational exchange for individual well-being? Are those individuals *not* involved in such exchange able to find support from other types of personal relationship? These are the research questions of this paper.

1.1 Level of intergenerational exchange

There was an important tradition of British community studies in the 1950s and the 1960s (e.g. Firth, 1956; Dennis *et al.*, 1956; Mogey, 1956; Young and Willmott, 1962; Kerr, 1958; Willmott and Young, 1967; Stacey, 1960; Rosser and Harris, 1965; Bell, 1968). Based on ethnographic as well as survey data, they provide a vivid account of the close family ties in those communities at that time. The closeness of family ties arose partly out of necessity, but it was also a matter of choice. Thus, for example, because of the postwar housing shortage, many young couples had to stay with one set of their parents (usually the bride's) for a period of time (Young and Willmott, 1962, ch.2). But when they could afford their own home and managed to find one, many would prefer to live near their parents (see also Mogey, 1956, pp.54–55; Rosser and Harris, 1965, pp.214–215). Young and Willmott (1962) reported that more than two thirds of their working class respondents in Bethnal Green lived within two or three miles of their parents. In this working class neighbourhood, the mother-daughter bond was especially strong, with more than half of the married women reported seeing their mother the day before the interview, and 80 per cent within a week.¹

But it would seem that social change was already afoot. Young and Willmott (1962, ch.9) argued that suburbanisation was weakening the bond of the extended family. And in a companion study, Willmott and Young (1967) reported that extended family ties were weaker for the middle class.² Extrapolating the trends of suburbanisation and the growth of middle class occupations since the 1960s, we might expect the ties between adult children and their parents to have become weaker.

Other social changes in the last few decades are also relevant. For exam-

¹Young and Willmott (1962, p.61) noted that '[after marriage] the daughter continues to live near her mother. She is a member of her extended family. She receives advice and support from her in the great personal crises and on the small domestic occasions'. Very similar pattern were reported by Rosser and Harris (1965, pp.218-219)

²To be more precise, the thesis that Willmott and Young (1967, p.78) advanced is at once stronger and more specific. They argued that social mobility 'creates a barrier inside the family only for men, not for women'. Subsequent research in the US had found little evidence supporting the mobility thesis (see e.g. Litwak, 1960).

ple, there are considerable evidence that young adults from divorced families have less contact with, and often feel less intimate to, their divorced father (Cooney, 1994; Booth and Amato, 1994; Furstenberg Jr. *et al.*, 1995; Grundy, 2005). Given the dramatic rise in divorce rate in the UK since the late 1960s, we might also expect intergenerational ties to have weakened.

[Yet to consider: Affluence and market alternative, fall in fertility rate, growth in public service]

However, in recent research, British scholars are still reporting quite strong intergenerational links. For example, using data from the 1995 British Social Attitudes Survey, McGlone *et al.* (1999, p.154) argue that 'the family remains an important source of help, especially for young families'. Similarly, Grundy (2005, p.233) analyses data from a retirement survey conducted in 1994 and reports that 'between two thirds and three quarters of parents were involved in some sort of exchange relationship with at least one of their children'. She also notes that this exchange relationship is strongly reciprocal, and children are responsive to parental needs. My first goal in this paper is to evaluate these claims with recent, nationally representative data from the British Household Panel Survey (BHPS).

1.2 Factors associated with intergenerational exchange

Having ascertained the overall level of intergenerational support and assistance in contemporary UK, my second goal is to ascertain the covariates that are associated with higher or lower level of intergenerational exchange. I have already touched on some aspects of this (e.g. parental divorce) in the above discussion. For example, adult daughters report more frequent contacts with their parents (Grundy and Shelton, 2001) and a greater likelihood of providing assistance to parents (Spitze and Logan, 1990). The ties between mother and daughter are especially strong, leading many researchers to note that women are kin-keepers (Rossi and Rossi, 1990; Lye, 1996).

Number of siblings is also associated with intergenerational relations. Respondents with siblings tend to live further away from their parents (Shelton and Grundy, 2000), have less frequent contact with them (Grundy and Shelton, 2001), and are less likely to provide help to their parents (Spitze and Logan, 1991).

Another

- Class,
- income, wealth,
- region and geographical proximity,

2 Data and method

In 2001 BHPS respondents were asked whether they have relatives of various kinds who were *not* living with them. Those with a non-coresident mother and/or a non-coresident father were then asked about their parents' age, whether their parents lived together, how far away their parents lived, and how often they kept in touch by visit, telephone and email. But most relevant for the purpose of this paper, respondents were then asked 'Nowadays, do you regularly or frequently *do* any of the things listed on this card for your parents? ... And do you regularly or frequently *receive* any of the things listed on this card from your parents? The eight types of assistance on the relevant show card are listed in Table $1.^3$

Table 1: Percentage of respondents who regularly exchanged help of various types with non-coresident parents (N = 4, 394).

		give	receive
a	Giving them (you) lifts in your (their) car	26.5	12.2
b	Shopping for them (you)	18.2	9.5
с	Providing or cooking meals	9.2	13.4
d	Helping with basic personal needs like dressing, eating	2.1	21.7
	or bathing (Looking after your children)		
е	Washing, ironing or cleaning	5.5	6.4
f	Dealing with personal affairs, e.g. paying bills, writing	12.4	3.3
	letters		
g	Decorating, gardening or house repairs	18.9	9.4
h	Financial	5.5	13.2

The 16 items of Table 1 form the basis of the following analysis. Most quantitative analyses of this type of data consider various types of help, and the giving and receiving of help, *separately* (see e.g. Ermisch, 2004; Grundy, 2005). Thus, for example, they show what proportion of respondents give financial assistance to, or receive financial assistance from, their parents, and then a multivariate analysis would show what covariates predict the giving and receiving of financial help. Typically, there will also be parallel analysis of, say, help with domestic chores. This analytical strategy has the important advantage that they could reveal possibly different mechanisms

³Of the 2,862 respondents with two non-coresident parents, 647 reported that their parents were not living together. Unfortunately, for this group of respondents, the relevant BHPS questions did not specify with which parent the respondents exchanged help.

which underlie the various types of exchange. For example, compared with domestic chores, financial help is less constrained by geographical proximity.

But an alternative strategy would consider the items of Table 1 as indicators of a latent structure of exchange (Hogan *et al.*, 1993; Silverstein and Bengtson, 1997). Rather than analysing the indicators separately, this strategy seeks to reveal the underlying structure. The advantage of this analytical strategy is that it would reveal which types of assistance tend to go together. Also, because this approach explicitly links the giving and receiving of help, it highlights the element of reciprocity in the analysis. It is this approach which I shall adopt in this paper,

Based on the response to the items of Table 1, my first goal is to use latent class analysis to describe the structure of intergenerational exchange as reported by adult children aged 25 to 54 (N = 4,394).⁴ Latent class analysis can be regarded as the categorical counterpart of factor analysis for continuous variables. Latent class models seek to capture the association that exists among observed categorical indicators through a small number of discrete latent classes. In effect, this association is regarded as resulting from a mixture of 'pure' types within the population studied, so that if these types can be identified and separated as latent classes, then *conditional on membership of these classes*, the indicators will become statistically independent of each other. This principle of 'local independence' is key to all latent variable analyses, including latent class models (McCutcheon, 1987).⁵

The object of analysis of latent class models is the crosstabulation formed by the observed indicators. In the present case, the binary response to the 16 items of Table 1 form a 16-way contingency table with 65,536 (i.e. 2^{16}) cells. Since there are only 4,394 respondents, this contingency table is clearly too large to support reliable analysis. Some preliminary data reduction is therefore necessary. In considering which items to combine, I am guided mostly by the pairwise association of the items. It can be seen from Table 9

$$\pi_{ijk}^{ABC} = \sum_{t=1}^{T} \pi_t^X \pi_{it}^{A|X} \pi_{jt}^{B|X} \pi_{kt}^{C|X},$$

⁴Intergenerational exchange as reported by adult children is likely to be different from that as experienced and reported by the parents. I shall address this issue in a separate paper. I have also repeated the analysis of this paper with a smaller sample of adults who live with their own children (N = 2,446). The results obtained for that sample are essentially the same as those reported here. Details are available on request.

⁵Thus, if there are three observed categorical variables A, B, C with I, J and K categories respectively, a latent class model with T classes can be expressed as follows:

where π_t^X is the probability that a person belongs to latent class t, $\pi_{it}^{A|X}$ is the probability that this person is found at level i of A given membership in latent class t, and so on.

in Appendix A that the odds ratios of the responses to items b (shopping), c (providing or cooking meals) and e (washing, ironing and cleaning) are relatively high in relation to both the giving and the receiving of help. Thus, these three items are combined to form a single indicator of 'domestic help'.⁶ Secondly, I am also guided by the substantive reference of the items. Since item f uses paying bills as an example of 'dealing with personal affairs', it is combined with item h to form a single indicator of 'money'. Having combined these items, we are left with a much smaller 10-way contingency table with 1,024 (2¹⁰) cells, which forms the basis of the following analysis.

3 Results

3.1 Latent class measurement model

Table 2 shows that the overall level of intergenerational exchange in contemporary UK was rather modest. At a maximum, 27 per cent of the respondents regularly gave their parents lifts in their car. At the low end, only 2 per cent of the respondents regularly helped their parents with dressing, eating or bathing, which suggests that most of the parents were in good health and consequently did not require intensive personal care. If we were to consider any kind of help, then 44 per cent of the respondents regularly gave assistance to their parents, and almost the same proportion (43%) regularly received parental help. This level of exchange was broadly consistent with results reported in other recent UK studies (e.g. Grundy, 2005). What is not clear from Table 2 is to what extent the giving and receiving of help was reciporal. To answer this question, we need to turn to latent class analysis.

	giving	receiving
lift in car (a)	26.5	12.2
domestic help (b, c, e)	22.2	20.2
personal care or childcare (d)	2.1	21.7
money (f, h)	15.5	14.4
decorating, gardening and house repair (g)	18.9	9.4
Any help (i.e. items a to h)	43.6	42.6

Table 2: Percentage of respondents who regularly exchanged help with non-coresident parents (N = 4, 394).

Note: letters in parentheses refer to original BHPS items, see Table 1.

⁶A positive response from any of the three items would mean a positive response for the combined indicator of 'domestic help'.

When latent class models are fitted to this data, a fairly straightforward pattern can be discerned. Table 3 shows that a model postulating three latent classes fits the data quite well by the conventional standard of 5% of type I error. I report the solution of this three-class model in Table 4. It can be seen that members of the first and largest latent class, which accounts for 60 per cent of the sample, have relatively low level of exchange with their parents. For example, their probability of giving personal care to their parents is practically nought, and the probability of their parents helping them with childcare is only 0.12.

17					
	#latent class	G^2	df	p	BIC
	1	5176.26	1013	0.00	-3320.78
	2	1837.40	1002	0.00	-6567.37
	3	1029.70	991	0.19	-7282.80

Table 3: Goodness of fit statistics of latent class measurement model as applied to data on intergenerational exchange.

Members of the second latent class constitute just over one fifth of the sample (22%). Compared with those in the first latent class, they are involved in intergenerational exchange to a considerably greater extent, though the balance of their exchange is tilted slightly towards receiving rather than giving help, especially when receiving help with childcare (p = 0.52) is compared to giving personal care (p = 0.01). Finally, for members of the third latent class, which make up 18 per cent of the sample, the flow of help generally goes from the respondents to their parents. Given these patterns of intergenerational exchange, I shall refer to the three latent classes as 'low-level exchangers' (Ls), 'high-level exchangers' (Hs) and 'givers' (Gs) respectively.

Overall, our latent class analysis suggests that in contemporary UK the exchange of support and assistance between adult children and their parents is rather limited, at least when compared with results reported in previous research. Clearly, much has changed since the community studies of the 1950s and 1960s.

3.2 Characterising the latent classes

Who belong to which latent class? To answer this question, we need to introduce covariates into the analysis. This can be achieved in several ways. In this paper, I will employ the method of modal latent class assignment, which works as follows. First, I calculate, on the basis of our preferred

		latent class			
		1	2	3	
	relative size	0.601	0.219	0.180	
giving	lift in car	0.057	0.505	0.666	
	domestic help	0.010	0.385	0.729	
	personal care	0.000	0.009	0.105	
	money	0.049	0.164	0.500	
	decorating, etc.	0.063	0.270	0.513	
receiving	lift in car	0.022	0.472	0.034	
	domestic help	0.034	0.668	0.197	
	childcare	0.116	0.517	0.188	
	money	0.062	0.380	0.134	
	decorating, etc.	0.037	0.327	0.003	

Table 4: Relative size of the latent classes and the conditional probabilities of giving and receiving help.

latent class solution (cf. Table 4), the conditional probability of our respondents belonging to each of the three latent classes, given their responses to the ten indicators.⁷ All respondents with a particular response pattern are then assigned to the same latent class—that to which they have the highest, or modal, conditional probability of belonging. With the respondents then distributed among the three latent classes, I can go on to investigate the association between latent class membership and other variables of interest, using the multinomial logistic regression model.

Assigning individuals to modal latent classes inevitably introduces error into the data, no matter how high the modal probabilities might be, and the relative sizes of the latent classes after modal assignment could differ quite significantly from those estimated from the measurement model. However, in our present case, this is not a serious problem. Modal class assignment misclassifies just under 10 per cent of the respondents which is a quite modest level.⁸ Since measurement errors tend to attenuate the association between

$$\pi_{tijk}^{X|ABC} = \frac{\pi_t^X \pi_{it}^{A|X} \pi_{jt}^{B|X} \pi_{kt}^{C|X}}{\sum_{t=1}^T \pi_t^X \pi_{it}^{A|X} \pi_{jt}^{B|X} \pi_{kt}^{C|X}}.$$

⁸Post-assignment, the relative sizes of the latent classes are 0.604, 0.206, and 0.191 respectively, compared with 0.601, 0.219 and 0.180 in the measurement model (see Table 4).

⁷Thus, suppose there are three observed categorical variables A, B and C, the conditional probability that someone belongs to latent class t given that this person is at level i of A, level j of B and level k of C is given by the following expression:

Table 5: Descriptive statistics						
	%		%			
male ^a	45.8	no siblings ^{a}	10.5			
female	54.2	siblings	89.5			
$\operatorname{married}/\operatorname{cohabit}^{a}$	82.1	No child at home ^{a}	46.1			
div/sep/wid	8.4	Youngest child 0–4	24.1			
never married	9.5	Youngest child 5–15	29.9			
London & South ^{a}	36.4	class $I+II^a$	38.9			
Rest of England	47.8	class III	22.1			
Wales	5.1	class IV	8.0			
Scotland	9.5	class V	7.2			
Northern Ireland	1.2	class VI+VII	23.8			
parent's class $I+II^a$	32.0	parents live together ^{a}	50.4			
parent's class III	20.0	parents separated	14.7			
parent's class IV	11.4	only mum alive	25.7			
parent's class V	9.2	only dad alive	9.2			
parent's class VI+VII	27.5					
distance $(<30 \text{ min})^a$	61.4					
distance $(30-60\min)$	11.4					
distance $(60-120\min)$	9.8					
distance (>120min)	17.4					
		mean	sd			
age		37.9	7.8			
parent's age		66.8	9.4			
annual household income ^{b}		33.6	23.2			

variables, the statistical association reported below can be regarded as *conservative estimates*.

Note: a reference category; b in thousand of pounds.

Descriptive statistics of the covariates are reported in Table 5. Much of this table is self-explanatory, but it should be noted that social class of the respondents and their parents are measured in terms of a five-fold version of the Goldthorpe class schema.⁹

Table 6 reports the parameter estimates and standard errors of a multinomial logistic regression in which membership of latent classes is the de-

⁹Unfortunately, there is no information on parental health status. I will, however, be able to include such information in the companion paper which considers intergenerational exchange from the point of view of the non-coresident parents.

pendent variable. It can be seen that younger respondents are more likely to be high-level exchangers rather than low-level exchangers or givers. As are respondents with children. This might reflect a life course process whereby younger respondents and respondents with children have greater needs for assistance and support from their parents. At the same time, the parents of younger adults would be, on average, younger themselves, and thus have less need for support and care from our respondents.

Consistent with past research which suggests that women are kin-keepers [ref], we see that women are more likely than men to be high-level exchangers or givers rather than low-level exchangers. Compared with married respondents, singles are more likely to be high-level exchangers or givers rather than low-level exchangers. Those who are separated, divorced or widowed are more likely than those who are married to be high-level exchangers rather than low-level exchangers or givers. In other words, other things being equal, married respondents are least likely of all to be involved in exchanging help with their parents.

Respondents with siblings are more likely to be low-level exchangers rather than high-exchangers or givers. This finding is consistent with the argument that siblings share out the responsibility of care for parents. But note that this finding is inconsistent with the strategic bequest theory which posits that in order to compete for potential parental bequests, people with siblings will have to be more attentive to their parents.

With London as the reference category, only two of the twelve regional parameters of Table 6 are statistically significant at the conventional 5% level. So, in contrast to results reported in previous research, there is little evidence for regional difference in the pattern of intergenerational exchange. This is mainly because we have controlled for distance to parents in the model. Without the distance parameters, then all but one of the regional parameters, in the contrasts between high-level exchangers and low-level exchangers or between givers and low-level exchangers, would be significant. Thus, the often reported regional differences are due to the fact that many Londoners are inter-regional migrants. The fact that they live further away from their parents means that they are less likely to be exchanging help with their parents.

Table 6 also shows that, social class and household income is not associated with latent class membership. This is also inconsistent with previous research which often reported stronger intergenerational ties among working class respondents. Again, it can be shown that such class difference is, at least in part, due to the fact that working class or low income respondents tend to live closer to their parents. In a model without the distance parameters (not shown), the parameter for classes VI+VII, and that for income

	H v	H v L G v L		G v	Н	
	\hat{eta}	s.e.	\hat{eta}	s.e.	\hat{eta}	s.e.
age	-0.061 **	(0.012)	0.015	(0.012)	0.076**	(0.015)
Youngest child 0–4	0.571 **	(0.125)	0.056	(0.163)	-0.515 **	(0.181)
Youngest child 5–15	0.492 * *	(0.121)	-0.087	(0.127)	-0.579 * *	(0.152)
female	0.513 * *	(0.105)	0.576 * *	(0.118)	0.064	(0.139)
never married	1.092 * *	(0.180)	0.674 * *	(0.235)	-0.418	(0.250)
div/sep/wid	0.840 * *	(0.173)	0.232	(0.195)	-0.608 * *	(0.217)
siblings	-0.825 **	(0.151)	-0.526 **	(0.162)	0.300	(0.183)
Rest of England	0.130	(0.111)	-0.060	(0.123)	-0.190	(0.147)
Wales	0.428	(0.221)	0.430	(0.248)	0.002	(0.277)
Scotland	0.613 * *	(0.166)	0.277	(0.200)	-0.336	(0.222)
Northern Ireland	0.799	(0.487)	1.312 * *	(0.469)	0.513	(0.524)
class III	-0.009	(0.132)	-0.108	(0.155)	-0.099	(0.176)
class IV	-0.046	(0.197)	0.247	(0.211)	0.293	(0.252)
class V	0.007	(0.192)	0.032	(0.226)	0.025	(0.260)
class VI+VII	0.044	(0.138)	-0.009	(0.156)	-0.053	(0.182)
household income	-0.133	(0.069)	0.053	(0.099)	0.186	(0.108)
parent–class III	0.231	(0.136)	0.164	(0.167)	-0.066	(0.189)
parent–class IV	0.117	(0.161)	-0.101	(0.215)	-0.217	(0.238)
parent–class V	-0.022	(0.185)	0.509*	(0.204)	0.531*	(0.240)
parent–class VI+VII	-0.118	(0.136)	0.505 * *	(0.151)	0.623 * *	(0.177)
parent's age	0.012	(0.009)	0.063 * *	(0.010)	0.051 * *	(0.011)
parent separated	-0.403 **	(0.136)	0.685 * *	(0.161)	1.088 * *	(0.184)
only mum alive	-0.167	(0.154)	1.138 * *	(0.140)	1.305 * *	(0.174)
only dad alive	-0.714 **	(0.205)	0.039	(0.183)	0.754 * *	(0.245)
distance $(30-60\min)$	-0.889 **	(0.161)	-0.772 **	(0.175)	0.118	(0.216)
distance (60–120min	-1.669 **	(0.218)	-1.175 **	(0.201)	0.495	(0.277)
distance $(>120\min)$	-2.170 **	(0.197)	-2.221 **	(0.219)	-0.051	(0.282)
constant	2.161*	(0.854)	-6.898 * *	(1.189)	-9.059 * *	(1.306)

 Table 6: Multinomial logistic regression model: latent class of exchange relationship as the dependent variable.

are significant for the contrast between high-level exchangers and low-level exchangers.

Turning to social origin, it can be seen that, compared with respondents of salariat origin, those with working class parents are more likely to be givers rather than high-level or low-level exchangers. This is again inconsistent with the strategic bequest theory which posits that resourceful salariat parents would be able to command more attention from their children. Quite the contrary, precisely because working class parents are likely to have less resource to buy in services, our result would suggest that our respondents are sensitive to parental needs. This interpretation is corroborated by the parameters of parent's age, in which respondents with older parents are more likely to be givers rather than high-level or low-level exchangers.

There is also evidence that parental divorce and parental survival status affect intergenerational exchange. Thus, compared with respondents with two parents who lived together, those with separated or divorced parents are more likely to be givers rather than high-level or low-level exchangers, and are more likely to be low-level exchangers rather than high-level exchangers.¹⁰

If there is only one surviving parent, then the pattern of intergenerational exchange depends on the parent's gender. Respondents with a non-coresident mother are more likely to be givers rather than high-level exchangers or lowlevel exchangers. But those with a non-coresident father are more likely to be givers or low-level exchangers rather than high-level exchangers. This is partially consistent with the view that because mothers typically have invested more than fathers in maintaining familial relationship in the past, mothers tend to be closer with their children later on in life.

Discussion on the distance parameters

3.3 Does intergenerational exchange matter?

To summarise our results so far, we have seen that sixty per cent of our respondents have relatively low level of exchange with their non-coresident parents, which is a lower proportion than that reported in previous research. At the same time, though, covariates of membership in one or the other three latent class are consistent with previous research.

But does intergenerational exchange matter? For example, are low-level exchangers socially more isolated? Could they find support and assistance

¹⁰The interpretation of this parameter is problematic, because as indicated in note 3 above, in cases where the parents are separated, it is not clear from the questionnaire with which parent the respondent is interacting. Furthermore, there is no information of the timing of parental separation, which might be important in affecting subsequent parent–children interaction.

from other sources? We could address these questions by turning to other questions in the BHPS. In 2001, BHPS respondents were also asked whether there is anyone from *outside* their household they could rely on to deal with problems of various type.

In 2001, BHPS respondents were also asked 'Is there anyone you could rely on to help you from *outside* your own household, (a) if you were feeling depressed; (b) if you needed help finding a job for yourself or a member of your family; (c) if you needed to borrow money to pay an urgent bill like electricity, gas, rent or mortgage?' Then there were five further questions on emotional support: (d) 'Is there anyone who you can really count on to listen to when you need to talk?' (e) 'Is there anyone who you can really count on to help you out in a crisis?' (f) 'Is there anyone who you can totally be your self with?' (g) 'Is there anyone who you feel really appreciates you as a person?' (h) 'Is there anyone who you can really count on to comfort you when you are very upset?'

Table 7: Percentage of respondents enjoying social support of various kinds, and mean reported GHQ score.

	L	Η	G
a. depressed	83.4*	90.6	84.7*
b. find job	63.3*	71.7	63.2*
c. borrow money	78.3*	90.3	77.1*
d. listen	90.4*	95.0	92.4*
e. help in crisis	89.9*	95.9	91.8*
f. relax with	90.5*	94.3	92.2*
g. really appreciate you	89.2	92.0	88.6
h. offer comfort when upset	88.4*	94.5	91.5*
GHQ score (mean)	11.3*	11.8	11.7
GHQ score (s.d.)	5.6	5.9	5.6

See text for question wordings, * p < .05 for L–H and G–H contrasts (one-tail tests).

The top panel of Table 7 shows the percentage of respondents answering in the affirmative to these questions. Three points are notable here. First, the differences between low-level exchangers and givers are minimal. Secondly, compared with low-level exchangers or givers, high level exchangers were consistently more likely to report having someone who could provide various kinds of practical and emotional support, and that these differences are mostly statistically significant at the 5% level. However, and this is the third point, the difference between the three latent classes are, in substantive terms, quite small. For example, for item c where the greatest difference is observed, 90 per cent of high-level exchangers reporting having someone from whom they could borrow money to pay for an urgent bill, 78% and 77% of low-level exchangers and givers respectively also said yes to this question. The same pattern is observed when we compare mean GHQ score across latent class (see bottom panel of Table 7).¹¹ It is true that, on average, highlevel exchangers have higher GHQ score than low-level exchangers or givers, and that the L–H difference is statistically significant. However, the substantive difference between the three classes are very small. Thus, it would seem that most of our respondents have someone on whom they could rely to

to support enderly	parents	wittiiii	latent (Jass.
	low	high	givers	overall
strongly agree	5.5	6.2	10.0	6.3
agree	33.5	32.1	32.7	33.0
neither	29.6	32.1	30.2	30.3
disagree	26.8	26.2	22.4	26.0
strongly disagree	4.7	3.3	4.7	4.4
N	1414	545	361	2320

Table 8: Expressed attitudes regarding obligations to support elderly parents within latent class.

"Adult children have an obligation to look after their elderly parents"

4 Summary

A BHPS items on exchange between adult children and non-coresident parents

 $^{^{11}}$ GHQ (General Health Questionnaire) score is a measure of overall subjective well being. It is derived from a battery of 12 questions, running from 0 (the least distressed) to 36 (the most distressed).

	a	b	с	d	е	f	g	h
a lift		9.11	5.95	3.79	4.58	6.57	6.66	3.75
b shopping	9.77		9.71	4.06	10.77	12.08	5.24	4.84
c cooking	5.81	11.84		3.02	9.95	7.02	4.30	4.14
d care	4.28	31.14	17.79		3.24	2.77	3.16	2.86
e washing	3.32	22.65	17.96	34.82		7.66	5.89	2.96
f personal	4.86	8.81	5.63	11.54	9.28		4.45	12.79
g decorating	4.52	5.61	3.64	5.87	5.02	4.27		3.17
h finance	2.78	3.60	3.14	4.11	3.78	6.58	3.55	

Table 9: Pairwise association of BHPS items of intergenerational exchange.

Note: Lower triangle refers to help given to parents, and upper triangle refers to help received from parents.

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