International Union for the Scientific Study of Population, XXV International Population Conference Tours, France July 18-23, 2005

Session 606: Intergenerational Relations in the Context of Population Ageing

The role of private-level transfers in maintaining solidarity across generations – support from child to ageing parent in New Zealand¹

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Acknowledgements: This paper draws on data from a survey conducted as part of the project 'Transactions – Mid-Life Family' funded by the Foundation for Research, Science and Technology, New Zealand and Lottery Grants New Zealand. The project was carried out by a multidisciplinary team from the University of Waikato, New Zealand.

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¹ Data file is agepchild25b_1_05.

INTRODUCTION

In New Zealand, the thesis of generational conflict associated with population ageing has focused on tensions that may arise if public-level transfers between generations cannot be sustained (Thomson, 1989, 1993), but minimal attention has been paid to the role private transfers at family and kinship levels may play in maintaining intergenerational solidarity. This paper redresses this imbalance by focusing on transfers provided by *midlife individuals* to their ageing parents, and will complement previous New Zealand research which has examined the factors influencing the likelihood of transfers from mid-life parent to their young, adult child.

The broader aim of the paper is to explore at the micro-level of intergenerational transfers (material, financial and emotional) the contention advanced by several researchers (Brody, 1990; Hamill & Goldberg, 1997; Kinsella & Velkoff, 2001) but nuanced by others (Agree, 2003; Evandrou, 2002; Hagestad, 2000; Kohli, Motel-Klingebiel, & Martin Kohli, 2003), that those in mid-life are at the nexus of generational tensions. They may, because of demographic change in the form of delayed family formation and improved life expectancies, find themselves having to meet the potentially competing needs of cosurviving, younger and older generations of their kin network, with the result that these particular intergenerational links of solidarity may be compromised.

We achieve this aim through empirical analysis of the *actual* support that individuals in the early phase of mid-life, aged between 40-54 provide to older members of their kin network, establishing the most influential factors in this process of intergenerational transfer, including some characteristics of a third generation of grandchild. These findings will then be compared with previous analysis focusing on the factors influencing transfers from midlife parent to child, with the purpose of providing a broader framework from which to consider the nature, and potential asymmetry of private transfers in a three-generation structure.

THEORETICAL BACKGROUND

Our empirical analysis draws on the theoretical paradigm of micro-level family solidarity developed and applied by Bengtson and others (Attias-Donfut, 1995b; V.L Bengtson, Olander, & Haddad, 1976; Mangen, Bengtson, & Landry, 1988; Retraite et Société, 2003). The solidarity model originally comprised six elements representing the types of bonds existing between parents and their children, which can be divided into two general dimensions of intergenerational solidarity: (a) structural-behavioural including functional (help with daily tasks), structural (co-residence) and associational (contact) solidarity; (b) cognitive-affective including: affectual (feelings of emotional closeness), consensual (shared opinions) and *normative* (norms regarding responsibility for other generations) solidarity. Testing of the model has concluded that intergenerational solidarity is not a uni-dimensional construct, and that each element may be tested separately, or used to elaborate typologies of solidarity (Silverstein & Bengtson, 1997). More recently the notion of ambivalence has been integrated into the framework (Lüscher, 2004). Our particular focus will be on the structuralbehavioural dimension of solidarity, with functional solidarity as our dependent variable, that is, the likelihood of an ageing parent receiving material, emotional or financial support from their mature, mid-life child.

DATA SOURCES

Data for our empirical analysis come from the 1997 New Zealand survey Transactions in the Mid-Life Family (Koopman-Boyden et al., 2000), providing a sample of 750 males and females aged 40-54. The data set includes some characteristics of all their surviving children and ageing parents. The sample was selected on a nationwide basis and identified by area stratification according to population size. Of all eligible respondents randomly selected for interview, the final success rate for contacts throughout New Zealand was 54%. Although the survey is the only national-level source of unit-record data providing information on family transactions, it does have its limitations. It provides only a limited number of characteristics for the child population and ageing parent (for example no data are available for the ageing parent's marital status, age or ethnicity nor for the child's family nor employment situations) and only on three dimensions of solidarity - association, structure and function. Furthermore, the mid-life individual has acted as a proxy respondent for both the ascending and descending generations of ageing parent and child so we are unable to cross-check the validity of their responses with either group to establish whether our data reflect potential reporting discrepancies (Shapiro, 2004). Finally, data on intergenerational transfers as exchanges of support have been comprehensively recorded only in terms of outward flows from respondent to child and ageing parent groups, so we are unable to examine inward flows of help that the respondent may have received.

Multivariate logistic regression techniques will be used with the purpose of estimating the relationship between transfers of material, emotional and financial support from mid-life parent to ageing parent, and selected covariates for all three generations.

PREVIOUS FINDINGS

Earlier New Zealand work completed on the structural-behavioural dimensions of solidarity between mid-life parent and young adult child provides insight into the factors most likely to influence such transfers. Focusing first on the factors likely to influence *associational* (frequency of contact when parent and child live apart) and *structural* (the likelihood of coresidence between parent and child) solidarity, parental and child gender and ethnicity, as well as parental religious affiliation have been found to exert a significant influence on both dimensions of solidarity (Hillcoat-Nallétamby, Dharmalingam, Koopman-Boyden, & Pool, 1998). Refining this analysis further, neither associational nor structural solidarity were found to be weakened as much as anticipated by the potentially constraining factors of the presence of at least one ageing parent (the grandparent generation), parental income and employment status. These findings suggest that both independent living and communication for the young generation reflect the effects of a natural transition to adulthood, unconstrained by parental resources (Hillcoat-Nalletamby, (under review)).

Extending our analysis to examine the factors influencing *functional solidarity*, that is, the transfers of material (in-kind), financial and emotional support provided by mid-lifers to their non co-resident young, adult children, we find that the likelihood of financial and emotional transfers declines with increasing child age, but that emotional transfers are enhanced when the parent-child bond is not biological. Mothers are significantly more likely than fathers to provide emotional and in-kind help, whilst children whose parents are separated benefit the least from all types of parental transfers. Infrequent contact (association) reduces emotional and financial transfers, and increased geographic distance reduce the likelihood of in-kind and emotional transfers. The presence of a third generation (grandparent of the child generation) reduces the likelihood of a young, adult child receiving

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in-kind help from their mid-life parent, but they will benefit *more* from emotional help if at least one member of the grandparent generation is alive (Hillcoat-Nallétamby & Dharmalingam, 2003).

Finally, confining analysis to triads of non co-resident, mid-life parent, adult child and ageing parent, initial descriptive findings indicate an asymmetry of transfers in terms of the nature of support provided to child and ageing parent generations: compared to their grandparents, the youngest generation receives more financial and in-kind support, but both generations benefit from emotional transfers (Hillcoat-Nallétamby & Dharmalingam, 2002). When an ageing parent receives emotional support, this enhances their grandchild's chances of benefiting from all dimensions of support. No negative relationship is found between the number of ageing parents and the likelihood of children receiving help (Hillcoat-Nallétamby & Dharmalingam, 2001).

At a broader level, initial interpretations of these findings suggest: (a) preliminary evidence of the asymmetrical nature of intergenerational transfers which reflect a more pronounced parental response to the life-course transition needs of youth than to the needs of ageing parents; (b) such an asymmetry can potentially offset the conflicting constraints that mid-life individuals are anticipated to experience in a three-generation context. These tentative preliminary interpretations notwithstanding, we anticipate that transfers will be patterned by gender, suggesting that women in New Zealand continue to play a key role in the maintenance of micro-level bonds of solidarity between generations.

METHODOLOGY

Study Population

The study population for this paper comprises all respondents who have at least one parent or parent-in-law alive but with whom they do not cohabit. Of the total sample of 750 mid-life respondents, only 20 were actually living with an ageing parent or in-law at the time of interview. A focal member of the ascending generation was selected when more than one parent or in-law was alive, based on the following criteria: of all ageing parents or in-laws not living with the respondent, the individual receiving the greatest number of types of assistance from their adult child or child-in-law was selected; amongst those receiving no support, those maintaining the most frequent contact with the respondent were selected. In this way, we have maximized the potential for the mid-life respondent to be exposed to giving help and remaining in regular contact with the ascending generation (Lee, Netzer, & Coward, 1994). This gives a total study population of 584, excluding 4 cases of respondents with no age specified.

We have also included in our analysis, data for the respondent's children, selecting a focal child in the same manner from those aged 15 or more who did not live with the parent. Of all respondents, 287 had a child matching these criteria. The remaining missing values in the data set for the child variables were recoded to correspond to a category of 'no focal child'. The purpose of including this individual is to assess whether the presence of a third, younger generation, has an impact on the way in which the adult child engages in relationships of functional solidarity with their ageing parent.

Finally, we restrict the representation of child characteristics² in this analysis to only one explanatory factor, a functional solidarity variable indicating whether the child has benefited

² The other variables available include gender, age, ethnicity, health problem, birth status and residential proximity to parent.

from *in-kind* help from their parent over the last twelve months (Figure 1). Two reasons underpin this decision. First, to include receipt of emotional support as a child characteristic would suggest a hypothetical link between this factor and the likelihood of an ageing parent receiving in-kind help, an association that we find difficult to substantiate from a theoretical perspective. Second, we assume that this variable will capture the influence of other child characteristics.

INSERT FIGURE 1 ABOUT HERE

Functional solidarity as a dependant variable

The types of help the mid-life respondent has reported providing to their ageing parent at least once within the last twelve months provide the basis for the development of the dependant variable. Responses were first regrouped into three categories to provide an indicator of functional solidarity: *emotional* support provided; *financial* support provided; *in-kind* support provided (Table 1). Each category is treated as dichotomous (1 = respondent) has provided emotional support to their ageing parent, 0 = has not provided this support; 1 = respondent has provided in-kind support to their ageing parent, 0 = has not provided this support; 1 = respondent has provided financial support to their ageing parent, 0 = has not provided this support). As individuals can receive more than one type of assistance, analysis is limited to whether giving at least one type of assistance was reported.

As Table 1 indicates, only a minority of adult children, about 7%, actually reported providing their ageing parent with direct financial help. Comparison of results from bivariate analysis using in-kind and financial dependent variables separately, and then combined as one variable, showed no significant changes in overall results. We therefore decided to merge the small number of cases reported for financial help with in-kind help, leaving two dependant variables.

INSERT TABLE 1 ABOUT HERE

Empirical analysis is completed using multivariate logistic regression techniques, appropriate when the dependant variable has two response categories. Models show how the probability of being in a particular outcome category versus the likelihood of being in another, is modified when the specified independent variables are introduced (Tabachnick & Fidell, 1996). The parameters of the models are expressed as odds ratios, the reference category taking on the value 1.

RESULTS

Types of assistance provided to ageing parents

About a third of respondents say that they have not provided any help to their parent over the past year (Table 1). Of those who have, similar proportions have provided in-kind or emotional support (37% and 39% respectively). The most pressing types of in-kind assistance which appear to be needed are those involving an activity outside the home transport, house maintenance, gardening and shopping - but few require help in the home either with housework or personal health⁴. The category 'other' regroups those types of help for which reportings were less than five percent.

³ Including those to whom respondent has given other types of support or no support.

⁴ (Shapiro, 2004) also makes the distinction between housework and errands (transportation, shopping, errands) because although both represent forms of instrumental assistance, the locus of activity is different; inside or around the household and beyond it.

Characteristics of Respondent, Ageing Parent and Child

A minority of respondents, about a quarter, are in their early fifties, and the majority in a union, but for those who are not, most have experienced separation or divorce (Table 2). A significant proportion, close to thirty per cent, experience a long-term health problem or illness. The study group reflects the predominance of the Pakeha population as a whole and of Christian-based religions, with both Maori and other ethnic groups representing less than fifteen per cent, and Christians about seventy percent, most of the remainder reporting no religion. Predominantly city or town dwellers, respondents are on the whole involved in some form of paid employment, and earning less than fifty thousand dollars per year, and just under one fifth have never completed any educational qualification. About seven per cent have no children and a similar proportion only one, but over one in five have four offspring or more, and about half live in households of four or more people.

ADD TABLE 2 ABOUT HERE

Of the ageing parent population, the majority of whom are female⁵, nearly half have a health problem and a similar proportion live at least one hundred kilometres from their adult child. About one in three represent the respondent's only surviving parent or parent-in-law but six out of ten are related through a maternal kinship bond. Of the child population, slightly more than half are female but only about a third have reached their mid twenties.

Bivariate results

As noted previously, given the very small number of cases of individuals who had provided financial help to their ageing parent, this category is not considered as a dependant variable so our bivariate analysis reflects only two dimensions of functional solidarity – emotional and in-kind support.

We find a significant association between the respondent's age, gender and personal income and both functional solidarity variables (Table 3). Providing emotional support appears to decrease as adult children⁶ (respondents) themselves age, but in-kind help is the most likely when they are in their mid- to late forties. Over forty percent of daughters compared to about a third of sons provide emotional and in-kind help. Interestingly, it is those adult children with the lowest personal income who are the most likely to offer in-kind help (about 40%) and those in the highest income bracket (over 50%) who provide emotional support. Significant proportions in both groups however have refused to provide any information about their income.

Unlike in-kind help, giving emotional support is associated with the adult child's marital status, educational achievement and whether they have a focal child (a child aged fifteen or more and who does not live at home with the respondent). Emotional support is most forthcoming from those currently married or in a de facto relationship, increases the higher the educational achievement and is more likely if there is a focal child who receives support.

⁵ Given the disproportionate number of older women compared to men in our study population (see Table 2), we wanted to see whether results for the dependant variables would differ by gender of the ageing parent. We therefore ran bivariate analysis of the dependant variables with the variable on whether the ageing parent had a health problem, restricting analysis to the females only (results not shown). There was no significant difference in the results, indicating no gender differentials in the relationship between whether the aging parent had a health problem and the likelihood of receiving help.

⁶ We refer to the respondent aged 40-54 as either 'respondent' or 'adult child' of their ageing parent.

ADD TABLE 3 ABOUT HERE

Providing in-kind support shows a weak association with religious affiliation and total number of children: those the least likely to provide support have no particular religious affiliation, and although the relationship is not clearly linear, the higher the number of offspring, the less likely this help will be. Interestingly, providing in-kind help is linked to whether the adult child themselves has a long-term health problem, but in an unexpected direction – those who do, are significantly more likely to provide in-kind help to their ageing parent.

Considering ageing parent characteristics, the strongest association appears between support provided and geographic distance separating households. There does not appear to be a clear negative relationship between receipt of in-kind help and geographic distance as we would expect, although about sixty percent of adult children living within three kilometres of their parents provide this help compared to less than twenty percent for those who live a long way away. Interestingly, although emotional support does not necessarily have to be mediated by distance (it can involve telephone or written contact for example), here we do find a negative relationship – the higher the distance separating the two households, the less likely the receipt of emotional support.

The adult child appears to give preference to their mother or father over an in-law when it comes to emotional support, and there is a weak association between providing this support and the total number of surviving parents or in-laws. If an ageing parent suffers from a long-term health problem, they are more likely to receive in-kind support from their child.

MULTIVARIATE RESULTS

Three models were run for each of the dependant variables representing functional solidarity, in-kind and emotional support. The first set included the ageing parent's characteristics, the second the adult child's (respondent) characteristics as control variables and the third, representing complete models in which the focal child attributes were included. As the estimated effects for parent and adult children's characteristics do not vary substantially across the three models, we present results for the third set of models only (the results for the other models are available from authors). Model 1 assesses the factors influencing the probability of the respondent providing in-kind support to their ageing parent as opposed to not providing it; Model 2 assesses the factors influencing the probability of the respondent providing emotional support to an ageing parent as opposed to not providing it (Table 4).

INSERT TABLE 4 ABOUT HERE

Due to small cell sizes, the category 'other' of the ethnicity variable has been collapsed with 'Maori' so the odds ratios for these results should be interpreted with this in mind. The first two categories of the variable measuring geographic distance (below three kilometres and between three and twenty kilometres) were merged as there was little difference between these two in terms of providing in-kind and emotional support.

Several variables were omitted from the final models: partner's work status was dropped because it was highly correlated with respondent's union status; we retained household size as opposed to the total number of children as we consider the former variable is more likely to capture any direct constraints experienced by the adult child in maintaining links of functional solidarity with their ageing parent. Personal income was dropped as exploratory

analysis showed results were not statistically significant, and a significant proportion of the data were missing. The ageing parent's gender was dropped because this is reflected in the kinship variable. Also, there was an interaction between the two variables.

In-kind support to parents

As we would expect, of the four parental characteristics included (Table 4, Model 1), the distance separating parent and adult child households had the strongest effect on the likelihood of a parent receiving in-kind support: compared to those living one hundred kilometres or more away, those within closer geographic proximity were about five to seven times more likely to have received in-kind help. Even though the estimated effect was greater (odds ratio: 7.65) for parents living between 21 and 100 kilometres than for those living within 20 kilometres (odds ratio: 5.16), the difference in the effect of these distances was not statistically significant. Taken as one group therefore, those living within 100 kilometres are more likely to have received in-kind support from their adult child than those living the furthest away.

Interestingly, although the estimated effects are not statistically significant, the adult child does not appear to make a distinction between mother or mother-in-law when providing in-kind help, but may do when it comes to their father and father-in-law who are less likely to have received this support. This result suggests the predominance of gender over kinship bond, although results are not statistically significant.

ADD TABLE 4 ABOUT HERE

The total number of surviving parents or parents-in-law also has a significant influence on the likelihood of providing in-kind support: while having one or two parents or in-laws alive makes no difference, having three or four clearly reduces the likelihood by almost half. As expected, when a parent has a long-term health problem this increases by about 50 percent the likelihood that they will receive-kind help.

Four of the eleven adult child's (respondent) characteristics included in Model 1 had no significant effect on the likelihood of parents receiving in-kind support. There was no difference between sons and daughters, between the youngest and oldest of children, or between Pakeha (people of European descent) and non-Pakeha (Maori and others). It is only adult children with the highest of educational achievements with bachelors or post-graduate university qualifications who may be more likely than the others to provide in-kind support (about 65% more likely), but this effect is not statistically significant.

Adult children living in rural areas were only just over half as likely (56%) as town-dwellers to provide in-kind help, although again, this effect is statistically weak. Compared to adult children with no religion, those of Christian practice were about two-thirds and twice as likely (65% and 93% respectively) to provide in-kind support to their ageing parent.

If an adult child is not living in a partnership, whether through divorce, separation, widowhood or single-hood, they will be about half as likely as those with a partner to offer in-kind help. Larger household size also seems to decrease the likelihood of providing support: those sharing their household with five or more people for example, are about 60 percent less likely than those in a household of one or two, to help out. Together, it seems that the observed effect of martial status and household size probably represent constraining

factors in an adult child's ability or willingness to provide in-kind support to their parents or parents-in-law.

In terms of employment status, only adult children who are homemakers are more likely to have given in-kind support (but the relationship is not statistically significant), whereas the unemployed are clearly much less likely than those employed full time to have provided it. The age at which the adult child has had a first birth influences this form of functional solidarity quite significantly, particularly amongst those who had a child after the age of 20; they are about twice more likely to have given in-kind support to their parents than those who had their first child in their adolescent years. Surprisingly, parents or in-laws are more likely to have received in-kind support from an adult child who is experiencing long-term health problems.

The last explanatory factor included in Model 1 has been designed to capture the effect of the respondent having a focal child on the likelihood of an ageing parent receiving in-kind help. A focal child, as we have noted earlier is a child aged 15 or more who does not live with their parent⁷. For those who do have a focal child, the variable reflects whether this child received in-kind support from the respondent. Those ageing parents with no focal grandchild were about 66% more likely to receive in-kind support from their adult child compared to those with a focal child (results not shown), but the effect was statistically weak (significant only at p<12%). The results shown in Model 1 therefore combine the existence of a focal child and whether or not this child received in-kind support. Interestingly, an ageing parent is over two times more likely to receive in-kind support when the respondent has no focal child, or if they do, when this child also receives in-kind support. The significance of this result is discussed later on.

Emotional support to parents

Logistic regression results for emotional support received by parents or parents-in-law are given in Table 4. As with the in-kind support described above, we use the estimates from the full model (Model 2). The results show that a limited number of explanatory variables had a significant effect on the likelihood of an ageing parent receiving emotional support.

The residential proximity of ageing parent to adult child does influence this type of transaction, but only when distances separating them are small: when the two generations reside within 20 kilometres of each other, then the parent is over twice as likely as those living more than 100 kilometres away to receive emotional support. The kinship bond between parent and adult child (respondent) proves more important than an ageing parent's gender: both father- and mother-in-law are much less likely to receive emotional support than the respondent's own parents, but for in-laws, this difference is more pronounced for males. The health status of the parents or total number of parents alive did not make any difference to the likelihood of receiving emotional support.

Of all the characteristics of the adult child, only three were of significance. An ageing parent whose adult child had no partner was much less likely to receive emotional support compared to those who did. Emotional support was more forthcoming from adult children the higher their level of educational achievement, and proves to be a factor of significant import: when respondents had achieved at least bachelor level qualifications for example, they were about four and a half times more likely to provide emotional support compared to those who had no educational qualification. As was the case for in-kind support, adult

⁷ This does not exclude the possibility that the adult parent will have other younger children living with them.

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children with a health problem are more likely (more than 50% so) to give emotional support to their parents.

Finally, we come to the relationship between the focal child and the ageing parent's receipt of emotional support. As the estimated effect in Table 4 shows, respondents with no focal child and those with one who receives in-kind help, are four and a half times to six times more likely to provide emotional support to an ageing parent than those who have a focal child to whom they give no in-kind help. As an initial interpretation of these findings which we elaborate further in our discussion, we suggest that what matters here is not the presence or absence of a focal child per se, but rather whether this child actually benefits from support from their own parent.

DISCUSSION OF FINDINGS

Informed by research developed in the field of intergenerational solidarity, the purpose of this paper was to establish the most influential factors affecting the likelihood of an adult child in mid-life providing support to an ageing parent, and to compare these findings with previous research which focused on transactions between the dyad of mid-life individual and their young, non co-residing adult offspring. Our postulate was that these transactions would be structured in particular by gender, and would display an asymmetry across the two dyads in terms of the types of help provided. Underpinning this work has been an investigation of the broader debate surrounding the mid-life period as one in which intergenerational bonds of solidarity may be increasingly compromised as those in this period of the life course confront the potentially competing support or care needs of older and younger generations.

We focus our discussion on two aspects of our results: first, for the dyad of adult child (respondent) and ageing parent, the key factors influencing the receipt of in-kind and emotional support; and second, the comparison of some of these findings with previous work covering the dyad of mid-life parent (respondent) and young, adult child.

Factors influencing functional solidarity

We have found that it is not the *adult child's*, but the *ageing parent's* gender which will exert some influence on these transactions; this factor may increase their chances of receiving inkind help in their roles as mother or mother-in-law. The adult child's ethnicity and age do not affect the likelihood that they will maintain bonds of functional solidarity with their ageing parent, and only those of Christian practice appear to be a little more likely to offer in-kind help.

The most striking of our results however, is that the more successful an adult child has been in pursuing educational qualifications, the more an ageing parent can expect to receive emotional support from them. Could it be that if higher socio-economic status contributes to increased geographic mobility, then adult children may be more likely to substitute in-kind help which requires their physical presence, with emotional help which is not necessarily mediated by proximity? Some support for this interpretation comes from findings on the influence of social class (and income) and its association with geographic mobility. (Rossi & Rossi, 1990) have found that upward mobile adult children (low-income parents and high income children) engage less in exchanges of help than downwardly mobile children (high-income parents, low-income children). In particular, low-income children provide more in-kind help (chores) than high-income children (op. cit: 434). Silverstein and Bengtson (1997) find that higher income is associated with adult children being more likely to have 'intimate

but distant' relations with fathers (strong emotional closeness but not geographic proximity, contact, providing help or receiving help), and this is consistent with the greater geographic dispersion and a lower affiliation to family found amongst higher social classes (op. cit: 450).

Some of the factors we have examined influence both dimensions of functional solidarity. When an adult child has no partner for example (whether through being single, divorced or separated), their ability or willingness to engage in assisting their parent with either emotional or in-kind help is certainly reduced, suggesting that their inaction reflects some constraint, such as time. This said, neither geographic distance (unless they live a considerable distance from their parent – more than one hundred kilometres) nor a personal, long-term health condition appear to deter them from providing either type of support. It also seems that an adult child will be far more likely to maintain these bonds of solidarity with their own ageing parent in two situations: if they themselves do not have a child who has already left home once reaching age fifteen (a focal child); if they do have one, and also continue to provide him or her with in-kind help even though they have left home.

The first two results concur with some international findings on the effect of adult children's marital status in influencing intergenerational bonds of contact or provision of support with parents (Attias-Donfut, 1995a; Hoyert, 1991)⁸, and on the determining effect of residential proximity in regulating the exchange of resources (Arrondel & Masson, 2001; Hoyert, 1991: 217), but the latter two findings require further interpretation.

The more intriguing of our findings is that older parents' receipt of emotional and in-kind help is somehow tied to the likelihood of a grandchild also receiving the latter type of support or of there being no grandchild (that is, no grandchild who has already reached aged 15 and left home, the focal child in this study). Given that these results are net of the influence of all the other individual and group level factors for which we have controlled in the model, we must look for explanations in factors which have not been included.

The first of these is the lack of data on the ageing parent's age. Rossi and Rossi have identified the effect of life course changes in influencing the flow of support provided across the parent-adult child dyad: for example, they find that an increasing number of adult children provide money to their mothers as the latter age (1990) or that daughters provide increasingly more help to mothers with domestic chores as their parents age (op. cit.).

Another explanation could be that we are missing a key interpretative element because we have no data on the normative, affective and consensual aspects of intergenerational relations. Others have found for example, that with higher affective solidarity, comes greater associative solidarity (Roberts & Bengtson, 1990), and in turn, a greater likelihood of the evidence of functional solidarity, particularly financial exchanges (Rossi & Rossi, 1990). Shuey and Hardy, in their study of family allocation decisions regarding intergenerational transfers of assistance between couples and their ageing parent find that those providing financial help to their children were also more inclined to provide help to their ageing parent or in-law. They point to the importance of considering unobserved but underlying dispositions that may influence intergenerational transfers because they represent a trait of generosity underpinning supportive behaviour in certain families (Shuey & Hardy, 2003).

⁸ In the case of parental widowhood however, Rossi and Rossi (1990:403) found that adult children who were unattached (in no partnership) were more likely to give help than married children and (Eggebeen, 1992: 440) found that marital status of adult children were not associated with the likelihood of giving support to a parent.

More recent work focusing on classificatory approaches which identify types of family intergenerational relationships provides a further avenue of explanation. Depending upon the co-existence of varying combinations of the original elements of the solidarity model (Burholt & Wenger, 1998; Silverstein & Bengtson, 1997), or on task-specific functions (Pyke & Bengtson, 1996; Silverstein & Bengtson, 1997; Silverstein & Litwak, 1993), these researchers have provided explanations for differences in family relationships, in terms of transfers of support between adult children and their parents (Berkman, Oxman, & Seeman, 1991). Silverstein and Bengtson's (1997) typology of family types for example, includes 'detached' relations which are qualified by a lack of engagement between adult child and parent on any of the solidarity elements of association, affect, geographic proximity, etc.

Could the respondents in our sample who give less readily to their ageing parent when also failing to provide in-kind support to their own child (the focal child who receives no in-kind help) in fact be displaying a certain type of family relationship or 'culture' with regard to exchanges, governed perhaps by norms, values or attitudes towards their relations with family members? Hung and colleagues research in New Zealand for example, on notions of obligation felt by younger European and Chinese family members to family elders, were able to identify family types through the combination of responses regarding feelings of filial obligation (financial support, respect, obedience, maintaining contact, etc.). They find that divergence with regard to filial obligations is characteristic of parent-child bonds for European families, but that convergence is the norm for the Chinese dyads observed (Ng, Loong, Liu, & Weatherall, 2000).

Exploring this idea further, we have used data from a smaller sub-set of the original Transactions survey obtained from a postal questionnaire containing four questions on the degree of respondents' agreement on the importance of family life. A total of 479 respondents provided information, excluding 19 missing values. Questions were phrased as: "Many of the important things that happen to me involve family", "A lot of my interests are centred around my family", "I am very much involved personally in my family", and "To me, family is a large part of who I am", with responses graded on 1 = strongly agreed to 7 = strongly disagree. We have taken these data as a proxy indication of the importance respondents attach to family life, and they provide the only variable available which goes some way towards capturing the cognitive-affective dimensions of the solidarity model. We constructed an index by combining scores on all four variables, and depending on the frequency with which respondents shared the same scores on each item, responses were classified as weak importance: (23.6% of respondents); moderate importance: (26.5%); and strong importance: (49.9%). Although the new variable is by no means an adequate measure of the cognitive-affective dimensions of solidarity or of the respondents' perceived attachment to family values, when it was included in the regression model for in-kind help (models not shown but results available from authors), the coefficient for the variable 'child receives in-kind help' lost its importance (p-value 0.16), but the new variable had an estimated odds ratio of 1.47 with a p-value of 0.12.

The interpretation we offer of these results is that the two groups of adult children (respondents) who either do not have a focal child, or if they do, then provide them with inkind help, are also more likely to support their ageing parent because they tend to display a strong attachment to 'family values'. Our interpretation is also corroborated by the fact that when the 'family values' variable was introduced into Model 1, two other variables also lost their statistical significant: rural residence and mainstream Christian affiliation. Both represent other values and norms captured by the new variable of family attachment that we have created.

Turning now to health status, our finding that an ageing parent's poor health is likely to improve their chances of receiving in-kind support generally concurs with international work on the relationship between health and exchange of support⁹ (Arrondel & Masson, 2001; Carrière & Martel, 2003; Lowenstein et al., 2003; Rossi & Rossi, 1990). This said, we would have expected an adult child's impaired health status to be a limiting factor in their ability to help. Our findings however indicate the opposite, but are resonate with French research. Arrondel and Masson (2001), in studying mainly inter-vivos family transfers in a three-generational context found that the likelihood of parents receiving help because of a health problem or old age increases when their own adult child also has some health problems (op cit: 437). They offer two possible explanations: the first is the 'demonstration effect' – adult children will reproduce the type of caring behaviour towards parents that they hope themselves to receive from their own children. Second, and along with research on the potential stress related to mid-life responsibilities for caring of dependants, they point out that the cause of the health problems may in fact have be induced as a result of the caring needs of an ageing parent (op. cit: 439).

Arrondel and Masson's first explanation of the 'demonstration effect' bears some relevance to our analysis. Once we had added in the 'family values variable' to Model 1, parental health was no longer significantly related to receiving in-kind support, but the odds remained significant for the respondent's health status variable. This suggests that if the adult child continues to give, despite their own health needs, then their behaviour is influenced by their values (anticipating help in similar situations when they age, as suggested by Masson and Arrondel) rather than purely health status alone.

COMPARISON OF PREVIOUS FINDINGS

Finally, we compare elements of our findings with other research using the *Transactions* data which examined factors influencing flows of emotional, financial and in-kind support from the mid-life parent to a focal child (Hillcoat-Nallétamby & Dharmalingam, In press). The purpose of this comparison is to see whether the relationship of functional solidarity between parent (respondent) and child on the one hand, and adult child (respondent) and ageing parent on the other, display any asymmetry in terms of the influence that given characteristics have on such exchanges. The comparison is done bearing in mind a difference in conceptualisation underpinning each piece of work. In the former, we included all available child characteristics as explanatory factors of parental engagement in functional solidarity; in this paper, we have assumed that child characteristics influence transactions with the ageing parent through the child functional solidarity variables alone (see Figure 1). Comparison is therefore restricted to the influence of respondent and ageing parent characteristics. Furthermore, whilst the analysis for the mid-life parent and child dyad was restricted to a study population of all respondents who had both a focal child and focal parent alive, giving a relatively small sample of 310 individuals, the analysis in this paper has included respondents with and without a focal child.

Asymmetry in help provided

Initial evidence of an asymmetry in the intergenerational transactions across the two dyads is shown both in terms of the overall support provided to each generation, but also in the different types of help provided. Compared to their parent, the mid-life respondent provides

⁹ Rossi and Rossi (1990: 415) find a significant increase in the proportion of adult children helping a parent during a period of illness. (Lowenstein, Katz, Mehlhausen-Hassoen, & Prilutzky, 2003): 64) found that for parents aged 75+, they were more likely to receive in-kind help if they perceived their health and functional capacity were good.

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more to their child: about a third of the ascending generation, compared to a fifth of the youngest group have received no type of help over the past twelve months. The most obvious indication of asymmetry in terms of the types of help given is the almost total absence of any financial support from adult child to ageing parent (see Figure 2), a sharp contrast to the downward flow of financial help from parent to young adult child. The lack of financial transfers is somewhat counterbalanced by the flow of in-kind help to the ageing parent generation, but closer examination of the nature of this help suggests a further asymmetry: overall, the oldest generation receives a greater variety of in-kind help, as indicated by the larger proportion in the 'other' category (close to 20%) where less than 5% of respondents in each case have reported providing other forms of help such as financial advice or help with personal mobility. Of the main categories of in-kind help provided, the child generation benefits more than their grandparents from only two types of help, childcare, and surprisingly, meal preparation.

ADD FIGURE 2 ABOUT HERE

Finally, both generations do benefit from emotional support from the mid-life respondent, although this is clearly to the advantage of the descending generation.

These findings align with other research. In her analysis of transfers across three generations in France, with the pivotal generation aged between 49-53, Attias-Donfut found that financial assistance flowed almost exclusively to the younger generation (Attias-Donfut, 1995b). She also found that young and old generations required specific types of in-kind help: one out of two of the pivotal group provided childcare for their children, and about one out of three help to a parent with a handicap. For financial exchanges (gifts, loans or regular financial assistance) she found that less than five percent of the pivotal group offered regular financial assistance to the parents compared to sixteen percent who did for their children (op. cit: 76).

Although based on older parents' accounts of help they have received, our findings are surprisingly similar in terms of the ordering of the types of help reported in the OASIS survey of urban-based individuals aged between 25-74 and 75+ covering Norway, England, Germany, Spain and Israel (Katz, Lowenstein, Prilutzky, & Mehlhausen-Hassoen, 2003). Across all five countries, respondents aged 75 or older reported having most frequently received emotional support, then transport or shopping, followed by gardening and house repair and finally, the least frequently, personal care and financial assistance. Furthermore, with the exception of Germany, between a quarter and a third reported having received no help at all, a proportion similar to ours (Katz et al., 2003: 177). Rossi and Rossi (1990) in examining flows of help from adult child to parent and parent to child find a similar asymmetry: in the former case, help given is mainly of a personal supportive type (comfort, help during illness) whilst for children, they will benefit more from instrumental and financial help. The interpretation drawn by the authors is that such asymmetries reflect life course phenomena, parents assisting children in their move to adulthood, and assisting older parents with consequences of ageing, loss and illness (op. cit: 396).

Asymmetry of individual characteristics

We have also found evidence of two other forms of asymmetry: first, through the way the same adult child and parent characteristics affect transactions across each dyad, but operate differently depending upon the type of support provided; and second, through the different ways in which transactions across each dyad are influenced independently by adult child and parent characteristics.

In essence, Figure 3 suggests that in their role as adult child, our mid-life respondents will have difficulty providing in-kind, but not emotional help to their parent because of the needs of others – their household members (*h.hold size*) or another parent or in-law (# ascending) (odds ratios in column 1 of Figure 3). However, as a parent, they do not let these factors significantly affect how they help out their child with practical matters (odds ratios column 3 of Figure 3). These same factors however, operate quite differently in affecting the parent's ability to help their child emotionally (column 4 of Figure 3): they will readily continue to provide their child with emotional support once they have left home when their kinship network comprises at least three of their own parents on in-laws (# ascending). The opposite can be said however when they are living in 'crowded' households of three or more people. It appears therefore that the immediate constraints posed by total household size are more likely to reduce the child's chances of emotional support, whereas the 'distant' constraints of a larger network of grandparents will actually enhance it.

ADD FIGURE 3 ABOUT HERE

Although we cannot test the idea empirically from our data, for further research we should ask whether this could perhaps be an indication of a substitution effect whereby the presence of numerous kinship members in a grand-parenting role actually acts to maintain other forms of solidarity across the grandparent-grandchild dyad which run parallel to those in operation across the mid-life parent-child dyad. These 'parallel' bonds of solidarity perhaps buffer or absorb the needs of young, residentially independent adults, hence leaving the parent freer to maintain emotional, but not necessarily other types of support. This idea has been advanced in a broader sense in the literature with regard to the increasingly important role played by grandparents in assisting kin members through situations of family change such as divorce (V.L. Bengtson, 2001).

Turning now to kinship and gender, it is the maternal kinship bond which shapes the transactions between parent and child, with mothers much more likely to continue providing both in-kind and emotional support once their offspring has left home (columns 3 and 4 of Figure 3). Conversely, in their role as adult child, but regardless of whether they are son or daughter, the mid-life respondent does seem to differentiate the help they will provide to the ascending generation in terms of either consanguinity links or gender (left hand columns, Figure 3). On the one hand, they appear more likely to provide in-kind support to females, irrespective of consanguineal or affinial kinship bond (column 1 of Figure 3). On the other, it is clearly the consanguineal kinship bond which predominates over gender and affinial bonds as both mother- and father-in-law are significantly less likely to receive emotional support (column 2 of Figure 3).

The more obvious explanation for these asymmetries in the parent-child dyad is the primacy of the maternal bond in the early life course stage of the parent-child relationship. The adult child-ageing parent kinship bond is perhaps more susceptible to processes of change (divorce for example), which affect the non-biological relations more. Likewise, as suggested by others (Shuey & Hardy, 2003), family decision-making regarding the allocation of resources may be influenced by lineage structures, which in a context of constraint, privilege a greater responsiveness to consanguinial over affinial obligations. This suggestion could be the object of further research for us.

In comparing the effect that health status has on functional solidarity across the two generational dyads, we find further support for Arrondel and Masson's (2001) interpretation of transfer behaviour as a 'demonstration effect' – as parents, personal health status bears no significant impact upon whether they will provide help to their children (columns 3 and 4 of

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Figure 3, *health*). When it comes to their own ageing parent however, despite personal health impediments they demonstrate a willingness to help (columns 1 and 2 of Figure 1, *health*), specifically with support requiring physical commitment (in-kind) – perhaps hoping that this 'demonstration' of intergenerational support in later life will be inculcated through example, and hence transfer into the later life behaviour of their own offspring.

A factor reducing the adult child's engagement in providing support to their parent, but which has no significant effect on their supporting the younger generation is their marital status: being alone as opposed to partnered significantly compromises either in-kind or emotional support (columns 1 and 2 of Figure 3, *marital status*).

Finally, what enhances the support that both child and parent will benefit from is whether the pivotal, mid-life generation has achieved high educational qualifications; this factor however, operates only to enhance their emotional, but not in-kind investment in intergenerational transactions (columns 2 and 4 of Figure 3, *education*).

CONCLUSION

On the argument that the mid-life period will represent one of increasing constraint as individuals deal with the potentially competing demands of older and younger generations, our findings make us question beyond this possibility in search of alternative explanations. First, adult child and ageing parent characteristics which might potentially constrain intergenerational transactions in fact have an unusual effect. A long-term health problem does not inhibit these forms of functional solidarity. The presence of a large network of ascendants enhances emotional support for children. A strong correlation between ageing parent and child receiving in-kind help suggests that support to the ascending generation is not necessarily in lieu of help to the descending generation: this suggests that competition for the mid-life individual's resources is not necessarily a trait of three-generation structures. Furthermore, when potentially constraining factors do have an influence, in the case of total household size for example, their impact upon support provided varies significantly depending upon the nature of the help. The same however can be said for 'enhancing' factors such as the mid-life respondent's educational achievement; the higher it is, the more likely it will induce non-material support which benefits both ascending and descending generations equally well, but does not alter significantly their chances of receiving material help.

What could potentially be significant factors, but which our data only hint at and do not enable us to explore much further, are the effects of the strength of consanguinity over affinity in structuring transactions, and the force of 'family cultures' as unobserved mechanisms at play in regulating these transactions.

The constraints that the mid-life respondent may be encountering as they engage in intergenerational transactions should therefore not be limited to an analysis of the effect of material factors alone, but should also consider those symbolising the cultural significant of kinship, and such aspects of familial relations as obligation, responsibility and normative expectation between generations.

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Table 1: Assistance provided by mid-life respondent to ageing parent at lea	ast once a year. $N = 584^{10}$
Types of assistance ¹¹	% (Yes)
Emotional	39.2
Financial	7.1
In-kind	37.1
a) Gardening	6.4
b) House maintenance	8.5
c) Housework	5.3
d) Personal health	5.0
e) Shopping	6.8
f) Transport	11.1
g) Other ¹²	17.7
None	35.1
Percentages do not add up to 100% due to multiple responses	

¹⁰ Unless otherwise specified, frequency distributions are presented as unweighted and percentage distributions

of the state of th sport; general care; clothing; gift; accommodation; car repairs; social assistance; all; other.

	e distribution of explan			584)
RESPONDENT		%	N	
Gender	Male	49.8	248	
	Female	50.2	336	
Age	40-44	41.7	238	
	45-49	34.6	213	
	50-54	23.7	133	
Marital status	Single/widowed	3.0	51	
	Div/separated	14.3	94	
	Married/defacto	82.7	439	
Employment	Full-time	47.4	260	
	Part-time	11.1	103	
	Self-employ	25.5	121	Includes family business not paid
	Homemaker	12.6	54	Includes students, retired, voluntary
	Unemployed	3.4	46	
Residence	City	65.4	387	
	Town	13.9	93	
	Rural	20.7	104	
Ethnicity	Maori	7.5	26	
	Pakeha	86.1	517	
	Other	6.4	41	Includes Asian and P.Island groups
Religion	None	25.8	148	
	Christian	58.0	328	
	Other Christ.	11.9	74	
	Non-christian	4.2	34	Includes don't know
Educational qual.	None	18.6	101	
	Secondary	42.9	255	
	Tertiary	24.0	140	
	Bach/Post.	14.6	88	
Total children	0	7.2	69	Includes born, adopted, step, foster
	1	7.1	44	
	2	37.1	205	
	3	27.2	153	
	4+	21.4	113	
Age 1 st birth	< 21 years	17.2	100	
U	21+	74.8	410	
	No live birth	8.0	74	
Focal child	Yes	51.6	287	Child aged 15+ not living at home
Has health prob.	Yes	28.7	179	Long-term health problem or illness lasting 6 or more months.
# in household	1	4.1	43	
	2	26.4	155	
	3	20.1	119	
	4	26.1	145	
	5+	23.2	122	
Personal income	<\$30,000	39.9	263	
	30,001-50,000	27.5	148	
	50,001+	19.5	103	
	Don't know	13.1	71	
Child exchanges	No focal child	51.6	287	
In-kind (y/n?)	Receives	14.2	83	
· /	Does not receive	34.2	204	
Emotional (y/n?)	No focal child	51.6	287	
· · · · · · · · · · · · · · · · · · ·	Receives	26.7	156	
	Does not receive	21.7	131	

Table 2 cont.				
AGEING		%	N	
<u>PARENT</u>				
Gender	Male	27.4	155	
	Female	72.5	429	
Health problem?	Yes	47.5	282	
# ascending	1	28.7	183	Total number of parents or in-law alive -
generation				based on respondent's current union only
	2	34.1	205	
	3	20.8	114	
	4	16.4	82	
Kin relationship	Mother	60.5	366	
	Father	23.3	130	
	Mother-in-law	12.2	63	
	Father-in-law	4.1	25	
Distance in kms	≤ 3	12.7	85	
	3-20	29.4	170	
	21-100	12.2	78	
	100+	45.7	251	
CHILD (focal child	d not living with r	esponde	ent and	aged 15+; N = 287)
Gender	Male	46.2	130	
	Female	53.8	157	
Age	<25	64.2	182	
	≥ 25	35.8	105	

RESPONDENT	analysis: Help given b	Emotio		ig parent.	$\frac{76 \text{ (N} - 38)}{\text{In-kind}}$		
KEDI ONDENI		Yes	No	N	Yes Yes	No	N
Age at survey	40-44	43.8	56.2**	238	32.7	67.3**	238
Age at survey	45-49	39.1	60.9	213	43.5	56.5	213
	50-54	31.0	69.0	133	35.2	64.8	133
Gender	Male	35.2	64.8**	248	31.8	68.2***	248
Gender	Female	43.0	57.0	336	42.4	57.6	336
Marital status	Single/widow	27.8	72.2**	51	33.3	66.7	51
iviaritai status	Married/defacto	41.5	58.5	439	37.9	62.1	439
	Div/separated	27.9	72.1	94	32.6	67.4	94
Employment	Full-time	38.2	61.8	260	34.7	65.3	260
Linployment	Part-time	40.3	59.7	103	35.8	64.2	103
	Self	39.6	60.4	121	36.6	63.4	121
	Homemaker	42.1	57.9	54	50.0	50.0	54
	Unemployed	33.3	66.7	46	28.6	71.4	46
Residence	City		59.9	387	39.8	60.2	387
Residence		40.1				_	
	Town	35.7	64.3	93	29.8	70.2	93
Ethnisit	Rural	38.7	61.3	104	33.6	66.4	104
Ethnicity	Maori	34.1	65.9	26	42.2	57.8	26
	Pakeha	40.0	60.0	517	37.7	62.3	517
D -1:-:-	Other (+dk)	33.3	66.7	41	23.1	76.9	41
Religion	None	39.4	60.6	148	28.4	71.6*	148
	Christian	38.8	61.2	328	41.0	59.0	328
	Other Christ.	38.0	62.0	74	36.6	63.4	74
	Non-christ.	44.0	56.0	34	36.0	64.0	34
Educational	None	21.4	78.6***	101	43.8	56.3	101
	Secondary	40.7	59.3	255	35.3	64.7	255
	Tertiary	45.1	54.9	140	34.7	65.3	140
	Bach. Etc.	47.1	52.9	88	37.9	62.1	88
Total children	0	34.9	65.1	69	46.5	53.5*	69
	1	34.9	65.1	44	39.5	60.5	44
	2	40.4	59.6	205	41.7	58.3	205
	3	39.9	60.1	153	34.4	65.6	153
	4+	39.1	60.9	113	28.1	71.9	113
Age at 1 st birth	Under 21 years	36.9	63.1	100	33.0	67.0	100
	21 years & over	39.9	60.1	410	37.0	63.0	410
	No own child	37.5	62.5	74	45.8	54.2	74
Focal child	Yes	35.8	64.2*	287	36.1	63.9	287
	No	42.8	57.2	297	38.1	61.9	297
Health prob.	Yes	44.2	55.8	179	47.7	52.3***	179
•	No	37.1	62.9	405	32.9	67.1	405
# in h.hold	1	40.0	60.0	43	29.2	70.8	43
	2	36.1	63.9	155	42.8	57.2	155
	3	38.0	62.0	119	32.2	67.8	119
	4	38.2	61.8	145	40.1	59.9	145
	5+	44.6	55.4	122	32.4	67.6	122
Personal income	<30,000	34.9	65.1***	264	39.4	60.6**	264
	30,001-50,000	34.5	65.5	148	32.1	67.9	148
	50,001+	52.5	47.5	103	30.5	69.5	103
	Refused	41.6	58.4	69	50.0	50.0	69
Child exchange	TCTGGCG	71.0	JU.T	0,	50.0	50.0	07
In-kind	Does not receive	+	1		34.3	65.7***	204
III-KIIIU	<u> </u>	+	+	-	43.4		83
	Does receive	+	1			56.6	
Emation -1	No focal child	10.1	00 0444	121	43.8	56.2	297
Emotional	Does not receive	19.1	80.9***	131		-	
	Does receive	51.9	48.1	156			
	No focal child	41.8	58.2	297		I	1

Table 3 cont.: Bivariat AGEING PARENT		Emotion		<u> </u>		In-kind		
AGEING FARENT			- i	3.7			1 3 7	
		<u>Yes</u>	<u>No</u>	<u>N</u>	<u>Yes</u>	<u>No</u>	<u>N</u>	
Gender	Male	37.2	62.8	155	34.5	65.5	155	
	Female	39.9	60.1	429	38.1	61.9	429	
Has health prob.	Yes	41.3	58.7	282	41.3	58.7**	282	
	No	37.1	62.9	302	33.3	66.7	302	
#. surv. parents-law	1	37.8	62.2*	183	37.6	62.4	183	
	2	35.3	64.7	205	41.0	59.0	205	
	3	38.4	61.6	114	33.6	66.4	114	
	4	50.0	50.0	82	32.7	67.3	82	
Kin relationship	Mother	41.9	58.1**	366	37.5	62.5	366	
-	Father	41.4	58.6	130	34.3	65.7	130	
	Mother-in-law	30.1	69.9	63	41.1	58.9	63	
	Father-in-law	12.5	87.5	25	36.0	64.0	25	
Distance in kms	≤3km	53.2	46.8***	83	61.8	38.2***	83	
	3-20km	42.4	57.6	170	48.0	52.0	170	
	21-100	39.7	60.3	77	53.4	46.6	77	
	100+	33.2	66.8	251	18.6	81.4	251	

Table 4: Logistic regression models of the effects of selected characteristics on the likelihood of a mid-life respondent providing in-kind or emotional support to their ageing parent. Odds ratios (N = 584)

AGEING PARENT		Model 1	Model 2
		<u>IN-KIND</u>	EMOTIONAL
Distance kms.	100+	1.00	1.00
	≤3-20	5.16***	2.16***
	21-100	7.65***	1.60
Kinship	Mother	1.00	1.00
	Father	0.67	0,80
	M-in-law	1.16	0.41**
	F-in-law	0.53	0.14***
Health problem	No	1.00	1.00
	Yes	1.46*	0.97
Number ascending generation	1	1.00	1.00
	2	1.01	0.70
	3-4	0.54**	0.66
RESPONDENT			
Gender	Male	1.00	1.00
	Female	1.25	1.32
Age at survey	40-44	1.00	1.00
-	45-49	1.10	0.83
	50-54	0.72	0.75
Ethnicity	Non-Pakeha	1.00	1.00
<u> </u>	Pakeha	0.91	1.21
Residence	City	1.00	1.00
	Town	0.77	0.99
	Rural	0.56*	1.07
Religion	None	1.00	1.00
5	Christian	1.65*	1.10
	Other Christian	1.93*	1.18
	Non-Christian	1.32	1.03
Marital status	Married/de facto	1.00	1.00
	Single/widowed	0.44*	0.23***
	Div/sep.	0.50*	0.43**
Educational achievement	None	1.00	1.00
	Secondary	0.76	2.86***
	Tertiary	0.89	3.16***
	Bachelors	1.66	4.44***
Number in household	1-2	1.00	1.00
	3	0.55*	1.03
	4	0.58	0.63
	5+	0.38**	1.04
Employment status	Full-time	1.00	1.00
	Part-time	0.70	0.94
	Self-employed	0.99	1.20
	Home-maker	1.58	1.00
	Unemployed	0.37***	1.77
Age at 1 st birth	< 21	1.00	1.00
	21+	2.01**	0.90
	No child	2.91*	0.86
Health problem	No	1.00	1.00
•	Yes	2.01***	1.56*
CHILD			<u> </u>
Receives in-kind	Does not receive	1.00	1.00
ACCOLVES III-KIIIU	Yes, receives	2.90***	5.98***
	No focal child	2.15**	4.52***

Figure 1: Conceptual Framework

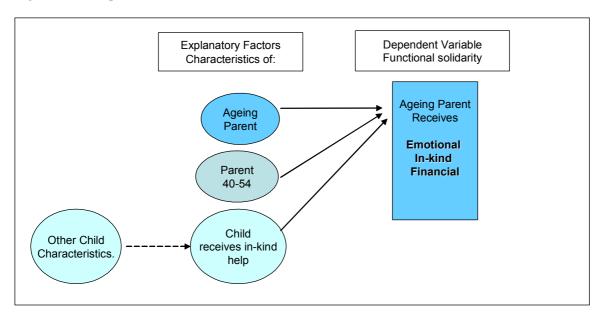


Figure 2: Generational asymmetry in outward flow of help from mid-life respondent (ego) to ageing parent and child (% represent proportions of 40-54 reporting having provided a given type of help over the past 12 months prior to interview).

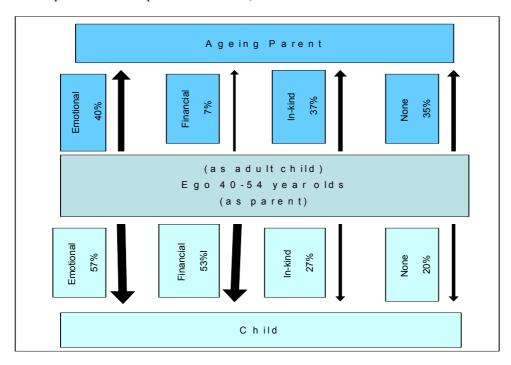


Figure 3: Comparing effects of Selected Ageing Parent and Respondent Characteristics (Explanatory Variables) on Odds of Child and Ageing Parent Receiving In-kind or Emotional Support								
Ageing Parent Receives In-Kind Ageing Parent Receives In-Kind Child Receives In-Kind Child Receives Emotional								
Odds Explanatory Odds Odds Explanatory Odds Variables Variables								
<u>Col. 1</u>		<u>Col. 2</u>		<u>Col. 3</u>		<u>Col. 4</u>		
1 = ref 2=1.01 3-4 =0.54**	# ascending	NS		NS	# ascending	1=2=ref 3+=1.93*		
1-2=ref 3=0.55* 4=0.58 5+=0.38**	H.hold size	NS		NS	H.hold size	1-2=ref 3=0.27*** 4+=0.32**		
Moth=ref Fath=0.67 Mlaw=1.16 Flaw=0.53	Kinship (ap)	Moth=ref Fath.=0.80 Mlaw=0.41** Flaw=0.14***		NS	Gender (ap)	NS		
NS 9.55	Gender (r)	NS		Fath=ref Moth=3.07**	Gender (r)	Fath=ref Moth=2.12*		
No=ref Yes=1.46*	Health (ap)	NS		No effect dropped	Health (ap)	No effect dropped		
No=ref Yes=2.01***	Health (r)	No-ref Yes=1.56*		NS	Health (r)	NS		
Mar=ref S/w=0.44* D/sep=0.50*	Marital status	Mar=1.00 S/w=0.23*** D/sep=0.43**		NS	Marital status	NS		
NS	Education	None=ref Sec=2.86*** Tert=3.16*** Bach=4.44***		NS	Education	None=ref Sec=2.06 Tert=4.60*** Bach=3.25*		

⁽r) = respondent; (ap) = ageing parent; NS = odds ratios not statistically significant

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