Introduction

Like much of the world, population ageing, defined as an increase in the number and percent of a population that is in older ages, is a primary demographic force occurring within the Caribbean. Ageing of a population is mostly a function of past and current declines in fertility although increasing longevity also plays a part (Zimmer 2006). Although there are variations in fertility decline and therefore the pace of population ageing across countries, Barbados, the focus of the current paper, is already classified as being at an advanced stage with the proportion of older persons increasing much faster than any other age group (Schkolnik et al. 2008). According to the United Nation's (UN) Population Division (United Nations 2010), by 2050 roughly 26 percent of the Caribbean population will be 60 years and over, but Barbados is expected to have the largest proportion of aged persons in the English-speaking Caribbean.

Population ageing has implications for systems of formal and informal support. A growing elderly population combined with a reduction in fertility could place pressures on smaller numbers of family members for the provision of elderly support, as well as on formal systems of health care. Moreover, Barbados is experiencing the concurrent phenomenon of high rates of internal and international migration, which raises a concern regarding the extent to which support is a function of proximity of family members, and more specifically, proximity of the nearest child. Do older adults with a co-resident child have a better chance of receiving support than those with their nearest child in a different community, city or country, and if so, how disadvantaged are those whose nearest child lives within or outside of Barbados? We submit that these questions represent a legitimate place to begin a dialogue on elderly support in a country like Barbados that has seen minimal research on the topic of elderly support.

Background

Intergenerational support and proximity of nearest child

The pace of population ageing in many developing countries raises policy challenges regarding formal and informal care for growing proportions of older persons. There has been particular concern where social insurance systems do not provide adequate coverage or health infrastructure is not fully equipped to meet the needs of the elderly (Lloyd-Sherlock 2000; Barrientos 2000). In many ways, this describes the Caribbean, where care of elders still operates primarily in the private arena of the family (Calvo and Williamson 2008; Saad 2006, Rawlins 1999). A decline in fertility coupled with high rates of migration compounds these concerns since these demographic processes threaten family systems through decreased availability of informal care-givers (Aboderin 2005). As such, the geographic proximity of adult children and the types of support that older adults receive as a function of their nearest child becomes increasingly important in regions characterized by both ageing and mobile populations (Economic Commission for Latin America and the Caribbean (ECLAC) 2004).

While theoretical perspectives on adult child proximity are not well developed within the gerontological literature, we can refer to and borrow from a combination of 'new home economics' and 'modified extended family' perspectives to help understand the impact of the location of nearest child on support (Stark and Bloom 1985; Litwack 1960). Proximity is important for both of these perspectives since they each suggest that distance enables or constrains exchange between parents and children. Close proximity, for instance, is an important factor in fostering personal or functional relationships between age groups. It may also impact psychosocial well-being (Lee, Netzer and Coward 1995; Lawton, Silverstein and Bengston 1994). But, both perspectives suggest that geographic separation does not necessarily hinder

certain types of exchanges. In developing regions where migration is often labour related distance may induce material exchanges and older adults with children living away may be in a good position to be receiving financial support. Indeed, migration may be an adaptive household strategy utilized for the economic benefit of all household members since internal and international migration can generate income, part of which is remitted to the household of origin (Stark and Bloom 1985; Stark and Lucas 1988).

Latin American studies have shown that national and international remittances by children are generally contingent on the originating household's needs and are critical to the welfare of elders (DeVos, Solis and Montes de Oca 2004, Gomes 2007, Massey and Basem 1992). Evidence from Asia, where such research is more developed, shows migrant children continue to support their elderly parents financially and emotionally and pay for major household expenses and maintain frequent contact via telephone and return visits (Knodel et al. 2010, Zimmer et al. 2008). Thus, forms of support can change while function remains in place (Litwak 1960; Hoyert 1991; Smith 1998). Co-residence between an older adult and an adult child, a very typical living situation throughout the developing world, is not necessarily needed for mutual or specific support. For one, elders will have other kin and/or children within close proximity to provide functional and emotional support in times of need, if one or other children leave the household. Also, children who live further away from parents often provide material and other types of support through improved communication systems (Knodel et al 2010).

Other factors play into the probability of support besides the location of the nearest adult child. Many of these relate to the needs of the older parent. A common finding in the literature in both developed and developing countries is that older parents tend to rely on their adult children for assistance in times of frailty, decreased mobility and declines in resources to live

independently (Dowd 1980; Lin and Rogerson 1995; Rogerson, Burr and Lin 1998; Silverstein, Gans and Yang 2006). These factors tend to disproportionately characterize the experiences of female elderly parents, who also tend to be unmarried (UN 2005) and as such we observe more reciprocity of intergenerational relations between mothers and their adult children (Silverstein et al 2006, Lawton et al 1994, Wolf and Soldo 1998). Studies in Asia show that migrant children are likely to return home to visit their parents if one or both has declining health (Zimmer and Knodel 2010). In some cases the initial decision of the child to migrate is contingent on the health status of the parent and the availability of other siblings to care for the ill parent (Giles and Mu 2007). Other demographic factors such as the total number of living children, gender and marital status of the elder parent are important mediating factors in the informal support received by older adults.

The Barbados context

Any prior research on intergenerational support exchanges in the Caribbean is scarce. Somewhat more literature exists on the greater Latin American region. The majority of the existing work has focused on economic and political consequences of migration (Thomas-Hope 2009). Some studies have assessed the intersection of migration and family dynamics with regards to parents facilitating the migration of their adult children (Chamberlain 2004, 2006) and the effects of parental separation due to migration on children's development (Jones, Sharpe and Sogren 2004, Pottinger 2005). Whether elderly parents receive support and care from migrant and other non-co-resident children, and the impact of proximity of any or nearest child, and the nature thereof, however, is gravely under-studied.

Barbados presents a compelling setting for an assessment of the impact of nearest child on support of older adults. It has a long history of internal, regional and international migration, and the family is recognized as the primary source of caregiving across the life course. Although these socio-demographic characteristics can describe many developing countries, Barbados stands out among the English speaking Caribbean countries because of its fertility and mortality decline and the subsequent aged population structure. As of 2009, 15 percent of the Barbadian population was 60 years and over and this is projected to reach to 36 percent by 2050 (UN 2010). Table 1 presents a demographic profile of the country from 1960 to 2050. It shows declining fertility and increasing life expectancy at birth for both sexes. Women live longer, as is the case in nearly every country in the world. The United Nations Population Division documents that women aged 60 years and over, during the 2005-2010 period, can expect to have an additional 23 years of life while men 60 and over can expect to live an additional 18 years (UN 2010). Longer years of life are associated with increased propensity to have chronic diseases. Among the Barbadian elderly, the principal causes of death are cardiovascular diseases and diabetes while the primary reasons for medical consultations are related to hypertension, cardiovascular and respiratory diseases and diabetes among others. Disability amongst the population 65 and over was recorded at 35 percent in 2000 and more common amongst females 21 percent as opposed to 14 percent of males. These conditions place great demands on formal health care provision including housing and primary health care delivery.

Table 1 about here

At the same time, the government of Barbados is committed to improving conditions of vulnerable groups, which include the elderly, and in some ways may be more advanced with respect to formal provision of care than other countries in the region. Elderly persons have

unconditional access to primary and secondary health care services provided by the polyclinics and the national hospital. There are also five geriatric/district hospitals, which provide inpatient care. These services, provided by the national government, are free of charge at the point of delivery but private health care services are also available and used by those who can afford it (Pan American Health Organization (PAHO) 2007). Regarding pensions, over 92 percent of Barbadians 65 years and over receive pensions, which are funded by a combination of contributory and non-contributory pensions systems. Furthermore, Barbados is recognized as the only country in the English-speaking Caribbean that adjusts pension distributions to account for changes in the costs of living (Pettinato and Diaz Cassou 2005). These provisions are bound to have a prevailing impact on support from children, especially those living farther away. If parents have formal systems of support, the need for support provided from a distance may not be as great as in other developing nations with weaker systems.

Still, wide availability of formal health care may not negate that demands placed on the family to provide care, and the family remains the most common source of support (Rawlins 1999). Only four percent of the elderly lives in institutions (PAHO 2007). Demographic changes such as declining fertility and out-migration of younger cohorts raise concerns about the availability of younger family members to provide care. Therefore, Barbados presents an interesting contrast; it is a country with somewhat better formal systems of support in place for older persons than many developing countries, yet norms still dictate that older adults receive the bulk of their support within the family.

Current study and hypotheses

The above discussion highlights both theory and research that suggest that older adults are likely to receive support from children, but that the type of support may be a function of where a child lives. Those living out of country, for instance, are more likely to provide financial support, while those living close by may be more likely to provide functional support. This is to say that those who have co-resident children are likely to receive all types of supports, but are particularly likely to receive those that are easily provided within close proximity. Those without co-resident children, but with children who have migrated, especially internationally, are not likely to receive the same types of support, but may be in a good position to receive financial support and may not be disadvantaged in this respect. In this paper, we concern ourselves with the proximity of the nearest child and ask whether those without children nearby are disadvantaged across three types of support: functional, material and financial, with reference to the following hypotheses:

1. Older adults will receive support from their children across all dimensions regardless of the location of the nearest child.
2. The closer the location of the nearest child, the more likely it is that parents will receive support of all types.
3. Elderly parents whose children live in close proximity, for instance, they have co-resident children, will be particularly likely to receive the types of support that requires frequent personal contact such as functional support.

4. Parents whose closest child lives far away, for instance, those whose closest child lives in a different country will be most disadvantaged with respect to functional support and least disadvantaged with respect to financial support.

5. The effect of proximity will be contingent on needs of elderly parent such as availability of additional people in the household, gender, health, income, disability and marital status.

Methods

Data

This study draws upon the Survey on the Health, Well-Being and Ageing (SABE) in Latin America and the Caribbean (Pelaez et al. 2000). This multi-center study was conducted between October 1999 and December 2000 in seven urban cities in Latin America and the Caribbean, including Bridgetown, Barbados, under the auspices of the Pan American Health Organization (PAHO) with additional support provided by the Center for Demography and Ecology at the University of Wisconsin (Trujillo, Mroz, Angeles 2007; Glaser et al. 2006; Durate, Lebrao, Dias de Lima 2005). The University of the West Indies in Barbados provided assistance with the data collection. The sample of households was randomly drawn from the national election registry. A total of 1,878 households with persons 60 years and over were selected. One random individual, age 60 and over in the household was interviewed. An eighty percent response rate yielded a total of 1,508 interviews. The analytic sample includes 1,248 elderly persons who have at least 1 living child 15 years and over. Sample weights were constructed using the Census age categories to reflect the population of elderly persons in Barbados in each age and sex category during the 2000 Census (Nam 2009). Results are weighted to assure representativeness.

Measures

The receipt of support is examined across three dimensions: financial, material and functional. Elderly respondents were asked the following question of each child: "I would like to ask if (NAME) helps you in anyway with a) money, b) services like transportation, c) giving you things that you need like food and clothes and other items." We call these financial, functional and material supports respectively. The responses are dichotomized as either yes they receive help from at least one child or not.

Proximity of nearest child is measured by using information on the location of each child recorded at time of interview. Four categories of proximity are considered: co-resident; in the neighbourhood; outside the neighborhood but in the country; and abroad. Obviously, parents can have children in multiple locations but our primary interest in this paper is to examine the probability of receiving each form of support based on the location of the nearest child rather than on receipt of support from specific children.

Demographic characteristics of the elderly respondents that are considered as covariates include *age,* coded as a categorical variable with the youngest group, 60 to 64 years as the reference group. These categories were created to match those used by the Barbados National Census 2000. This was necessary to get the sample distribution of the elderly 60 and over to mirror the population distribution of the elderly by age and sex for the year 2000. *Gender* is categorical with women as the reference group. *Union status* is categorical and elderly persons in a union are the reference group. The unmarried or not in union category is a combination of persons identified as separated, divorced or widowed or in free union. *Number of living children* is treated as a continuous variable. *Residual household size* is included as a measure of other

persons in the household, other than the respondent's spouse and/or co-resident child who are already accounted for in other measures.

Socio-economic characteristics include *employment status* with persons not working at the time of the survey as the reference group. We also include a measure of *yearly income* from the following sources: job, pension, bank or rental, welfare and other sources. Within each source, weekly, biweekly and monthly income values were converted to yearly income. Yearly income was then categorized into quintiles with those with no income from these sources chosen as the reference category. Highest *education attained* is categorical with primary education as the reference group.

Health status is examined through three measures. *Self-rated health* is a categorical variable. The respondent was asked the following question: "Would you say that your health is excellent, very good, good, fair or poor?" We collapsed excellent health and very good health into one category because of small numbers of respondents indicating excellent health and this is the comparison category. Similarly we collapsed fair health and poor health. Respondents' *disabilities* were assessed with their indications of having difficulty with at least one Activity of Daily Living (ADL) and Instrumental Activity of Daily Living (IADL). The former include bathing; dressing; eating; getting in and out of bed; walking across a room and using the bathroom. IADLs include preparing a hot meal; shopping; doing light housework; doing heavy housework; managing finances and taking medication.

Analysis

Presented first are descriptive analyses of the analytical sample and variations in support received based on proximity. Multivariate analyses follow. Separate dichotomous logistic

regression models are used to predict the probability of elderly Barbadians' receipt of financial, material and functional support as a function of the location of their nearest child controlling for other things. Estimated are main effects of proximity of children on the odds of receiving each form of support. Then, interaction terms test for proximity with age, gender, health and income status to assess if and how support from adult children may be contingent on parental vulnerabilities.

Results

Table 2 shows the sample characteristics by presenting the distribution of social, demographic, economic and health variables for men and women. In alignment with global trends in population ageing, there are a greater number of women than men. The women are more likely to have a child living in the household. They tend to be older, are more likely to have more children and larger households, be married, and be in poorer health and have disabilities. As for assistance, elderly women are much more likely to receive all three types of support.

Table 2 about here

Table 3 shows the percent receiving various types of support by the location of the nearest child. Elderly Barbadians whose nearest child is co-resident are far more likely to receive every dimension of support. The likelihood of receiving financial support is highest for those whose nearest child is co-resident and lowest for ones with the nearest child outside of the country. For functional support, there is a sharp reduction in the likelihood of support received with increasing distance. Material support is most likely received when the nearest child is co-resident, but there is little difference in the percent receiving material support across other

distances. On balance, descriptive results indicate that the likelihood of elderly parents receiving different types of support does vary by the proximity between them and their children.

Table 3 about here

The effect of selected covariates on the probabilities of elderly Barbadians receiving three dimensions of support from their children is presented in Table 4. These effects generally correspond with expectations and support bivariate results presented in Table 3. Controlling for other factors, the likelihood of receiving support generally declines with increasing distance, although it is clear that those with co-resident children, the comparison group, are substantially more likely to receive support across all dimensions than those with a nearest child anywhere else. Indeed, elderly persons who have children not living in the same household are disadvantaged even if the nearest child is in the same neighbourhood. Elderly with their nearest child abroad, in contrast to one of our hypotheses, are quite disadvantaged even with respect to financial support.

Table 4 about here

Men are less likely to receive all forms of support relative to women and the likelihood of receiving functional and material support increases with age. There is a positive association between the number of children and probability of receiving functional and material support. Health status is also important. The probability increases if the parents' self-assessed health is good or fair/poor in comparison to very good/excellent.

Hypothesis (5) proposed that even among those whose nearest child is co-resident, the likelihood of receiving support will be contingent on the needs of the elderly parent. To determine if this hypothesis finds support in our data, interactions were tested. Table 5 presents

models with significant interactions. Shown are only the main and interaction coefficients, although each model controls for the other characteristics in the previous table.

Table 5 about here

Residual household size, economic activity and ADL difficulty interact with proximity in various ways. Residual household size combined with having a nearest child outside the neighbourhood increases the probability of financial support. One possible explanation here is that it is reflecting remittances to those caring for grandchildren when adult children are working further from home but not abroad. Economic activity interacts with proximity to influence financial support and material support such that those with nearest child outside the neighbourhood and currently employed have advantages. While this interaction is difficult to explain, it could be that older persons work because they lack economic sufficiency and thus are receiving financial and material help from both a job and a non-co-resident child who lives within the country. Finally, experiencing activity of daily living difficulties increases functional support among those whose nearest child is outside the neighbourhood. This suggests that children living further away will provide assistance to those in physical need. While the number of significant interactions is few, they do point toward children responding to the needs of parents when not living nearby but in the same country. That is, interactions suggest increased probabilities of receiving support when the nearest child lives outside of the neighbourhood but within the country and there is some need that the older adult experiences. However, interactions do not indicate increased probabilities of help when the nearest child is living abroad even if there is a need.

Discussion

Research on ageing and intergenerational relations in the Caribbean region has been somewhat neglected, yet the import of such research is heightened by realities such as the rate at which population ageing is occurring and the fact that it is occurring within relatively poor socio-economic contexts relative to developed regions. In addition, it is occurring in a region where the family plays a critical role in the care-giving of older persons. This role may take on particular significance in a country like Barbados where there is significant migration of the younger adult population and fertility has declined to below replacement level. This combination of demographic factors raises questions such as whether older adults without co-resident children receive similar levels of support as those with co-resident children, and whether those only with children living abroad receive remittances to a similar extent as those with children living in the same country. The main objective of the current study was to answer some of these questions by assessing how proximity of the nearest adult child relates to the probability that an older person receives three types of supports: financial, material and functional. By doing this, we hope to inform as well as activate the dialogue on the association between living situation and intergenerational support of older persons in the Caribbean. It is true that Barbados has a small population, but it is also the case that the country is experiencing many of the conditions that are or will be soon experienced in other Caribbean countries and therefore this study can serve as a baseline for similar studies elsewhere in the region.

Our results show, to quite an alarming degree, that geographic separation impinges on the receipt of support. Indeed, it is hard to over-emphasize from the current results the importance of having a co-resident child on the probability of support. Those whose nearest child is co-resident are highly likely to be receiving financial, material and functional support, net of other

important characteristics, like health and economic condition. When distance between parent and nearest child increases, outside of co-residence, little difference is noticed in the probability of receiving support. There is an exception in that the probability of receiving functional support is greater for those with a nearest child in as opposed to out of the country. At the same time, interactions provided some reason for optimism among those in need with a nearest child living in the country but outside one's neighbourhood. It is interesting, for instance, that those with the nearest child outside the neighbourhood and with ADL difficulties have quite a high probability of receiving functional support. Further calculations conducted using coefficients from Table 5 indicated that there is a 0.150 probability of receiving functional support if an older has a nearest child living outside of the neighbourhood and has no ADL difficulties, holding all other variables constant at their mean values. This doubles to 0.306 if there is an ADL difficulty. While these probabilities are still lower than those for older adults with a co-resident child, which work out to be about 0.540 with or without ADL difficulties, the increase is nonetheless dramatic and suggests some degree of changing probabilities of receiving support with increasing need.

Other characteristics that positively impact on the probability of receiving support include number of children, being female and age. Yet, we found no significant relationship between age and receipt of financial support or between income level and financial support. Moreover, our results are somewhat in contrast to literature that indicates strong provision of support by international migrants to elders in their country of origin (Gomes 2007, DeVos et al 2004). Some of this research is even based on qualitative studies conducted in Barbados (Chamberlain 2004, 2006). Our study suggests that the approximately 11 to 12 per cent of Barbadian elders whose nearest child lives outside of the country are disadvantaged relative to others, a situation that may be interpreted by some as a type of neglect.

But, the lack of association between income and financial support and the possible neglect among those without co-resident children and among those whose nearest child is abroad should all be interpreted with caution. The 2000 Census indicated that only a small proportion of Barbadian elderly depend on remittances as a source of their livelihood. The government of Barbados has instituted a number of public health provisions that have benefited health care for older adults (PAHO 2007), and there is a stronger pension support system in place in Barbados than in most of the region (Pettinato et al 2005). Indeed, the relatively strong public health and pension programs that exist in Barbados may provide a context within which to interpret our results, meaning that elderly parents who do not have a co-resident child may in fact be receiving a substantial amount of formal support. Elderly parents who do receive support from their nearest child living abroad may also receive substantial amounts, a factor that we could not measure in the current data. Although parents whose nearest child is co-resident are likely to receive support, our study cannot tell whether this actually comes from the co-resident child or whether there are children living elsewhere, including abroad, who are providing this support. Finally, we are disadvantaged in these data due to a cross-sectional design that limits the ability to make causal statements. The lack of longitudinal data, for instance, means that we cannot tell whether older parents whose nearest child is abroad have assisted their children in obtaining their living status with financial exchanges moving in the opposite direction. It is also possible that older adults may have been supported in the past by their children who live abroad. Thus we cannot say definitively that older adults whose nearest child lives abroad are neglected.

Earlier in the paper we referenced both new household economics and modified extended family perspectives. By suggesting that support is most likely received when nearest child is co-resident does not necessarily lend strong support to these ideas in Barbados. Rather, it suggests

some inflexibility in the informal and intergenerational support system. But, again, we caution not to over-interpret the findings. Our ability to comment on the modified extended family is limited in that the study did not assess other dimensions of intergenerational support, such as emotional, that may be evidenced by frequency of social interaction either via telephone calls, visits, or forms of new technology such as computer contact. These forms may be more characteristic of the relationship for elderly parents whose nearest child is abroad, as has been documented in studies of transnational Barbadian and other Caribbean families (Zontini 2007, Foner 1997). Our ability to comment on the new home economics perspective is hindered by our sample, which is entirely urban. We cannot determine whether similar relationships exist among rural living elders.

Increases in life expectancy alongside declining fertility and migration can pose some threat to the sustenance of informal support. The Caribbean region experienced very low population growth rates between 1996 and 2002, which has implications for low labour force growth rates in the near future. Relatively high unemployment continues to threaten the economic security of younger adults, especially in Barbados where national economic activity is dangerously dependent on the service and tourism sectors. As of 1999, the unemployment rate was 21.8 percent among young adults 15 to 24 years (Downes 2006). Young women are at greater risk of unemployment throughout the wider Latin America and Caribbean region even though their labour force participation rates have increased (Arriagada 1998, Downes 2006). If and when the need arises, labour market insecurity of young adults can potentially threaten financial support to older adults, which may explain to some extent the low probability of financial support to older adults with a nearest child outside their home. Moreover, labour

market insecurity and other declines in economic conditions can drive spatial separation of parents and their adult children who may emigrate for employment.

Our focus on the nearest child as a main indicator of proximity has both advantages and disadvantages. We do not mean to say that proximity of nearest child is the only factor that determines the supply of support. Indeed, it is quite likely that having children living in various places, such as co-resident and abroad, may be most advantageous. Still, given the changes taking place in the region that will see further reductions in family size and lead to increased separation between older adults and adult children, the results are certainly cause for concern. Now, as noted, relatively strong government programs make it possible that structural supports are playing a role in the lives of older people who do not have co-resident children. This is something we cannot tell from our data. Still, our study does intimate that there is a need for future studies in the region to assess the propensity and intensity of upward and downward flows of support based on proximity of all children. Since spatial separation of older adults and their children may have different meanings and consequences for the well-being of older adults in rural parts of Barbados, subsequent analyses should also assess the flows of intergenerational support to elderly in rural parts of Barbados and how this may differ from urban elderly. Indeed, the health status of rural elderly may have a stronger effect on financial, functional and material support from non-co-resident children than was shown amongst this urban sample due to broad socioeconomic differences in infrastructure across regions of the country. We would also suggest that a promising line of investigation is cross-national comparisons of intergenerational support. This is possible given other urban samples provided by the SABE study and other datasets available in the Caribbean and Latin American region. Comparative study can be useful

for disentangling how intergenerational transfers operate within distinct demographic and socio-economic contexts.

Most importantly, it is necessary to continue to push a research agenda with respect to the impact of migration on upward and downward flows of intergenerational support within a region that has a historical and cultural thread of familial separation as a means to the ultimate goal of ensuring the well-being of all members. Although this relationship is rarely assessed, it will take on more significant meaning as the region ages, fertility declines and migration among younger age cohorts continue against a backdrop of the family unit having the primary responsibility for care over the life course.

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Table 1: Demographic Profile of Barbados 1960 to 2050

	1960-1965	2000 - 2005	2010 - 2015	2045-2050
[1]Population (thousands)	231	268	273	270
Total Fertility Rate	4.27	1.5	1.58	1.84
Life Expectancy at Birth (males)	63.5	72.6	73.9	78.5
Life Expectancy at Birth (females)	68.3	78.9	80.3	84.2
[1]Percentage aged 60 or over	10	15.2	16.4	32.6

Source: United Nations World Population Prospects: The 2010 Revision. Accessed 5 May 2011 via http://esa.un.org/unpd/wpp/unpp/p2k0data.asp[1]These figures represent population and percent thereof at the beginning of the period.

Table 2: Characteristics of older adults by sex, showing means for continuous variables and percents for categorical variables

Characteristics of Parents	Men (N=489)	Women (N=759)
Receipt of Assistance		
% received financial assistance	30.3	62.6
% received functional assistance	26.6	49.0
% received material assistance	27.1	54.0
Location of Nearest Child		
% same household	41.4	55.5
% same neighborhood	13.8	9.5
% outside neighborhood	32.9	23.6
% abroad	11.9	11.4
Children		
Mean number of living children (sd)	4.0(2.5)	4.6(3.0)
Residual Household Size		
mean (sd)	0.9(1.4)	1.2(1.7)
Age		
60-64	24.8	22.5
65-69	22.5	21.1
70-74	20.3	19.9
75-59	13.8	15.0
80-84	10.5	11.4
85 and older	8.1	10.2
Marital Status		
% Married	47.9	76.8
Education		
% Primary	77.6	79.4
Employment Status		
% currently not working	74.7	79.0
% currently working	25.3	13.9
% no info on work	n/a	7.2

Continued next page

Table 2 continued:

	Men	Women
Yearly Income		
% no income	27.6	23.8
% income $130 to $3768	10.9	19.4
% income $ 3840 to $5100	11.9	21.2
% income $5110 to $ 13111.93	17.4	16.7
% income 13200 and over	24.7	12.4
% missing income	7.6	6.4
Health Status (self-rated)		
% very good/excellent health	20.4	13.0
% good health	38.9	34.0
% fair/poor health	40.7	53.0
Difficulty with ADL		
% have difficulty with at least 1 ADL	9.7	16.2
Difficulty with IADL		
% have difficulty with at least 1 IADL	16.4	27.0

Table 3: Support received by proximity of children

Location of Nearest Child	Total Cases	% Financial	% Functional	% Material
Household/Co-resident	617	70.0	61.9	60.5
Same Neighborhood	142	31.6	27.4	25.8
Outside the neighborhood	342	32.2	20.2	24.2
Abroad	147	21.6	4.7	24.6
Total	1248			

Table 4: Logistic regression results for informal support received showing log odds ratios (comparison category in parentheses) N=1248

	Financial	Functional	Material
Location of Nearest Child (Co-resident)			
Same neighbourhood	-1.520****	-1.449***	-1.434***
Outside neighbourhood	-1.406***	-1.755***	-1.305***
Abroad	-2.019***	-3.503***	-1.472***
Covariates			
Number of living Children	0.090**	0.066*	0.065*
Residual HH size	0.096	0.075	0.110*
Age (60-64)			
65-69	0.047	0.313	0.184
70-74	-0.147	0.597**	0.496*
75-79	-0.166	0.681***	0.403
80-84	0.398	0.728**	0.847**
85 and older	0.250	0.844***	0.842**
Gender (Women)			
Men	-1.292***	-0.830***	-1.060***
Marital Status (married)			
Unmarried	0.103	0.154	0.081
Education (Primary)			
Above Primary	-0.211	0.165	-0.154
Employment (unemployed)			
Employed	-0.360	0.152	-0.133
No info on work	0.364	0.117	-0.408
Yearly Income (no income)			
income $130 to $3768	0.358	0.055	-0.066
income $ 3840 to $5100	0.146	-0.078	-0.319
income $5110 to $ 13111.93	-0.152	-0.115	-0.570**
income $13200 and over	0.047	-0.258	-0.270
missing income	0.385	0.294	-0.180
Health Status (very good/excellent)			
good	0.052	0.211	0.435*
fair/poor	0.193	0.356	0.476*
Disability			
at least 1 ADL	-0.001	0.246	0.090
at least 1 IADL	0.074	0.159	0.247
Constant	0.558	-0.486	-0.214
Pseudo R-square	0.2128	0.2286	0.1743
chi2	257.22***	268.99***	224.29***

*p <.05; **p <.01 *** p <.001

Table 5: Logistic regression coefficients for informal support transfers received showing interactions effects(comparison category in parentheses) N=1248

	Financial	Functional	Material
Location of Nearest Child (Co-resident			
neighborhood	1.553***	-1.455***	1.487***
outside neighborhood	1.861***	-1.910***	-1.522***
abroad	1.987***	-3.344***	-1.592***
Residual HH size	0.051	0.077	0.121*
Employment (unemployed)			
Employed	-0.491*	0.150	-0.476*
No info on work	-0.076	0.152	-0.502
Disability			
at least 1 ADL	0.045	-0.012	0.093
Interactions			
Proximity *Residual HH Size			
Neighborhood x Residual HH	-0.060		
Outside Neighborhood x Residual HH size	0.453**		
Abroad x Residual HH size	-0.266		
Proximity x Working			
Neighborhood x Employed	-0.598		0.407
Outside Neighborhood x Employed	0.936*		1.266**
Abroad x Employed	0.717		0.165
Neighborhood x no info on work	na		na
Outside Neighborhood x no info on work	-0.715		-0.087
Abroad x no info on work	1.559		2.056
Proximity X ADL			
Neighborhood x ADL		0.105	
Outside Neighborhood x ADL		0.930*	
Abroad x ADL		na	
[1]**change in log likelihood (lr test)**	23.81*	7.55*	13.57*
Constant	0.672*	-0.469	-0.126
Pseudo R-square	0.2253	0.2245	0.1812
chi2	274.6***	263.37***	234.55***

*p <.05; **p <.01 *** p <.001
1 Compared to model without interactions
na no cases