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Poster

# *Inter-generational solidarity in New Zealand : exchanges of assistance between mid-life individuals and their families*

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WORK IN PROGRESS : NOT TO BE CITED WITHOUT AUTHORS' CONSENT

## INTRODUCTION

Key demographic changes occurring in New Zealand – increasing union dissolution, decreasing family size, longer life expectancies – have the potential to transform the dynamics of family ties of solidarity. Drawing on the theoretical paradigm of inter-generational solidarity developed by Bengtson and others (Bengtson, et al. 1976; Mangen, Bengtson and Landry, 1988), our paper focuses on how the provision of assistance to a focal child by a midlife parent is associated with or influenced by the attributes of a third generation, a focal parent of the mid-life individual. Our focus is therefore primarily on functional solidarity.

We draw on data collected in 1997 in the context of a multidisciplinary project '*Transactions in the Mid-Life Family'* completed at the University of Waikato, New Zealand[1] (Koopman-Boyden, et al., 2000). Our interest in the mid-life groups - men and women aged between 40-54 in the mid 1990s - stems essentially from their collective identity as members of the Baby-Boom generations. Demographically speaking, they will contribute significantly to increasing proportions of older persons arriving at retirement age within the following decade. They are hence at the heart of debate over issues of intergenerational equity, particularly with regard to retirement income (Thomson, 1993; McCulloch, 2000; Preston, 1999). Long-term improved life expectancies and declining fertility also suggest that these generations will be at the nexus of an increasingly complex and perhaps conflicting set of structural and relational links with antecedent and succeeding generations (Pool, Jackson and Dickson, 1998; Hamill and Goldsberg, 1997). Finally, in the history of New Zealand's welfare provisions, the Baby-Boomers as a collective group, have benefited from the

[1] The 'Transactions – Mid-Life Project' has been funded by the Foundation of Research, Science and Technology, New Zealand and Lottery Grants New Zealand, and is now in its third phase. For further details of the Project and its members, see Koopman-Boyden et al, 2000.

introduction of extensive post-war, universal-based provisions, whilst also living first hand the effects of recent radical shifts from a solidarity-based system of social assistance, to one of residual, individualistic and privatised service provision (Boston, 1999).

## THEORETICAL AND CONCEPTUAL FRAMEWORKS: SOLIDARITY AND GENERATIONS

### Inter-generational solidarity as a theoretical construct

Our empirical investigation is inspired by Bengtson and colleagues' theoretical framework, from which inter-generational solidarity is conceived as bonds existing between parents and children (Bengtson et al, op. cit, Bengtson, 2001; Roberts, et al 1991; Young McChesney et al 1988; Silverstein and Bengtson, 1997). These bonds may be based on a set of six inter-dependant or isolate elements: 1) structural solidarity (co-residence, or the geographic proximity separating individuals); associational solidarity (frequency of contact between individuals); affective solidarity (sentiments of affection); consensual solidarity (shared opinions); functional solidarity (exchange of assistance); normative solidarity (values pertaining to obligations across generations).

The notion of *generation* in New Zealand is conceptualised in terms of individuals within a structure of kinship bonds (Koopman-Boyden and Hillcoat-Nallétamby, 2000). These bonds are represented by the network of relationships that may exist between ego (the reference person, in this case the mid-life respondent), their surviving descendants (children), ascendants (parents/in-laws and grandparents/in-laws) and collaterals (partners, sisters, etc.). With ego as the locus, relationships are defined through kinship affiliation and as opportunity structures in terms of the geographic proximity of members.

Again with ego as the locus, generational transactions or exchanges occurring between members are conceptualised in terms of their *flow* (giving and/or receiving), their nature or *type (*financial, indirect financial[2] and non-financial (emotional)) and their *frequency.* Our conceptualisation of inter-generational relations thus reflects three of the elements of solidarity posited by Bengtson: structure, association and function.

### Conceptual framework

Building on recent research (Hillcoat-Nallétamby and Dharmalingam, forthcoming), our aim is to establish whether the likelihood of a focal child receiving assistance from their parent is influenced by or associated with the characteristics of an ascending generation, a focal parent of the respondent. Underlying our analysis is the investigation of the premise that mid-life individuals

[2] Services, care or assistance which would other have had to be purchased by the child, had the respondent not provided them.

are at the centre of competing inter-generational requirements. Should this be the case, then we would expect to find their capacity to engage in functional solidarity with their own children, compromised by the hypothetically competing or perhaps conflicting attributes of their own parents. Being able to distinguish the mid-life age groups as portraying specific forms of engagement in functional solidarity is of course not possible in our analysis, given that we have no other age groups with which to compare and contrast them. Taking this on board, we present a 'portrait' analysis of the nature of intergenerational solidarity as it is manifested within the parameters of a dyadic structure – the mid-life respondent and their child.

We represent the elements of our analysis in the conceptual framework shown in Figure 1. We hypothesise that the engagement of the mid-life respondent ( R) in the manifestation of functional solidarity towards their focal child ( C) will be influenced by the attributes of three generations: Ri (ego: respondent), Ci (descendant: child), Pi (ascendant: parent of ego). Our particular focus in this paper is how *parental attributes* (Pi) influence the relationship R→ C. This is established at the multivariate level by controlling for the attributes of R and C at each phase of analysis.

INSERT FIGURE 1 HERE

## REVIEW OF EXISTING FINDINGS

We summarise here the most salient of results of our initial analysis of functional solidarity (Hillcoat-Nallétamby and Dharmalingam, op. cit). Using logistic regression models, we established the factors influencing the likelihood of a mid-life respondent providing assistance to a non-co-residing focal child, taking as covariates, child and respondent characteristics, including structural and associational solidarity measures. The concept of functional solidarity was developed as a typology to represent different types of assistance received by the focal child from the respondent – emotional (non-financial), financial and indirect financial assistance (services or care given which would otherwise have had to be purchased).

Our results show that the mid-life respondent's engagement in functional solidarity does not seem to involve any distinction in terms of their child's gender – boys are as likely as girls to benefit from some form of parental assistance. However, the *type* of support a respondent provides may be constrained by his or her *own* gender; mothers, for example are clearly more likely than fathers, to engage in providing emotional (non-financial) and indirect financial assistance to their focal child.

The older a child, the less likely they are to benefit from emotional or direct financial assistance from their parents, an indication that the weakening of parental engagement in functional solidarity results not so much from conflict, but

from a natural progression towards child independence. Supporting this interpretation is the finding that respondent age in itself does not significantly influence provision of assistance. Were mid-life parents to be experiencing increasing difficulties in providing support as they pass through the 40-54 age phases, this factor would probably have been more significant.

The child's relationship of descent to the respondent (biological, adopted or step descent) appears to operate in favour of those of non-biological descent for emotional support alone; children who are not related to their parents through direct biological descent, are clearly the most likely to benefit from this type of functional solidarity. Reinforcing the results are those for respondent union status; if parents are *separated*, their children are less likely than those whose parents are in union, to benefit from any form of functional solidarity. There is some indication therefore that previous history of union dissolution may affect functional solidarity across the dyads observed.

Three others factors – respondent (and partner) employment status, place of residence and educational achievement show no consistent patterns in their influence upon a mid-life parent's engagement functional solidarity. Results do suggest that unemployment (for the respondent or their partner) may compromise provision of assistance of any type. Children whose mid-life parents live in cities are the least likely to receive non-financial support. Respondent educational achievement appears to have a limited influence on functional solidarity alone, the likelihood of receipt of financial and emotional support for children increasing the higher the educational achievement of their parents.

Finally, and surprisingly for New Zealand, neither child nor respondent ethnicity appear to influence the mid-life parent's engagement in functional solidarity.

## RESPONDENT-CHILD FUNCTIONAL SOLIDARITY AND PARENTAL ATTRIBUTES

## METHODOLOGY

### Data sources

The sample data we draw on comprises 750 males and females aged between 40 and 54 in 1997. These age groups represent a significant proportion of New Zealand's Baby-Boom generations. The sample was selected on a nationwide basis and identified by area stratification according to population size (Dharmalingam, 2000). Of all eligible respondents randomly selected for interview, the final success rate for contacts throughout New Zealand was 54% (one of every two persons aged between 40-54 contacted by the recruiters agreed to participate in the survey). Of these, 86% participated in the telephone interview[3], giving a final sample size of 750. Data were collected through

[3] The survey also involved the completion of a mailback questionnaire designed to collect information on work aspects of transactions.

telephone interviewing and mail back questionnaires. The sample was subsequently weighted to improve representativeness, with weights derived to adjust for deviation of the sample from the 1996 Census with respect to gender, marital status, ethnicity, employment status and age.

The questionnaire was multipurpose, covering three broad themes: work, leisure and individual well-being. The documentation of the giving of assistance by the respondent to others is exhaustive for all surviving members of their descending and ascending generations. Sample identification did not include prior screening on whether the respondent had a surviving child and/or parent, so 14% (n = 110) of the total sample was childless at the time of the interview, and another 16% had no surviving parent or in-law (n = 123).

## Study Population

The identification of a population of dyads comprising a mid-life parent and focal child builds on previous research (Hillcoat-Nallétamby and Dharmalingam, op cit). Of all children not living with their parents, a focal child was identified as follows: child receiving the greatest number of types of assistance from their parent selected; amongst those receiving no support, those maintaining the most frequent contact with the respondent selected. This gave an initial study population of 380 dyads. Based on this set, a focal member of the generation of parents of the respondent was selected for all those with a surviving parent or parent-in-law. When more than one parent or in-law was alive, we selected them based on the same criteria as those used for identification of the focal child. In this way, we have maximized the potential for the mid-life respondent to be exposed to the giving of help to two other generations. Our final sample is of 310 triads of a non co-residing respondent, a focal child and a focal parent.

## Indicators of solidarity : function, structure and association

### Functional solidarity

Functional solidarity is taken as both a dependant and explanatory variable in this paper. In both cases, it is broadly conceptualised in terms of whether the respondent reports providing specific types of assistance to the focal child or parent more than once a year (see Table 1).

For the dependant variable, child functional solidarity is conceptualised in terms of a typology of three specific, and one generic type of assistance: financial, indirect financial, emotional (non financial), and whether assistance has been given at all. As the focal child and parent can be in receipt of more than one type of assistance, analysis is limited to whether there was reporting of at least one type of assistance being given. The rational for the typology is based on the recognition that functional solidarity may include not only direct and indirect financial transactions (direct financial assistance or services offered like housework) but also those of a non-material nature (Mangen and McChesney, 1988).

As an explanatory variable, functional solidarity indicates whether the respondent reports providing assistance to a focal parent, and is presented in two forms (see Table 1): financial/indirect financial assistance and non financial assistance. We have not treated financial and indirect financial assistance as two separate categories for parents because initial exploratory analysis revealed that none of the 310 parents received only financial support, and only 11 received both indirect and financial support.

### Structural and associational solidarity

Structural and associational solidarity for both children and parents are taken as explanatory variables. The former is measured as the distance in kilometres separating the respondent's household from the focal child and parent, whilst associational solidarity is represented as the frequency of contact with the focal child and parent as reported by the respondent.

### Statistical techniques

Empirical analysis is completed using multivariate logistic regression models, a technique more appropriate when the dependant variable has two response categories. The model shows how the probability of being in a particular outcome category versus the likelihood of being in another outcome category is modified when the specified independent variables are introduced into the models (Tabachnick, B. 1996; Alison XXXXXXXX). The parameters of the models are expressed as odds ratios (for a given population, the probability of experiencing an event against the probability of not experiencing that event). The reference category takes on the value 1. For a given category, an odds ratio of less than 1 indicates that it is less likely for the individuals in that group than for those of the reference category to take on a value of 1 for the dependant variable. If the odds ratio is greater than 1, then the probability of taking on a value of 1 for the given category is more likely than for the reference category.

### Model Specification

We have run models for each of the four dimensions of child functional solidarity (SET I: child receives assistance yes/no; SET II: child receives financial assistance, yes/no; SET III: child receives indirect financial assistance, yes/no; SET IV: child receives non-financial assistance, yes/no). The variables have been measured as a dichotomous variable (1 if a child receives support from the respondent, 0 otherwise). To arrive at the most parsimonious of results, we have run the models in three stages. The first stage (Model 1) provides results of logistic regression for the four dimensions of functional solidarity taking into consideration parent functional solidarity (financial/indirect and non-financial assistance), parent gender and total number of surviving parents and in laws (Model 1). The second and third stages introduce the child (Model 2) and respondent (Model 3) characteristics respectively, as sets of control variables.

We limit the presentation of results of odds ratios in Table 4 to the explanatory variables for parents only, in order to clearly reflect the focus of our paper – the effect of a focal parent's attributes on respondent manifestation of functional solidarity towards a focal child.

Our exploration of the association between parental characteristics and child receipt of functional solidarity has been limited by the availability of information provided by the survey. Unfortunately, age of parent was not documented. All other explanatory variables introduced into the models for respondent, child and parent are indicated in Table 1.

We initially planned to introduce all three parental solidarity variables into our models as explanatory factors, but finally retained only functional solidarity. The reasons for this are as follows. We assume that a respondent's engagement in providing indirect or non-financial assistance to a parent will involve extensive contact and be facilitated by close geographic proximity. When tested empirically our data do indicate an association between those parents receiving either type of assistance, geographic proximity and frequency of contact.

For children, we retained only structural solidarity as an explanatory factor. The case for using child association as an explanatory factor of child functional solidarity is weak because it seems unrealistic to make the assumption that there might be a direct causal relationship between the two variables. In other words, the manifestation of contact cannot be an antecedent event to the manifestation of providing assistance and vice-versa. However, for child structural solidarity, it may be argued that this element can have a causal link with the receipt of assistance or even with frequency of contact.

## RESULTS

### Characteristics of Respondent, Child and Parent

INSERT TABLE 1 HERE

Table 1 presents the key attributes of the study population of 310 triads, as well as the frequency distributions for each of the four dimensions of the dependant variable, child functional solidarity. The majority of the focal children (over 80%) receive some form of assistance from the respondent. Over half receive financial or non-financial assistance, and just over one quarter indirect financial assistance. Just over half of the child population is female, two thirds aged below 25, and just under half related to the respondent through direct biological parental descent. About one sixth have a health problem and about the same proportion live within 3 kilometres of their parents' home. Over three quarters of the focal parent population are female. Just over one third benefit from non-financial or financial/indirect financial assistance from the respondent. Of a potential network of four surviving parents or parents-in-law, two thirds of the respondents have only two surviving parents.

Of all mid-life respondents, nearly 60% are female, just over one quarter below the age of 45, the majority of Non-Maori ethnicity, with close to three quarters declaring some form of religious affiliation. One fifth are currently not in any form of union, approximately the same proportion live in rural locations, and have no school qualification. The majority (over 80%) are engaged in some form of paid employment, and just over 40% earn a personal annual income of between $NZ15,000 and 41,000. One third declare suffering from a long-term health condition which limits their activities. Just over one third of respondents have a total of one or two children, and over forty percent live in households of the same number of individuals.

## Bivariate results

We confine the presentation of bivariate results to the four parental characteristics (Table 2). Children with grandmothers are less likely than those with a grandfather to receive financial assistance from the respondent. Children are less likely to receive financial and non-financial assistance from the respondent if the parent is one of only two surviving members of that generation. There is a strong and positive correlation across all four types of functional solidarity and parental receipt of non-financial assistance from the respondent, although the relationship is much weaker for indirect financial support.

INSERT TABLE 2 HERE

## Types of assistance provided to child and parent

Table 3 provides the percentage distribution of child and parent populations by type of assistance provided by the respondent, and odds ratios for children receiving support as compared to parents. The majority of both parent and child groups receive *some* type of assistance from the respondent (less than 40% and 20% of parents and children respectively receive no assistance). Taken separately however, the types of assistance received across the two groups vary considerably. Whilst over half of all focal children receive non-financial and financial assistance (56.7% and 53.4% respectively), only a minority of parents receive financial assistance (3.7%), and just over one third, non-financial support. The distribution of types of indirect financial assistance received varies quite markedly. This is clearly reflected in the odds ratios. Children are clearly much less likely to receive any form of indirect financial assistance than parents, with the exception of meal preparation and childcare. In contrast, they are over thirty times more likely than parents to benefit from financial help, and nearly two and a half times more likely to receive emotional support.

INSERT TABLE 3 HERE

There is therefore a clear generational difference at play in the likelihood of a respondent providing assistance per se, as well as type of assistance to both children and their own parents. Functional solidarity of an indirect financial nature clearly seems to characterise the flow of transaction from respondent to parent, whilst financial assistance is confined to children. Emotional support seems to be common to both sets of dyadic transactions.

**Multivariate results**

In Table 4, we provide selected results from the multivariate logistic regression models on the likelihood of children receiving assistance from the respondent. As stated earlier, our focus is on how children's receipt of assistance from the respondent is associated with four parental attributes – their own receipt of non-financial and financial/indirect financial assistance from the respondent, their gender and the total number of parents or in-laws still alive.

Results show that across all models and all types of functional solidarity, the child is more likely to benefit from assistance if the respondent's own parent also benefits from non financial support. This effect is the most pronounced when the child receives non financial support (Set IV, odds ratios for 'non financial support are all close to 6), but less so for example, in the case of receipt of financial support (odds ratios for each model are below 4).

In contrast, parental receipt of financial/indirect financial assistance is positively associated with child's receipt of indirect financial support alone (SET III). If the parent benefits from this type of functional solidarity, it increases almost three-fold, the likelihood of the child also receiving this support.

These results are somewhat surprising, as we might have expected to find a negative relationship between child and parental receipt of indirect support if this resource is conceptualised as a limited supply in terms of the time or action required by the respondent to render unpaid services or assistance to two generations at the same time. Further examination of the nature of the types of support offered by the respondent to the child and parent provide some explanation. As can be seen from Table 3, the types of indirect support that each generation receives are quite different, with the exception of meal preparation (and childcare which is limited exclusively to children). Parents are on average more likely than children to receive each type of indirect financial support from the respondent. On balance therefore, the variation in the types of indirect support given to children and parents results in a strong and positive correlation (SET III) between parent and child receiving indirect support from the respondent.

All models in Set II indicate that a respondent is much less likely to give financial support to their child, if the focal parent is a grandmother. This finding at first seems quite plausible. Older women are perhaps more in need of financial assistance than their male counterparts, partly because of economic dependence

on male earnings, but also due to life expectancy differences which would render the likelihood of living alone more probable for women. Respondents may therefore find that they have to forego provision of financial support to their own children in favour of providing this type of functional solidarity to their own parents. However our data do not support this initial explanation. As noted earlier (see Table 3) only a very small number of parents actually benefit from financial support from the respondent.

A second possible explanation might be that the gender of the grandparent is a proxy for some characteristics of the child or the respondent, but this explanation can be ruled out. With each successive model, we have introduced child and respondent characteristics, but the direction, magnitude and significance of the odds ratios do not vary (Set II, odds ratios for the variable 'gender').

The third explanation could be that the relationship between child receipt of financial assistance and parent gender is spurious. The observed relationship could perhaps be due to the interaction between the gender of the grandparent and the characteristics of the child or respondent. In our multivariate analysis we found that child age was very strongly associated with receiving financial support (full models not shown). If the child is aged below 24, then they are almost five times more likely to receive monetary support compared to those aged 24 and above. When incorporating an interaction term for the two variables (grandparent gender and child age) in the full model (not shown here), we found that grandparent gender lost its independent effect on the likelihood of the child receiving monetary support, but the interaction effect and the effect of child age were significant.

How do we make sense of these findings? From exploratory analysis (not shown here) we know that most female grandparents are single or widowed, and as seen above, that older children are less likely than younger offspring to receive financial support from the respondent. As widowed women are likely to be older than non-widowed, it is possible that their grandchildren are on average, older as well. The relationship between grandparent gender and child receipt of financial support (models in Set II) would therefore be spurious as it would be attributable to parent and child age. We are not able to explore this explanation any further because we do not have data on the age of the parent. However, referring to secondary sources, we can lend some support to this explanation. New Zealand Census data for 1996 indicate the average age of widowed women amongst all those aged 60+ to be 76.3 years, but for all those who are not widowed, to be 67.5 years.

### Variation between models: controlling for child and respondent characteristics

Of the four parental variables included in the multivariate analysis, several seem to have captured the effects of child and respondent characteristics. Although children whose grandparents receive emotional support are more likely to receive financial and non-financial assistance from the respondent (Sets II and IV), this

likelihood is progressively reduced as child and respondent characteristics are introduced into the models (Models 2 and 3). This notwithstanding, the odds for this parental characteristic remain positive and significant in the final model, indicating that it clearly does have an independent effect upon the likelihood of children benefiting from respondent support.

Interestingly in the case of children receiving indirect financial assistance, the introduction of child characteristics (Set III, Model 2) has the effect of slightly reducing the odds ratios for both parental solidarity variables, but they are then strengthened once respondent characteristics are introduced. It is in fact only in this case, that both parental variables of solidarity increase the likelihood of children receiving assistance from the respondent.

Including child (Model 2) and then respondent characteristics (Model 3) in the models weakens the effect of the total number of parents alive on the likelihood of children receiving financial support, with odds losing their statistical significance. Conversely, in the case of children receiving non-financial assistance (emotional support), this explanatory factor gains statistical significance and increased magnitude once both child and respondent characteristics have been added (Set IV). Hence, the greater the number of surviving grandparents, the greater the likelihood of the child receiving emotional support (Model 3, odds ratio of 1.93).

## SUMMARY

The aim of our paper was to establish whether introducing the attributes of an ascending generation into our analysis would influence the likelihood of a mid-life parent engaging in the manifestation of functional solidarity towards a focal child.

In short, our findings indicate that having grandparents whose relationship with their own offspring is characterised by a strong element of emotional, and to a lesser extent, service-type support is likely to enhance the grandchildren's chances of benefiting from all dimensions of support provided by their own mid-life parents. (There is some evidence to suggest that a child's receipt of financial and emotional support is contingent upon respondents maintaining emotional support for their own parents (Sets II and IV).

The fact that children are more likely to benefit from help with daily activities like meal preparation, gardening or housework if their own grandparents also receive either the same sorts of help or emotional support as well, reinforces our earlier interpretation of the odds ratios presented in Table 3. Rather than proving to be conflicting for the mid-life respondent, the two generational groups' receipt of assistance seems to be mutually reinforcing (Set II).

If our interpretative assumptions are correct, then having a grandmother does not reduce a child's likelihood of receiving financial help from their own parents because financial transactions have been channelled towards an older female generation. Rather, it is the interplay of both demographic-driven factors – longer life expectancies for grandmothers than grandfathers – and life course factors -

the progressive financial independence of children from parental support as they become young adults – which explain the depressing effect that parental gender has upon children receiving money from their own parents.

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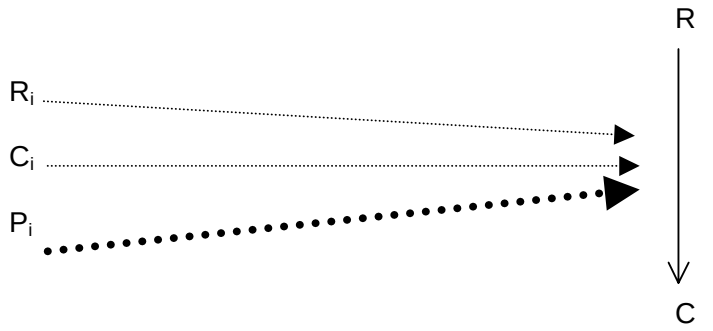
Figure 1 : Conceptual Framework




R ⟶ C = respondent providing assistance to focal child (functional solidarity as dependant variable)

$R_i$, $C_i$, Pi : covariates of respondent, focal child and focal parent

Table 1 : Univariate distribution of total study population of respondents, non co-residing focal child and non co-residing focal parent of respondent (%, N = 310, weighted data)

| **DEPENDANT VARIABLE : RESPONDENT PROVIDES ASSISTANCE TO CHILD (% = YES)** | | |
|---|---|---|
| Assistance given | 80.7 | Care/assistance provided by respondent to child at least once a year (as reported by respondent) |
| Financial assistance | 53.4 | Financial assistance |
| Indirect financial assistance | 27.4 | Material support, services, etc provided by respondent to child: gardening, house maintenance/work, meal preparation, personal health, shopping, transport, childcare, other |
| Non-financial assistance (emotional) | 56.7 | Emotional support, financial advice, sport, leisure. Of the 56.7%, 50.2% received emotional. |

| | | |
|---|---|---|
| **CHILD CHARACTERISTICS** | | |
| Gender | | |
| Male | 46.2 | |
| Female | 53.8 | |
| Age | | |
| <25 | 64.2 | |
| >25 | 35.8 | |
| Ethnicity | | |
| Non-Maori | 85.7 | |
| Maori | 14.3 | |
| From current/past parental union? | | |
| Born of current union | 47.2 | |
| Other (step, foster) | 14.1 | |
| Born of previous union | 38.7 | |
| Child has health problem? | | |
| Yes | 15.7 | |
| No | 84.3 | |
| Structure (distance) | | |
| <3km | 13.4 | |
| 3-100 | 41.3 | |
| 100+ | 45.3 | |
| **PARENT CHARACTERISTICS** | | |
| Gender | | |
| Male | 22.8 | |
| Female | 77.2 | |
| Total surviving parents + in laws | | |
| 1-2 | 66.1 | |
| 3+ | 33.9 | |
| Receives financial+indirect finance from respondent | | See dependant variable |
| Yes | 37.5 | |
| Receives non-financial from respondent | | See dependant variables |
| Yes | 35.8 | |

Table 1 continued :

| **RESPONDENT CHARACTERISTICS** | | |
|---|---|---|
| Gender | | |
| Male | 42.7 | |
| Female | 57.3 | |
| Current age | | |
| 40-44 | 26.2 | |
| 45-49 | 38.4 | |
| 50-54 | 35.4 | |
| Ethnicity | | |
| Non-Maori | 89.7 | |
| Maori | 10.3 | |
| Residence | | |
| City + Town | 77.7 | |
| Rural | 22.3 | |
| Religion | | |
| None | 29.2 | |
| Some | 70.8 | |
| Union status | | |
| Not currently in union | 20.0 | (single, widowed, divorced, separated) |
| In union | 80.0 | (legal and de facto) |
| Highest educational qualification | | |
| None | 22.7 | |
| Secondary | 49.3 | |
| Tertiary other | 18.9 | |
| University | 9.1 | |
| Employment status | | |
| Self-employed | 29.4 | |
| Homemaker | 11.0 | |
| Full and part time | 54.4 | |
| Unemployed and other | 5.2 | (other : retired, student, voluntary worker) |
| Partner employment status | | |
| No partner | 16.1 | |
| Self and family | 21.8 | |
| Homemaker + other | 10.5 | |
| Full and part time | 51.6 | |
| Respondent has health problem? (yes) | 34.4 | Any long term health problem/condition lasting six months or more and which limits activity |
| Respondent's tot. annual income (NZ$) | | |
| 0-14,999 | 18.1 | |
| 15-40,999 | 40.9 | |
| 41,000+ | 26.5 | |
| Other | 14.5 | (dk and missing) |
| Total number of children | | |
| 1-2 | 34.9 | |
| 3 | 28.3 | |
| 4+ | 36.8 | |
| Total in household | | |
| 1-2 | 43.8 | |
| 3 | 25.4 | |
| 4+ | 30.7 | |

Table 2 : Bivariate distribution by dependant variables and parental characteristics. Percentages = 'yes' (N = 310; weighted)

| | FUNCTIONAL SOLIDARITY : RESPONDENT PROVIDES ASSISTANCE TO CHILD? | | | |
|---|---|---|---|---|
| PARENT CHARACTERISTICS | Assistance | Financial | Indirect financial | Non-financial |
| Gender | | | | |
| Male | 81.7@ | 73.2*** | 21.4@ | 60.6@ |
| Female | 80.3 | 47.5 | 29.2 | 55.6 |
| Tot. surviving parents+ in-laws | | | | |
| 1-2 | 80.0@ | 48.3*** | 29.3@ | 52.7** |
| 3+ | 81.9 | 63.2 | 23.8 | 64.8 |
| Financial/indirect financial | | | | |
| Yes | 84.2@ | 52.5@ | 39.2*** | 55.8@ |
| Non-financial (emotional) | | | | |
| Yes | 92.8*** | 71.2*** | 34.2** | 81.1*** |

p<10% *; p<5% **; p<1% ***; ns @

Table 3 : Types of assistance provided by the respondent to the focal child and focal parent (Percentages and odds ratios. Percentages do not add up to 100% due to multiple responses).

| TYPE OF ASSISTANCE | Parent N = 310 | Child N = 310 | Odds ratios c/p |
|---|---|---|---|
| **NON-FINANCIAL** | | | |
| ▪ Emotional[4] | **35.8** | **56.7** | **2.35*** ** |
| **FINANCIAL** | | | |
| ▪ Financial support | **3.7** | **53.4** | **31.22*** ** |
| **INDIRECT FINANCIAL** | **36.0** | **27.4** | **0.66** ** |
| ▪ Gardening | 5.2 | 1.2 | 0.24*** |
| ▪ House maintenance/work | 14.7 | 4.5 | 0.31*** |
| ▪ Meal preparation | 5.8 | 6.1 | 1.05@ |
| ▪ Personal health | 5.5 | 1.8 | 0.28*** |
| ▪ Shopping | 7.0 | 2.0 | 0.25*** |
| ▪ Transport | 10.0 | 5.5 | 0.52** |
| ▪ Childcare | - | 6.9 | - |
| ▪ Other[5] | 11.4 | 14.5 | 1.33@ |
| **NONE** | **39.5** | **19.3** | **0.49*** ** |

p<1% ***; p<5%; ** p<10%* ; ns @

[4] This category also includes financial advice, sharing of sport and leisure activities. These three categories represent less than 5% of the total category.

[5] Frequencies less than <5% of total reportings. Parents : care/disability, childcare, advice, education, sports, leisure, general care, clothing, gift, accommodation, car repair, social assistance, help business, all sorts, other. Child : care/disability, advice, education, leisure, general care, clothing, sport, gifts, accommodation, car repairs, social assistance, help with business, all types, other. Also includes mobility.

Table 4 : Estimated Odds Ratios for Models of Functional Solidarity (N = 310).
Odds ratios: yes = 1, no = 0.

| PARENT CHARACTERISTICS | | SET I : ASSISTANCE GIVEN (yes/no) | | |
|---|---|---|---|---|
| | | **Model 1** | **Model 2** | **Model 3** |
| Functional : financial/indirect financial | No | 1.00 | 1.00 | 1.00 |
| | Yes | 1.28@ | 0.98@ | 0.93@ |
| Functional : non financial (emotional) | No | 1.00 | 1.00 | 1.00 |
| | Yes | 4.19*** | 3.83*** | 2.99** |
| Gender | Male | 1.00 | 1.00 | 1.00 |
| | Female | 0.89@ | 0.85@ | 0.56@ |
| Total surviving parents + in laws | 1-2 | 1.00 | 1.00 | 1.00 |
| | 3+ | 1.08@ | 1.17@ | 1.61@ |
| | | **SET II : FINANCIAL ASSISTANCE (yes/no)** | | |
| | | **Model 1** | **Model 2** | **Model 3** |
| Functional : financial/indirect financial | No | 1.00 | 1.00 | 1.00 |
| | Yes | 1.00@ | 0.89@ | 0.95@ |
| Functional : non financial (emotional) | No | 1.00 | 1.00 | 1.00 |
| | Yes | 3.31*** | 3.03*** | 2.39*** |
| Gender | Male | 1.00 | 1.00 | 1.00 |
| | Female | 0.32*** | 0.35*** | 0.35*** |
| Total surviving parents + in laws | 1-2 | 1.00 | 1.00 | 1.00 |
| | 3+ | 1.68* | 1.46@ | 1.36@ |
| | | **SET III : INDIRECT FINANCIAL ASSISTANCE (yes/no)** | | |
| | | **Model 1** | **Model 2** | **Model 3** |
| Functional :financial/indirect financial | No | 1.00 | 1.00 | 1.00 |
| | Yes | 2.98*** | 2.51*** | 2.98*** |
| Functional : non financial (emotional) | No | 1.00 | 1.00 | 1.00 |
| | Yes | 1.73* | 1.71* | 1.81* |
| Gender | Male | 1.00 | 1.00 | 1.00 |
| | Female | 1.34@ | 1.14@ | 1.18@ |
| Total surviving parents + in laws | 1-2 | 1.00 | 1.00 | 1.00 |
| | 3+ | 0.89@ | 0.88@ | 1.15@ |
| | | **SET IV : NON FINANCIAL ASSISTANCE (yes/no)** | | |
| | | **Model 1** | **Model 2** | **Model 3** |
| Functional : financial/indirect financial | No | 1.00 | 1.00 | 1.00 |
| | Yes | 0.95@ | 0.97@ | 0.85@ |
| Functional : non financial (emotional) | No | 1.00 | 1.00 | 1.00 |
| | Yes | 5.92*** | 5.91*** | 5.83*** |
| Gender | Male | 1.00 | 1.00 | 1.00 |
| | Female | 0.89@ | 0.88@ | 0.97@ |
| Total surviving parents + in laws | 1-2 | 1.00 | 1.00 | 1.00 |
| | 3+ | 1.66@ | 1.65@ | 1.93* |

p<10% *; p<5% **; p<1% ***; ns @
Model 1 : parent characteristics
Model 2 : parent characteristics controlling for child characteristics
Model 3 : parent characteristics controlling for child and respondent characteristics