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LIVING ARRANGEMENT CHOICES AMONG THE ELDERLY: A DECISION-MAKING APPROACH

by

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Department of Sociology

Submitted in partial fulfillment
of the Requirements for the degree of
Doctor of Philosophy

Faculty of Graduate Studies
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ABSTRACT

This research investigates the determinants of living arrangements among non-institutionalized elderly. More specifically, it explores the factors which differentiate elderly persons living alone, living with spouse, and living with other persons, e.g. son or daughter, sibling etc. These factors are organized in terms of a decision-making framework developed from micro-economic and demographic theory. The framework is modelled after Dixon's (1978), where marriage patterns are viewed as the result of economic feasibility, demographic availability of mates and desirability of mates. Choice of a living arrangement is seen as the product of underlying norms and preferences, a set of socio-demographic factors, and constraints on choice.

Much previous research on this general topic has relied on census data, which did not provide direct measures of relevant factors such as physical health or attitudes towards residential arrangements. This dissertation uses data from 454 personal interviews drawn from a stratified random sample of persons 65 and over living in private households in London, Ontario.

Data analysis indicates that the decision of whom to live with is influenced by several of the variables defined in terms of the theoretical framework. For the present

sample, the most important factors are the social norms and personal preferences of the respondents. Of these, a preference for independence and to a lesser degree, privacy, surface as the strongest predictors of living arrangements. Being able to do what one wants without outside interference tends to be viewed by older persons as a very important household good. The analysis also suggests that the constraining effects of past fertility, physical strength and mobility, domestic competence, and informal support and family characteristics are, to a lesser degree, also important. In addition, several socio-demographic variables (e.g., ethnicity, age and sex) arise as significant predictors of living arrangements. Part of their effect on living arrangements operates through preferences and constraints. For example, gender appears to be associated with attitudes viewed as determinants of living arrangements.

Overall, living arrangement selection among the elderly often involves a fair degree of passivity and inertia. But when actively stimulated, the choice entails a self-conscious evaluation of costs and benefits associated with living arrangement options. Perception of options is itself affected by constraints as well as by norms and preferences. Compromise and acceptance of less than optimal living arrangement conditions are common features of these decisions.

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CHAPTER I

REVIEW OF LITERATURE

1.1 Introduction

The study of non-institutional living arrangements among the elderly in contemporary societies has been growing rapidly over the last two decades. Living arrangements are defined as whom one chooses to live with and for the purpose of this research will involve non-institutional living arrangements.

Alterations in the household composition of modern countries such as Canada have implications for intergenerational family relationships as well as other broad social changes. Issues involving privacy, independence, conflict, dominance, companionship, and kinship obligations and ties surface as focal points related to choices of living arrangements.

The choice of living arrangements at the latter stages of the life cycle is particularly significant when it is realized that these choices also have implications for the utilization of both informal and formal support services. These implications are magnified by the expected growth in our elderly population, in particular, the old-old (80 plus).

The thrust of this thesis is to further our understanding and knowledge of living arrangement choices among

the elderly by means of an indepth analysis of key determinants followed by the organization of these factors into a theoretical framework from which testable hypotheses can be drawn. This will involve direct measurement and empirical testing of variables which have not yet been analyzed in this manner. The impetus for such research originates from two sources. First, the dissatisfaction with census data due to the omission of variables central to this field of study. And second, the absence of a strong theoretical development related to the living arrangements of the elderly or even more generally to the selection of living arrangements.

1.2 Previous Research on Living Arrangements

Interest in the non-institutional living arrangements of the elderly has been prompted by the unprecendented rise in single person living among the elderly that took place in Canada, United States, and other developed nations after 1940. These changes in household structure have kindled concerns about the social welfare of the elderly (Shanas, 1969) and the effects of household changes on family processes (Goode, 1963). Most concerns relate to the notion that living alone may interfere with a proper level of emotional and material support necessary for 'healthy' living at older ages. Researchers have attempted to isolate the determinants as well as the negative consequences of such living arrangements.

One way of defining living arrangements is to view them using an underlying dimension of independence representing a scale of separateness. Those living alone can be looked upon as the most separate, those living with spouse only as next most separate, and those living with one or more kin or non-kin (with or without a spouse) as least separate (Lawton, 1980:64). It is recognized that there are other dimensions that could be used, however, this one is most relevant to this research work. As well, the empirical analysis lends support to this decision. Since the statistical analysis does not rely on an ordinal dependent variable, and treats living arrangement as a categorical variable, this division of the dependent variable does not represent a major pivot point of the thesis.

For the purposes of this work, living arrangements will be left in the three categories listed above. Separate living will refer to the ranking of living arrangements using independence as the underlying dimension, where living alone and only with a spouse are viewed as more separate forms of living arrangements than living with others. This will facilitate the development of clearly stated hypotheses in Chapter II.

1.3 The Rise of Separate Living

The number of older persons living in single person households in Canada has quadrupled between 1951 and 1976.

Similar trends have been reported for United States (Kobrin, 1976a). Change in the proportions living alone has occurred among many groups, however, in absolute terms previously married women 65 and over stand out (Chevan and Korsan, 1975; Kobrin, 1976a; Michael et al., 1980; Fletcher and Stone, 1980; Harrison, 1980). Changes in the age/sex/marital status distributions have had some effect on the transformation of living patterns among Canadian and American elderly. In the United States, changes in the distributions of these compositional factors explain about one-third of the increase in female primary individualship[1] at older ages between 1950 and 1970 (Kobrin, 1976a:134). Similarly, Harrison (1980:35) discovered that, in Canada, about 34% of the growth in one-person households between 1961 and 1976 among persons aged 65 and over was due to population change. Thus, other factors besides alterations in population composition must be at work.

A review of the most popular explanations for the dramatic increase in living alone in conjunction with an overview of the supplementary determinants found in the literature will: 1) help to designate the major determinants of living arrangements among the elderly; and 2) assist in the formulation of a theoretical framework from

[1] Primary individuals, a U.S. census term, are those individuals who live alone as heads of separate households, as well as the small proportion, mainly young people, who head households containing non-relatives.

which we can organize these variables in a meaningful way.

1.4 Explanations of Separate Living

Several competing theories have attempted to explain this phenomenon. The most popular explanations have been: a) rising real income has allowed for the increased purchase of privacy among the elderly; b) declining fertility has limited the availability of adult children with whom they might co-reside; and c) alterations in social norms or personal preferences regarding living arrangements of the elderly have placed a higher relative value on privacy and independence as opposed to companionship and mutual help, and/or changes in family and social norms have resulted in greater age segregation and therefore have substantially increased the degree of social isolation experienced by elderly persons.

1.4.1 The Purchase of Privacy Hypothesis

One of the first attempts to explain this new residential pattern was by Beresford and Rivlin (1966). Analyzing changes in "privacy" among persons of all ages in the United States (measured statistically as the proportion of households containing only one person or one nuclear family), the authors argue that given a strong preference for privacy, as income rises, peoples' demand for privacy increases. Using Massachusetts census data from 1885 to 1940, they find that

while relative income had increased during this time period there was no appreciable change in household structure. In contrast, the period from World War II until 1960 experienced both an increase in relative income and a rise in age-specific headship rates, in particular, an expansion of primary individualship. They conclude that, "a basic shift in tastes occurred at the same time after which people tended to use their rising income to purchase additional privacy" (Beresford and Rivlin, 1966:254). This would result in both a reluctance of adult children to accommodate their older parents, and on the other side, a preference for private households among elderly persons. Utilizing cross-sectional data for 1952 and 1960, support is found for the contention that an increase in the relative incomes of elderly women has led to more separate living by this group.

With a similar emphasis on income, Michael et al. (1980) argue that income level is the major determinant of separate living, which they view as "a reflection of an economic demand for privacy" (Michael et al., 1980:60). Furthermore, they state that the historic growth in relative income since around the turn of the century was not substantial enough to influence residential independence until the post World War II period, at which time it reached a 'threshold' level. The effect of income is tested by fitting regression equations to 1970 United States cross-sectional data across states. By estimating cross-sectional

structures, they attempt to explain longitudinal household variations between 1950 - 1976 for single persons ages 25 - 34 and widows age 65 and over (Michael et al, 1980:40). While it is argued that alterations in income and prices from 1950 to 1976 have resulted in an increase in percent living alone, they confront the same problem as Beresford and Rivlin (1966), where income growth previous to 1950 does not elicit expected variations in the relative numbers of persons living alone. Their resolution is to assume a curvilinear relation which they interpret in terms of a threshold.

A direct measure for 'tastes' and 'preferences' would be necessary for an adequate test of both Beresford and Rivlin (1966) and Michael et al's. (1980) contentions. The former rely on a circular argument, where tastes are assumed to have changed in parallel with changes in living alone, then these changes in living arrangements are explained by arguing that advances in income must have affected tastes for privacy. The latter argument, based on a micro-economic model, assumes that tastes remain relatively constant, and thus have no explanatory value, while economic factors actually cause the behavioural change.

It is therefore necessary to clearly define and operationalize the concepts of tastes and preferences as commonly used by economists, in addition to the sociological terms of norms, values, attitudes, and desires frequently referred

to for ex post facto explanations of variations in behaviour over time (Burch, 1981:11). Furthermore, to argue that a shift in 'tastes' and 'preferences' for living alone has affected living arrangement choices of the elderly, it must be empirically proven rather than assumed that these factors affect the decision to live alone apart from other factors such as economic or health-related variables.

1.4.2 Demographic Availability Hypothesis

Another explanation for the rising number and proportion of primary individuals involves the relative decline in fertility over time and its effect on the availability of alternative forms of living arrangements. Basing her research on United States census data between 1950 and 1974, Kobrin (1976a) argued that for women aged 55 and over and previously, but not currently married, the rise is due in large measure to a decline in the relative number of adult daughters (i.e., women ages 35 - 44) with whom they might co-reside. The crux of her argument is that age-specific headship rates for older females are influenced by the past fertility of those same older women.

Kobrin presents no direct evidence for the hypothesis, but shows that for aggregate time-series data, average household size and the total fertility rate (averaged over the preceding twenty years) decline in parallel until around 1950 but diverge sharply thereafter, with fertility rising

while average household size continues to fall through 1973 (Korbrin, 1976, Figure 1, p. 135). At the same time, a ratio of women aged 35-44 to widowed and divorced women 55 and over (a rough measure of the number of women in the daughter generation with whom older divorced and widowed women might live) is more or less stable until 1930, and then declines steadily in parallel with declining average household size (Wister and Burch, 1983:1). Kobrin concludes:

> There is evidence that in the not too distant American past elderly relatives, particularly female ones, ordinarily lived with the families of their kin, especially of their children ... Under former demographic conditions, it was possible for these women to be included in available families, and yet still have only a small proportion of families contain such relatives (p.136).

Furthermore, she speaks of the "sharp rise in non-nuclear families which would have occurred in order to absorb the increases in eligibles caused by the shift in population structure" (p. 136).

A number of studies have found fertility to be an important determinant of elderly persons' living arrangements. Using census data from United States, Shanas (1962) found that childless elderly were more likely to live alone than those with children; 23 percent of those with children were primary individuals as compared with 63 percent of those without children. More recent research based on Canadian census data has revealed a similar relationship.

Finding both fertility and income as key determinants, Harrison (1980:60) argues that "a decrease in the number of children ever-born is likely to result in a contraction of the opportunity structure for living arrangements during widowhood and an increased propensity to live alone". His tabular analysis, however, only included fertility and income, and did not compare the relative impact of fertility against additional determinants, such as edueation, age, or health factors.

Using multiple regression to analyze 1971 Canadian census data, Wister and Burch (1983) found that for previously married women over 55, children ever-born was the strongest predictor of separate living, while education, age and income also displayed significant relationships. They conclude that "as a decline occurs in the relative number of adult offspring available for shared living arrangements, there will be an increase in the number and proportion of female primary individuals" (Wister and Burch, 1983). A supplementary finding shows that children ever-born and income produce a significant interaction effect in addition to the main effects. This means that fertility and income both exert an effect on living arrangements but that a full understanding of their effects requires attention to combinations.

The extent to which fertility determines household arrangements, however, depends on the relative causal

importance to be attributed to the availability of adult kin, compared to the importance of other factors including income, health, educational attainment, availability and cost of various housing types, as well as norms and attitudes affecting these arrangements.

1.4.3 Normative/Cultural Hypotheses

In a cross-cultural study based on the living arrangements of widows in the United States and Israel, 1960 and 1961, Chevan and Korson (1975) attempt to display the universal trend of 'family modernization'. They define this process as "the adoption of a set of norms, attitudes and values which lead to changes in family structure", and that, "as different societies and subcultures modernize, their family structures come to resemble one another" (Chevan and Korson, 1975:517). The assumption is that the diffusion of the small family system has led to a rise in separate living. This argument runs parallel with parts of the previously discussed works of Beresford and Rivlin (1966) and Kobrin (1976), where emphasis is placed on changing norms and preferences for privacy and primary living.

Conducting cross-sectional analyses on 1960-61 household census data, Chevan and Korson (1975) find that living alone (a 'national norm' for both countries) is determined by similar factors for Israel and the United States. However, while age and children ever born were consistently the

strongest independent variables, Chevan and Korson (1975) did not have comparable data on health, family attitudes and values, personality factors, and economic variables, which they list as salient although unmeasured predictors.

The fact that their study does reflect some similarity of trends in living alone between Israel and United States leads them to conclude that these processes are "under closely corresponding social and demographic influences" (p. 517). They then argue that 'family modernization' is usually accompanied by several societal changes that have been demonstrated as being determinants of separate living including increased female labour force participation, rising educational attainment, urbanization, decreased fertility, changes in age at marriage, changes in marital stability, increased life expectancy, and increased income (p. 517).

Other proponents of the 'family modernization' theme have emphasized the effect that certain structural changes have had on the status, power, and security of older family members when societies change from traditional to modern forms. From the perspective of the western modernization experience, Smith (1981) suggests that the elderly have gradually lost the status that was once associated with age because of a number of societal changes. Among these, according to the author, "are the rising proportion of the population in older age groups, the impact of compulsory

retirement, the emergence of mass affluence, and the development of the welfare state as an alternative to the family" (Smith, 1981:92).

These structural arguments, however, are weakened by the absence of a micro theory that can link the previously discussed societal determinants of separate living to the changes in normative and preference structures embedded in the process of 'family modernization' or 'nuclearization' at the individual level. An adequate explanation of this phenomenon must uncover the motivating forces affecting the propensity to live separately at the individual level before such structural associations can be understood.

A common interpretation of modernization theory, as it relates to older people, focuses on the decline in the position of the elderly within the family and society over generations, which causes them to experience increased isolation (Cowgill, 1974). However, a controversy presently exists as to whether the modernization of the family in western countries is a function of increased isolation or 'welcome gains' in privacy (Kobrin, 1981).

Hareven (1981) argues that, historically, the level of kin integration in the United States was tied to family needs and obligations that were a necessary part of family economic strategies. She states that,

> in the nineteenth and early twentieth centuries, family relations were characterized by a high degree of kin integration. Kin served as the most

> essential resource for economic assistance and security and carried the major burden of welfare functions, many of which fall now within the purview of the public sector (Haraven, 1981:161).

Haraven (1981:160-161) concludes that "the increasing separation between the family of origin and the family of procreation over the past century, combined with a growing privatization of the family...all occurred in the context of changes in the quality of kin relations."

Kobrin (1981) is in agreement with Haraven in her contention that older people today have experienced considerably more isolation, regardless of a number of researchers (most notably Shanas et al., 1968 and Shanas, 1980) who have shown that there is a high frequency of contact between kin and elderly parents. It is believed that these contemporary studies have not documented the intensity, quality, and consistency of kin support, and in particular have ignored the breakdown of instrumental ties found when the family no longer provides economic security and social support (Haraven, 1981).

In contrast to the perspective that age segregation is a by-product of 'family modernization' resulting in the relative isolation of age groups, a number of other researchers view the shift in living arrangements as the result of a norm or preference for separate living that connotes a desire to live apart from kin (Shanas et al., 1968; Lopata, 1973; Abu Laban, 1980). This perspective is clearly stated

in the following passage:

> ... a norm of independence tends to operate in North American society, stressing the independence of both older parents and their adult children. Older people themselves give verbal assent to this norm. They do not express a wish to live with their adult children, but rather, see such a move as fraught with hazards for all concerned (Abu-Laban, 1980:133).

In finding that income increases the propensity to live alone, several researchers contend that financial resources allow for the purchase of privacy (Beresford and Rivlin, 1966; Michael et al., 1980; Kobrin, 1981), thereby assuming that privacy as measured by independent living is always desired. Many economists, but particularly those adhering to the Chicago School, tend to view 'tastes' and 'preferences' involving privacy as fairly constant while most sociologists and demographers view privacy, autonomy and independence preferences as historically recent and dynamic phenomena in western countries. It is apparent from this discussion that there is a need to measure this dimension. In fact, it was stated as early as the 1970's that a study was needed to determine the degree to which the elderly are increasingly pleased with independent living, rather than simply using culturally prescribed attitudes as rationalizations for the fact that they cannot live with others (Lopata, 1971).

The lack of good historical data makes the previously discussed arguments difficult to test. Due to the problems

of definition in longitudinal data (Smith, 1981) and the limited scope of census variables, it has been suggested that a cross-sectional study based on interviews may reveal contemporary norms and preferences concerning household choice (Burch and Wister, 1982; Haraven, 1981; Kobrin, 1981; Smith, 1981).

In her most recent contribution to the literature, Kobrin (1981:376) concludes that one must transcend demographic and economic considerations by gaining "a more sociological understanding of the group norms or preference structures" determining the selection of whom to live with.

Following this line of thinking, Thomas and Wister (1984) have attempted to examine the effect of cultural or normative structures, as reflected by ethnicity, on the living arrangements of older previously married women. In an analysis of 1971 Canadian census data, ethnicity was found to be the second strongest predictor of living alone next to fertility after key social, demographic, and economic variables were controlled. The authors argue that, the persistence of ethnic differentials suggests that other unmeasured variables associated with ethnicity may be at work. Norms involving kinship obligations and achievement orientations were noted as important cultural factors that contribute to the differential household behaviour of British, French, Jewish, and Italian ethnic groups. Like several other researchers, they conclude that future

research must more clearly articulate the domain of salient cultural or normative factors and to display how these factors interrelate with or are mediated through social, demographic and economic variables affecting household decision-making. This perspective stems from past research indicating that the living arrangements of the elderly are the outcome of a lifelong series of interactions between decisions, experiences, and behaviours (Soldo, 1977).

1.5 Integrating the Major Explanations of Household Change

The major hypotheses explaining changes in household behaviour can be organized theoretically by adapting Dixon's (1971, 1978) framework for analyzing variations in marriage patterns, where the demographic availability of mates, the feasibility of marriage, and the desirability of marriage are placed into a funnel-like schema as constraining forces on choice. Similarly, living arrangements can be viewed as the result of: 1) social norms or personal preferences affecting the desirability or demand for certain household configurations; 2) the economic feasibility of various options; and 3) the demographic availability of kin for co-residence, as well as the availability or supply of dwelling units suitable for certain living arrangements.

Kobrin and Goldscheider (1979) have made a strong case for adopting this strategy to study changes in household structure both within and between societies. They emphasize

the need to study not only preferences and social norms as they relate to changes in household structure, but to include economic feasibility and demographic availability as constraints on these decisions. This is consistent with previous research on the determinants of household status among elderly women (see Wister and Burch, 1983 and Thomas and Wister, 1984). Furthermore, they argue that, "the major transition associated with household structure in the process of modernization involves the changing norms or preferences about living arrangements mediated through changes in demographic and economic constraints" (Kobrin and Goldscheider, 1979:6).

According to the literature on determinants of living arrangements among the elderly, there are a number of other variables associated with the household status of older persons, and to these we now turn.

Logically, it makes sense to extend the domain of constraints to include other determinants that appear to affect living arrangements, such as: health and kinship support. For example, poor health may result in limited functional ability, which may hamper one's ability to live alone unless compensated by intense kinship support. In addition, while there may be determinants that cannot be designated as constraints or as social norms or preferences, perhaps they may be seen as affecting household behaviour directly or through one or more of these factors. It is

therefore necessary to review these other determinants of living arrangements for the purpose of organizing them into a theoretical framework in the following chapter.

1.5.1 Chronological Age

The study of age related processes involving critical stages that the typical family experiences over the course of its life span has been termed the life cycle of the family (Glick, 1977). For the elderly, one would expect major life events to include retirement, the onset of serious health problems and losing spouse. Entering into the empty nest stage, however, tends to occur in the early 50's (estimated as the median age of mothers at the marriage of their last child). Within this context, research centering on the determinants of living arrangements considers age to be working indirectly on three levels (Soldo and Brotman, 1981). First, it has been shown that age affects the probability of being currently married due to the effect of mortality (Soldo and Lauriat, 1976; Soldo, 1977). Second, age affects the probability of living in various living arrangements because of its relationship with morbidity. Shanas (1962) and Widgor (1978) have documented a negative relationship between age and functional capacity. With advancing age, fewer older persons are able to live on their own due to restricted movement and other limitations linked to poor health. It is not surprising that Shanas (1962)

finds that older persons with health limitations are considerably more likely to co-reside with kin. For the same reason, age also affects the distribution of older people in institutional versus private settings.

Finally, age can affect personal preferences of older people with regard to separate living. With passing years situations may arise where shrinking friendship networks, dwindling income and increased physical dependency make shared living more acceptable despite previous feelings about independence (Abu-Laban, 1980).

1.5.2 Sex Differences

As with age, variation in living arrangements by gender can partly be explained by the mortality and marital status experiences of men and women. The effect of differential survival rates between males and females (Kitagawa and Hauser, 1973), magnified by the fact that women tend to marry older men results in the former living in non-intact households more than twice as often as men (Kobrin, 1976a; Soldo, 1977).

In 1978 there were 131 females for every 100 males over 65 in Canada. Furthermore, after divorce or widowhood women are less likely to remarry, which increases the probability of being unmarried at older ages. The consequence is that women are expected to be found living alone more often than men, a finding that has been consistently supported by

researchers.

In terms of actual numbers, the 1976 Census of Canada showed the Canadian population containing 1.1 million women aged 65 and older. In addition, the absolute number of older women in Canada is expected to triple over the next 40 years (Fletcher and Stone, 1980). When we combine these increases with the previously stated sex differences by marital status and mortality, it is not surprising that older widows tend to be the focus of gerontological research.

An additional factor that contributes to sex differences in living arrangements involves relationships with kin. Research has consistently found that elderly women are much more kin-oriented than elderly men. When elderly men and women without spouses are compared, we notice that the latter are more likely to live with kin (Shanas et al., 1968), while the former tend to be institutionalized (Soldo, 1977). The closeness of the mother-daughter tie and the greater degree of assistance that older women are able to provide in their daughters' home contribute to these differences in living arrangements by sex.

1.5.3 Marital Status

Changes in marital status at older ages usually signify a critical point in the life cycle and may prompt a reassessment of living arrangements. The probability of

moving from a married state to a widowed state increases with age and is also related to gender. Not only does the loss of a spouse immediately affect the composition of a household but marital status in general is related to a number of social and economic factors that shape the living arrangements of the elderly. For example, the very small percentage of older people who are never married experience a significantly reduced network of kin as potential co-residents, which produces a greater likelihood of the never-married being institutionalized. Divorced and separated persons tend to have a slightly smaller completed family size than widowed (Soldo and Brotman, 1981) and tend to co-reside with kin less often than the widowed. For women, widowhood usually results in a reduction in income, making elderly widows one of the most socially disadvantaged groups in society. Separating marital status from its social and economic correlates, we find that the major distinction is between being married and non-married, (which includes never-married, separated, divorced and widowed). Assuming that spouses co-reside, those who are no longer married or never-married are candidates for primary living.

1.5.4 Educational Attainment

Education has been shown to be associated with older persons' living arrangements. Beyond its effect through income, education appears to have an independent influence

on living arrangements. Older previously married women with higher education tend to live alone rather than with kin or with non-relatives (Wister and Burch, 1983). It has been suggested that the independent effect of education on the household status of older women after key social, demographic and economic variables have been controlled, may result from two sources. Within an attitudinal framework education may modify preferences towards independent living while from a practical standpoint it may "enhance one's competence and confidence" for separate living (Thomas and Wister, 1984). Further research is needed to assess the non-economic nature of education as a causal factor in the selection of living arrangements of the elderly.

1.5.5 Health Status and Domestic Competence

Changes in health status can completely alter the effect of the aforementioned determinants of living arrangements. Constraints due to poor health limit individuals in their household choices. For instance, the loss of the ability to cope with everyday tasks forces elderly persons to meet their needs through co-residence or some combination of formal or informal support services. Those suffering from severe health problems can remain in the community if they receive adequate care from relatives or friends, while those without strong family support must rely on special home medical services, such as a live-in nurse,

or else be institutionalized. Therefore, living alone requires at least a minimum functioning capacity. This minimum level of coping ability, however, has not been clearly defined by researchers, partly because it can vary according to the design of the housing environment. For example, specially designed single apartments for the elderly have been experimented with in England. These very small attached apartments have been constructed for elderly persons with health impairments and include a number of conveniences and safety features, the most notable being strategically placed emergency cords that summon the housing unit's nurse or paramedic. Whether a person lives in a house, apartment, or retirement home affects the minimum level of functional capacity required.

The relative importance of health-related factors has not been adequately assessed by researchers, primarily due to heavy reliance on census data, which lacks health related variables. Although older person's health problems make up a considerable bulk of the gerontological literature, relatively little has been done on the effects of these health conditions on living arrangements, beyond their relationship with support service needs and institutionalization.

1.5.6 Adult Children and Other Kin

It has been clearly shown that the kin of elderly persons provide the major sources of interpersonal support

(Abú-Laban, 1980; Marshall, 1980). While the absolute number of adult children may limit the network of potential candidates for co-residence, it is also important to consider both the quantity and quality of kin support (Haraven, 1981). The degree to which kin provide emotional and material support for the elderly can determine their living arrangements. This is particularly true for elderly widows who tend to be economically disadvantaged and often experience difficulties in coping with responsibilities formerly handled by their husbands. However, health, economic, or more general coping problems experienced by the elderly can be mitigated by family support; sometimes giving the older persons the option of continued separate living. Proximity of kin to the elderly person could also affect the level of support and therefore influence living patterns through this effect.

Other things being equal, greater quantity and quality of kin support from outside the household would be expected to be associated with living alone rather than living only with a spouse. However, those living with a spouse or other kin would receive more support due to the proximity of potential helpers, which is determined by the living arrangement. In this sense, while informal support may be a determinant of living arrangements, they may be a consequence of them as well. This problem of isolating temporal ordering will be discussed further. Overall, informal

support should be more important for the spouse-less, the economically disadvantaged, the unhealthy, and therefore particularly for older widows.

A comprehensive analysis of the determinants of household decision-making must include additional information about adult children and other kin. Hill and Hill (1976) have emphasized the importance of the supply of alternative household choices. Furthermore, adult children often influence household decisions of elderly parents. Apart from family support, the preferences that adult children or even kin express towards joint living may also modify choice. An understanding of the decision-making process would therefore be facilitated through the inclusion of attributes that reflect pertinent characteristics of close kin such as physical distance, living arrangement preferences, available space and even education, marital status and gender.

1.5.7 Ethnicity

In the discussion of the salience of norms and preferences in an analysis of the major correlates of living arrangements, it was mentioned that ethnic variations in living arrangements reflect cultural and normative differences after controlling for other major factors. The importance of ethnicity in shaping normative or preference structures surrounding the selection of living arrangements should be analyzed further (Thomas and Wister, 1983).

Initial findings indicate that the level of kin support and the expectations involved in household decision-making vary by ethnicity. In addition, ethnicity may also play a role in the proximity of kin to the elderly person due to the differential migration behaviour found among Canadian ethnic groups (Trovato and Halli, 1982).

1.6 Summary

The preceding review of the literature has served three important functions. First, it has provided an in-depth discussion of the principal factors influencing the living arrangements of the elderly. Second, it emphasizes the need for a more complete analysis of this behaviour for the purpose of structuring these variables within a useful theoretical model. Third, underlying the discussion of competing interdisciplinary explanations of household behaviour are hints of a common theme. An assessment of past research suggests that it may be fruitful to mold the determinants of living arrangements into a comprehensive theoretical framework. This perspective considers that living arrangement choices are the outcome of individual level evaluations of the costs and benefits associated with various living accommodations. The decision-making is done under the influence of constraints on choice, underlying normative and preference structures, and a number of socio-demographic factors that capture macro-level societal processes.

CHAPTER II

THE CHOICE OF LIVING ARRANGEMENTS AT THE OLDER AGES

2.1 Theoretical Intentions

This section attempts to organize the determinants of living arrangements among the elderly within a decision-making framework. This will lead to the formulation of several hypotheses that will contribute to furthering understanding and knowledge of living arrangement choices. Decision theory will also help determine whether variables viewed as important environmental factors are in fact relevant from the viewpoint of the individual decision-maker. In particular, we are interested in making sense of the large number of determinants by placing them within a model, which reflects macro and micro-level processes. It should be emphasized that this theoretical work is primarily exploratory in nature due to its early stage of development. The theoretical modelling is therefore provisional.

This perspective originates from the proponents of exchange theory (see especially Homans (1961), (1974) and Blau (1964)), where decisions about social interaction or exchange are based on human desires to achieve joint satisfaction through the transfer and mutual experience of

rewards and punishments. These may be social (status), psychic (love), or physical (money) (Bagozzi and Van Loo, 1980:99). Furthermore, decision-making models have been successfully applied to a number of demographic behaviours including fertility, migration, marriage and divorce, and recently household formation.[1]

2.2 Economic Models of Household Formation

It is within the domain of economics that we find the first application of a decision-making model to the explanation of household formation (see especially Duncan and Morgan, 1976; and Ermisch, 1981). Based on the conventional model of consumer choice, individuals are seen as rational decision-makers who consciously weigh the costs and benefits of various living arrangements in an attempt to maximize satisfaction. Assuming a general 'taste' for privacy or independence, which manifests itself in the selection of separate living when economically feasible, economists are able to focus on a number of economic variables that affect household configurations. Past work has attempted to show that changes in income and housing costs/availability affects an individual's ability

[1] A general review of these applications can be found in Burch, 1979. For specific applications of decision-making theory to these areas see Burch (1980) for fertility; Bach and Smith (1977) for migration; Wolfe (1977), and Becker, Landes, and Michael (1977) for marriage, divorce, and remarriage; and Ermisch (1981) for household formation.

to buy privacy (Beresford and Rivlin, 1966; Carliner, 1975; Michael et al., 1980). These studies do confirm a positive relationship between income and separate living. More recently, attempts have been made to broaden this perspective somewhat by assuming that the only reason elderly couples or individuals would choose to live with others would be if they economically or physically could not live alone (Schwartz et al., 1982).

Other economists, however, argue that the "taste for privacy" conception is too simplistic, because it ignores the benefits derived from joint living in the form of assistance in home production (Ermisch, 1981). This may be produced either through contributions to work that arise around the home or by means of the scale of economies related to housing and consumer durables. Adopting the view that residential choice is the result of 'optimal household grouping' (commonly referred to as the maximization of a utility function in economic analysis) allows this approach to directly explain joint living as well as separate living. Furthermore, transcending the more narrow economic view of 'purchasing privacy', the household production approach provides a framework that incorporates the role of several socio-economic factors in shaping decisions about household formation. Adult household members provide aid in the production of these "non-marketable home produced commodities, ... the production of which requires home time and

goods purchased in markets, particularly housing and consumer durables" (Ermisch, 1981: 2). Economies of scale were found to be the primary contributor to home production in his analysis of 1973 and 1976 British General Household Surveys.

Several issues arise when the application of micro-economic models are considered in the light of previous work on the living arrangements of the elderly. Some of these issues have surfaced due to developments in decision-making theory as applied to individual fertility behaviour and to a lesser degree in the areas of migration, marriage, divorce and remarriage. It is therefore convenient to begin with a discussion of these concerns before we attempt to apply a decision-making approach to living arrangement choices among the elderly.

2.3 Assumptions and Issues Underlying Decision-Making Theory

A number of key issues appear in the decision-making literature with a fair degree of consistency. The assumption concerning constant tastes adopted by the majority of micro-economists has been questioned with greater intensity in recent years. Also, the narrow view of "relevant" variables to be included in the micro-economic models can also be seen as restricting and unrealistic. When broadening this view to include more subtle sociological and psycho-

logical variables, definitional problems arise that must be clarified. Probably the most central issue involves the idea of rationality in decision-making. This leads directly into a discussion of active versus passive decision-making; the irrational aspects of how people view alternatives; and finally, individual versus joint decision-making models.

2.3.1 Changing Tastes and Values

The assumption made by certain economists and micro-demographers that 'tastes' surrounding living arrangement choices are constant (rooted in the belief that privacy is a good which most people desire) is questionable in the face of recent research findings. For example, Thomas and Wister (1984) document considerable variation in living arrangements across ethnic groups after major social, demographic and economic variables were controlled. Also, in a recent article, Kobrin (1981) argues that women's greater responsibility for maintaining family ties can be interpreted as an indication of different preferences for living arrangements by gender. This bias among economists in rejecting normative or taste explanations is depicted in the following passage:

> The notion that economists have an acceptable theory of systematic differences in household technology, but do not have a definite theory of taste formation, is hardly a justification for excluding or neglecting hypotheses related to tastes...in any case, the testing of alternative

> models should be left to the empirical arena and not settled by a priori arguments about the proper scope of economics, demography, or other social sciences (Easterlin, 1980:116)

It is therefore necessary to include hypotheses that describe the role of norms or values in living arrangement choices.

2.3.2 Unrealistic Restrictions of the Micro-economic Model

The approach purported by Ermisch (1981) views additional household members as adding to the economic production of the household while omitting social-psychological factors (such as companionship) that may be a central component of the exchange process. The omission of relevant sociological and psychological variables in the micro-economic models of household choice appears to restrict their explanatory value. The inclusion of these supplementary variables may explain additional unexplained variance such as found in Danziger et al's (1982) finding that the actual increases in female headship between 1968 and 1975 in United States are substantially higher than predicted by the economic situation of those persons, including welfare benefits. In this sense, the micro-econmic model seems unable to capture the complexity of the exchange process.

There is no doubt that economic forces are pervasive forces in social life and that they play an important role in the formation of households involving the elderly.

However, when looking deeper into the reasons why people do what they do, it becomes apparent that economic factors are not the only relevant factor affecting choice, and that more subtle social and psychological forces interact with the economic, as well as exerting an independent influence of their own (Bagozzi and Van Loo, 1978:215). It is therefore necessary to go beyond economic and demographic considerations to include more sociological forces such as group norms or personal preferences that affect choice. This should be done in a way that reflects the complex network of interacting factors that shape living arrangement decisions.

2.3.3 Key Terms: Norms, Values, Attitudes, Tastes and Preferences

Amalgamating a variety of economic, social, and psychological variables within a decision-making model invariably leads to some definitional problems. Often, different terms are used for the same phenomenon or the same term is applied to different phenomena. Although the majority of the concepts so far discussed are fairly clear-cut, there remain a number of seemingly overlapping terms that need refining. The economic concepts of tastes and preferences are usually translated into norms, values, attitudes or desires by sociologists, anthropologists, and psychologists (Burch, 1981:11). It will be argued that constraints or limitations affecting decisions may also interact with

normative and preference factors. Clarification of these concepts would therefore assist such an analysis.

It is instructive to begin by emphasizing that the terms tastes, preferences, norms, values, and attitudes are not completely distinct nor mutually exclusive concepts. The economic terms of tastes and preferences can be grouped together as found in the economic literature and will therefore be considered interchangeable. 'Tastes' or 'personal preferences' are viewed by economists as the relative desirability of products or situations and can be logically manipulated using algebraic equations. The concept of 'value' has been defined as, "the 'emotional weight', positive or negative that we attach to our perception of a situation, measuring its relative desirability (personal preference) and/or its relative goodness (culturally prescribed preference)" (Storer, 1973). This fairly broad concept contains the ideas of 'personal preferences' as well as 'culturally prescribed preferences'. The latter connotation is related to the concept of norms which are expectations of behaviour or "rules of behaviour that are supposed to guide the occupant of a status" (Storer, 1973). Additionally, the term 'attitude' generally refers to a feeling or emotion toward a fact or state.

It is apparent that a number of these concepts overlap with one or more other terms; (i.e. values, appear to overlap preferences, norms, and attitudes.) It therefore seems

logical to discard those terms which are superfluous.

Kobrin's (1981) choice of normative and preference factors or structures appears to capture the meanings intended by the use of the various terms. By norms or normative structures we mean expectations of behaviour that are spread through social institutions and group interaction and are of a sufficient strength to affect the selection of living arrangements. This would include cultural expectations surrounding household formation such as those discussed by Thomas and Wister (1984)[2], in addition to the expectations of reference groups and significant others. This brings in the notion of social norms; cultural or subcultural norms; and even norms adhered to by peer groups, families, or other significant individuals. In this sense, the social environment is included as a factor affecting the decision-making process.

The inclusion of preference taps the notion that personal desires for particular qualities in the home enivronment may affect living arrangement choices. These may differ by age, sex, socio-economic status, etc., and perhaps are also affected by social norms, but they do represent personal preferences for certain qualities such as

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[2] Italians have been shown to have 'traditional' family ties involving a cultural norm of rendering respect to the elderly. Specifically, children are expected to take widowed parents into their home. On the other hand, persons of British descent have been viewed as holding norms of privacy, autonomy, and independence.

privacy or independence in the home environment. The importance of affective qualities of the residential environment for older persons are emphasized in Jirorec's (1977) study, where the elderly preferred quite different qualities than younger respondents, including: friendliness, quiet, neatness, esthetic, and texture, in addition to cost. Furthermore, within the elderly population, male/female differences in the desire to continue close kinship ties at older ages has been used as a proxy for preferences to assess their impact on residential choice (Kobrin, 1981). Questions reflecting both normative and preference structures as previously discussed should adequately measure, in an unambiguous manner, the role of these predominantly sociological factors in living arrangement decisions.

2.3.4 Rationality in Decision-making

At the heart of any decision-making theory is the assumption that perceived rewards and costs are assessed rationally. The term "rational" has numerable connotations but its technical meaning here involves the maximization of expected value (Meeker, 1980:30). This does not necessarily entail the use of logical reasoning or consistent rules, which when confused with its technical meaning can lead to doubt and even adamant criticism about the presence of rationality in decision-making. It is therefore important

to emphasize that rationality is a subjective process that connects actions, outcomes and preferences (Meeker, 1980).

One of the common criticisms of this view is that it is difficult to measure the degree to which an individual maximizes one or more utility functions since this perspective begins with individual's decisions, then depends on subjective (perceived) rather than objective (actual) evaluations to explain these decisions. It appears that, in order to refrain from falling into untestable ex post facto explanations, it may be necessary at some point to make objective statements about what constitutes a significant cost or benefit within a given set of situational factors or constraints.

Similarly, Leibenstein (1981) suggests that, rather than arguing about rational versus non-rational decisions, it may be more useful to accept that decision-making is omnipresent and then examine the nature of the decision as shaped through interactions with the social setting.

In their analysis of fertility decision-making, Bagozzi and Van Loo (1978) view this practice as a calculative psychological process wherein the individual decision-maker maximizes utility while taking into account resource limitations and cost constraints. In this sense one captures the factors intervening between what they term environmental factors and outcomes, as well as delineating the exchange process.

All disciplines applying decision-making theory do not assume that the process involves purposeful and cumulative aspects to the same degree. Economics clearly builds the strongest case for continual and long-term maximizing behaviour while sociology, anthropology and psychology lean towards a less rigorous effort to order objectives and goals, which are not necessarily cumulative or additive (Robinson and Harbison, 1980). For our purposes it will be argued that rationality in decision-making can be thought of as a subjective process whereby individuals select and interpret information in a variety of ways with an underlying motive of maximizing their welfare in the face of various constraining factors. In this way it is recognized that, "a complex web of cultural knowledge and symbolism surrounds all decisions" (Hull, 1981:6) and that a primary goal is to analyze the nature of the decision as it is shaped through interactions with normative and preference factors, constraints, and individual perceptions. This perspective suggests a schematic model (at least at this stage of development), that allows a certain amount of flexibility necessary to incorporate a multiplicity of decision processes rather than a single universal one.

2.3.5 Active and Passive Decision-making

It is generally recognized that residential and household decision-making among the elderly may often involve

large elements of passivity and inertia rather than decisiveness. Rather than invest time and energy to change, which entails continuous decision problems, individuals may appear to refrain from making a decision to alter their situation. However, this can be seen as at least a partial indicator that circumstances of their life make acceptance the least bad decision (Hull, 1981). For the elderly, for example, perceptions of a limited remaining lifetime may offset the expectation of small benefits accrued by modifications in living arrangements (Sjaastad, 1962).

Liebenstein (1981) has greatly contributed to the development of decision-making theory in his distinction between active and passive decision-making.[3] Although in reference to fertility behaviour, his discussion of these concepts are of immense value to any applications of that model. He begins by distinguishing passive decision-making as the more frequent form, usually involving routine behaviour. Liebenstein argues that this routine behaviour can be viewed as behaviour "within a holding pattern" and that only if an event is potent enough, with a resultant significant impact, will the realization be made that an active decision is forthcoming. Since the cost of active decision-making outweighs the advantage of considering every

[3] He notes that these terms are altered from their more common meaning referring to the extent to which an individual participates in family decision-making.

piece of information, passive decision-making may in fact be seen as one form of maximizing behaviour (p. 387). Further more, deferring a decision may reflect a rational response to fears about conflict with a family member, if an attempt is made to make a decision; concerns about needed time for a better informed active decision; or a need to procrastinate until one is psychologically ready to take on the task of active decision-making. This latter point reflects the psychological stress associated with active decision-making. As is emphasized by Leibenstein, we need to formulate a theory about how nonroutine decisions are stimulated.

Early work by Wolpert (1965) on human movement attempts to fit residential mobility and migration within a decision-making framework. Similarly, these behaviours are considered to be responses to evaluations about a wide range of social and economic variables. However, search behaviour is not activated until a threshold level is reached, where a negative evaluation or lack of satisfaction (Speare, 1974) is of sufficient strength. Speare (1974) shows that the satisfaction index (reflecting feelings about one's household environment) intervenes between personal and environmental factors and that it has the strongest impact on the wish to move. Perhaps the transition from routine behaviour to active decision-making can be understood as resulting from a threshold level of dissatisfaction with one's present living arrangement. On the other side of the same coin is

the view that elderly individuals evaluate their living arrangement options (at least those perceived as viable options), only when a minimal acceptable level of satisfaction is no longer maintained. These ideas bring in the possible effects of more gradual changes such as personal preferences, or the slow erosion of functional ability, in addition to major life events, such as sudden health problems or widowhood, that may push dissatisfaction or acceptance to some critical level. Furthermore, dissatisfaction can be seen as resulting from evaluating positive pull factors as well as negative push factors.

In a recent survey report prepared by the London Coalition for Seniors Organization, it was documented that elderly people can be very accepting of their circumstances and that their ideas concerning acceptable standards of living appear to be very different from what their grandchildren want for them. This suggests that the 'threshold level' of active decision-making by older persons may be quite distinct from that of other age groups. Past experiences (such as living through the Depression) may have contributed to cohort differentiation, which may be an influential force in the apparent deviation in older person's decision-making behaviour (see for example Easterlin's (1978) discussion of changes in acceptable levels of living due to relative deprivation). Perhaps even more important is the notion of perceived time horizons,

which may affect the 'threshold level' of the very old (i.e. 80+). Thus, the very old may be expected to view moving as too costly due to their perception of the time left for them to enjoy the benefits of a change in living arrangements (Sjaastead, 1962).

Two overlapping hypotheses can be generated from the previous discussion. First, it takes relatively striking changes to stimulate active decision procedures. Second, a threshold level of dissatisfaction that exceeds the minimal level of acceptable standards, must be crossed before active or nonroutine decision-making is activated. Once the process of active decision-making begins, people weigh the perceived costs and benefits of known alternatives. Of course, one may decide to remain in their present living arrangement in the final analysis, but only after an evaluation has been made.

2.3.6 Viewing Alternatives

It has been stated that the most irrational aspect of the decision-making process is probably the limited number of behavioural options that are perceived by individuals (Meeker, 1980). This appears to be consistent with the previous discussion concerning the propensity towards a routine or passive style of decision-making, where individuals refrain from stressful and costly evaluations of various alternatives as long as possible. In this sense,

the routine decision-making stage allows an individual to procrastinate, or even ignore the calculative psychological process involved in active decision-making. This is because, at the very least, a minimum amount of effort is required to select information and organize it in a way that allows one to assess the perceived implications of various options. Furthermore, the attempt to actively evaluate all alternatives will involve concern about perceived options, including whether all relevant elements are to be considered (Leibenstein, 1981). Since personal tastes and individual personalities shape the degree to which one considers or even perceives all alternatives, and since active decision-making appears to be a costly exercise, it is not surprising that the viewing of alternatives is seen as a very irrational part of the process by those studying decision-making.

For elderly persons today, the idea of sharing accommodations with non-relatives is probably not usually considered as an option to living alone. It may even be the case that while some elderly individuals are greatly dissatisfied with separate living they do not see any alternative arrangement. The realm of potential options can be affected by personal tastes, past histories, personalities, social roles and expectations, and socio-economic status among other factors. It would therefore be useful to gather information on individual's perceptions of alternatives as

well as the reasons why various options are not always recognized. The latter could be done by prompting a decision on alternatives to living alone that have been suggested, such as: how would you feel about living with a friend; or how do you feel about living with adult children? Responses to these types of questions may reflect the different life histories and attitudinal structures of age cohorts. The idea of home-sharing established in such areas as Regional Niagara, for example, (which may involve co-residence with a friend) may be viewed as an option to some while never being considered by others. Certainly future cohorts of women will display changes in social roles and past histories by viewing some of these alternative forms of living arrangements as more acceptable or perhaps even desirable.

2.3.7 Individual versus Joint Decision-Making

The conceptualization of an individual's decision-making becomes more complex once it is broadened to include other persons. Transcending the individual necessitates the inclusion of intrafamily conflict, which can become an issue of analyzing power as a means of conflict resolution. The case of the elderly individual actively deciding whom to live with falls into this category. The question arises: should information concerning the decision process be based on a single individual or include other members of the

household or kin network? Leibenstein (1981) argues that at its early stage of development, fertility decision-making theory should give priority to individual decision-making before moving on into more complex problems. In contrast, Bagozzi and Van Loo (1980) conceptualize the fertility decision as a family decision process and thus make a case for collecting data on both participants.

In studying household choices it makes sense to view these decisions as affected by other individuals both within and outside of the household. For example, in the situation where a married couple is making a living arrangement decision, both parties play a role in determining the outcome. Outside the household, adult children may directly shape their parents' decision by exhorting their influence, which at times can be quite forceful, or even by affecting supply of alternative living arrangements. Other significant others and reference groups may also have bearing on these decisions, sometimes less directly, through imposing norms or expectations on behaviour. For example, having a circle of friends who feel that living with adult children or other relatives is not proper behaviour for a widow may exert a strong normative proscription on one's behaviour.

There is no doubt that future research methodologies may benefit from the inclusion of data on the normative and preference structures elicited directly from family and friends surrounding the individual decision-maker. However,

at this point in the development of household decision-making theory, it may be advantageous to sacrifice a sophisticated but complicated model that necessitates a flexible unit of analysis for the simplicity of an individual level model and research design.

This would still allow for information to be collected on the influence of the social environment. This could be achieved by capturing the norms and preferences of 'other' household members as well as key family and friendship network members who are perceived by the individual as having bearing upon their decisions.

2.4 Developing a Household Decision-Making Framework

Applications of micro-economic consumer models to household formation, fertility, migration, and marriage have opened a path for the development of a general household decision-making schema. This framework attempts to organize the large number of household determinants into a number of interrelated components that display the relationship between structural and individual factors as they relate to household decision-making. This will be done in a way that reflects the interacting nature of environmental and individual variables. At this early stage of development, the primary goal is to produce a provisional theoretical model from which a number of testable propositions can be generated. Further fine-tuning and sophistication of the

model must be deferred until these preliminary steps have been taken.

It should also be noted that a descriptive rather than a prescriptive rational model is being proposed. The latter usage is to advise a decision-maker what choice to make while the former is analogous to any scientific theory, where assumptions and verified propositions are combined to produce a testable prediction (Meeker, 1980: 27).

2.4.1 A Summary of the Model

The underlying assumption is that living arrangement outcomes are the result of either routine behaviour (passive decision-making) or conscious evaluations of costs and benefits associated with various alternatives in a deliberate effort to increase personal satisfaction or welfare, once a minimal level of satisfaction of needs is no longer met (active decision-making). Thus, household decision-making, like other forms of decision-making, is viewed as goal-seeking behaviour, where individuals attempt to fulfill various needs. By expanding the micro-economic model to include psychological, sociological, and cultural factors, a comprehensive theoretical framework can be sketched.

In its skeletal form, this approach views household decisions as the result of social norms and personal preferences. These normative and preference factors, however, may be altered by the interaction effects of constraints, such

as the availability of kin for co-residence or the economic feasibility of separate living (see Figure 2:1).

This framework, thus far, is analogous to the one developed by Dixon (1978), where marriage patterns are analyzed in terms of the demographic availability of mates, the feasibility of marriage, and the desirability of marriage. As to the sequential ordering of these factors, it is suggested that social norms and personal preferences come prior to constraining forces since the former originate through socialization and personality development processes, most of which are fairly well articulated by the time the constraining factors come into play. The constraining pressures can be viewed as resulting from different life styles and life chances.

Several background socio-demographic factors can be delineated as determinants of both normative/preference structures and constraints on choice. Here again, we have relied on past research and do not purport that these background factors exhaust all possibilities. Furthermore, based on our knowledge about some of the interrelationships of variables within and between components, it is expected that there will be statistical interaction among factors.

2.4.2 Elaboration of the Model

Within this decision-making framework, an individual's household status is viewed as a bundle of "goods" that

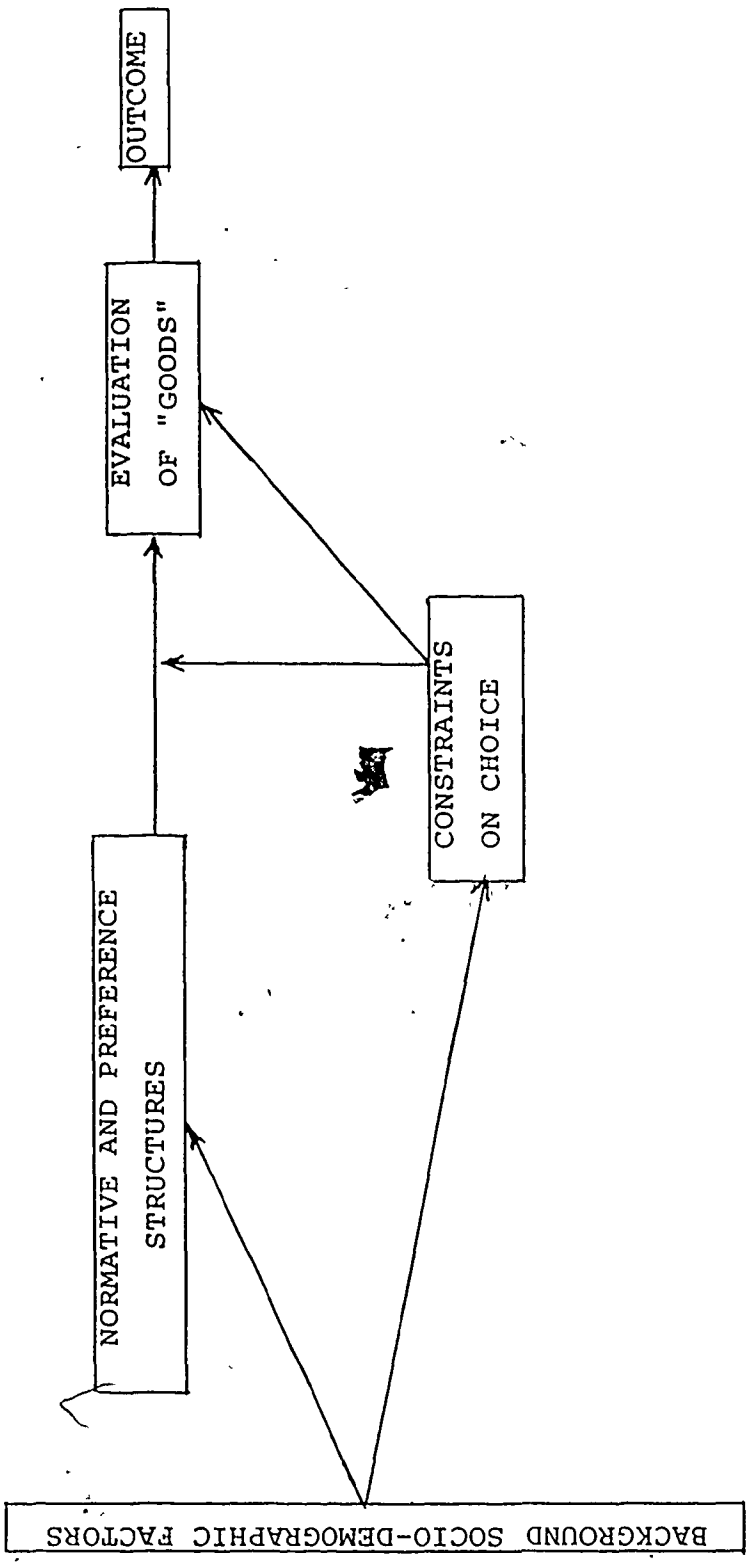


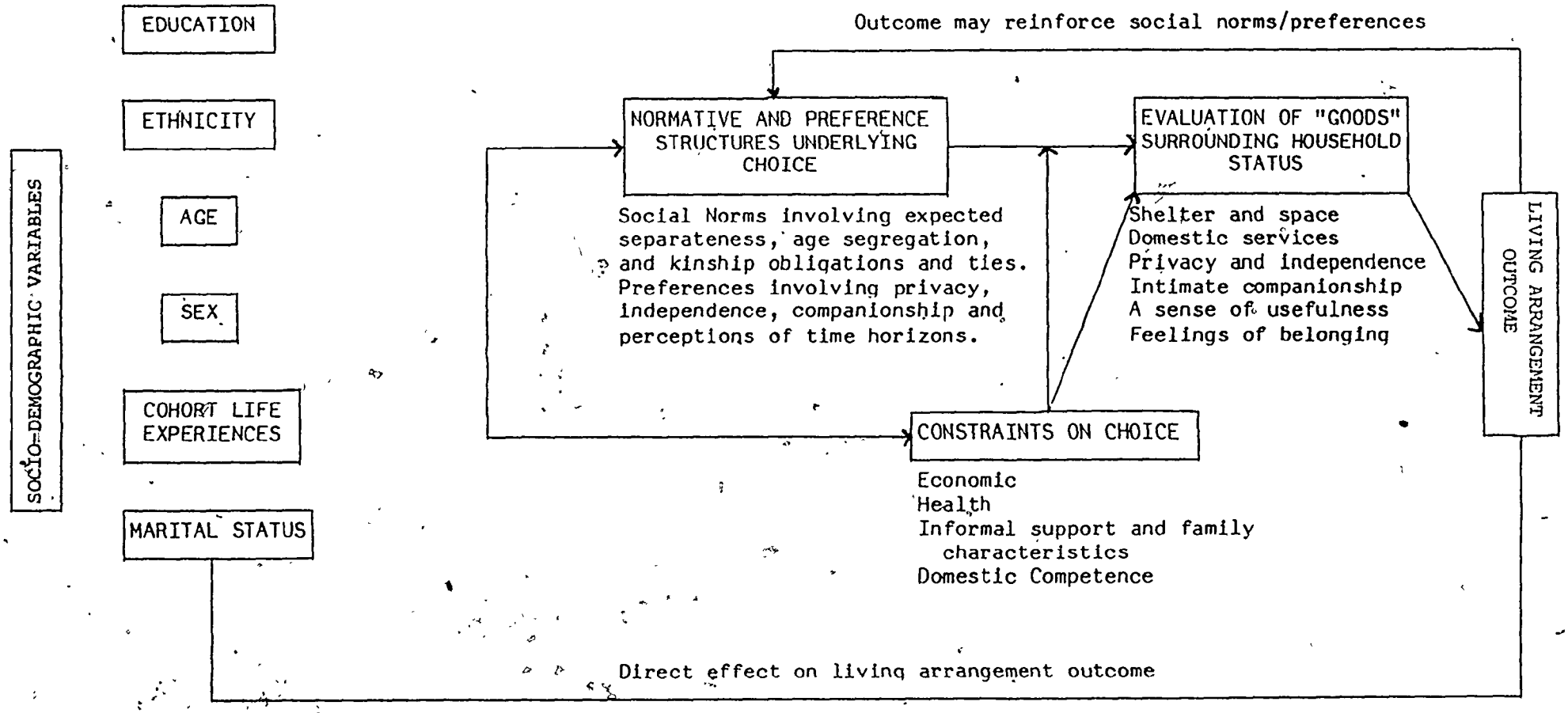
Figure 2:1 A Skeletal Diagram of the Decision Model

provide a means to the satisfaction of varying human needs and desires (Burch and Wister, 1982). At times they may be incompatible in that sacrifices of one "good" are necessary for the achievement of another. These "goods" include: 1) physical shelter and space; 2) domestic services; 3) intimate companionship; 4) privacy and independence; 5) a sense of usefulness; and 6) feelings of belonging. This section of the schematic diagram represents the individual decision-making process related to living arrangement choice.

Underlying the assessment of these "goods" surrounding an individual's household status are social norms about the expected separateness of the elderly, age segregation and kinship obligations and ties, as well as preferences involving privacy, independence, companionship and perceptions of time horizons. As observed in Figure 2:2, these normative and preference structures may be affected by the interaction effect that constraints may have upon these components.

Based on the literature review and related discussions, we can identify a number of determinants as constraints on living arrangement choices, including: 1) economic factors - total income, home ownership, and supply and price characteristics of the housing market; 2) general health as it affects functional ability as well as the health of other household members; 3) supply and influences of family - including the quantity and quality of kin support and

Figure 2:2 A Schematic Diagram of Living Arrangement Determinants Among the Elderly



characteristics of adult children and their family (such as: age, sex, number, marital status, family income, physical distance, family size, and their preferences about living arrangements as perceived by the elderly individual); and 4) domestic competence. This list, however, does not exhaust all possibilities, but rather, draws upon the substantial body of literature focussing on determinants of household status.

Both the normative/preference factors and the constraining forces have roots in a number of socio-demographic variables. These include: 1) educational attainment; 2) ethnicity; 3) age; 4) life experiences; 5) sex; and 6) marital status. It should be noted that a change in marital status may initially produce a direct effect on a living arrangement outcome by altering the composition of the household. However, while it is recognized that the living arrangement known as 'living alone' is often forced upon older persons because of life-cycle change involving movement from one marital status to another, invariably a choice must be made to remain in a separate living arrangement, remarry, or co-reside with others. In this sense, the decision-making process must eventually come into play.

Inspection of Figure 2:2 will also reveal the feedback process that may occur when living arrangement outcomes consistent with social norms or personal preferences reinforce this behaviour and generate momentum towards a

continuation of this trend.

2.4.3 Goods Surrounding Household Status

Before a set of clearly defined hypotheses are developed, we will elaborate the components of household status "goods" in detail. In doing so, we will highlight dynamics of the decision process at the individual level. This will also depict the complexity of factors that affect living arrangements and their interrelationships. An additional purpose is to identify several key areas, such that a manageable number of hypotheses can be identified for the following section.

Physical shelter and space: the goods associated with a housing unit, such as shelter, storage of furniture, and the manipulation of these objects are important since housing units are controlled by households themselves. Whether an older person lives in one's own home rather than another's is therefore partially determined by the value placed on certain housing characteristics, as well as the importance of having control or "authority" over these items. Individuals who display a strong attachment to possessions accumulated over a lifetime will be less likely to co-reside with others, if the space limitations of the household deem it incapable of holding these objects. Additionally, living in one's own household allows for greater control over personal possessions than living in

someone else's household. Finally, it is quite obvious that the amount of space in a household places some limits on the number of people that can live there.

2) Domestic services, including: preparation of food; laundry and repair of clothing; transportation; cleaning and maintenance of the housing unit; care during sickness; and financial organization of the household. Although these services may be purchased (if affordable), they tend to be provided by household members. If the loss of a spouse or a decline in health make it difficult to provide these services themselves, then assistance from non-household persons is necessary. Thus, support from family and to a lesser degree from friends plays a major role for many older persons who desire to live alone, particularly since home nurses and maids are too expensive for the majority of this population. Co-residence may become a necessity when "outside" support from family or friends is unavailable or insufficient and when domestic competence erodes to the point where there exists a clear difficulty in day to day living. This would usually be due to health limitations, although sex role differentiation may influence domestic competence. Living with a spouse provides a readily available intensive support base, depending on the functional capacity of the "helper".

3) Intimate companionship: this term is used here to convey a very close or familiar relationship in which an individual

desires satisfaction. Although it is argued that household members are best suited to serve these needs, they may also be met through other arrangements such as frequent contact with a confidant who may be a friend or relative. In a study of elderly widows, Arling (1976) found that contact with family members failed to increase morale while friendship-neighbouring was related to less loneliness and feelings of "usefulness", primarily because of common interests and life-styles. These sources of intimate companionship can be viewed within the context of household decision-making, especially centering on the quality and frequency of contact of adult children and friends.

Furthermore, the perception of co-residence as an intimate act may be blocking current older persons from realizing that co-habitation with a non-relative could be mutually beneficial (Burch and Wister, 1982).

4) Privacy and independence: the concept of privacy or of being unobservable would appear to be important at older ages. Deviant labels are often attached to the elderly in conjunction with a loss of social status (Jarvis, 1972). Previous research has emphasized the effect of increased income on the ability to buy privacy and the changes in values about the desire for privacy as causes for the significant rise in living alone since the 1940's. However, the extent to which desires for privacy are truly important in this context or whether age segregation is resulting in

the enforced isolation of older persons requires attention in the literature. This may be clarified by distinguishing the effect of social and family norms from personal preferences.

Independence, which must be viewed as a relative concept, would also seem to be highly valued by the elderly since providing for oneself in one's own household would tend to preserve family/social status by sustaining a lower level of dependency and greater authority. Those living with a spouse and other kin may lose some degree of privacy but may retain a relative amount of independence and authority, particularly when remaining in their own household.

For single elderly, it is obvious that extreme privacy and independence manifested through household status are incongruent with intimate companionship, if the latter cannot be provided from outside of the household. An elderly widow may be lonely living alone but at the same time enjoy the privacy and independence associated with living by oneself. Perhaps the continuation of relative privacy and independence enjoyed during the empty nest stage is valued more highly than intimate companionship when one marital partner is lost. In this sense, the choice of a household status involves a number of potential benefits and related costs, which must be balanced through compromise in the face of various constraints.

5) Sense of usefulness: with the decline in social roles and social status associated with growing old, it is mentally and physically important to retain some sense of self-esteem. This can be conceived as a reflection of the social functions that individuals contribute to households. Living independently and providing for oneself may create a sense of usefulness, in that dependency on society or the family is minimized. However, it can also be achieved by contributing to the household of an adult child. In this case, older women tend to provide greater assistance in the role of helper while financially, older men tend to have more to give. It is of interest to discover the extent to which this sense of usefulness helps to shape household decision-making.

6) Feelings of belonging: in a similar vein, the idea of belonging has been used to explain patterns of household behaviour providing another "good" relating to household status. It has been noted that the relative stability found among the elderly when analyzing residential mobility may be attributed to their tendency to be more socially integrated into the community and neighbourhood surrounding them (Goldscheider, 1971; Wai and Beaujot, 1982). Such links may be crucial to the psychological state of an individual, especially if they live alone.

Apart from the community and neighbourhood, feelings of belonging may arise due to involvement with kin. Thus, the

lack of community or neighbourhood integration may prompt an older person to move in with or near to members of their kinship network, other things being equal. Questions tapping these psychological dimensions of usefulness and belonging may add insight into the process of household decision-making.

The choice of living with others rather than separately (i.e. either alone or with a spouse) may involve other costs related to social roles and social status. At the heart of exchange theory is the concept of reciprocity (Homans, 1961). Providing an elderly person with several goods as the result of co-residence usually means that some form of remuneration is expected, if possible. This may take the shape of contributions to household production either through domestic services or through the payment of money, or it may be in the form of deference. The extent to which such exchanges are expected by adult children or other kin who accept elderly persons into <u>their</u> household is partly dependent on cultural and family norms involving respect and kinship obligations, which consider the older parent as having built up "credits" throughout their lifetime. We have previously observed how these norms vary across ethnic groups, how they influence the choice of living arrangements, and presently, how they may enter into the exchange process.

For those elderly persons who are unable to afford living alone or who cannot adequately care for themselves, the benefits of co-habitation may significantly outweigh the costs of loss of status, role change, exchange of services, etc. The choice here may be co-habitation or institutionalization, the latter of which may involve much higher costs.

2.5 Developing Hypotheses

It is quite obvious that the schematic diagram presentd earlier contains potential for the development of an unwieldy number of hypotheses based on the review of literature. This is particularly severe due to the large number of interrelationships between the variables. Therefore, our intention here is to delineate what are felt to be several primary hypotheses that highlight relationships that have arisen in the literature and our discussions.

The hypotheses that have surfaced as being of central importance to this thesis can be organized into the following areas: 1) social norms and personal preferences; 2) health and domestic competence; 3) social support and characteristics of kin; 4) economic constraints; and 5) socio-demographic factors affecting social norms and personal preferences.

2.5.1 Social Norms and Personal Preferences

Documentation of the significance of social or cultural-

norms on behaviour has been a major goal for sociologists from the early thinkers to the present. Specifically, a norm is visualized as "a rule or standard of behaviour defined by the shared expectations of two or more people regarding what behaviour is to be considered socially acceptable" (Theodorson and Theodorson, 1969: 276-277). Therefore the views of significant others, such as peers or family, as well as perceptions about what is generally socially acceptable or not may influence individual's behaviour.

It has been argued that the changing structure of the family in industrial societies has partly been due to greater emphasis on separateness. Thus, young adults tend to leave home earlier to set up their own households and elderly parents are reluctant to co-reside with adult children or other kin. Social mobility and age segregation have been identified as potential contributors to these household changes (Sussman, 1959). However, a thorough investigation of what constitutes expectations of separateness and age segregation as normative forces in household behaviour has not been undertaken, even though researchers have suggested that they may be important (Abu-Laban, 1980; Haraven, 1981; Kobrin, 1981; Thomas and Wister, 1984). Earlier discussions concerning the potential relevance of these factors have provided justification for their investigation and inclusion in explanatory modelling.

Norms involving intergenerational family obligations and ties may be incongruent with those involving expectations of separateness and age segregation. There is little doubt that social norms involving the rendering of respect to older parents through obligations specifying the caring and providing for elderly members of families enter into decisions about co-residence. However, the degree to which families adhere to such norms depends on perceptions of both old and young family members about 'proper' behaviour under certain circumstances. In this sense, perceived expectations about family obligations and ties are expected to be negatively correlated with those involving separateness and age segregation.

Not completely separate from social norms is the notion of preferences. A portion of preferences may lie within the development of normative factors. An individual may prefer living alone because other options are not viewed as "proper". Preferences may be limited by constraints. For example, an elderly individual suffering from health limitations may be forced to live with an adult child because of the built-in support network. Perhaps preferences can be best understood as what people would want if they had a completely free choice, that is, free from constraints.

Researchers have emphasized elderly persons' preference for privacy and independence (Abu-Laban, 1980; Kobrin, 1981; Thomas and Wister, 1984), as well as preferences involving

companionship (Burch and Wister, 1982). However, once again, there is a need to see what lies beneath the concept of preferences for various living arrangements.

From the previous dicussions, a number of hypotheses can be generated concerning living arrangements and perceptions of social norms and personal preferences.

1. Perceived social norms involving the expected separation of the elderly will be positively associated with separate living, as previously defined.
2. Perceived social norms concerning age differentiation are expected to be positively associated with separate living.
3. Social norms reflecting familial obligations and ties are expected to be positively associated with living with one or more kin, besides a spouse.
4. Personal preferences concerning privacy and independence will be positively associated with separate living.
5. Elderly who have a preference for intimate companionship will be more apt to live with others rather than alone.
6. Age will be positively associated with personal preferences involving the effect of time horizons on major changes like moving.

2.5.2 Health and Domestic Competence

Several constraining factors have been noted as central components in household decision-making. Constraints on choice can be seen as interacting with social norms and preferences. The following hypotheses concern health status and domestic competence as they relate to living arrangement choices among the elderly. These directly affect the feasibility of selecting certain living arrangements, especially the one that involves the greatest degrees of separateness - living alone.

7. Health status is expected to be positively associated with separate living. Poor health and limited functional ability means that options are limited to either living with kin, institutionalization or having a nurse-maid. Good health opens the possibility of living alone. For older persons who are currently married, health problems may not be a constraining pressure on living arrangements if the spouse can maintain the household and look after his/her marriage partner. In this sense, health status affecting functional ability acts as a constraint on household choice depending on the presence of adequate informal or formal social support.

8. Partly related to health status is the notion of domestic competence. The latter is expected to be positively associated with separate living, reflecting one's ability to run a household successfully without outside help. Inability to meet a minimum level of domestic competence will result in reliance on one or more household members for these "goods", unless frequent visits from a nearby helper (probably an adult child) can satisfy these requirements.

2.5.3 Informal Support and Characteristics of the Family

Another factor that can be viewed as a constraint is informal support as well as certain characteristics of the family. In particular, past fertility as an indicator of availability of kin with whom one might co-reside represents a powerful demographic constraint on living arrangement decisions.

9. Past fertility is expected to be positively associated with living with kin and conversely, negatively associated with separate living (particularly for the previously married elderly). Past fertility provides a crude indicator of the opportunity structure for co-residence with kin, therefore affecting the availability of this living arrangement.

A number of additional characteristics of kin affect the feasibility of certain household decisions.

10. Informal support (social and material) will be higher for those currently married than those living alone. Living alone involves many difficulties that may be alleviated through such support networks, while intact marital relationships contain a strong built-in support system, as long as both partners' health is not seriously impaired. Living with other kin also provides greater daily support than living alone, due to the proximity of potential "helpers".

11. The more children born to elderly person's adult offspring, the less room there will be for the older person to be included, making it more likely that the elderly person will live separately rather than co-reside with such adult children. Furthermore, grandchildren affect the peaceful nature of a household in the eyes of the elderly person.

12. Single, separated and divorced adult children will more likely co-reside with elderly parents than those currently married. This relates to conflict over authority in the household as well as other forms of personal conflict with in-laws as 'outside' family members.

2.5.4 Economic Factors

The constraint centered on most by economists is income. Living alone rather than with kin (not including a spouse) usually requires greater economic resources. Income represents the feasibility of fulfilling a preference from an economic standpoint.

13. Thus, economic resources will be positively associated with separate living. This allows the elderly person the option of purchasing privacy, assuming that most actually prefer to live separately. Of course, living with a spouse tends to involve greater economic resources than when one is single or previously married. This is particularly true when the remaining marriage partner is a woman.

2.5.5 Socio-Demographic Factors and Social Norms/ Preferences

The relationship between the 'socio-demographic' factors (education, ethnicity, age, sex, marital status, and cohort life experiences) and the constraints on choice have been fairly well documented in the gerontological literature (see McPherson, 1983). In addition, the relationships between socio-demographic variables and living arrangements of the elderly have also been covered in the literature (see Wister and Burch, 1983; and Thomas and Wister, 1984), and

appears at the end of the literature review in Chapter I. However, there is a need to more clearly articulate the relationships between those factors termed 'socio-demographic' and the normative and preference factors underlying household decision-making among the elderly. Our review of the literature relating to these variables suggests an analysis of their effect on various attitudes reflecting norms and preferences. The following hypotheses pertain to certain of those relationships. Due to the unmanageable number of potential hypotheses, it was necessary to select those hypotheses which appear most significant based on the review of the literature and theoretical work.

14. Education will be positively associated with social norms depicting the expected separateness of elderly persons. Education also expected to be negatively associated with perceptions of age segregation and social norms stressing kinship obligations and ties. This stems from differential socialization experiences due to differential exposure to values presented within the educational system.

15. Formal education is also expected to display a positive relationship with privacy and independence preferences. Again, the rationale for this hypothesis

is rooted in the attitudinal effect that education has on personal preferences.

16. Social norms and personal preferences will vary by ethnic origin. Ethnic groups retaining their traditional culture (i.e. Southern European countries) involving the rendering of respect to elders in the form of co-habitation will have stronger emphasis on kinship ties, while ethnic groups with more modern roots that appear to be more acculturated into Canadian culture (i.e. Northern European countries) will emphasize social norms involving expected separateness as well as privacy and independence preferences as these appear to be highly valued in modern industrial society (Abu-Laban, 1980).

17. Men more than women are expected to perceive social norms of expected separateness, while women more than men are expected to view familial obligations as important. This is based on women's previous roles involving family ties and their greater domestic usefulness in the home. Although elderly males may have more to gain from co-residence with kin, females may have more to give in addition to these different perceptions of social expectations and preferences.

18. The relationship between age and time horizons was already discussed in the section pertaining to personal preferences. Briefly, perceptions of limited time horizons are expected to be positively associated with age.

2.6 Summary

In this section we have developed a theoretical schema that attempts to make sense of a substantial contingent of determinants surrounding living arrangement choices of the elderly. In so doing, several hypotheses have been formulated that we feel accentuate the focal points of the theoretical review and related discussions.

For the elderly, household and residential choice involves a decision-making process. Generally, decision-making is routine behaviour resulting in passive decisions. Either when dissatisfaction with the residential environment reaches a threshold level or when relatively dramatic changes occur (e.g. widowhood) active decisions are stimulated. These involve a conscious evaluation of perceived alternatives where various costs and benefits are weighed against each other. The costs and benefits associated with a particular household status are assessed in terms of their value as "goods". The extent that these "goods" are relevant and/or available in the decision is a function of normative and preference structures and the effect of

constraints.

An assessment of the relative contribution of these factors in the decision-making process in conjunction with tests of some of the parameters of the process itself should help to better understand patterns of living arrangements among the elderly.

CHAPTER III

METHODOLOGY

The purpose of this chapter is to develop a research strategy to test the hypotheses formulated in the previous theoretical chapter. This will entail the discussion of several methodological issues relevant to the empirical work.

3.1 DATA SOURCE

The absence of adequate data that tap a number of key variables in the literature has led to the collection of new data. The data for this research represent a subset of those obtained in a larger 1983 survey based on 454 older persons 65 years or older living in non-collective households.[1]

Measures of health, family characteristics and dimen-

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[1] This research project entitled, "Residential Choices among the Elderly" was funded by the Social Sciences and Humanities Research Council of Canada and was directed by Dr. Thomas K. Burch. In working as a research associate on this project, the author played a major role at each phase of the study, including conducting over 120 interviews himself.

sions of normative and preference factors displayed by elderly persons were included in the study. This provided an opportunity to test the hypotheses, developed in the previous chapter.

3.2 The Sampling Technique

A proportional stratified sampling technique by age and sex (using oversampling to account for anticipated non-response) was applied to the 1982 Assessment File obtained from the London, Ontario City Hall. This was accomplished using a two-stage sampling scheme in conjunction with an anticipated non-response rate to generate the inflated sample elements. In the first stage, the gender of the individual determined the strata. The second stage involved the following age categories: 64-69, 70-74, 75-79, and 80 plus. This allowed for a breakdown of the London seniors population into eight age/sex categories. The desired number of sample elements (450) were then distributed into those age/sex categories using the proportions calculated from the London Assessment File (see Tables 3.1 and 3.2). These were then randomly selected from the appropriate age/sex groups in the File.

The decision to select the number of desired sample elements involved balancing of two concerns. First, it was important to have a large enough sample such that the older age groups would be adequately represented to ensure that

Table 3.1

Distribution of London Seniors by Age and Sex
Based on London Assessment File, 1982

Age Group	Males	Females	Total	Ratio = $\frac{\text{Males}}{\text{Females}}$
65-69	3946 (38.5)	4647 (30.5)	8593 (33.7)	0.85
70-74	2834 (27.7)	3879 (25.4)	6713 (26.3)	0.79
75-79	1743 (17.0)	2909 (19.1)	4652 (18.3)	0.60
80+	1722 (16.8)	3803 (25.0)	5525 (21.7)	0.45
	10245 (100.0)	15238 (100.0)	25483 (100.0)	

Note: Figures in the brackets represent percentages

Table 3.2

Distribution of Desired Sample Elements (450) by Age and Sex

Age Group	Desired Sample Elements	
	Males	Females
65-69	70 (38.5)	82 (30.5)
70-74	50 (27.7)	68 (25.4)
75-79	31 (17.0)	51 (19.1)
80+	30 (16.8)	68 (25.0)
	181 (100.0)	269 (100.0)

Note: Figures in brackets represent percentages.

they would be unbiased and useful for the analysis. Second, financial constraints and practical concerns deemed it necessary to select a sample size that would meet a minimum level effectiveness. It was determined that 450 sampling elements (1.77% of total population 65 years and over) would be suitable for the final analysis.

Past experience suggests that non-response or non-coverage among this population can be as high as 50 percent. The potential for systematic bias created by large non-response or non-coverage led to the selection of a method to deal with this problem.

The oversampling method suggested by Kish (1965) was chosen over other techniques for the following reasons. First, two recent studies centering on the seniors population of London provided convenient sets of anticipated non-response rates by age and sex. Second, financial limitations made the other methods (such as substitution or extensive call backs) less desirable when compared with the oversampling method.

Table 3.3 gives the anticipated non-response rates, the calculation of the inflated sampling elements and the actual sample element totals, all by age and sex. The selection of the anticipated non-response rates was based on the experiences of the two earlier studies. Their rates of non-response by age and sex were tailored slightly to account for small differences in study design. The application of

Table 3.3

Inflated Sample Elements by Age and Sex
Using Anticipated Non-Response Rates by Age and Sex

Age Group	Anticipated Non-Response Rates		Inflating Factors		Inflated Sampling Elements		Actual Sample Elements	
	Males	Females	Males[a]	Females[b]	Males[c]	Females[d]	Males[e]	Females[f]
65-69	0.504	0.628	0.2216	0.2819	40	76	110 (30.4)	158 (29.4)
70-74	0.590	0.538	0.2594	0.2415	47	65	97 (26.8)	133 (24.7)
75-79	0.570	0.531	0.2595	0.2383	47	64	78 (21.5)	115 (21.4)
80+	0.570	0.531	0.2595	0.2383	47	64	77 (21.3)	132 (24.5)
Total	2.274	2.228	1.0000	1.0000	181	269	362(100.0)	538(100.0)

Note: Figures in the brackets indicate percentages

a Anticipated non-response rate for males $\times \frac{1}{2.274}$ = Inflating factors for males

b Anticipated non-response rate for females $\times \frac{1}{2.228}$ = Inflating factors for females

c Inflating factors by age for males x 181 = Inflated males by age

d Inflating factors by age for females x 269 = Inflated females by age

e Male desired sample elements by age x inflated males by age

f Female desired sample elements by age x inflated females by age

these anticipated non-response rates resulted in a total of 900 actual sample elements broken into the eight categories by age and sex. We were able to complete interviews with 454 of these, almost the exact number of expected completions.

Table 3.4 gives the complete breakdown of the response and non-response rates. It should be noted that the response rate for this study was about 10% higher than the two previous studies of London seniors. We attribute this to our use of personal contact directly after the introductory letter, rather than the use of a phone call.

A final consideration relating to the sampling procedure involves the issue of whether to apply weights to the age and sex crosstabulation of the 454 cases. Table 3.5 gives the breakdown of these cases by the selected age and sex categories. A comparison of Table 3.5 with the desired sample elements (Table 3.2) shows several items relevant to the decision to apply weights.

First, it is the older ages (70-74 and 80+) that display the closest percentages to the desired sample element percentages in the selected age/sex categories. There is only a slight variation in the percentages of these older age groups for both males and females. Second, the only significant difference was found among males 64-69 and males 70-74, where the former were moderately under-represented and the latter moderately over-represented. In

Table 3.4

Breakdown of Response and Non-Response

Completed interviews	454	(50.44%)
Not at home when contacted	87	(9.66%)
Not found at given address	86	(9.55%)
* Verified listing mistakes	19	(2.11%)
Incapacity due to health or language	47	(5.22%)
Deceased	30	(3.33%)
Not unique data - (two from same household)	9	(1%)
Refusals	168	(18.66%)
Total listings	900	(100%)

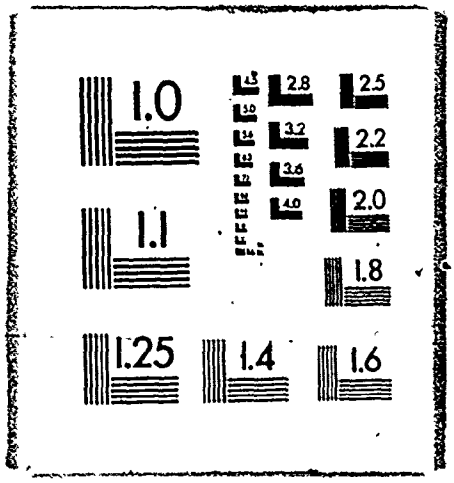
*These include: 1) 9 listings under a holding company; 2) 8 listings with a hospital address, but were not in the hospital; 3) 1 listing from another city; and 4) 2 listings of the same person.

Table 3.5

Distribution of Sample Cases
by Age and Sex

Age Group	Males	Females
65 - 69	54 (31.8)	96 (33.8)
70 - 74	59 (34.7)	62 (21.8)
75 - 79	30 (17.6)	59 (20.8)
80+	27 (15.9)	67 (23.6)
	170 (100.0)	284 (100.0)

2



light of the fact that it is the older age categories that are of central concern due to their relatively smaller proportions in the population and that we oversampled all age categories, it was decided that no weights would be applied to the data.

3.3 Collection of the Data

The 900 names randomly drawn from the London Assessment File included addresses and postal codes. This provided an opportunity to systematically cover one area at a time. A letter of introduction from the principal investigator and the research associate was sent to the prospective respondents stating objectives, social relevance, ethical concerns and requesting cooperation. They were also informed that a trained interviewer would visit them within a couple of weeks.

Interviewers were given a list of names and addresses on record sheets. If necessary, three visits at different times were required by the interviewers in order to increase the probability of arranging an interview in person. The record sheets provide a complete inventory of non-response and non-coverage including reasons for refusals. A total of ten interviewers worked on the project, however, only three interviewers (including the author) collected two-thirds of the 454 completed schedules. This increases the reliability of the data. In addition, the research associate trained

all interviewers, which included bringing trainees to an interview in the role of an observer directly after an intensive review of the interview schedule.

The interview schedule will not be discussed in whole as only a portion of the data will be used for the analysis. However, it is important to note that it was primarily a structured set of questions and responses with a selection of open questions to supplement the former (see complete schedule in Appendix 1). The author, in conjunction with the principal investigator, constructed the interview schedule aided by correspondence with several researchers who had recently completed a gerontological study in Canada. These include Victor Marshall's "Family Life Course Study" (McMaster Univesity); George Hough and Steven Neworth's "Public Housing Tenant Opinion Poll" (Ministry of Housing); Ingrid Connidis' study entitled, "The Elderly in the Community" (University of Western Ontario); and the London, Ontario Needs Survey called "Long Range Planning for Seniors" (Coalition for Seniors Organization).

3.3.1 Recall and Reliability of Interview Data from Elderly Respondents

The increasing use of social science research based on personal interviews has alerted researchers to the problem of various types of errors made during the collection of the data. This concern is magnified when the focus of a study

is either young or elderly persons. Validity problems involving older persons' responses center on the ability to recall information rather than problems associated with intentional inaccuracies. In general, survey literature has tended to center on reliability issues, where the emphasis is on the stability of responses over time.

In a recent study by Ridley et al. (1979), retrospective fertility and marital histories of older women were studied in an attempt to access recall ability and reliability. The ability of elderly women to provide specific information on events occurring up to 50 years prior to the interview were assessed. It was concluded that, "problems of recall ability and reliability have a relatively minor effect on the supportive reports of older women" (Ridley et al., 1979:104). It should be noted that these conclusions were not as definitive when the information sought concerned events that were less salient to the individual. However, it is felt that overall, the responses elicited from elderly respondents are relatively accurate and reliable.

3.4 The Pre-Test

Before commencing with the collection of the data using the stratified sample drawn from the Assessment File, a small pre-test was conducted to enable us to refine instruments and to ascertain the adequacy of the procedure for

directing the interview schedule. The pre-test involved a trial administration of the interview schedule among 12 seniors selected by means of a sample of convenience. The author performed the interviews himself and spent additional time discussing potential problems with respondents during and after the completion of the interview schedule.

Special attention was given to the wordings of questions such that their meaning was clear and unambiguous to elderly respondents. In particular, we were interested in improving the battery of 18 attitude items. Here, we were concerned with obtaining an adequate amount of variance on certain questions, as well as meeting desired levels of clarity. The respondents were asked to comment on the interview schedule at any time and were found to be extremely helpful in that role.

Overall, the pre-test assisted in refining insturments and shortening the interview schedule by the omission of redundant questions. In addition, it provided an opportunity for the author to develop a standard method to administer the schedule, which all of the interviewers were instructed to follow.

3.5 Measurement and Related Issues

This section deals with the measurement of those variables included in the hypotheses chosen for analysis.

3.5.1 Living Arrangements

Earlier, we had presented a rationale for dividing the dependent variable into three categories based on the degree of separatenes elicited by each household grouping. Living alone was coded as 1, living only with a spouse as 2, and living with any other kin or non-family persons (with or without spouse present) as 3. Due to the sample size, this latter group will not be further subdivided, although this would be useful for future research. This produces a three category nominal dependent variable for our analysis.

3.5.2 Social Norms and Personal Preferences

Three social norms were measured using attitude questions. The first of these is the social norm depicting the expected separateness of elderly persons. The attitude items measuring this social norm involved the following statements: 1) older people should live on their own until they simply can't manage it any longer; and 2) in this age of pensions and welfare, it isn't necessary for older persons to be taken care of by their adult children. For all of the attitude items, respondents were asked whether they strongly agree, agree, don't know or are uncertain, disagree or strongly disagree. This produced a five point Likert scale on these items. In addition, all of the questions in the schedule allowed for a "don't know" or "no answer" response. Where applicable, there was also oppor-

tunity to give a "not applicable" response.

The second social norm involves the concept of age differentiation, also referred to as age segregation. This attitude item read: a person's children are apt to be so different when they grow up (in income, moral values, recreational interests and hobbies, etc.) that its hard to share day-to-day living with them in the same household.

Finally, the construct representing kinship obligations and ties included the following two attitude items: 1) older people have earned the right to be taken care of in their later years by their kin; and 2) I would say our family has very strong commitments towards other family members.

Preferences involving privacy and independence were measured two ways. In the first, we again used attitude items to tap these dimensions. The concept of privacy involved the following two attitude statements: 1) most older people would want to live with their sons, daughters, or other relatives if houses provided more privacy and independence (for example, separate bathrooms, kitchen, bedroom, etc.); and 2) the hardest thing about sharing a household with other family members is the lack of privacy. As well, two attitude items attempted to reflect independence. These included: 1) to move into someone else's household, even a son or daughter, means losing one's independence as an adult; and 2) the most important thing in

life is being independent, being able to do what you like without having to answer to someone else.

The second approach involved open-question responses, which immediately followed a structured question. Two sets were used. The first set involved the following structured question: most of us have to make certain compromises concerning our living arrangements. However, if you had a free choice, whom would you want to live with? The open question asked: could you tell us why you prefer this arrangement? The second set began with a five point Likert scale where respondents were asked to rank how satisfied they were with their present living arrangement. The open question following this enquired: again, could you give reasons for your satisfaction or dissatisfaction? It was felt that responses to the two open questions may shed light on whether privacy or independence enter into household decision-making. These same questions also provide information on other factors to be discussed later.

The categorization of the open questions was based on an ethnographic approach, where the most frequently used responses were used as category labels. It so happened that responses involving notions of privacy and independence tended to appear together very frequently. This suggested that we group the two into one category.

We then produced two dichotomous privacy-independence variables by recoding the two open questions, where those

who gave privacy-independence reasons were coded as 1 and all others coded as 0. This step allowed for more sophisticated statistical analysis by giving an ordinal nature to the privacy-independence indicator.

It was argued earlier that on the other side of the coin from privacy and independence, we have intimate companionship and mutual help. The above two open questions provided an opportunity for these additional preferences to appear.

The perception of time horizons was measured by the attitude item: when you reach my age, it isn't worth the trouble to make major changes like moving, establishing new relationships, etc.

Finally, preferences involving cohabitation with children were measured in the following way. Respondents were asked: overall, how do you feel about living with adult children? Structured responses ranged from 1) preferable to 5) not preferable. Respondents were then asked to elaborate on why they prefer or don't prefer this living arrangement using an open question format. This again provided an opportunity for independence, privacy, companionship, mutual exchange and kinship factors to surface.

3.5.3 Health and Domestic Competence

The selection of a health measure was based on the

significance of physical mobility as it relates to daily coping ability. We therefore chose the question specific to mobility rather than a more general health measure. The following health related question was used: would you describe your physical strength and ability to get around as: 1) excellent; 2) good; 3) fair; or 4) poor?

Closely related to health is domestic competence -- the ability to handle tasks that are integral for day-to-day living. A domestic competence scale was computed using five dimensions of household tasks. These include: 1) preparing meals (purchasing food, cooking, etc.); 2) laundry, ironing, and sewing; 3) household cleaning; 4) caring for self and others during minor illness; and 5) financial responsibilities (budget, taxes, paying bills). Those who responded that they could handle a task easily were coded as 1, while those who had some problems with a task were coded as 0. This produced an additive domestic competence scale ranging from zero to five.

3.5.4 Informal Support and Characteristics of the Family

Number of living children was used as a crude indicator of one's opportunity structure for co-residence. Respondents of both sexes were asked to give information on their present number of children. We included adopted children and stepchildren since these additional family members represent additional potential co-residents. In general,

there tends to be a positive relationship between number of children and size of kin network.

Informal support was measured in two ways. Material support was represented by the number of times per month that kin members or friends come to help the respondent. The responses were given for friends, primary family members (children, grandchildren, siblings, children-in-law), and a general category for "other" relatives. This required the computation of an informal support variable by adding the responses for the six categories, which represented the average total amount of help received per month. The second variable was computed in a similar fashion giving the total frequency of seeing kin members or friends per month. This measure is a more general indicator of informal support and probably includes both material and emotional support.

Information collected on the four most proximate children to elderly respondents provided us with measures for variables involving two other family characteristics. Average number of children borne to an elderly person's adult offspring was calculated by averaging the number of children that these four adult children have. This gives a rough measure of the availability of physical and social space in adult children's households -- the most likely recipients of elderly co-habitors. Information on the marital status of the four closest adult children provided an opportunity to compare living arrangement decisions about

cohabiting with elderly parents among married and non-married adult children.

For descriptive purposes, we have included additional information on the domestic tasks listed earlier, which involves identification of "helpers". This will give some indication of the reliance on informal forms of social support across different living arrangements.

3.5.5 Economic Factors

Total income from all sources was used as an indicator for economic resources. This income measure included only the respondent and spouse's (if applicable) income from all sources, including pensions, bank interests, annuities, any investments, support from family members, etc. To ensure a high response rate for this precarious question, a card was used with letters associated with income categories, such that respondents would not have to directly reveal this personal information. The income categories used were as follows: 1) no income; b) less than $2,000; c) $2,000 to 2,999; d) $3,000 to 3,999; e) $4,000 to 5,999; f) $6,000 to 7,999; 9) $8,000 to $9,999; h) $10,000 to 14,999; i) $15,000 to 19,999; j) $20,000 to 24,999; k) $25,000 to 39,000; and l) $40,000 or more.

3.5.6 Socio-Demographic Factors

The socio-demographic factors (education, ethnicity,

age, sex, marital status, and cohort life experiences) will be analyzed with respect to their associations with several of the attitude items measuring social norms and personal preferences.

A) Education

Educational attainment was measured by asking for the highest level of education reached, equivalent to the Ontario educational system. This produced a range between grade two and five or more years of University or College.

B) Ethnicity

Respondents were given affiliation to an ethnic group through their response to the question: in addition to being a Canadian or living in Canada, what is your main ancestry or ethnic group? Due to small numbers in many of the ethnic groups, it was necessary to group several ethnic categories together. The strategy for categorization was based on the review of literature pertaining to household and family research among various ethnic groups. It was decided that Canadian, American, Jewish, British and Northern European ethnic origins would be classified as non-traditional, since their household and family structures tend to be of a "modern" variety. Northern European included: German, Swiss, Dutch and Belgium. The remaining groups were classified as traditional and include: French, Italian, Ukrainian, Latvian, Hungarian, Czechoslovakian, Polish, Russian, Arabic, Chinese, Japanese and Filipino.

The majority of the traditional category were either French or Southern European.

C) Age and Sex

Chronological age was measured using actual age at the time of the interview. This resulted in an interval scale for age. Gender was coded by the interviewer in order to shorten the length of the interview.

D) Marital Status

Six marital status categories were used, however, no responses were elicited for the common law category. The other five marital status divisions include: 1) single; 2) married; 3) separated; 4) divorced; and 5) widowed. We also regrouped these categories into a dichotomous married - non-married variable for further analyses.

E) Cohort Life Experiences

Past non-family living experiences were measured using two methods. First, the effect of age, after controlling for the other variables, represented a crude measure of differential experience of historical events. Second, the field notes provided examples of important life events that appeared to affect key attitudes held by elderly persons regarding living arrangement decisions.

3.5.7 Field Notes

The measures discussed above will be supplemented periodically with field notes compiled by the author. These

were written after the completion of the 120 interviews that he conducted. The notes represent themes that continually arose during the interviews as well as during post-interview discussions with respondents. Careful study of these field notes led to the development of a list of central common themes that appear to have significance for the questions addressed earlier in the dissertation. These findings will be used for descriptive and supplementary analysis purposes in the following chapter. Furthermore, they have assisted in the formulation of ideas relating to implications of the study results.

CHAPTER IV

UNIVARIATE AND CROSSTABULAR ANALYSIS

The data analysis consists of two chapters: a) univariate and crosstabular analyses of the variables; and b) discriminant analysis employed to test the hypotheses in a multivariate analysis. The former of these allows for an initial exploration of the primary determinants selected for analysis. The latter section provides a more sophisticated analysis of the data, which gives an opportunity to summarize the major findings and reflect upon the relative importance of the explanatory variables.

4.1 Living Arrangement: The Dependent Variable

As previously defined, the dependent variable living arrangement was divided into three categories. These include: 1) living alone; 2) living only with spouse; and 3) living with "others". The latter category may include a spouse but always includes some other kin member, friend or boarder. Our sample yielded 159 (35%) elderly persons living alone, 216 (47.6%) living only with their spouse, and 79 (17.4%) living with 'others'.

Past research suggests that only about 7% of the elderly live with someone other than a spouse (McPherson, 1983). The relatively large percentage (17.4%) of elderly found to be living with 'others' (apart from a spouse) in our sample was the result of two factors. First, we included those who live with a spouse and other(s) in this grouping (e.g. kin member, friend or boarder). This boosted the proportion in the living with 'others' category from 11.2% to 17.4%. Second, it is argued here that the response rate was higher for those who live with other household members apart from a spouse, and to a lesser degree those who live alone, since persons in these living arrangements may have perceived themselves as important components of the type of study suggested by the introductory letter (see Appendix II). Our uninvariate analysis of the living arrangement variable supports this view. In summary, our sample resulted in a modest over-representation of these two living arrangement categories when compared with other studies.

4.2 Social Norms

The three social norms analyzed include: 1) a social norm depicting the expected separateness of elderly persons; 2) age differentiation or age segregation; and 3) kinship obligations and ties.

4.2.1. Expectation of Separateness

Two attitude items were used as measures of social norms depicting the expected separateness of the elderly. Table 4.1 shows the frequency distribution for the responses to these two statements. Regarding the first of these, the vast majority (86.5%) of the sample agree or strongly agree with the statement that: older people should live on their own until they simply can't manage it any longer. This finding suggests that, in general, the elderly are aware and in agreement with an expectation of separateness in their living arrangements.

The second item also resulted in a majority of respondents displaying agreement. About 67% of the sample either agree or strongly agree with the statement: in this age of pensions and welfare, it isn't necessary for older persons to be taken care of by their adult children. A limitation with the second attitude item is that it not only captures a social norm of expected separateness but also brings to bear the degree to which today's pensions and welfare benefits are adequate. Thus, a portion of the 20% who disagree with this latter attitude item may be voicing disapproval with the pension system rather than with an expectation of separateness. However, we are unable to determine the extent to which disapproval is due to the latter of these factors.

When the first attitude item is crosstabulated with

Table 4.1.

Frequency Distribution for Social Norms of Expected Separateness

Variable	Category	f	%
Attitude			
ITEM 1*	(1) Strongly Agree	268	59.0
	Agree	134	29.5
	Don't Know/Uncertain	20	4.4
	Disagree	24	5.3
	(5) Strongly Disagree	6	1.3
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 1.6	s = 0.9	
Attitude			
ITEM 2**	Strongly Agree	53	11.7
	Agree	251	55.3
	Don't Know/Uncertain	54	11.9
	Disagree	82	18.1
	Strongly Disagree	12	2.6
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 2.4	s = 1.0	

* Older people should live on their own until they simply can't manage it any longer.

** In this age of pensions and welfare, it isn't necessary for older persons to be taken care of by their adult children.

f = frequency $\bar{x}$ = mean s = standard deviation

living arrangement, we observe a fairly strong relationship, chi square = 35.7, p = .001 (see Table 4.2). The probability of living alone is about 34% for those who strongly agree with this attitude item and 30% for those who disagree. This represents a small percentage difference in the expected direction. The probability of living only with a spouse is reduced from 54% to 23% comparing the strongly agree to the disagree category, while the probability of living with others is increased substantially from about 12% to almost 47%. Although all relationships are in the expected direction, it is weaker than expected for the living alone group.

Based on the relative probabilities across living arrangements, it appears that those living with others hold significantly different attitudes concerning the expected separateness of the elderly than the other two groups, although those living with a spouse are most likely to display this attitude. These findings give tentative support to Hypothesis (1), that perceived social norms involving the expected separation of the elderly will be positively associated with separate living. The greatest influence of this attitude is on those living with others. As will be seen in the following analyses, those who live alone and those who live only with their spouse tend to display relationships with the independent variables in a similar direction, while those living with others tend to

Table 4.2.

Crosstabulation of Living Arrangement
and Social Norms of Expected Separateness*

Living Arrangement	Attitude Response: Strongly Agree	Agree	Don't Know Uncertain	Disagree/ Strongly Disagree	Total
Living Alone	92 (34.3)	53 (39.6)	5 (25.0)	9 (30.))	159 (35.2)
Living Only with Spouse	145 (54.1)	56 (41.8)	7 (35.0)	7 (23.3)	215 (47.5)
Living with Others	31 (11.6)	25 (18.7)	8 (40.0)	14 (46.7)	78 (17.3)
					452

x^2 = 35.7 p = .001

Missing = 2

* Attitude Item 1 - Older people should live on their own until they simply can't manage it any longer.

Disagree and strongly disagree categories have been grouped due to a small subgroup size (less than 10).

Figures in brackets represent column percents.

x^2 = chi square

p = level of significance

display relationships in the opposite direction. This supports the view that the former two living arrangements consist of greater separateness than those choosing to live with others using a criterion of separateness and that the addition of other people in the household represents a major change in certain aspects of one's living style.

Table 4.3 shows the crosstabulation for the second attitude item measuring the expected separateness of elderly persons. This bivariate relationship displays a chi square that is not statistically significant at the .05 level. However, as argued earlier, this attitude item does not represent a clear and unambiguous measure of a social norm of expected separateness. The author's extensive interview experience during this study lends credence to the contention that some respondents focused on the adequacy of pensions and welfare instead of the issue of dependency/support involving adult children.

4.2.2 Age Segregation

The second normative structure measured is the social norm representing age segregation or differentiation. Table 4.4 shows the frequency distribution for the attitude item measuring this social norm. While about 65% of our sample were found to be in agreement with this statement (see footnote to Table 4.4), there was disagreement among almost 1/4 of the respondents.

Table 4.3

Crosstabulation of Living Arrangement and Social Norms of Expected Separateness*

Living Arrangement	Attitude Response: Strongly Agree	Agree	Don't Know Uncertain	Disagree/ Strongly Disagree	Total
Living Alone	21 (39.6)	95 (37.8)	19 (35.2)	24 (25.5)	159 (35.2)
Living Only with Spouse	26 (49.1)	121 (48.2)	21 (38.0)	47 (50.0)	215 (47.5)
Living with Others	6 (11.3)	35 (13.9)	14 (25.9)	23 (24.5)	78 (17.3)
					452

$x^2 = 15.0$ $p = .06$

Missing = 2

* Attitude Item 2 - In this age of pensions and welfare, it isn't necessary for older persons to be taken care of by their adult children.

Disagree and strongly disagree categories have been grouped due to small subgroup size.

Figures in brackets represent column percents.

x^2 = chi square

p = level of significance

Table 4.4.

Frequency Distribution for Social Norm Depicting Age Segregation

Variable	Category	f	%
Attitude			
ITEM*	(1) Strongly Agree	97	21.4
	Agree	205	45.2
	Don't Know/Uncertain	45	9.9
	Disagree	82	18.1
	(5) Strongly Disagree	23	5.1
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 2.4	s = 1.2	

* A person's children are apt to be so different when they grow up (in income, moral values, recreational interests and hobbies, etc.) that it is hard to share day-to-day living with them in the same household.

f = frequency

$\bar{x}$ = mean

s = standard deviation

When crosstabulated with living arrangement, our attitude measure of age segregation elicits a strong relationship; chi square = 43.1, p =.001 (see Table 4.5). The probability of living alone is 40% among those who strongly agree with this statement and 9% among those who strongly disagree, representing a 31% difference in the expected direction. Those living only with their spouse display probabilities of 51.5% and 43.5% going from strongly agree to strongly disagree categories on the age segregation attitude item. The probability of living with others is almost exactly opposite to the living alone group. The probability of living with others increases from 8% to 48% when moving from the strongly agree to strongly disagree categories, representing a 40% difference.

This suggests that the way elderly persons perceive age as a social barrier can play an important role in their living arrangement decisions. Although adult children are not the only possibility for co-residence, they do represent the most likely candidates for this option. These data produce support for Hypothesis (2) that: perceived social norms concerning age differentiation or segregation are positively associated with separate living, where living alone or with a spouse are viewed as more separate living arrangements than living with others, based on a criterion of independence. It is the living with others group that contrasts sharply with those living alone and to a lesser

Table 4.5.

Crosstabulation of Living Arrangement and Social Norm Depicting Age Segregation*

Living Arrangement	Attitude Response: Strongly Agree	Agree	Don't Know Uncertain	Disagree	Strongly Disagree	Total
Living Alone	39 (40.2)	77 (37.6)	21 (46.7)	20 (24.4)	2 (8.7)	159 (35.2)
Living Only with Spouse	50 (51.5)	104 (50.7)	14 (31.1)	37 (45.1)	10 (43.5)	215 (47.5)
Living with Others	8 (8.2)	24 (11.7)	10 (22.2)	25 (30.5)	11 (47.8)	78 (17.3)
						452

$x^2 = 43.1$ $p = .001$

Missing = 2

* A person's children are apt to be so different when they grow up (in income, moral values, recreational interests, and hobbies, etc.) that it is hard to share day-to-day living with them in the same household.

Figures in brackets represent column percents.

x^2 = chi square

p = level of significance

degree those living only with their spouse. In addition, age segregation appears to have the greatest impact on those who live alone and those who live with others.

4.2.3 Kinship Obligations and Ties

The final social norm consists of two attitude items measuring kinship obligations and ties. Table 4.6 gives the frequency distributions for the responses to these statements. The first of these states that older people have earned the right to be taken care of by their kin, while the second refers to perceptions of very strong commitments within the family.

Crosstabulations of living arrangement and these two indicators of kinship obligations and ties results in moderate, statistically significant relationships of about equal strength (see Tables 4.7 and 4.8). Table 4.7 shows that the probability of living alone and living only with a spouse increases about 12 to 15 percent comparing those who strongly agree and those who strongly disagree on this attitude item. In contrast, the probability of living with others decreases about 27% moving across the same categories, from 35% to 9%. This social norm displays a stronger effect for this latter group as compared to the former two. Similar but weaker associations are found when inspecting Table 4.8, where the second attitude depicting kinship obligations and ties is crosstabulated with living

Table 4.6.

Frequency Distribution for Social Norms Depicting Kinship Obligations and Ties

Variable	Category	f	%
Attitude ITEM 1*	(1) Strongly Agree	17	3.7
	Agree	83	18.3
	Don't Know/Uncertain	53	11.7
	Disagree	205	45.2
	(5) Strongly Disagree	94	20.7
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 3.6	s = 1.1	
Attitude ITEM 2**	Strongly Agree	147	32.4
	Agree	213	46.9
	Don't Know/Uncertain	25	5.5
	Disagree	60	13.2
	Strongly Disagree	7	1.5
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 2.0	s = 1.0	

* Older people have earned the right to be taken care of in their later years by their kin.

** I would say that our family has very strong commitments towards other family members.

f = frequency

$\bar{x}$ = mean

s = standard deviation

Table 4.7.

Crosstabulation of Living Arrangement
and Social Norms Depicting Kinship Obligations and Ties*

Living Arrangement	Attitude Response: Strongly Agree	Agree	Don't Know Uncertain	Disagree	Strongly Disagree	Total
Living Alone	4 (23.5)	32 (38.6)	23 (43.4)	67 (32.7)	33 (35.1)	159 (35.2)
Living Only with Spouse	7 (41.2)	28 (33.7)	20 (37.7)	107 (52.2)	53 (56.4)	215 (47.5)
Living with Others	6 (35.3)	23 (27.7)	10 (8.9)	31 (15.1)	8 (8.5)	78 (17.3)
						454

$x^2 = 22.6$ $p = .01$

Missing = 2

* Attitude Item 1 - Older people have earned the right to be taken care of in their later yeas by their kin.

Figures in brackets represent column percents.

x^2 = chi-square

p = level of significance

Table 4.8.

Crosstabulation of Living Arrangement
and Social Norms Depicting Kinship Obligations and Ties*

Living Arrangement	Attitude Response: Strongly Agree	Agree	Don't Know Uncertain	Disagree/ Strongly Disagree	Total
Living Alone	38 (25.9)	78 (36.6)	16 (64.0)	27 (40.3)	159 (35.2)
Living Only with Spouse	74 (50.3)	102 (47.9)	6 (24.0)	33 (49.3)	215 (47.5)
Living with Others	35 (23.8)	33 (15.5)	3 (12.0)	7 (10.4)	78 (17.3)
					452

$x^2 = 19.8$ $p = .01$

Missing = 2

* Attitude Item 2 - I would say that our family has very strong commitments towards other family members.

Disagree and Strongly disagree categories have been grouped due to small subgroup size.

Figures in brackets represent column percents.

x^2 = chi square

p = level of significance

arrangement. The exception is the living only with spouse group, which shows virtually no percentage difference across this attitude response. Except for this case, the relationships are in the direction expected based on their theoretical underpinnings.

These findings lend support to Hypothesis (3), that social norms reflecting familial obligations and family ties are expected to be positively associated with living with one or more kin, besides a spouse and negatively associated with the other two living arrangements, which are viewed as more separate forms of living.

Overall, the findings produced by these data suggest that social norms involving expected separateness, age-segregation and to a lesser extent kinship obligations and ties, arise as important correlates of living arrangement choices among the elderly. This supports theoretical developments involving the importance of certain key underlying social norms in household decision-making. The strength of the bivariate relationships between these measures of social norms and living arrangement gives reason for confidence in the salience of these factors as significant contributors to living arrangement decisions among the elderly.

4.3 Personal Preferences

The four personal preferences investigated include: 1)

privacy preferences; 2) independence preferences; 3) companionship preferences; and 4) preferences involving perceptions of time horizons. These have arisen in the literature as pertinent preferences that underlie living arrangement decisions. However, as far as we know, this is the first attempt to directly measure and test the causal importance of these variables for household decision-making.

4.3.1 Privacy Preferences

Two attitude items were used to measure a preference for privacy among the elderly. The first of these presented a hypothetical situation stating that if houses provided more privacy and independence (for example, separate bathrooms, kitchen, bedroom, etc.), then most older people would want to live with their adult children or other kin. The second item suggests that the hardest thing about sharing a household with other family members is the lack of privacy. Frequency distributions for these two attitude items are presented in Table 4.9. Responses to the first statement were about equally split into agreement and disagreement categories (see Table 4.9). However, the vast majority (76.4%) of the sample were in agreement with the second statement, with only 17% disagreeing.

The two attitude items measuring preferences for privacy were crosstabulated with living arrangement. Inspection of the bivariate relationships in Tables 4.10 and

Table 4.9.

Frequency Distribution for Privacy Preferences

Variable	Category	f	%
Attitude ITEM 1*	(1) Strongly Agree	25	5.5
	Agree	178	39.2
	Don't Know/Uncertain	46	10.1
	Disagree	165	36.3
	(5) Strongly Disagree	38	8.4
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 3.0	s = 1.1	
Attitude ITEM 2**	Strongly Agree	133	29.3
	Agree	214	47.1
	Don't Know/Uncertain	28	6.2
	Disagree	69	15.2
	Strongly Disagree	8	1.8
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 2.1	s = 1.0	

* Most older people would want to live with their sons, daughters, or other relatives if houses provided more privacy and independence (for example, separate bathrooms, kitchen, bedroom, etc.).

** The hardest thing about sharing a household with other family members is the lack of privacy.

f = frequency

$\bar{x}$ = mean

s = standard deviation

4.11, reveals statistically significant relationships of moderate and strong strength, respectively. In the first, the probability of living alone is not significantly altered when comparing the extreme categories of the independent variable. For those living only with a spouse, the probability increases from 56% to 68%, representing a 12% difference, but opposite to what one could expect moving from the strongly agree to strongly disagree category. The probability of living with others changes from 16% to about 5%, representing an 11% difference in the expected direction.

The latter of the attitude items more clearly articulates a preference for privacy in the statement: the lack of privacy is the hardest thing about co-residence. Regarding this privacy dimension, the probability of living alone decreases from 35% to 27%, the probability of living with a spouse only from 55% to 31%, and the probability of living with others increases substantially from approximately 11% to 42%, when comparing those who strongly agree with those who disagree or strongly disagree (see Table 4.11). These relationships are all in the expected direction and contribute to a large chi square (44.7, $p = .001$). According to this relationship, a preference for privacy results in an increased likelihood of living alone and living only with a spouse but a decreased likelihood of living with others.

Table 4.10.

Crosstabulation of Living Arrangement and Privacy Preferences*

Living Arrangement	Attitude Response: Strongly Agree	Agree	Don't Know Uncertain	Disagree	Strongly Disagree	Total
Living Alone	7 (28.0)	61 (34.3)	14 (30.4)	67 (40.1)	10 (26.3)	159 (35.2)
Living Only with Spouse	14 (56.0)	82 (46.1)	18 (39.1)	75 (45.5)	26 (68.4)	215 (47.5)
Living with Others	4 (16.0)	35 (19.7)	14 (30.4)	23 (13.9)	2 (5.3)	78 (17.3)
						452

$x^2 = 17.2$ $p = .05$

Missing = 2

* Attitude Item 1 - Most older people would want to live with their sons, daughters, or other relatives if houses provided more privacy and independence (for example, separate bathrooms, kitchen, bedroom, etc.).

Figures in brackets represent column percents.

x^2 = chi square

p = level of significance

Table 4.11.

Crosstabulation of Living Arrangement and Privacy Preferences*

Living Arrangement	Attitude Response: Strongly Agree	Agree	Don't Know Uncertain	Disagree/ Strongly Disagree	Total
Living Alone	46 (34.6)	81 (37.9)	11 (39.3)	21 (27.3)	159 (35.2)
Living Only with Spouse	73 (54.9)	107 (50.0)	11 (39.3)	24 (31.2)	215 (47.5)
Living with Others	14 (10.5)	26 (12.1)	6 (21.4)	32 (41.5)	78 (17.3)
					452

$x^2 = 44.7$ $p = .001$

Missing = 2

* Attitude Item 2 - The hardest thing about sharing a household with other family members is the lack of privacy.

Disagree and Strongly disagree categories have been grouped due to small subgroup size.

Figures in brackets represent column percents

x^2 = chi square

p = level of significance

The inconsistent results of the first privacy preference investigated may reflect the inability of this hypothetical statement to capture a preference for privacy. This attitude item suggests that most people would want to coreside with kin given more space instead of tapping the individual respondent's preference.

Overall, these data support Hypothesis (4). It appears that a preference for privacy does enter into living arrangement decisions with the major difference occurring between those who live with others and the remaining two groups, based on the direction of the relationships.

4.3.2 Independence Preferences

The second preference investigated involves a preference for independence. Past research has suggested that a strong preference for independence exists in our society and affects family and household formation (see for example, Abu-Laban, 1980). However, review of the literature indicates that there has been no direct measurement of this variable and, furthermore, no direct proof of its relevance for living arrangement decision-making among the elderly.

Two attitude items were selected as measures of a preference for independence. The first of these statements suggests that moving into someone else's household, even an adult child's, means losing one's independence as an adult. The second states that the most important thing in life is

being independent, being able to do what one likes without having to answer to anyone else. Frequency distributions for these two attitude items appear in Table 4.12. About 84% of the respondents were in agreement with each of these statements reflecting independence.

Crosstabulations of the two attitude indicators reflecting levels of independence and living arrangement result in statistically significant relationships (see Tables 4.13 and 4.14). Regarding the first, the probability of living alone decreases from 37% to 22%, the probability of living only with a spouse from 49% to 46%, while the probability of living with others increases from about 15% to 32%, when moving from the strongly agree to the disagree/strongly disagree response. These relationships are in the expected direction according to the underlying theoretical work.

In addition, the ranking by level of independence, as measured here, reflects the categorical divisions selected for the dependent variable. The three living arrangement groups were structured according to degree of separateness, where it was argued that those who live alone are most separate in their living style, those who live with others least separate, and those who live only with their spouse falling somewhere in-between. Thus far in the analysis, the tendency is for elderly living only with a spouse to be more similar to those living alone than the alternate as seen in the directionality of the relationships with the

Table 4.12.

Frequency Distribution for Independence Preferences

Variable	Category	f	%
Attitude ITEM 1*	(1) Strongly Agree	131	28.9
	Agree	205	45.2
	Don't Know/Uncertain	25	5.5
	Disagree	78	17.2
	(5) Strongly Disagree	13	2.9
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 2.2	s = 1.1	
Attitude ITEM 2**	Strongly Agree	235	51.8
	Agree	148	32.6
	Don't Know/Uncertain	17	3.7
	Disagree	40	8.8
	Strongly Disagree	12	2.6
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 1.8	s = 1.0	

* To move into someone else's household, even a son or daughter, means losing one's independence as an adult.

** The most important thing in life is being independent, being able to do what you like without having to answer to someone else.

f = frequency

$\bar{x}$ = mean

s = standard deviation

Table 4.13.

Crosstabulation of Living Arrangement and Independence Preferences*

Living Arrangement	Attitude Response: Strongly Agree	Agree	Don't Know Uncertain	Disagree/ Strongly Disagree	Total
Living Alone	48 (36.6)	75 (36.6)	16 (64.0)	20 (22.0)	159 (35.2)
Living Only with Spouse	64 (48.9)	103 (50.2)	6 (24.0)	42 (46.2)	215 (47.5)
Living with Others	19 (14.5)	27 (13.2)	3 (12.0)	29 (31.8)	78 (17.3)
					452

$x^2 = 30.3$ $p = .001$

Missing = 2

* Attitude Item 1 - To move into someone else's household, even a son or daughter, means losing one's independence as an adult.

Disagree and Strongly disagree categories have been grouped due to a small subgroup size.

Figures in brackets represent column percents.

x^2 = chi square

p = level of significance

Table 4.14.

Crosstabulation of Living Arrangement and Independence Preferences*

Living Arrangement	Attitude Response: Strongly Agree	Agree	Don't Know Uncertain	Disagree/ Strongly Disagree	Total
Living Alone	94 (40.0)	49 (33.1)	3 (17.6)	13 (25.0)	159 (35.2)
Living Only with Spouse	108 (46.0)	75 (50.7)	7 (41.2)	25 (48.1)	215 (47.5)
Living with Others	33 (14.0)	24 (16.2)	7 (41.2)	14 (27.0)	78 (17.3)
					452

$x^2 = 16.6$ $p = .05$

Missing = 2

* Attitude Item 2 - The most important thing in life is being independent, being able to do what you like without having to answer to someone else.

Disagree and Strongly disagree categories have been grouped due to small subgroup size.

Figures in brackets represent column percents.

x^2 = chi square

p = level of significance

independent variables. Based on our original rationale for these categorical divisions, these findings appear to make intuitive sense. Whether someone lives alone or only with a spouse seems to be a less significant distinction than the addition of one or more other kin or non-family members (i.e. living with others).

Similar findings are uncovered for the crosstabulation of the second independence indicator and living arrangement, although the relationship is only half as strong (chi square - 16.6, p = .01). Inspection of this table indicates that a preference for independence has the greatest effect on those who live alone and those who live with others. These data in conjunction with the previous findings strongly support Hypothesis (4), that personal preferences involving privacy and independence are associated with living arrangement choices.

To further test Hypothesis (4), an analysis was undertaken using open ended responses to a question tapping living arrangement preferences. Table 4.15 shows the frequency distribution for the question inquiring whom the respondent would live with given a free choice. Given their choice, respondents were then asked the main reason for their selection using an open question format. The frequency distribution for these responses is presented in Table 4.16. The most common reasons include: 1) compatible/content (31.3%); 2) independence (25.3%); 3)

Table 4.15.

Frequency Distribution for (Unstructured) Living Arrangement Preference

Variable	Category	f	%
Free Choice Preferences*	Only with Spouse	208	45.8
	Alone	152	33.5
	Daughter - family	28	6.2
	Spouse and other kin	17	3.7
	Friend/companion	12	2.6
	Sibling/Sibling-in-law	8	1.8
	Son - family	8	1.8
	Daughter-in-law	2	0.4
	Marry/remarry	2	0.4
	Live-in nurse	1	0.2
	Spouse and non-kin	1	0.2
	Grandchildren	1	0.2
	Other relative	1	0.2
	Missing	13	2.8
		454	100.0

* Most of us have to make certain compromises concerning our living arrangements. However, if you had a free choice, whom would you want to live with?

f = frequency

companionship (5.5%); 4) knows person well (5.1%); 5) like to have a family atmosphere (4.4%) and 6) enjoy being by myself (4.0%). All other responses represented less than 4% of the sample. Respondents giving a reason suggesting compatibility or contentment were almost exclusively (95%) living only with their spouse. This finding is what one would expect from married elderly. Intimate companionship as a key preference factor will be analyzed in the following section.

It is interesting to note that the response: "so I can do what I want to do," categorized as independence, was given as a reason among one quarter of the sample. This adds further support to the contention that independence is perceived by many elderly as a significant preference factor in household decision-making.

In order to investigate the distribution of the unstructured privacy and independence indicators across the three living arrangement categories, we calculated a dichotomous privacy/independence variable. Privacy and independence responses were grouped together in this instance, since they were both given frequently as responses by the same respondent suggesting a fair degree of overlap. Table 4.17 presents the crosstabulation of the dichotomized privacy/independence variable by living arrangement.

Since these reasons are responses to the previous question asking whom one wishes to live with given a free

Table 4.16.

Frequency Distribution for Main Free Choice Preference

Variable	Category	f	%
Reason for Free Choice Preference*	Compatible, content	142	31.3
	Independence**	115	25.3
	Companionship	25	5.5
	Knows person well	23	5.1
	Like to have family atmosphere	20	4.4
	Enjoy being by myself	18	4.0
	Receive daily help	15	3.3
	Don't want to be burden	13	2.9
	Too old to compromise	13	2.9
	No reason for change	12	2.6
	Privacy	10	2.2
	Mutual exchange	10	2.2
	No options viewed	9	2.0
	Keeps them busy	3	0.7
	Lonely	2	0.4
	Enjoy young people	2	0.4
	Tired living with others	2	0.4
	Afraid to live alone	2	0.4
	Afraid of nursing homes	1	0.2
	Marital problems	1	0.2
	Enjoy living alone	1	0.2
	Missing	15	3.2
		454	100.0

* Operationalization - could you tell us why you prefer this living arrangement?

** "Can do what I want to do" responses were categorized as independence.

f = frequency

Table 4.17.

Crosstabulation of Living Arrangement
and Dichotomized Privacy/Independence Preference*

Living Arrangement	Reason for Free Choice Preference: Remaining Reasons	Privacy/ Independence	Total
Living Alone	60 (21.3)	71 (65.1)	131 (33.5)
Living Only with Spouse	163 (57.8)	35 (32.1)	198 (50.6)
Living with Others	59 (20.9)	3 (2.8)	62 (15.9)
			391

x^2 = 71.7 p = .001

Missing = 63**

* Based on the main reason for their free choice preference; privacy or independence reasons were coded as 1, all others were coded as 0.

** Includes respondents whose free choice preference differed from present living arrangement.

Figures in brackets represent column percents.

x^2 = chi square

p = level of significance

choice, it was necessary to eliminate those who preferred a different living arrangement than the one they presently are in. In this way, it is possible to link the preferences to our living arrangement variable. This resulted in 63 missing cases for Table 4.17.

The crosstabulation between the dichotomous privacy/independence variable and living arrangement results in a strong relationship between these variables (chi square = 71.7, p = .001). The probability of living alone increases threefold from 21% to 65% moving from the remaining reasons to the privacy/independence categories (see Table 4.17). The probability of living only with a spouse decreases from 58% to 32% and the probability of living with others decreases from 21% to about 3%, when making the same comparisons across the independence indicator. Those living alone and those living with others display strong relationships in the hypothesized direction. However, those living only with their spouse are more likely to do so when adhering to one of the remaining reasons than when a privacy/independence reason is given. Perhaps this can be accounted for by the fact that the primary reason stated by this group for their free choice preference (i.e. living only with their spouse) involves being happy and content with their spouse and that this preference outweighs the effect of a privacy/independence preference in their living arrangement decision.

These data lend support to Hypothesis (4), with the exception previously discussed, and furthermore, display the strongest association with living arrangement investigated thus far. The majority of elderly who live alone (65%) view privacy/independence as the main reason for their preference to live alone. About 32% of those who live only with their spouse and less than 3% of those living with others do so. These potent personal preferences appear to be central components of household decision-making among the elderly. They seem to represent goods that are differentially valued by elderly in different living arrangements. These results are consistent with our theoretical foundations discussed in Chapter 2 involving the influence of normative and preference structures underlying living arrangement choices.

In addition, these initial results indicate that the elderly tend to purport reasons for their living arrangement preferences that involve independence more often than privacy, even though there is a tendency for them to appear together. Independence and to a lesser degree privacy, as associated with living arrangement selection, are perceived as relevant goods for those selecting separate living styles.

An additional analysis was undertaken to investigate one other open-ended question involving reasons given for living arrangement satisfaction scores. It was felt that this question provided an opportunity to verify earlier

findings. Table 4.18 displays the proportions of the sample in the various satisfaction categories. It is worth noting that almost 90% of the respondents were either satisfied or very satisfied with their present living arrangement.

Following the satisfaction index, respondents were asked to give the main reason for their living arrangement satisfaction or dissatisfaction. The frequency distribution for this question is shown in Table 4.19, where we observe that 4.2% of the respondents stated that privacy is the main reason for their level of satisfaction and 19.8% said that it is related to independence. These results parallel those obtained from the free preference open-ended question.

It was decided that a further test of the importance of privacy/independence preference factors would be to calculate a trichotomous privacy/independence variable using both open-ended questions. Thus, those who gave privacy or independence responses to both open questions were coded as 2, those who gave a privacy or independence response to either the free preference or satisfaction open question received a 1, while all other reasons were coded as 0. Those coded as 2 were viewed as high in their preference for privacy/independence, those coded as 1 were categorized as medium, and the remaining were labelled as low.

The trichotomized privacy/independence variable is crosstabulated with living arrangement in Table 4.20. This produces a very strong bivariate relationship (chi square =

Table 4.18.

Frequency Distribution for Living Arrangement Satisfaction

Variable	Category	f	%
Living Arrangement Satisfaction			
	(1) Very satisfied	233	51.3
	Satisfied	173	38.1
	Neutral	19	4.2
	Dissatisfied	22	4.8
	(5) Very Dissatisfied	5	1.1
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 1.7	s = .86	

f = frequency

$\bar{x}$ = mean

s = standard deviation

Table 4.19.

Frequency Distribution for Reason for Living Arrangement Satisfaction

Variable	Category	f	%
Reason for Living Arrangement Satisfaction	Lonely	31	6.8
	Like to have family atmosphere	10	2.2
	Compatible	58	12.8
	Privacy	19	4.2
	Independence*	90	19.8
	Duty/responsibility	3	0.7
	Companionship	18	4.0
	Financial reasons	2	0.4
	Lived together a long time	30	6.6
	Happy, content	82	18.1
	Receives daily help	6	1.3
	Peace and quiet	13	2.9
	No one bothers them	10	2.2
	Health of spouse	1	0.2
	Lived alone a long time	18	4.0
	Afraid to live alone	3	0.7
	Enjoy being by myself	30	6.6
	Keeps them busy	5	1.1
	Enjoy young people	1	0.2
	Handicapped child is a problem	1	0.2
	Mutual exchange	11	2.4
	Able to compromise	2	0.4
	Desires reconciliation with spouse	1	0.2
	Views no options	5	1.1
	Marital problems	1	0.2
	Poor relationship with in-law	1	0.2
	Enough room	1	0.2
	Missing	15	3.2
		454	100.0

f = frequency

80.3, p = .001). The results previously discussed are replicated using this indicator, however, the relationships are slightly stronger.

These findings lend additional support to our previous conclusions. Privacy and independence preferences appear to affect the probability of being in different living arrangements. This is particularly apparent comparing those who live alone and those living with others. Preference factors appear to be salient variables in household decision-making among the elderly. Futhermore, independence and privacy to a lesser degree are highly valued goods especially among those living alone.

4.3.3 Preference For Intimate Companionship

In the theoretical chapter, it was argued that the evaluation of goods surrounding household status sometimes involves sacrificing one good for another. The most obvious example is the balancing of privacy and independence in living style on one hand and intimate companionship on the other. While privacy and independence are hypothesized as being associated with separate living, the inverse is true for intimate companionship. Hypothesis (5) states that, elderly who prefer intimate companionship will be more apt to live with others rather than separately. We would therefore expect an increased probability of living with others when comparing low and high companionship, while opposite

Table 4.20.

Crosstabulation of Living Arrangement
and Trichotomized Privacy/Independence Preference*

Living Arrangement	Privacy/Independence Preference* Low	Medium	High	Total
Living Alone	51 (20.0)	32 (45.7)	49 (73.1)	132 (33.7)
Living Only with Spouse	146 (57.2)	34 (48.6)	18 (26.9)	198 (50.5)
Living with Others	58 (22.7)	4 (5.7)	0 (0.0)	62 (15.8)
				392

$x^2 = 80.3$ p = .001

Missing = 63**

* Respondents giving a privacy/independence reason for both the free choice preference and the satisfaction for their present living arrangement questions were coded as 2 (high); those giving a privacy/independence reason for either of these open questions were coded as 1 (medium); all others were coded 0 (low).

** Includes respondents whose free choice preference differed from present living arrangement.

Figures in brackets represent column percents.

x^2 = chi square

p = level of significance

relationships are expected for those living alone and those living only with their spouse. Regarding the latter of these, additional household members would be expected to be partly the result of a desire for companionship beyond the marital relationship.

To test Hypothesis (5), we adopted a similar approach to the one previously used to analyze privacy and independence preferences, using the same two open ended preference questions. These include the free preference and the satisfaction for present living arrangement open questions. As was previously done, respondents giving a companionship reason for both the free preference and the satisfaction for present living arrangement questions were coded as 2; those stating a companionship reason for either of these open questions were coded 1; and all others were coded as 0. These were categorized as high, medium, and low, respectively. However, due to the low number of respondents found to be high in companionship, it was necessary to group the medium and high categories.

The crosstabulation of living arrangement and the dichotomized companionship preference is presented in Table 4.21. Here we observe a strong bivariate relationship, chi square = 45.3, p = .001. The probability of living alone decreases slightly (34% to 29%) moving from low to high on the companionship indicator. The probability of living only with a spouse drops from 51% to 16%, while the pro-

Table 4.21.

Crosstabulation of Living Arrangement
and Dichotomized Companionship Preference

Living Arrangement	Companionship Preference* Low	Medium/High	Total
Living Alone	140 (34.4)	9 (29.0)	149 (34.0)
Living Only with Spouse	207 (50.9)	5 (16.1)	212 (48.4)
Living with Others	60 (14.7)	17 (54.9)	77 (17.6)
			438

$x^2 = 45.3$ $p = .001$

Missing = 16

* Respondents giving a companionship reason for either the free preference or the satisfaction for present living arrangement question, or both, were coded as 1 (Medium/High); all others were coded as zero.

Figures in brackets represent column percents.

x^2 = chi square

p = level of significance

bability of living with others increases from 15% to 55% when comparing the same categories of the independent variable.

These findings show that a preference for companionship results in a slightly lower likelihood of living alone, a substantially lower likelihood of living only with a spouse, and a considerably greater likelihood of living with others. For those living only with a spouse, a companionship preference was given among less than 2% of this subgroup, making comparisons across the independent variable tenuous. The remaining two relationships provide support for Hypothesis (5), emphasizing the significance of intimate companionship as a preference factor underlying household decision-making.

4.3.4 Time Horizons and Age

Earlier, the contention was put forth that decisions made by elderly persons involving whom they choose to live with may be influenced by perceptions of expected life. This is particularly relevant for the "older" elderly, who may be more likely to view change as more costly than "younger" elderly. Based on this rationale, Hypothesis (6) was introduced stating that: among the elderly, age will be positively associated with personal preferences involving the effect of limited time horizons on major changes like moving and establishing new relationships.

Perceptions of time horizons were measured using the attitude item: when you reach my age, it isn't worth the trouble required to make major changes like moving, establishing new relationships, etc. Table 4.22 provides the frequency distribution for this indicator of time horizons. Respondents are about equally divided into agreement and disagreement categories.

When perceptions of time horizons are crosstabulated with age, a moderately strong relationship emerges consistent with Hypothesis 6. Table 4.23 shows that when age is divided into the following categories: 64-69, 70-76, 77-94, (to ensure adequate size); and then crosstabulated with the time horizon measure, we observe a chi square = 22.5, p =.01 and a Kendall's Tau B = -.17, p = .001. The probability of agreement with the statement reflecting limited time horizons increases about 10% when comparing the young-old (64-69) and old-old (77-94). The probability of disagreeing runs in the opposite direction (see Table 4.23).

These findings support the view that as elderly individuals grow older there is a tendency for them to perceive limited remaining time, which makes changes in household status or residence more costly than at other stages of the life cycle. In this sense, the old-old appear to have different time-related preference structures underlying their household decision-making. While the effect of limited time horizons is most pronounced at the older ages,

Table 4.22.

Frequency Distribution for Time Horizon Preference

Variable	Category	f	%
Perception of Time Horizon Preference*			
	(1) Strongly Agree	57	12.6
	Agree	187	41.2
	Don't Know/Uncertain	21	4.6
	Disagree	138	30.4
	(5) Strongly Agree	49	10.8
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 2.8	s = 1.3	

* When you reach my age, it isn't worth the trouble required to make major changes like moving, establishing new relationships, etc.

f = frequency

$\bar{x}$ = mean

s = standard deviation

Table 4.23.

Crosstabulation of Perceived Time Horizons and Age

Perception of Time Horizon*	64 to 69	70 to 76	77 to 94	Total
(1) Strongly Agree (Low)	12 (8.0)	18 (11.4)	27 (18.6)	57 (12.6)
Agree	54 (36.2)	66 (41.8)	67 (46.2)	187 (41.4)
Don't Know/ Uncertain	8 (5.4)	7 (4.4)	6 (4.1)	21 (4.6)
Disagree	48 (32.2)	52 (32.9)	38 (26.2)	138 (30.5)
(5) Strongly Disagree (High)	27 (18.1)	15 (9.5)	7 (4.8)	49 (10.8)
				452

Kendall's Tau B = -.17, p = .001

x^2 = 22.5 p = .01

Missing = 2

* Attitude Item - When you reach my age; it isn't worth the trouble required to make major changes like moving, establishing new relationships, etc.

Figures in brackets represent column percents.

x^2 = chi square

p = level of significance

there is still a large portion of elderly (44%) who agree with the statement in the 64-69 age category. This suggests a broader view, where the elderly as a group appear to exhibit distinctive decision-making traits. The onset of age, therefore acts as a catylist for certain decision-making qualities, such as perceptions of limited time horizons.

Four preferences were investigated based on the review of literature and theoretical development. These include: 1) privacy preferences; 2) independence preferences; 3) companionship preferences; and 4) preferences involving perceptions of time horizons. It appears that the most influential of these is the strong preference for independence. Being able to do what one wants when they want is a highly valued good for those who live alone. In contrast, intimate companionship is a preference that arises for older persons choosing co-residence. Privacy seems to play a less important role, but is also correlated with separate living styles.

Our data suggest that there may be some kind of trade off between independence and privacy on one hand and intimate companionship and mutual exchange on the other. Elderly with a propensity for the former preference structures tend to live alone, while those with the latter are more likely to live with others besides a spouse. Those elderly living only with their spouse overwhelming indicate

preferences involving contentment and compatibility, as expected. They seem to benefit from both worlds experiencing a degree of privacy and independence as well as intimate companionship and mutual exchange. Living only with a spouse is a more private and independent living environment than the addition of other family or non-family household members. Furthermore, this living environment provides opportunity for intimate companionship in addition to a strong resource for social support.

Finally, it is fairly clear that the decision-making qualities of the elderly involve the significance of perceived time horizons. As they grow older, they display a proclivity for stability over change, which may enter into evaluations regarding living arrangement changes. Often, elderly persons, particularly the old-old, will associate higher costs to a potential change in residence or household status than persons at earlier stages of their life cycle.

Overall, the four preference factors investigated appear to be salient forces in household decisions among the elderly. The moderate to strong relationships presented in this section give reason to support the hypotheses involving the preference structures analyzed in this study. However, further sophisticated analyses will be necessary to more clearly reveal their relative importance in living arrangement choices, and to identify their role in household decision-making, once the social and economic constraints

are considered.

4.4 Health and Domestic Competence

Earlier, it was argued that living arrangement decisions are affected by a number of constraints on choice. These constraints can be seen as modifying the effect of social norms and personal preferences underlying choice, depending on the degree to which they pose limitations on one's options.

Health status and domestic competence can be viewed as one group of constraints that may have this type of effect on household decision-making. Poor health may limit an individual's ability to cope with daily living. Similarly, a certain level of domestic competence is also necessary in order to do the things that are necessary for day to day living. Since there is a fair amount of overlap between these variables they will both be discussed in this section rather than separately. However, there are instances when they may act as constraining forces independent of one another. For instance, poor domestic competence among some men may be due to past sex role behaviour rather than limited functional ability resulting from health problems.

Health status and domestic competence are seen here as factors that affect the feasibility of particular living arrangement options. This is especially true for living alone, where intense and close informal support is often

difficult to obtain. Those who live with a spouse and/or others have a greater likelihood of a built-in support base to assist them with daily living. Thus, health status is expected to be higher for those living alone than those living with others.

Health status is measured using a question that taps respondent's perception of their own strength and mobility. Table 4.24 displays the frequency distribution for the strength and mobility variable. It is interesting to note that about 62% of the respondents perceived their own strength and mobility as either good or excellent, and only 14% viewed themselves as poor on this health indicator. It appears that our sample reflects a fairly healthy population of senior citizens in non-institutional living arrangements.

The crosstabulation of living arrangement with the strength and mobility variable results in a chi square = 26.5, statistically significant at the $p = .001$ level (see Table 4.25). Contrary to the theoretical work, the probability of living alone actually increases 19% comparing those with excellent and poor strength and mobility. The probability of living only with a spouse is considerably higher when health is good, while the probability of living with others is considerably lower under this condition. These latter two relationships are in the expected direction. The finding that those who live alone are more likely to do so when their strength and mobility is poor may

Table 4.24.

Frequency Distribution for Strength and Mobility

Variable	Category	f	%
Strength and Mobility	Excellent	110	24.2
	Good	173	38.1
	Fair	107	23.6
	Poor	63	13.9
	Missing	1	0.2
		454	100.0
	$\bar{x}$ = 2.3	s = .98	

$\bar{x}$ = mean

s = standard deviation

Table 4.25.

Crosstabulation of Living Arrangement and Strength and Mobility

Living Arrangement	Excellent	Good	Fair	Poor	Total
Living Alone	26 (23.6)	62 (35.8)	43 (40.2)	27 (42.8)	158 (34.9)
Living Only with Spouse	70 (63.6)	85 (49.1)	44 (41.1)	17 (27.0)	216 (47.7)
Living with Others	14 (12.8)	26 (15.1)	20 (18.7)	19 (30.2)	79 (17.4)
					453

$X^2 = 26.5$ p = .001

Missing = 1

Figures in brackets represent column percents.

X^2 = chi square

p = level of significance

reflect the availability of support services in London centering on elderly living alone, which may override the constraining effect of health limitations.

From a relative standpoint, those living alone tend to have better strength and mobility, than those living with others. While this characteristic is expected, a supplementary explanation is necessary to make sense of the much higher proportion of elderly persons living only with a spouse and exhibiting good or excellent strength and mobility.

One interpretation of these results focuses on a life-cycle perspective (Soldo and Brotman, 1981). The common experience of most elderly involves first living in an intact marital relationship. When one of the spouses is no longer present in the household, the remaining person must decide whether to remain alone or co-reside with other kin or non-relatives.

Frequently, the elderly person stays on their own until they are no longer able to live alone, even with outside assistance in the form of formal and/or informal support. The above living arrangement decision can be seen as affected by the constraining effect of health limitations, as well as resources in the form of formal and/or informal support.

The life-cycle perspective thus views the effect of health status as primarily a function of age, which repre-

sents a rough proxy for a general life-cycle process. This process is largely the result of morbidity and mortality experiences associated with growing older. What this suggests is that if age is controlled for statistically, the relationship between living arrangement and health status should disappear.

Table 4.26 gives the crosstabulation of living arrangement and the strength/mobility indicator, while controlling for age. Inspection of this table reveals that once age is controlled, the relationship between living arrangement and health status is considerably weaker and is no longer statistically significant. This suggests that those living with a spouse tend to be at an earlier stage of their life-cycle resulting in generally better health. The life-cycle perspective appears to be able to explain the relatively better health status experienced by elderly living in an intact marital relationship.

Overall, we only find partial support for Hypothesis (7) that: health status is expected to be negatively associated with living alone and positively associated with living with others. As stated earlier, perhaps the availability of formal care for the elderly in conjunction with informal support from family and friends reduces the constraining force of health limitations for elderly persons living alone. To more clearly understand the relevance of health status as a determinant of living arrangement choice

Table 4.26.

Crosstabulation of Living Arrangement and Strength and Mobility, Controlling for Age

Living Arrangement	Strength and Mobility	64-69	70-76	77-94	Total
Living Alone	Excellent	9 (24.3)	6 (17.6)	11 (12.6)	26 (16.5)
	Good	17 (45.9)	16 (47.1)	29 (33.3)	62 (39.2)
	Fair	6 (16.2)	6 (17.6)	31 (35.6)	43 (27.2)
	Poor	5 (13.5)	6 (17.6)	16 (18.4)	27 (17.1)
		100.0	100.0	100.0	158 100.0
Living Only with Spouse	Excellent	38 (43.2)	21 (29.2)	11 (19.6)	70 (32.4)
	Good	30 (34.1)	33 (45.8)	22 (39.3)	85 (39.3)
	Fair	14 (15.9)	17 (23.6)	13 (23.2)	44 (20.4)
	Poor	6 (6.8)	1 (1.4)	10 (17.9)	17 (7.8)
		100.0	100.0	100.0	216 100.0
Living with Others	Excellent	7 (28.0)	2 (13.3)	5 (12.8)	14 (17.7)
	Good	12 (48.0)	6 (40.0)	8 (20.5)	26 (32.9)
	Fair	3 (12.0)	5 (33.3)	12 (30.8)	20 (25.3)
	Poor	3 (12.0)	2 (13.3)	14 (35.9)	19 (24.1)
		100.0	100.0	100.0	79 100.0
Missing = 1		X^2 = 6.30 p = .389	X^2 = 12.34 p = .055	X^2 = 9.89 p = .129	453

Figures in brackets represent column percents.

X^2 = chi square

p = level of significance

we turn now to the analysis of domestic competence.

As with health status, domestic competence or one's ability to handle tasks necessary for daily living is expected to play a constraining role on living arrangement decisions. Living alone requires at least a minimum level of domestic competence, especially since some elderly cannot afford the type of services needed to accomplish these tasks. It is hypothesized that the likelihood of living alone or only with a spouse will increase with better domestic competence while the probability of living with others will decrease.

Domestic competence was mesured using a scale composed of five dimensions of household tasks including: 1) preparing meals; 2) laundry, ironing, and sewing; 3) household cleaning; 4) caring for oneself and others during minor illness; and 5) financial responsibilities. Respondents were coded as 1 if they could handle a task easily and 0 if they had some problem. This produced a five point domestic competence scale.

Table 4.27 displays the frequency distribution for the domestic competence scale. Almost 60% of the respondents had no problems handling these domestic tasks. It is also interesting to note that over 75% of the respondents had difficulty with only one of the five tasks. It appears that overall, our sample tends to be quite healthy and competent in dealing with domestic tasks.

Table 4.27.

Frequency Distribution for Domestic Competence

Variable		Category	f	%
Domestic Competence	low	0	13	2.9
		1	22	4.8
		2	23	5.1
		3	49	10.8
		4	79	17.4
	high	5	267	58.8
		Missing	1	0.2
			454	100.0
			$\bar{x}$ = 4.1	s = 1.3

f = frequency

$\bar{x}$ = mean

s = standard deviation

Table 4.28 shows the crosstabulation of our living arrangement variable and domestic competence. This table shows that the probability of living alone and living only with a spouse increases about 10% comparing low and high domestic competence (28.6 to 38.2). An opposite relationship emerges for those living with others, where the likelihood of this living arrangement decreases by about 18% comparing low and high domestic competence (34.3 to 15.7).

The above results are consistent with Hypothesis (8) stating that domestic competence is expected to be positively related to living alone or with a spouse and negatively related to living with kin or non-relatives. Our data lend support to the contention that elderly who live alone tend to require better domestic competence than those who co-reside with others. Living with other people usually means that domestic assistance is more available and necessary to compensate for individual inadequacies. However, as discussed earlier, the weak relationships found for health status and domestic competence may be due to the network of formal support services available in London as well as informal support. These include such services as meals on wheels, volunteer groups (i.e. Kiwanis Club), housekeeping services, etcetera. The above forms of support allow many elderly with limited strength/mobility and low domestic competence to remain living alone in the face of these apparently weak constraints. In addition, one could empha-

Table 4.28.

Crosstabulation of Living Arrangement and Domestic Competence

Living Arrangement	(Low) 0-1	2	3	4	(High) 5	Total
Living Alone	10 (28.6)	7 (30.4)	16 (32.6)	23 (29.1)	102 (38.2)	158 (34.9)
Living Only with Spouse	13 (37.1)	11 (47.8)	22 (44.9)	47 (59.5)	123 (46.1)	216 (47.7)
Living with Others	12 (34.3)	5 (21.7)	11 (22.5)	9 (11.4)	42 (15.7)	79 (17.4)
						453

$X^2 = 15.2$ $p = .01$

Zero and one categories have been grouped due to small subgroup size.

Figures in brackets represent column percents.

X^2 = chi square

p = level of significance

size the large number of modern conveniences available to many elderly, which ease the limitations posed by poor functional ability.

One additional analysis was undertaken to analyze the effect of domestic competence on living arrangement choices. It was argued earlier that domestic competence as a constraint may be more significant for females than males since women tend to take on these responsibilities. However, when we control for sex, the relationship between living arrangement and domestic competence is altered. For males, we observe a chi square of 11.9, not statistically significant. However, for females, the chi square is 18.3, statistically significant at the $p = .05$ level. It seems that domestic competence as a constraint places more influence on the living arrangement choices of females than males. One explanation for this is that males receive greater assistance from their kin network with domestic tasks than females, thereby making this a less restrictive constraining force. Males also tend to have higher incomes and may therefore purchase necessary domestic services. When living with females in a household, males again tend to receive a lot of assistance in domestic tasks regardless of some changes in sex role behaviour among this population.

4.5 Informal Support and Characteristics of the Family

A number of factors relating to key individuals in an

individual's kinship network were analyzed as determinants of living arrangement decisions. These include: 1) the availability of kin for co-residence; 2) informal support from family and friends; 3) physical and social space in adult children's homes; and 4) the marital status of adult children. Although mobility and physical distance from kin have been seen as important determinants in the literature, we were unable to include these variables due to the absence of adequate measures.

4.5.1 Availability of Kin for Co-residence

The number of living adult children represents a rough indicator of an elderly person's opportunity structure for co-residence. This is based on the correlation between number of children born to an individual and the size of the kinship network. Elderly with a great number of children are more likely to live with others rather than live alone or only with their spouse, Hypothesis (9).

Table 4.29 shows the frequency distribution for number of living children. The proportion of elderly in our sample having no children (16.1%) is very close to that of the Canadian population 17%. This finding gives additional reason for confidence in the representativeness of our sample.

The crosstabulation of living arrangement and number of living children displays a strong relationship between these

Table 4.29.

Frequency Distribution for Number of Living Children

Variable	Category	f	%
Number of Living Children	0	73	16.1
	1	96	21.1
	2	136	30.0
	3	71	15.6
	4	35	7.7
	5+	43	9.5
		454	100.0
		$\bar{x}$ = 2.1	s = 1.5

f = frequency

$\bar{x}$ = mean

s = standard deviation

variables (chi square = 37.8, p = .001; see Table 4.30). Closer examination of this table reveals that the probability of living alone decreases substantially from 58% to 22% when contrasting those with no children and those with four or more. Conversely, the probability of living with others increases from approximately 18% to 26% making the same comparison.

These findings lend strong support to the contention that the greater the number of kin in a kinship network, the greater the likelihood that an elderly individual will live with others rather than alone. In this sense, the feasibility of living with others as an option is constrained by the opportunity structure for co-residence. It appears that number of living children as an indicator of the availability of kin for co-residence is a potent constraining factor in elderly persons living arrangement choices. Hypothesis (9) is therefore accepted -- past fertility is positively associated with co-residence, and conversely, negatively associated with living alone.

One further analysis was undertaken, where living arrangement was crosstabulated with number of living children while controlling for sex. The findings discussed above were replicated for both males and females.

4.5.2 Informal Support

It has been argued that social and material informal

Table 4.30.

Crosstabulation of Living Arrangement and Number of Living Children

Living Arrangement	(Low) 0	1	2	3	(High) 4+	Total
Living Alone	42 (57.5)	36 (37.5)	46 (33.8)	18 (25.3)	17 (21.8)	159 (35.0)
Living Only With Spouse	18 (24.7)	50 (52.1)	67 (49.3)	40 (56.3)	41 (52.6)	216 (47.6)
Living With Others	13 (17.8)	10 (10.4)	23 (16.9)	13 (18.3)	20 (25.6)	79 (17.4)
						454

$X^2 = 37.8$ *p = .001

Figures in brackets represent column percents.

X^2 = chi square

p = level of significance

support from kin and to a lesser extent from friends plays a significant role in the lives of today's elderly. There exists a large body of research on the importance of informal support for seniors (see for example McPherson, 1983). The relevance of informal support for living arrangement choices centers around the view that living alone as an elderly person involves a number of difficulties that can be alleviated by means of support networks. Living with a spouse or other kin usually means that there is a built-in support system, assuming there are no major health limitations for the potential helpers. Thus, Hypothesis (10) states that while informal support is expected to be fairly substantial for all groups, it is expected to be higher for those living with their spouse and/or other kin (or non-family household members) than for elderly who live alone. In this sense, this variable is both a determinant and consequence of living arrangement choices. Potential support may draw an individual to a particular arrangement as well as being a natural consequence of a particular living arrangement.

Two measures of informal support were used in the analysis. The first of these attempts to capture material informal support contributed by family or friends and would include such things as helping with certain domestic tasks or other chores. This is accomplished by adding the number of times per month that any help with daily living is given

to the respondent by kin members or friends. Table 4.31 gives the frequency distribution for material informal support. From this table we observe that the majority of respondents (73.6%) receive no material help from informal sources (i.e. family or friends). Thus, only a little over 1/4 of our respondents accept help with daily living from these sources.

When material informal support is crosstabulated with living arrangement, a strong relationship emerges chi square = 159.2, p = .001 (see Table 4.32). The probability of living alone increases from 29% to 44% comparing those receiving no support with those receiving material support four or more times per month. The probability of living only with a spouse decreases from 60% to 6%, while the probability of living with others increases from 11% to 51% comparing across the same categories of the independent variable. The probability of living alone increases with more material informal support, as expected. The likelihood of living with others is also inflated with greater amounts of material support and to a greater degree than for the living alone group. This is also what one would expect based on earlier theoretical discussions. Those living only with their spouse results in a negative relationship. However, since respondents living only with their spouse were <u>not</u> asked about the amount of help received from their spouse, resulting in the inclusion of only help from outside

Table 4.31.

Frequency Distribution for Material Informal Support

Variable	Category	f	%
Material Informal Support	None	334	73.6
	4 times or less per month	51	11.2
	4.1 to 12 times per month	36	7.9
	12.1 or more times per month	33	7.3
		454	100.0
	$\bar{x}$ = .489	s = .92	

f = frequency

$\bar{x}$ = mean

s = standard deviation

Table 4.32.

Crosstabulation of Living Arrangement and Material Informal Support

Living Arrangement	Material Informal Support (per month) 0	0.1-4	4.1+	Total
Living Alone	96 (28.7)	33 (64.7)	30 (43.5)	159 (35.0)
Living Only with Spouse	200 (59.9)	12 (23.5)	4 (5.8)	216 (47.6)
Living with Others	38 (11.4)	6 (11.8)	35 (50.7)	79 (17.4)
				454

$X^2 = 159.2$ $p = .001$

Figures in brackets represent column percents.

X^2 = chi square

p = level of significance

the household, comparisons between this group and the other two is precarious. This would explain the finding that elderly living only with a spouse receive so little material informal support.

While those living alone appear to be recipients of a fair degree of help, elderly living with others tend to receive more material assistance including assistance from inside and outside the household. This supports Hypothesis (10) that seniors living with others receive more help than those living alone because of the built-in support network that is present for the former group. Material informal support increases the likelihood of living alone and with others, but has a stronger effect on the latter.

The second indicator of informal support involves the frequency of seeing family or friends. This represents a crude indicator of both material and emotional support. According to the theoretical work underlying Hypothesis (10), most contact with family and friends should occur among those who live with others and those living only with a spouse since these two groups have live-in support. Again, those living only with a spouse were only questioned on the frequency of seeing family and friends apart from one's spouse.

Table 4.33 shows the frequency distribution for frequency of seeing family and friends. Here, the sample is almost equally divided into four categories. The categories

Table 4.33.

Frequency Distribution for Frequency of Seeing Family and Friends

Variable	Category	f	%
Frequency of Seeing Family or Friends	0-8.0 times per month	115	25.3
	8.1-16.0 times per month	120	26.4
	16.1-30.0 times per month	96	21.1
	30.1 or more times per month	123	27.1
		454	100.0
	$\bar{x}$ = 2.5 s = 1.14		

f = frequency

$\bar{x}$ = mean

s = standard deviation

were collapsed in such a way as to reflect the natural cut-off points resulting from respondent's tendency to convert months into weeks, as well as the tendency to round numbers. It is apparent from this table that, overall, elderly see family and friends considerably more often than they receive help with daily living from this informal support network.

Living arrangement is crosstabulated with frequency of seeing family and friends in Table 4.34. Living with others means greater contact with informal support networks than living alone, based on contact from inside and outside of the household. While the data for those living only with their spouse represent only "outside" support, they still exhibit fairly high contact with family and friends. The probability of living alone is only slightly increased (30% to 35%) comparing low and high categories of seeing family and friends. On the other hand, the probability of living with others is substantially increased (10% to 42%) when comparing the same categories of the independent variable. This form of support appears to have a greater effect on those living with others than those living alone, probably due to the "built-in" support network present in this type of living arrangement.

The findings surrounding the two variables measuring informal social support indicate a number of tentative conclusions. First, material support is much less frequent

Table 4.34.

Crosstabulation of Living Arrangement and Frequency of Seeing Family and Friends

Living Arrangement	Frequency of Seeing Family or Friends (times per month) 0-8.0	8.1-16.0	16.1-30.0	30.1+	Total
Living Alone	35 (30.4)	47 (39.2)	34 (35.4)	43 (35.0)	159 (35.0)
Living Only with Spouse	69 (60.0)	65 (54.2)	54 (56.2)	28 (22.8)	216 (47.6)
Living with Others	11 (9.6)	8 (6.7)	8 (8.4)	52 (42.2)	79 (17.4)
					454

$X^2 = 83.8$ p = .001

Figures in brackets represent column percents.

X^2 = chi square

p = level of significance

than social contact or visiting. Second, in absolute terms, the elderly in our sample appear to receive less help with daily living than we would expect. Perhaps this is due to the higher income enjoyed by London's elderly. Third, it appears that with whom one lives is an important determinant of informal support. Elderly living only with their spouse seem to be fairly self-sufficient. Those living with others are recipients of much greater informal support than seniors living alone. This suggests that compromises must be made between household goods involving intimate companionship and mutual exchange and those involving privacy and independence. However, the extent to which potential informal support associated with particular living arrangements act as determinants of living arrangement choices cannot be reflected upon here. A longitudinal design is necessary in order to clarify the sequential ordering of the causal relationship, which is confounded when using cross-sectional data. In addition, due to measurement difficulties, those elderly living only with their spouse could not be compared to the other two groups concerning the influence of the independent variable on the probability of living in the various arrangements.

4.5.3 Physical and Social Space

The amount of physical and social space in adult children's homes is viewed here as a factor entering into

elderly persons' decisions to co-reside in the home of adult children. The rationale for centering on adult children and their families is based on the fact that these family members are the most likely candidates for co-residence. Of course, focussing on the amount of physical or social space in adult children's homes limits the analysis to the supply of space on the children's side. It should be kept in mind that it may be the seniors who receive additional household members.

Our indicator of physical and social space in the residences of adult children is the number of grandchildren born to adult children. It is well known that while elderly persons enjoy having contact with grandchildren, they tend to prefer daily living in an atmosphere of peace and quite (Lawton, 1980). Hypothesis (11) states that the more children born to an elderly person's offspring, the less room there will be for co-residence. Table 4.35 displays the frequency distribution for average number of grandchildren. The mean for this variable is 1.5 grandchildren per adult child.

The crosstabulation of living arrangement and average number of grandchildren results in a chi square = 28.1, statistically significant at the p = .001 level (see Table 4.36). Inspection of this table shows that the probability of living alone increases from 39% to 55% comparing zero and four average number of grandchildren. In contrast, the pro-

Table 4.35.

Frequency Distribution for Average Number of Grandchildren*

Variable	Category	f	%
Average Number of Grandchildren	0	131	28.9
	1	87	19.2
	2	146	32.2
	3	70	15.4
	4+	20	4.4
		454	100.0
	$\bar{x}$ = 1.5	s = 1.3	

* Data for average number of grandchildren were collected only for the four most proximate adult children.

f = frequency

$\bar{x}$ = mean

s = standard deviation

Table 4.36.

Crosstabulation of Living Arrangement and Average Number of Grandchildren

Living Arrangement	Average Number of Grandchildren (rounded to nearest whole number) 0	1	2	3	4	Total
Living Alone	51 (38.9)	20 (23.0)	45 (30.8)	32 (45.7)	11 (55.0)	159 (35.0)
Living Only with Spouse	48 (36.6)	47 (54.0)	83 (56.8)	32 (45.7)	6 (30.0)	216 (47.6)
Living with Others	32 (24.4)	20 (23.0)	18 (12.4)	6 (8.6)	3 (15.0)	79 (17.4)
						454

$X^2 = 28.1$ p = .001

* Data for average number of grandchildren were collected only for the four most proximate adult children.

Figures in brackets represent column percents.

X^2 = chi square

p = level of significance

bability of living with others decreases from 24% to 15% moving across the same categories. This lends support to Hypothesis (11), that the more children born to elderly person's adult offspring, the less room there will be for the older person to be included, making it more likely that the elderly person will live separately rather than co-reside with such adult children. These data suggest that physical and social space are important considerations in living arrangement decision-making among the elderly.

4.5.4 Marital Status of Adult Children

The final characteristic of the family network to be analyzed involves the marital status of adult children. Hypothesis (12) states that, single, separated and divorced adult children will more likely co-reside with elderly parents than those currently married. This relates to conflict over authority as well as other forms of personal conflict with in-laws. Again, we are centering on the importance of family variables relating to adult children in the selection of living arrangements made by their elderly parents.

Table 4.37 shows the frequency distribution for number of married children. As before, data were only gathered for the four most proximate adult children. The mean number of married adult children for our sample is 1.4.

The crosstabulation of living arrangement and number of

married children is statistically significant (chi square = 24.0, p = .01) and appears in Table 4.38. Inspection of this table reveals that the probability of living alone decreases comparing zero and four married children (from 46.9 to 25.0). The greater the number of married adult children, the less likely the elderly parent will live alone. This relationship is in the opposite direction expected and may be confounded by the association that number of married children has with number of living children. The probability of living with a spouse increases two-fold comparing low and high categories on the independent variable. Having married children increases the likelihood of living only with a spouse, as one would expect due to the onset of the empty nest stage of the life cycle. The probability of living with others decreases from 22% to 7% comparing low and high categories of number of married children. As hypothesized, there is a greater likelihood of co-residing with non-married adult children and conversely a decreased tendency for elderly to co-reside with married adult children. Overall, only tentative support can be given to Hypothesis (12). These findings do suggest further study involving characteristics of the family network as important factors on the supply side of the relationship.

4.6 Economic Factors

The economic factor centered on most by economists

Table 4.37.

Frequency Distribution for Number of Married Children*

Variable	Category	f	%
Number of Married Children	0	113	24.9
	1	129	28.4
	2	131	28.9
	3	53	11.7
	4	28	6.2
		454	100.0
	$\bar{x}$ = 1.4	s = 1.16	

* Data for number of married children were collected only for the four most proximate adult children.

f = frequency

$\bar{x}$ = mean

s = standard deviation

Table 4.38.

Crosstabulation of Living Arrangement and Number of Married Children*

Living Arrangement	Average Number of Married Children (rounded to nearest whole number)					
	0	1	2	3	4	Total
Living Alone	53 (46.9)	35 (27.1)	48 (36.6)	16 (30.2)	7 (25.0)	159 (35.0)
Living Only with Spouse	35 (31.0)	75 (58.1)	60 (45.8)	27 (50.9)	19 (67.9)	216 (47.6)
Living with Others	25 (22.1)	19 (14.8)	23 (17.6)	10 (18.9)	2 (7.1)	79 (17.4)
						454

$X^2 = 24.0$ $p = .01$

* Data for number of married children were collected only for the four most proximate adult children.

Figures in brackets represent column percents.

X^2 = chi square

p = level of significance

studying changes in living arrangements is income. According to the economic argument, rising real income over time has allowed for the purchase of privacy (Michael et al, 1980). The underlying assumption is that privacy is desired, however, our theoretical work suggests that this assumption ignores important decision-making processes involving other constraints as well as the weighing of household goods, such as intimate companionship and mutual help against privacy and independence. Research on the living arrangements of the elderly in Canada has found that income is a significant determinant, but not as potent as other factors, such as past fertility, education and age (Wister and Burch, 1983). Income is viewed here as a constraint affecting the feasibility of separate living. Thus, Hypothesis (13) states that total income from all sources will be positively associated with separate living. Living alone rather than with kin requires greater economic resources. In addition, living with a spouse usually involves greater economic resources than when one is single or previously married, especially when the lone elderly is female. We would therefore expect elderly living with their spouse to have the highest income, followed by those living alone, and finally those living with others.

The frequency distribution for total income from all sources is presented in Table 4.39. It is apparent from this table that elderly living in London enjoy a relatively

high standard of living. The mean income for our sample falls within the $10,000 to $14,999 range. This is similar to other studies recently completed in the London area and slightly higher than for the Canadian elderly population (see for example Coalition for Seniors Study, 1983). Unfortunately, the use of set categories of the nature used in this study make national comparisons tenuous. However, previous studies based on the London seniors population support the view that older persons living in London tend to experience a higher relative income than the average Canadian elderly person.

The crosstabulation of living arrangement and total income reveals only partial support for Hypothesis (13) (see Table 4.40). Inspection of this table shows that income has a strong effect on the probabilities associated with each living arrangement. However, the relationship for the living alone group is in the opposite direction expected, based on earlier theoretical discussions. The probability of living alone decreases with higher incomes rather than increases, while the other two relationships support Hypothesis (13).

This anomalous finding can be explained by the effect of marital status on income. The income measure included both the respondent's and spouse's income. When marital status is controlled, comparing those living alone and only the non-married living with others, the probability of

Table 4.39.

Frequency Distribution for Total Income From All Sources

Variable	Category	f	%
Total Income from all Sources	1. No income	1	0.2
	2. Under $2,000	0	0.0
	3. $2,000-2,999	2	0.4
	4. $3,000-3,999	4	0.9
	5. $4,000-5,999	35	7.7
	6. $6,000-7,999	61	13.4
	7. $8,000-9,999	42	9.3
	8. $10,000-14,999	100	22.0
	9. $15,000-19,999	45	9.9
	10. $20,000-24,999	50	11.0
	11. $25,000-39,000	46	10.1
	12. $40,000+	20	4.4
	Missing =	48	10.5
		454	100.0

f = frequency

$\bar{x}$ = mean

s = standard deviation

Table 4.40.

Crosstabulation of Living Arrangement and Total Income From All Sources

Variable	Under $8,000	$8,000-$14,999	$15,000 and above	Total
Living Alone	62 (60.2)	45 (31.7)	29 (18.0)	136 (33.5)
Living Only with Spouse	9 (8.7)	77 (54.2)	110 (68.3)	196 (48.3)
Living with Others	32 (31.1)	20 (14.1)	22 (13.7)	74 (18.2)
				406

Missing = 48

$X^2 = 93.8$ $p = .001$

Figures in brackets represent column percents.

X^2 = chi square

p = level of significance

living alone increases slightly with higher income. However, while this is in the expected direction, the relationship is not statistically significant (see Table 4.41). Comparing married elderly living with a spouse only and those living with others, shows relationships in the expected direction but again not statistically significant (see Tbale 4.42). These results clarify the confounding effect of marital status but do not lend support to the purchase of privacy hypothesis (Hypothesis 13). Further analyses will be undertaken in the discriminant analyses to substantiate these findings and extend the discussion.

4.7 Socio-Demographic Factors and Social Norms and Personal Preferences

Past research has tended to focus on either economic determinants of household status or factors termed 'socio-demographic'. The latter consist of the following variables: education, ethnicity, age, sex, marital status and cohort life experiences. Since the relationships between these socio-demographic factors and living arrangements of the elderly have already been well documented in the literature (see for example, Soldo, 1977; Wister and Burch, 1983; and Thomas and Wister, 1984), the intention here is to ascertain the degree to which these variables are associated with social norms and personal preferences as reflected in the attitude items.

3

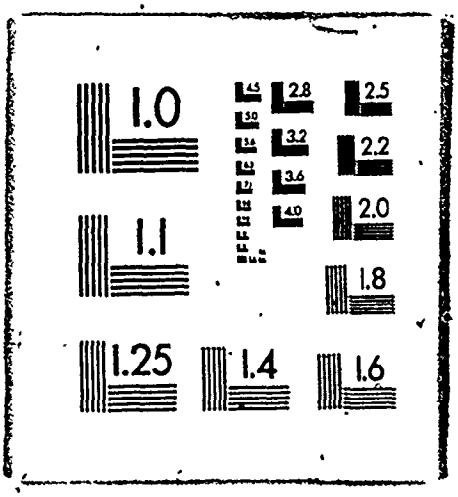


Table 4.41.

Crosstabulation of Living Arrangement and Total Income From All Sources, Controlling for Marital Status*

Variable	Under $8,000	$8,000-$14,999	$15,000 and above	Total
Living Alone	61 (68.5)	45 (80.4)	26 (76.5)	132 (73.7)
Living with Others	28 (31.5)	11 (19.6)	8 (23.5)	47 (26.3)
				179

Missing = 26

X^2 = 2.6 p = .26

* Includes only non-married elderly

Figures in brackets represent column percents.

X^2 = chi square

p = level of significance

Table 4.42.

Crosstabulation of Living Arrangement and Total Income From All Sources, Controlling for Marital Status*

Variable	Under $8,000	$8,000-$14,999	$15,000 and above	Total
Living with Spouse Only	9 (69.2)	75 (89.3)	109 (88.6)	193 (87.7)
Living with Others	4 (30.8)	9 (10.7)	14 (11.4)	27 (12.3)

Missing = 22

X^2 = 4.41 p = .11

* Includes only married elderly

Figures in brackets represent column percents.

X^2 = chi square

p = level of significance

This section therefore analyzes a set of hypotheses that flow from the theoretical discussions reviewed in the first chapter. Except for the strong direct effect that marital status has been shown to have on household status, the socio-demographic factors tend to be viewed as exogenous variables that work through the intervening effects of the normative and preference factors underlying living arrangement choices as well as through the constraining variables. For example, our review of the literature pertaining to the causal importance of eduction, ethnicity, age, sex and cohort life experiences suggests that they affect a number of attitudes that ultimately affect household decisions. While there has been only limited work on the identification and description of these attitudes, research done so far suggests that the normative and preference structures as measured by our attitude items represent important attitudinal dimensions that ultimately shape household decision-making among the elderly.

The following hypotheses represent the most salient relationships drawn from the review of the literature. Only the attitude items with the strongest relationship with living arrangement will be used, due to multiple measures of normative and preference variables.

4.7.1 Education

According to Hypothesis (14), education is expected to

be positively associated with social norms depicting the expected separateness of elderly persons. Education is also expected to be negatively associated with perceptions of age segregation and social norms stressing kinship obligations and ties. It is argued that differential socialization experiences linked to education causes differential exposure to various values, which may influence decisions about whom one lives with. It should be reiterated that education has been found to be a strong correlate of household behaviour among the elderly.

The frequency distribution for education is given in Table 4.43. Education was categorized into the following three groups: less than high school; some high school; and some college or university. It is interesting to note that almost 80% of our sample of London elderly have had at least some high school.

The crosstabulation of the social norm of expected separateness and education results in a positive relationship, but one that is not statistically significant (see Table 4.44). Based on these results, it appears that education does not significantly affect attitudes involving the expected separateness of the elderly.

Crosstabulation of the social norm depicting age segregation and education is given in Table 4.45. Here we find that education is negatively associated with the attitude item representing age segregation (Tau B = 0.06, p = .05).

Table 4.43.

Frequency Distribution for Education

Variable	Category	f	%
Education	(1) Less than High School	146	32.2
	(2) Some High School	219	48.2
	(3) Some College or University	87	19.2
	Missing	2	0.4
		454	100.0
	$\bar{x}$ = 1.9	s = .71	

f = frequency

$\bar{x}$ = mean

s = standard deviation.

Table 4.44.

Crosstabulation of Social Norm of Expected Separateness* and Education

Attitude Response		Education: Less than High School	Some High School	Some College or University	Total
(1)	Strongly Disagree	1 (1.0)	5 (2.3)	0 (0.0)	6 (1.3)
	Disagree	14 (9.7)	9 (4.1)	1 (1.2)	24 (5.4)
	Don't Know/ Uncertain	5 (3.5)	9 (4.1)	1 (1.2)	15 (3.4)
	Agree	44 (30.6)	63 (28.8)	26 (31.7)	133 (29.9)
(5)	Strongly Agree	80 (55.6)	133 (60.7)	54 (65.9)	267 (60.0)
					445

Tau B = .06 p = .08

Missing = 9

* Attitude Item - Older people should live on their own until they simply can't manage it any longer.

Figures in brackets represent column percents.

Tau B = Kendall's Tau B

p = level of significance

Table 4.45.

Crosstabulation of Social Norm Depicting Age Segreation* and Education

Attitude Response		Education: Less than High School	Some High School	Some College or University	Total
(1)	Strongly Disagree	3 (2.0)	12 (5.5)	8 (9.2)	23 (5.1)
	Disagree	31 (21.5)	39 (17.8)	12 (13.8)	82 (2.7)
	Don't Know/ Uncertain	9 (6.3)	22 (10.0)	13 (14.9)	44 (9.8)
	Agree	62 (43.1)	106 (48.4)	36 (41.4)	204 (45.3)
(5)	Strongly Agree	39 (27.1)	40 (18.3)	18 (20.7)	97 (21.6)
					450

Tau B = -.06 p = .05

Missing = 4

* Attitude Item - A person's children are apt to be so different when they grow up (income, moral values, recreational interests and hobbies, etc.) that its hard to share day-to-day living with them in the same household.

Figures in brackets represent column percents.

Tau B = Kendall's Tau B

p = level of significance

Less formal education seems to contribute to greater amounts of age segregation or age differentiation, perhaps due to the differential education experience found across generations. This is consistent with the relatively dramatic changes that have taken place in the education system, especially since the Second World War.

The crosstabulation of the social norm depicting kinship obligations and ties and education results in a moderately strong negative relationship as hypothesized (see Table 4.46). These findings suggest that greater amounts of formal education experienced by seniors results in less emphasis on a social expectation of kinship obligations and ties. It has been argued that education causes changes in a number of attitudes and values, such as liberalism/conservatism. It seems that the education experience has played a role in altering elderly person's attitudes involving expectations about kinship obligations and ties and therefore has contributed to a lesser degree of family cohesion beyond the nuclear family.

According to Hypothesis (15), education is also expected to display a positive relationship with privacy and independence preferences. Again, it is the attitudinal effect of education that is viewed as the causal force. Tables 4.47 and 4.48 give the crosstabulations of the privacy and independence preferences and education. In both cases we observe weak but statistically significant positive

Table 4.46

Crosstabulation of Social Norm Depicting Kinship Obligations/Ties* and Education

Attitude Response		Education: Less than High School	Some High School	Some College or University	Total
(1)	Strongly Disagree	26 (18.1)	46 (21.0)	22 (25.3)	94 (20.9)
	Disagree	52 (36.1)	112 (51.1)	40 (46.0)	204 (45.3)
	Don't Know/ Uncertain	17 (11.8)	27 (12.3)	9 (10.3)	53 (11.8)
	Agree	37 (25.7)	29 (13.2)	16 (18.4)	82 (18.2)
(5)	Strongly Agree	12 (8.3)	5 (2.3)	0 (0.0)	17 (3.8)
					450

Tau B = -.14 p = .001

Missing = 4

* Attitude Item - Older people have earned the right to be taken care of in their later years by their kin.

Figures in brackets represent column percents.

Tau B = Kendall's Tau B

p = level of significance

Table 4.47

Crosstabulation of Preference for Privacy* and Education

Attitude Response		Education: Less than High School	Some High School	Some College or University	Total
(1)	Strongly Disagree	6 (4.2)	1 (0.1)	1 (1.1)	8 (1.8)
	Disagree	26 (18.1)	28 (12.8)	15 (17.2)	69 (15.3)
	Don't Know/ Uncertain	14 (9.7)	8 (3.6)	6 (6.9)	28 (6.2)
	Agree	59 (41.0)	118 (53.9)	36 (41.4)	213 (47.3)
(5)	Strongly Agree	39 (27.0)	64 (29.2)	29 (33.4)	132 (29.3)
					450

Tau B = .07 p = .05

Missing = 4

* Attitude Item - The hardest thing about sharing a household with other family members is the lack of privacy.

Figures in brackets represent column percents.

Tau B = Kendall's Tau B

p = level of significance

Table 4.48.

Crosstabulation of Preference for Independence* and Education

Attitude Response		Education: Less than High School	Some High School	Some College or University	Total
(1)	Strongly Disagree	7 (4.9)	5 (2.3)	1 (1.1)	13 (2.9)
	Disagree	28 (19.4)	35 (16.0)	15 (17.2)	78 (17.3)
	Don't Know/ Uncertain	10 (6.9)	11 (5.0)	4 (4.6)	23 (5.5)
	Agree	59 (40.9)	106 (48.4)	38 (43.7)	203 (45.1)
(5)	Strongly Agree	40 (27.8)	62 (28.3)	29 (33.4)	131 (29.1)
					450

Tau B = .06 p = .05

Missing = 4

* Attitude Item - To move into someone else's household; even a son or daughter, means losing one's independence as an adult.

Figures in brackets represent column percents.

Tau B = Kendall's Tau B

p = level of significance

relationships. This indicates that education is associated with living arrangement preferences involving privacy and independence issues. Those with higher education tend to hold attitudes in favour of privacy and independence preferences that directly influence with whom one lives.

4.7.2 Ethnicity

Thomas and Wister (1984) have demonstrated the salience of ethnic origin in living arrangement decisions among the elderly. It is argued that ethnic differences reflect different social norms and personal preferences involving kinship obligations and ties, expected separateness, and privacy and independence preferences.

Due to the small number of cases in all but the British and Irish ethnic categories, it appeared logical to dichotomize ethnicity into modern and traditional ethnic groups. Modern ethnic origin encompasses the Northern European countries, which exhibit different household and family behaviour than Southern European, Eastern European and Asian countries. Not only do these more modern ethnic groups tend to have higher headship rates but they also tend to be more acculturated into Canadian culture. The more traditional countries, on the other hand, exhibit stronger emphasis on the family as the key social institution. Thus, 'modern' includes the following ethnic groups and frequencies: British (302), German (18), Irish (51), American (5), Jewish

(1), Swiss (4), Dutch (14), and Belgian-Flemish (3). The 'traditional' category includes: French (11), Italian (7), Chinese (1), Japanese (1), Ukranian (7), Latvian (5), Filipino (1), Hungarian-Czech.(5), Polish (5), Arabic (4), and Russian (1).

Table 4.49 gives the breakdown of ethnicity into the modern and traditional categories. We observe from this table that only a little over 10% of our sample fall within the traditional ethnicity category. This is, however, sufficient to analyze a set of bivariate relationships with the selected normative and preference attitude items.

According to Hypothesis (16), ethnicity, (where modern and traditional categories are coded as 0 and 1, respectively), is expected to be positively correlated with kinship obligations and ties and negatively associated with social norms depicting expected separateness, as well as privacy and independence preferences. Inspection of Tables 4.50 through 4.53 reveals relationships between ethnicity and these normative and preference structures, all in the expected direction, although they are relatively weak relationships with Tau B's around .10. These data suggest that ethnic groups of a traditional nature display greater respect for their elders in the form of stronger emphasis on family obligations and ties. Those of a more modern nature tend to stress social norms of expected separateness and privacy and independence preferences. It appears that

Table 4.49.

Frequency Distribution for Ethnic Dichotomy*

Variable	Category	f	%
Ethnicity	Modern	398	87.7
	Traditional	48	10.6
	Missing =	8	2.7
		454	100.0

* Modern includes the following ethnic groups and frequencies: British (302), German (18), Irish (51), American (5), Jewish (1), Swiss (4), Dutch (14), Belgian-Flemish (3).

Traditional includes the following ethnic groups and frequencies: French (11), Italian (7), Chinese (1), Japanese (1), Ukranian (7), Latvian (5), Filipino (1), Hungarian-Czech (5), Polish (5), Arabic (4), Russian (1).

f = frequency

Table 4.50.

Crosstabulation of Kinship Obligations/Ties* and Ethnicity

Attitude Response		Ethnicity: Modern (0)	Traditional (1)	Total
(1)	Strongly Disagree	88 (22.2)	5 (11.1)	93 (21.0)
	Disagree	184 (46.3)	19 (42.2)	203 (45.9)
	Don't Know/ Uncertain	46 (11.6)	6 (13.3)	52 (11.8)
	Agree	69 (17.4)	8 (17.4)	77 (17.4)
(5)	Strongly Agree	10 (2.5)	7 (15.6)	17 (3.8)
				442

Tau B = .14 p = .001

Missing = 12

*Attitude item - Older people have earned the right to be taken care of in their later years by their kin.

Figures in brackets represent column percents.

Tau B = Kendall's Tau B

p = level of significance

Table 4.51

Crosstabulation of Social Norm of Expected Separateness and Ethnicity

Attitude Response		Ethnicity: Modern (0)	Traditional (1)	Total
(1)	Strongly Disagree	5 (1.3)	1 (2.1)	6 (1.3)
	Disagree	22 (5.5)	2 (4.2)	24 (5.4)
	Don't Know/ Uncertain	15 (3.8)	3 (6.3)	18 (4.0)
	Agree	113 (28.5)	21 (43.7)	134 (30.1)
(5)	Strongly Agree	242 (60.9)	21 (43.7)	263 (59.1)
				445

Tau B = -.09 p = .05

Missing = 9

*Attitude Item - Older people should live on their own until they simply can't manage it any longer.

Figures in brackets represent column percents.

Tau B = Kendall's Tau B

p = level of significance

Table 4.52.

Crosstabulation of Preference for Privacy* and Ethnicity

Attitude Response		Ethnicity: Modern (0)	Traditional (1)	Total
(1)	Strongly Disagree	7 (1.8)	1 (2.1)	8 (1.8)
	Disagree	58 (14.6)	10 (20.8)	68 (15.3)
	Don't Know/ Uncertain	20 (5.0)	8 (16.7)	28 (6.3)
	Agree	192 (48.4)	20 (41.7)	212 (47.6)
(5)	Strongly Agree	120 (30.2)	9 (18.8)	129 (29.0)
				445

Tau B = -.11 p = .01

Missing = 9

*Attitude Item - The hardest thing about sharing a household with other family members is the lack of privacy.

Figures in brackets represent column percents.

Tau B = Kendall's Tau B

p = level of significance

Table 4.53.

Crosstabulation of Preference for Independence* and Ethnicity

Attitude Response		Ethnicity: Modern (0)	Traditional (1)	Total
(1)	Strongly Disagree	11 (2.7)	2 (4.2)	13 (2.9)
	Disagree	61 (15.4)	16 (33.3)	77 (17.3)
	Don't Know/ Uncertain	23 (5.8)	1 (2.1)	24 (5.4)
	Agree	183 (46.1)	21 (43.8)	204 (45.8)
(5)	Strongly Agree	119 (30.0)	8 (16.7)	127 (28.5)
				445

Tau B = -.12 p = .01

Missing = 9

*Attitude Item - To move into someone else's household; even a son or daughter, means losing one's independence as an adult.

Figures in brackets represent column percents.

Tau B = Kendall's Tau B

p = level of significance

privacy and independence are highly valued "goods" in modern industrial societies, supporting contentions made by several researchers, such as Abu Laban (1980) and Kobrin (1981). However, to the knowledge of the author, these data represent the only direct evidence in support of those cultural arguments.

4.7.3 Sex

It has been argued that men and women experience different roles involving family ties and domestic usefulness in the home and that these experiences promote different perceptions about social norms. Hypothesis (17) states that men more than women are expected to perceive social norms of expected separateness, while women more than men are expected to view family obligations and ties as more important.

Table 4.54 gives the frequency distribution for sex, while Tables 4.55 and 4.56 provide the bivariate relationships between these two social norms and sex, respectively. We observe from the crosstabulations that only the relationship between family obligations/ties and sex is in the expected direction and statistically significant. Women seem to place greater emphasis on kinship obligations and ties at the older ages. This lends credence to the view that women's greater experience with roles involving family cohesion and organization and perhaps their greater domestic

Tables 4.54

Frequency Distribution for Sex

Variable	Category	f	%
Sex			
	Male	170	37.4
	Female	284	62.6
		454	100.0

f = frequency

Table 4.55.

Crosstabulation of Social Norm of Expected Separateness* and Sex

Attitude Response		Sex: Male (1)	Female (2)	Total
(1)	Strongly Disagree	1 (0.1)	5 (1.8)	6 (1.3)
	Disagree	7 (4.1)	17 (6.0)	24 (5.3)
	Don't Know/ Uncertain	8 (4.7)	12 (4.2)	20 (4.4)
	Agree	47 (27.8)	87 (30.7)	134 (29.6)
(5)	Strongly Agree	106 (62.7)	162 (57.2)	268 (59.3)
				452

Tau B = -.05 p = .10

Missing = 2

*Attitude Item - Older people should live on their own until they simply can't manage it any longer.

Figures in brackets represent column percents.

Tau B = Kendall's Tau B

p = level of significance

Table 4.56.

Crosstabulation of Kinship Obligations/Ties* and Sex

Attitude Response		Sex: Male (1)	Female (2)	Total
(1)	Strongly Disagree	41 (24.3)	53 (18.7)	94 (20.8)
	Disagree	83 (49.1)	122 (43.1)	205 (45.4)
	Don't Know/ Uncertain	15 (8.9)	38 (13.4)	53 (11.7)
	Agree	25 (14.8)	58 (20.5)	83 (18.4)
(5)	Strongly Agree	5 (3.0)	12 (4.2)	17 (3.8)
				452

Tau B = .10 p = .01

Missing = 2

*Attitude Item - Older people have earned the right to be taken care of in their later years by their kin.

Figures in brackets represent column percents.

Tau B = Kendall's Tau B

p = level of significance

usefulness in the home contribute to these differential normative expectations across the sexes.

4.7.4 Age

The relationship between age and perceptions of time horizons has been discussed in the earlier section dealing with personal preferences. It will be recalled that a significant relationship emerged where age was found to be positively associated with elderly individual's perceptions of time horizons. It appears that the onset of old age affects key decision-making parameters involving the assessment of costs associated with changing residences and household statuses.

4.7.5 Summary

The analysis of relationships between the variables termed socio-demographic variables and the social norms and personal preferences reflected in the attitude items turned up interesting results. The vast majority of the bivariate relationships were found to be statistically significant and in the expected direction. Even though these tended to be weak to moderately-weak relationships, they still suggest that education, ethnicity, sex, and age are associated with the normative and preference factors proven to underlie household decision-making among the elderly. The relevance of this analysis is rooted in the advancement in our under-

standing of the social origins of these potent social norms and personal preferences. Furthermore, the previous analysis has assisted in classifying to some degree the structure and causal linking of relevant determinants of household decision-making among the elderly. Further analysis is required, however, to investigate the relative importance of each of the central independent variables while controlling for the remaining causal factors.

CHAPTER V

DISCRIMINANT ANALYSIS

5.1 Purpose of Using Discriminant Analysis

The extensive bivariate analysis covered thus far in the data analysis has allowed for exploration and initial testing of the hypothesis developed in the theoretical chapter. Difficulties with controlling several variables simultaneously and the cumbersome nature of the trichotomous categorical dependent variable make it necessary to supplement the crosstabular analysis with a multivariate method. This will provide an opportunity to compare the relative importance of the living arrangement determinants that came to light in the previous analysis. For example, the contribution of privacy and independence preferences can be weighed against the other independent variables in the equation while holding these variables constant. Employing this statistical method will therefore present an opportunity to summarize and highlight the major findings of this research work by using statistical controls to further test the relationships in the crosstabular analysis.

5.2 Description and Assumptions of Discriminant Analysis

Discriminant analysis is a statistical technique that allows the researcher to determine the effect of several independent variables on a nominal-level dependent variable (Nie et al., 1975:9). This approach produces a linear combination of independent variables that best discriminates between two or more groups of cases. In this sense, this method is analogous to other statistical methods, such as multiple regression, that rely on a linear model. The primary difference between discriminant analysis and multiple regression is that the former treats the dependent variable as being measured at the nominal level (Klecka, 1980:11).

Before describing this method of analysis further, it is appropriate to summarize the assumptions of discriminant analysis. First, there must be two or more groups (i.e. categories in the dependent variable). Second, there should be at least two cases per group. Third, there can be any number of discriminating variables, provided that it is less than the total number of cases minus two. Fourth, discriminating variables are measured at the interval level, however, as in multiple regression analysis, this requirement can be relaxed to include ordinal level independent variables, with chance of conservative error. Fifth, no discriminating variable may be a linear combination of other discriminating variables. Sixth, the covariance matricies

for each group must be (approximately) equal. And seventh, each group has been drawn from a population with a multivariate normal distribution on the discriminating variables (Klecka, 1980:11). Except for the inclusion of both interval and ordinal independent variables, it is believed that our data conform to the requirements spelled out in these assumptions.

The initial step in discriminant analysis is the computation of canonical discriminant functions to study the nature of group differences. These represent a linear combination of the discriminating variables which are formed to satisfy certain conditions (Klecka, 1980:15). The canonical discriminant function has the following mathematical form:

$$f_{km} = U_o + U_1 X_{1km} + U_2 X_{2km} + \ldots U_p X_{pkm}$$

where, f_{km} = the value (score) on the canonical discriminant function for case m in the group K;

X_{ikm} = the value on discriminating variable X_i for case m in group K; and

U_i = coefficients which produce the desired characteristics in the function.

The coefficients (the U's) for the first function are derived so that the group means on the function are as different as possible, while the coefficients for the second function are also calculated in this manner but under the added condition that values on the second function are not correlated with values on the first (Klecka, 1980:16). If

there are more than three groups (in the dependent variable), then additional functions can be defined in the same fashion maximizing the differences between group means while being uncorrelated with previously calculated functions.

In order to maximize group differences, it is necessary to have a point of comparison. Each group can be perceived as a swarm of points, where each data case represents a point spatially located by means of the case's value on each independent variable. A group "centroid" can be computed to summarize the position of the group. This group centroid is an imaginary point identified spatially using the group means on each of the variables (Klecka, 1980:16). These centroids can then be used to analyze how the groups differ, since they represent the "typical" position for the group.

Once the linear combination of independent variables or the discriminant function has been derived, it can be used to classify the original cases into groups; therefore, its adequacy can be assessed by determining what percentage of the cases are correctly classified (Nie et al., 1975). The magnitude of this percentage should be judged "in relation to the expected percentage of correct classifications if the assignments were made randomly." With three living arrangement categories, 33.3% of the cases should be correctly classified purely as the result of chance (Klecka, 1980:50).

If a stepwise method is employed, the variable that is the most powerful discriminator is entered first into the

analysis, analogous to stepwise multiple regression. Additional variables are selected on the basis of their ability to significantly increase the discrimination between the groups. This process continues until all the variables have been entered or until the remaining variables are found to contribute little to the discrimination of the groups. The stepwise approach is preferable when there is an absence of a clearly defined model to be tested. We intend to employ a stepwise method that attempts to minimize Wilks' lambda. In this case, the multivariate F ratio must be greater than 1.0 for the variable to be entered into the analysis (Nie et al., 1975:436-453). It should also be noted that the importance of a discriminant function can be determined by calculating Wilks' lambda. Lambda is an inverse measure of the discriminating power in the original variables which has not yet been removed by the discriminant functions (Nie et al., 1975:442). Furthermore, Wilks' lambda can be transformed into a chi square statistic to test for statistical significance.

The standardized discriminant functions "represent the relative contributions of the variables to the respective functions." (Nie et al., 1975:440). Standardized discriminant functions are calculated for each independent variable entered into the analysis for each function (equal to the number of groups in the dependent variable minus one). The interpretation of these standardized coefficients

is similar to that of beta weights in multiple regression (Nie et al., 1975:443). The standardized coefficients represent the amount of change in a case's position on that function if its score on the corresponding variable changed by one standard unit. This method produces sets of standardized discriminant functions suitable for comparing the relative discriminating power of the independent variables for (n-1) combinations of groups in the dependent variable.

5.3 Variables in the Discriminant Analysis

Twelve independent variables were included in the discriminant analysis. These represent the majority of variables discussed in the previous chapters and include the most significant determinants of living arrangements from the bivariate analysis.

It is necessary to omit marital status due to its almost one-to-one relationship with certain living arrangements. You can not live with a spouse if you are in the non-married category and very few elderly who are married live alone. Inclusion of marital status therefore confounds the analysis and leads to uninterpretable results. Ideally, it would be preferable to have a large enough sample size to divide those living with others by marital status. A suitable measure of cohort life experiences is not available and is also omitted from this analysis. In addition, it is necessary to omit the measure of a companionship preference

for two reasons. First, companionship and the privacy/independence variable are calculated from the same set of open questions. This creates a problem of them being a linear combination, which violates a critical assumption of discriminant analysis. Second, the number of missing values associated with the companionship measure would push the total number of missing values to a level that becomes problematic. However, since we view companionship as being balanced off against privacy and independence preferences, the exclusion of the former is not seen as a major problem. Finally, due to the problem of sequential causal ordering discussed in the previous section, measures of informal support are not included in this analysis.

The following variables are to be included as discriminating factors in the analysis: 1) a privacy/independence preference; 2) social norm of expected separateness; 3) social norm depicting kinship obligations and ties; 4) social norms depicting age segregation; 5) strength and mobility; 6) domestic competence; 7) income from all sources; 8) children ever born; 9) education; 10) ethnicity; 11) age and 12) sex.

1) Privacy/Independence Preference. Our bivariate analysis indicated that the strongest indicator of a preference for privacy and independence was the three-level ordinal variable derived from the two open questions regarding reasons for living arrangement satisfaction and living

arrangement preferences, given a free choice. For both questions, seniors giving either a reason involving privacy or independence were coded as 1, while all other responses were coded as 0. This produces a range from zero to two (low, medium and high). It will be recalled that a decision was made to collapse privacy and independence categories due to their apparent overlap, even though independence tends to be the more influential of the two preferences.

2) Social Norm Depicting Expected Separateness. The attitude item that most accurately captures this concept involves the statement: older people should live on their own until they simply can't manage it any longer. All responses to the attitude items range from strongly disagree to strongly agree, forming a five point Lickert scale. This measure was also found to have a strong association with living arrangement.

3) Social Norm Depicting Family Obligations and Ties. This variable was measured using the attitude item: older people have earned the right to be taken care of in their later years by their kin. This was found to be a significant determinant of living arrangement choices among seniors.

4) Social Norm Depicting Age Segregation. The measure used to tap this particular social norm is the same as in earlier analyses. This involves the attitude response to the statement: a person's children are apt to be so differ-

ent when they grow up (in income, moral values, recreational interests and hobbies, etc.) that its hard to share day-to-day living with them in the same household. This attitude item also proved to be an important determinant of living arrangements.

The relationship discussed earlier between marital status and income poses another problem. Income data was gathered for individual respondents and their spouses. It would therefore be best to undertake separate analyses for married and non-married elderly. However, subsample size limitations deem this approach inappropriate. A less direct approach to this problem is to divide the income of all married elderly by two. This provides an adjustment to the income variable such that the family income indicator is transformed into a rough measure of personal income for married elderly.

The remaining variables including: strength and mobility, domestic competence, children ever born, education, ethnicity, age, and sex entail measures described in the methodology chapter. These involve single and straightforward measures that do not require further discussion.

5.4 Results from the Discriminant Analysis

The classification results presented in Table 5.1 show that, overall, 67.80% of the cases were correctly classified. We would expect approximately 38% of the cases to be

Table 5.1.

Classification Results for Discriminant Analysis

Actual Group	No. of cases	Predicted Group Membership Number of cases per group (percentage) 1	2	3
Living Alone 1	125	91 (72.8)	24 (19.2)	10 (8.0)
Living Only with Spouse 2	196	55 (28.1)	127 (64.8)	14 (7.1)
Living with Others 3	61	9 (14.9)	11 (18.0)	41 (67.2)
	382			

Percent of grouped cases correctly classified = 67.80

Missing = 72*

* Cases excluded due to at least one missing discriminating variable.

correctly classified based on random chance, due to the unequal size of categories in the dependent variable. The discriminant analysis indicates that the independent variables are successful in discriminating between the groups (living alone, living only with spouse, and living with others), with almost 30% more cases classified using these variables than by chance.

These data strongly support the view that the independent variables used in the analyses represent a large portion of the salient determinants of living arrangements among the elderly. This conclusion is further supported when inspecting Figure 5.1. This figure represents the plots of discriminant scores and group centroids. It is apparent from this figure that the three groups are distinct, with group centroids that are approximately equidistant from one another. This finding also gives credence to our rationale for initially separating the sample into three living arrangement groups rather than creating a dichotomy.

To assess the relative ability of the independent variables to discriminate between the groups, the standardized discriminant function coefficients are compared between independent variables for each of the two functions. Klecka (1980) clearly states that,

> the standardized coefficients are helpful, because we can use them to determine which variables contribute most to determining

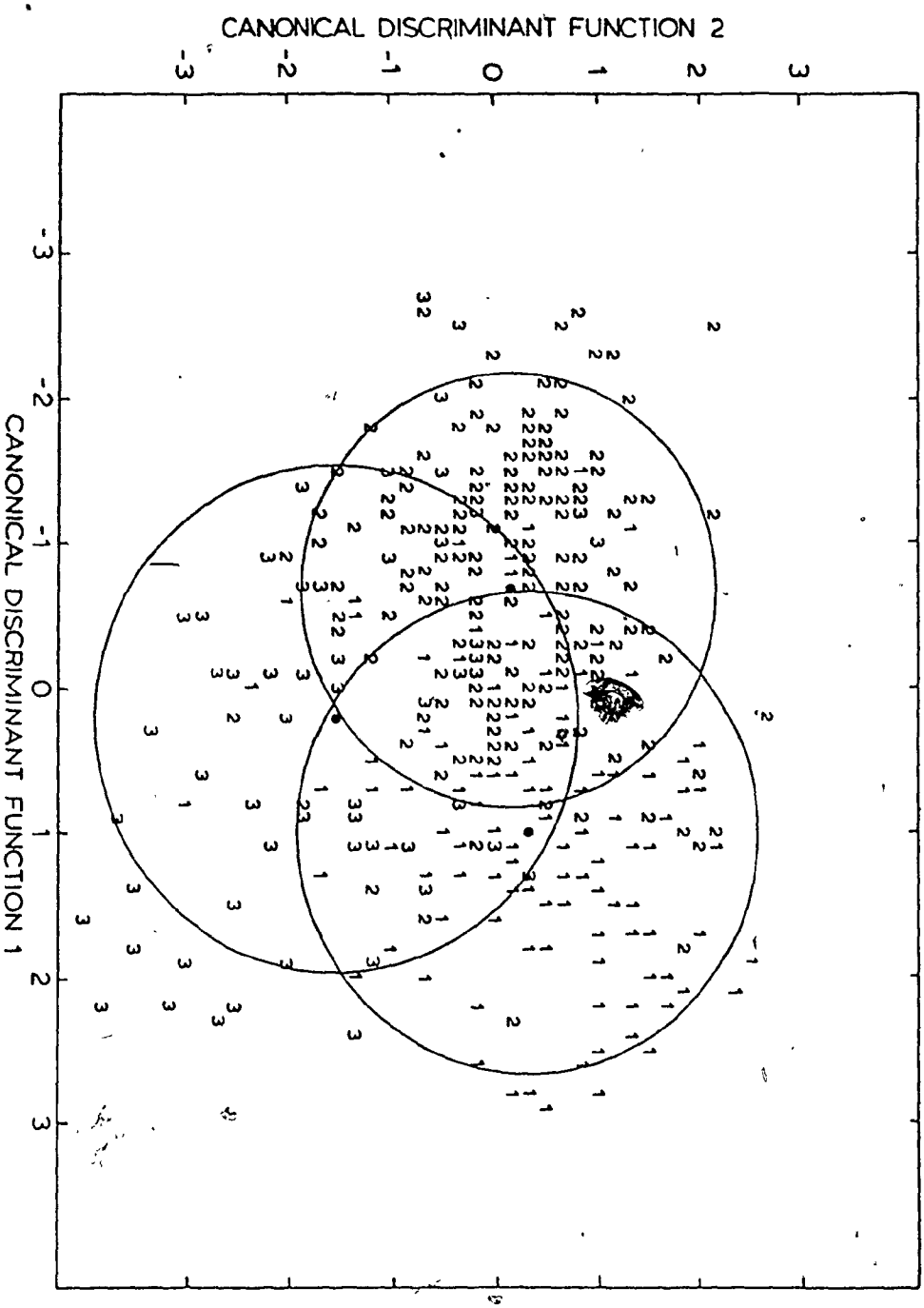


Figure 5:1. Plots of Discriminant Scores and Group Centroids (•).

> scores on the function. This is done by examining the magnitude of the standardized coefficients (ignoring the signs): The larger the magnitude, the greater is the variables contribution (p. 29-30).

Similarly, Nie et al., (1975:443) state that, when the signs are ignored, the coefficient stands for the relative contribution of that variable to its respective function, and that the sign merely denotes whether the variable is making a positive or negative contribution. To facilitate the analyses of the standardized discriminant coefficients, the signs will only be discussed if they are found to be contradictory to the theoretical work.

Table 5.2 displays the standardized discriminant function coefficients for each function, as well as the Wilks' lambda for each function. Let us begin by inspecting the coefficients for Function 1. This function represents the discriminant functions for living alone using living with others as the comparison group. The Wilks' lambda is calculated to equal .507, significant at the p = .001 level. It will be recalled that this represents an inverse measure of the discriminating power of the independent variables.

The coefficient for the privacy/independence preference is .613, indicating that this preference factor is the most important discriminating variable for Function 1. As found in the bivariate analysis, privacy and independence preferences arise as central components in the analyses

Table 5.2.

Discriminant Function Analysis for Living Arrangement and Independent Variables

Variables	Standard Discriminant Function Coefficients Function 1*	Function 2**
Privacy/Independence Preference	.613	.242
Social/Norm of Expected Separatenss	.497	.024
Sex	.039	-.682
Age	-.243	-.546
Social Norm Depicting Age Segregation	.338	.222
Social Norm Depicting Kinship Obligations and Ties	-.206	-.089
Strength and Mobility	.180	.184
Ethnicity	-.208	-.051
Domestic Competence	.131	.276
Children Ever Born	-.077	-.216
Income	not entered due to insufficient F-level	
Education	not entered due to insufficient F-level	
Wilks' Lambda	= .507***	.808***

* Function 1 represents the discriminant functions for living alone using living with others as the comparison group. A negative sign indicates a negative contribution to living alone when compared with the living with others group.

** Function 2 represents the discriminant functions for the living only with spouse group using living with others as the comparison group.

*** Level of significance = .001.

Sex - Male = 1, Female = 2

making a positive contribution to living alone. The second and third best discriminating variables for this function are the social norms of expected separateness and age segregation, having respective discriminant coefficients of .497 and .338. With statistical controls on the remaining variables, these measures of social norms make a positive contribution to living alone for Function 1. This again indicates the importance of social norms on living arrangement choices among the elderly.

The remaining variables entered into the analysis exhibit considerably smaller standardized discriminant function coefficients as indicated in Table 5.2 with signs in the expected direction. When constrasted with living with others, living alone is more likely among elderly with a strong privacy/independence preference, who adhere to social norms of expected separateness and those involving age segregation. To a lesser extent, they tend to be somewhat younger, with weaker kinship obligations and ties, and tend to be members of ethnic groups classified as modern. The remaining independent variables displayed weaker relationships, with education and income being excluded from the analysis due to insufficient F-levels.

Function 2 entails the discriminant function for those living only with a spouse using living with others as the comparison group. These two functions represent the most divergent comparisons grounded in earlier theoretical and

empirical work. Wilks' lambda for this function is .808. $p \leq .001$, and is not as strong as that for Function 1. In relative terms, Function 1 accounts for about two-thirds of the variance explained, while Function 2 explains about one-third. Gender and age contribute most to determining scores on Function 2 (coefficients = -.682 and -.546, respectively). Being female and older increases the likelihood of living with others compared against living only with a spouse. Domestic competence, a preference for privacy/independence, the social norm depicting age segregation and lower fertility contribute, to a lesser extent, to the likelihood of living with others for this function (see Table 5.2). The remaining variables exhibit smaller but statistically significant coefficients except for income and education, which were not entered due to insufficient F-levels.

To summarize the relative value of the independent variables on the discrimination of all three living arrangement groups simultaneously, the variables have been ranked according to the size of their associated Wilks' lambda in Table 5.3. Here we observe that, overall, the privacy/independence preference is the most significant discriminating variable. This is succeeded by the social norm of expected separateness, sex, age, the social norms depicting age segregation and kinship obligations and ties, strength and mobility, ethnicity, domestic competence, and finally

Table 5.3.

Ranking of Independent Variables Based on Wilks' Lambda

Variables	Wilks' Lambda	Level of Significance
Privacy/Independence Preference	.809	.001
Social Norm of Expected Separateness	.733	.001
Sex	.650	.001
Age	.587	.001
Social Norm Depicting Age Segregation	.554	.001
Social Norm Depicting Kinship Obligations/Ties	.539	.001
Strength and Mobility	.529	.001
Ethnicity	.520	.001
Domestic Competence	.512	.001
Children Ever Born	.507	.001
Income	not entered due to insufficient F-level	
Education	not entered due to insufficient F-level	

children ever born. Again, income and education were excluded from the analysis due to insufficient F-levels.

Two additional discriminant analyses were undertaken to supplement the former analysis. The first of these involves hierarchical discriminant analysis to assess the relative discriminating power of the three components (including socio-demographic factors, norms and preferences, and constraints). Based on the sequential ordering developed in the theoretical framework, the socio-demographic variables were entered first. Approximately 52% of the cases are correctly classified using only the socio-demographic factors - age, sex, education and ethnicity. After the normative and preference factors are included, the percentage of correctly classified cases is boosted 14% to 66%. The addition of the four variables classified as constraints on choice only increases the percentage of correctly classified cases 2% to about 68%. This suggests that the socio-demographic factors and the normative and preference factors are the most important components in the decision of whom to live with at the older ages. This is consistent with results from the step-wise discriminant analysis. However, it should be noted that the order in which the blocks of variables are entered into the analysis affects their contribution to correctly classified cases due to shared variance. Since the order of inclusion is based on provisionary theoretical modelling, these results will be

only used as substantiating evidence for earlier findings.

The second additional discriminant analysis involves the inclusion of a number of multiplicate interaction terms after all the main effects are entered. The discussion of possible interaction effects between variables in the theoretical framework suggests that an exploration be made for possible statistical interaction. It was decided that 26 plausible first order interaction terms be investigated. These were selected on the basis of earlier theoretical work. The results show that the inclusion of these interaction effects contribute little to the classification of correctly classified cases (approximately 2.5%). In the context of this study, it was decided that this slight increase in correctly classified cases (from 67.8% to 70.3%) did not warrant further attention.

5.5 Summary of Major Findings From Discriminant Analysis

The most noteworthy finding drawn from the discriminant analysis is the persistence of the privacy/independence preference measure as a determinant of household decision-making even after controlling for other key variables. Preferences that entail notions of independence and to a lesser degree privacy, as they relate to living arrangements, are strongly related to household structure. These findings provide direct empirical proof for contentions made by such researchers as Abu Laban (1980), Kobrin (1981),

Kobrin and Goldscheider (1983) and Thomas and Wister (1984) relating to the importance of issues involving independence and privacy, as well as several social norms to be discussed. The development of these normative and preference structures relates to family modernization themes that pivot on the transition from extended to nuclear families.

A second major finding drawn from the discriminant analysis is the power of sex and age in distinguishing between living only with a spouse and living with others (Function 2), and to a lesser extent, the impact of age in the discrimination between living alone and living with others (Function 1). Regarding Function 2, gender and age appear to be central factors affecting this dichotomy. For this function, age and being female decreases the likelihood of being married and therefore result in negative co-efficients. The effect of gender may also be due to unmeasured preference dimensions relating to women's greater desire to co-reside, particularly with kin, at older ages. The impact of age as a discriminating variable for both functions must be due to something other than its frequently noted inverse relationship with health status. Statistical controls have been placed on both strength and mobility as well as domestic competence. Perhaps a portion of the impact of age lies in its relationship with cohort life experiences, such as the Great Depression or one of the World Wars. These were experiences alluded to by many

seniors during the interviews and appeared to have significant impact on their attitudes and beliefs. Within the confines of this dissertation work we can only suspect that these are truly relevant factors and suggest that further research be done to test the validity of this explanation.

The third central discovery based on the discriminant analysis is the salience of all of the normative and preference measures included in the analysis. This is particulary true for Function 1, and to a lesser degree for Function 2. The privacy/independence preference and the social norm of expected separateness, the social norm depicting age segregation and the one representing kinship obligations and ties are all sociological factors that surface as central determinants of living arrangement choices. Although in the past, normative and preference structures have been resorted to as ex post facto explanations for large unexplained variance in household behaviour, our analysis provides direct empirical support for the existence and relevance of these less tangible but significant sociological variables.

Our analysis uncovered a fourth important finding. Although all of the independent variables (except for income and education) contribute to the discrimination of the living arrangement groups at a statistically significant level (see Table 5.3), the magnitudes of coefficients for certain variables is lower than expected. Strength and mobility, ethnicity, domestic competence and children ever

born display low ranking in the discriminant analysis. As argued earlier, the relatively weak effect of ethnicity may partially be due to the inclusion of attitudinal factors as direct measures of normative and preference structures. In previous studies these typically have not been measured so that their contribution to explained variance remained with ethnicity. This would explain the weak contribution ethnicity makes in discriminating between the three living arrangement groups in the present study. Children ever born, on the other hand, is viewed as a constraining factor representing a crude measure of the availability of kin for co-residence. It appears that the fairly strong bivariate relationship between children ever born and living arrangement (chi square = 38, $p \leq .001$) is weakened when controlling for the other variables in the model. Previous research has indicated that children ever born is a strong determinant of household status among the elderly, even when controlling for age, sex, education, income and ethnicity (Thomas and Wister, 1984). This suggests that the normative and preference measures included in our analyses reduce the influence of this constraint on household choice. Perhaps having a strong preference for privacy and independence may over-ride the availability of potential kin for co-residence.

A fifth finding emerged from the analysis involving the relatively weak (but statistically significant) effect of strength and mobility, and domestic competence. Due to the

overlap of these measures, it is somewhat surprising that one was not eliminated from the analysis because of an insufficient F-level. This suggests that they in fact do measure different dimensions of constraint on choice. Controlling for the other variables in the discriminant analysis resulted in the measure for strength and mobility, as well as for domestic competence, to be somewhat weaker in relation to other independent variables, suggesting that other constraints, social norms or preferences account for some of the effect. There is a need for more elaborate research on the effect of health-related variables and those involving domestic competence on living arrangement choices of seniors.

The sixth discovery of primary importance involves the non-inclusion of education and income in the discriminant analysis. Concerning the former, it has been argued that much of the effect of education resides in its influence on attitude development. Our analyses suggest that education is correlated with several normative and preference factors, and furthermore, when these are controlled the effect of education on living arrangement choice is eliminated.

The finding that income is unimportant as a constraint on choice is consistent with the crosstabular analysis. However, both results oppose the purchase of privacy hypothesis. The relatively higher income level of London's elderly may dilute the effect of income as a constraint on

living arrangement choices. Alternatively, it may be the case that once norms and preferences have been controlled, the constraining effect of income is reduced. In fact, overall, the constraints do not appear to be as important as the other two components as observed in the hierarchical discriminant analysis. This may be partly due to the accessibility of formal support services, modern conveniences, and welfare benefits. These inferences should be tempered by the possibility of measurement error involving the income indicator. Inaccuracies in the responses to income questions in combination with the relatively high rate of missing cases for this variable (15%) may contribute to bias in the results.

The final major finding to be discussed involves the classification results of the discriminant analysis. Overall, about 68% of the cases were correctly classified using ten statistically significant independent variables. We would expect only 38% of the cases to be classified correctly solely by random chance. This indicates that the variables drawn from the theoretical work and included in the analysis represent a considerable segment of the most salient determinants of living arrangements of the elderly. When compared to previous research, it appears that significant progress has been accomplished in the explanation of this phenomenon through the inclusion of several variables that until now have not been directly measured and tested in this manner.

CHAPTER VI

DISCUSSION AND IMPLICATIONS

The thesis presented in the previous chapters has striven to advance the current knowledge and understanding of non-institutional living arrangement choices among the elderly. Interest in this field has been stimulated by the rapid growth in single person households across most age/sex categories but especially among younger adult males and the elderly. A better understanding of this phenomenon will clarify a number of important issues relating to what has been broadly termed 'family modernization'. This research endeavour has centered on the selection of living arrangements made by persons at the later stages of the life cycle (65 years of age and over), although broader applications are possible.

In Chapter I, we introduce the large number of determinants that have been researched or discussed in relation to this topic. Review of the literature has uncovered a number of normative and preference factors that have been suggested as determinants of household structure but have not been formally measured and empirically tested. These

entail social norms of expected separateness, age segregation, and kinship obligations and ties, in addition to personal preferences involving privacy, independence, companionship and perceptions of time horizons. Furthermore, measures of health status, domestic competence, and a number of characteristics of adult children's families are included. The inclusion of these variables is in response to dissatisfaction with census data, which has been limited in its coverage of these areas. A set of factors frequently resorted to as explanatory variables in the literature (including: children-ever-born, income, education, age, sex, ethnicity and marital status) are also discussed.

Drawing from micro-economic and demographic theory, an attempt is made in Chapter 2 to organize the fairly large number of determinants of living arrangement choices into a theoretical framework. The underlying assumption is that household decision-making is motivated by the desire to satisfy certain household needs. This process involves individual level evaluation of perceived costs and benefits associated with a number of household "goods" that accompany a particular household status.

Affecting the assessment of these "goods" are social norms and personal preferences associated with the selection of living arrangements. These normative and preference factors may interact with constraints on household choice. Preceeding these two sets of factors are socio-demographic

variables that tend to work through these other components, apart from the direct effect that changes in marital status have on household composition.

Adopting such a framework to understand the plethora of determinants found in the literature assists in identifying both micro and macro processes involved in the ultimate decision of whom to live with. This theoretical development stems from work by Dixon (1978) explaining marriage patterns. Behaviour is analyzed in terms of the demographic availability of mates, the feasibility of marriage and the desirability of marriage. By expanding the micro-economic model to include psychological, sociological and cultural factors, and structuring these into the components discussed above, we have produced a comprehensive theoretical framework from which hypotheses can be derived. At this stage of development, emphasis has been placed on the isolation of key determinants and the context in which they act on living arrangements rather than analyzing the structural interrelationships of these components.

Kobrin and Goldscheider (1982) have discussed three sets of factors that affect residential arrangements for the purpose of explaining changes in family extension. These include: 1) the availability or accessibility of households that contain relatives; 2) the economic feasibility of various living arrangements; and 3) family norms and preferences. While this dissertation has expanded on these

components as they relate to elderly persons' household decisions and developed measures of these factors for empirical testing, our theoretical underpinnings are of a similar nature. However, unlike Kobrin and Goldscheider's (1982) macro-level model, the one developed here involves both individual level and societal level processes.

In Chapter 3, we discuss the methodology of this research. This involves a description of the study conducted by Dr. Thomas Burch and assisted by the author, in which 454 interview schedules were completed by a stratified random sample of elderly living in London, Ontario. In addition, discussions of measurement and related issues are covered in this Chapter.

Chapters 4 and 5 involve the crosstabular and multivariate analysis of the data. From this work, a number of central findings emerge. The most striking finding from the data analysis is the relative importance of the normative and preference variables. Of these, preferences for independence (and to a lesser degree privacy) display the largest standardized discriminant function coefficients. Being able to do what one wants without outside interference in conjunction with a private style of living contribute to more separate living and less family extension or non-family living. This lends empirical support to contentions made by a number of researchers (most notably Abu-Laban, 1980; Kobrin, 1981; Kobrin and Goldscheider, 1982; and Thomas and

Wister, 1984).

Social norms of expected separateness, age segregation, and kinship obligations and ties also proved to be significant explanatory variables exhibiting large discriminant function coefficients. The societal expectation that older people should look after themselves as long as possible and the view that there exists differentiation across generations in terms of life styles both promote separate living. Expectations involving kinship obligations and ties work in the opposite direction, decreasing the likelihood of separate living, while increasing the likelihood of co-residence. This analysis also indicates that preferences for privacy and independence are balanced off against those involving companionship and mutual exchange in the decision of whom to live with. As well, it may be that social norms ultimately shape the development of personal preferences, however, there is a need to further investigate their inter-relationships.

Our findings firmly support arguments stressing the relevance of normative and preference factors for household decision-making. This viewpoint is typified by a recent statement by Kobrin and Goldscheider (1983) that,

> Household units that are extended beyond the nuclear family are associated with more extensive interaction patterns, greater control over individual resources, and a different family preference structure than are nuclear households. While the absence of household extension does not necessarily mean the lack of other forms of family

> dominance or interaction, issues associated with privacy, independence, and companionship, as well as attitudes and values regarding broader family responsibilities and obligations, should be related to household structure and living arrangements (p.103).

The empirical support of the salience of these normative and preference structures and the discussions thereof have bearing upon a number of central issues discussed in the literature review.

Chevan and Korson (1975) define 'family modernization' as "the adoption of a set of norms, attitudes and values which lead to changes in family structure " (p.517). These authors have chosen to highlight the structural processes that are believed to contribute to the increased separation of the elderly. Smith (1981) and Cowgill (1974) point towards the loss of status and power associated with age due to societal changes over generations. While some researchers (such as Kobrin, 1981; Haraven, 1981) contend that older people today experience considerably more isolation, others place greater emphasis on 'welcome gains in privacy' as the cause of family modernization in western countries (Abu-Laban, 1980).

The results from the data analyses suggest that the propensity towards separate living is mostly due to a preference for independence, both of older parents and their adult children, rather than a forced separation. However, the data indicate that the increased separateness of the

elderly, as depicted by their selection of living arrangements is, to a lesser degree, also the result of age differentials in life styles. Perceptions of differences in life style across generations have contributed to these 'welcome gains in privacy and independence', in addition to causing some social distancing across age groups. It appears that rapid social change and the highly distinct life experiences connected with different age cohorts, and particularly across generations, have affected the desirability of certain options. The Great Depression and the two World Wars are examples of significant life experiences that have contributed to age segregation between elderly and younger cohorts. Perhaps these social norms are linked to independence and other preferences, such that if life styles are similar across generations then independence and privacy are not so relevant or important.

In contrast, those holding strong kinship obligations and ties (often associated with ethnicity) and those who place a high value on companionship rather than privacy and independence tend towards co-residence rather than separate living. However, overall, there is an overwhelming verbal assent to a norm of expected separateness of older persons, which the elderly tend to both acknowledge and accept. The family is expected to and does visit and give emotional support to today's elderly, but for the most part are not expected to take on the type of responsibilities that were

fairly common 50 years ago. It appears that there have been fairly substantial changes in social norms involving the expected separateness of older persons and that these social norms have generally filtered throughout society as a whole.

It has been argued that at a general level the choice of living arrangements among non-nuclear family members in modern societies is no longer a function of demographic availability of households to extend or economic constraints (Kobrin and Goldscheider, 1982:105). Rather, these authors remark that, "it is the question of the relative desirability of family extension versus independent living from the point of view of the non-nuclear family member and the potential receiving household" (p.105). The discrimant analysis results support this contention. The normative and preference structures investigated in this research work arise as stronger determinants of living arrangements than the constraints. In addition, the hierarchical discriminant analysis indicates that the component involving normative and preference factors contributes considerably more to the correct classifications of cases than the one involving constraints. It may be that these constraints are no longer powerful enough to dampen the emergence of these norms and furthermore, that the inclusion of norms and preferences into the analysis alter the effect of constraints on living arrangement choices.

Some of the exploratory results suggest that changes in

education and ethnic composition contribute to the diffusion of certain social norms and personal preferences. However, historical and comparative research is necessary to further our understanding of how these normative and preference factors, as well as constraints on choice, change over time and alter in their influence on household and family composition. Changes in the quantity and quality of kin relations, standard of living, education, ethnic composition and assimilation, the institutionalization of welfare, increased physical mobility, the advent of modern conveniences, and the supply of single-person dwellings are factors that deserve further attention.

Our results suggest that income does not significantly affect the living arrangement choices among the elderly. Perhaps economic resources as a constraint on separate living are not important after a particular level is reached (which may be lower for the elderly than other cohorts). However, a word of caution is appropriate here due to the possibility of measurement difficulties involving the income variable.

It appears that the omission of key normative and preference structures from many economists' models (cf. Michael et al., 1980) limits the theoretical advances that stem from that modelling. Furthermore, assuming that 'tastes and preferences' remain stable over time is incorrect and tends to downplay the importance of these sociological and

social-psychological variables.

This argument, however, is founded on the assumption that the social norms and personal preferences measured are not ex post facto rationalizations for household decisions. The tendency for most older persons to perceive a social norm of expected separateness and the use of 'free choice' preference items, however, gives reason for confidence in this assumption. A longitudinal research design would be useful to address this issue in a more definitive manner.

Overall, the decision of whom to live with at older ages is the product of a fairly large number of variables. While these can be grouped into the main components discussed in relation to the theoretical framework, their interrelationships are complex. Further research is needed to clarify the interaction effect between constraints and normative and preference variables. For example, when there exists a strong preference for independence associated with an elderly person's living arrangement, to what degree do health limitations or economic resources constrain their selection of living arrangements compared to when there is a weak preference? Furthermore, there is need to analyze the interrelations among the constraining forces, particularly since one may increase the probability of living alone while another may decrease it. For example, domestic competence increases the likelihood of living alone while past fertility and informal support increase the probability of

living with others. As well, the extent to which formal support allows for independent living requires separate attention.

The analysis of selected characteristics of the elder person's kin, especially adult children, exposed some interesting findings. Availability of kin, physical and social space in potential receiving households, and the existence of emotional and material support were found to be significant variables. However, more systematic and detailed research is necessary to clarify the ways in which these factors work to affect living arrangement decisions and to assess other family-related variables, such as physical distance and mobility. In addition, while emotional and material support may be identified as a causal force in these decisions, they are also consequences of these same decisions. To better understand these questions it will be necessary to incorporate longitudinal research designs to untangle the timing of causal effects.

This leads us to the identification of two limitations of this research work. First, the findings drawn from the results of this research should be tempered by the fact that they are a product of cross-sectional data taken at one point in time. Therefore, causal assumptions based on theoretical rationale are not empirically proven. Second, generalizations made from the London sample to the Canadian population in whole should be done with caution. It has

already been noted that this subpopulation of elderly enjoys a higher standard of living and better formal support services in the community than the average Canadian senior citizen. On the other hand, the data results show our sample to be representative on a large number of characteristics. This suggests that this limitation may not be a serious one.

A final area of discussion entails the actual decision-making process. Although theoretical advances are attempted in the second chapter, the data allowed for only limited testing of these hypotheses. The analysis of the relationship between age and perceptions of time horizons indicates that the elderly as a group tend to view residential change as an experience that involves greater costs at older ages; costs that are magnified as one grows older. This represents one dimension typifying the decision-making process of seniors as different than that of persons at other stages of the life cycle. Perhaps this is one reason why the elderly are more likely to be viewed in a passive decision-making state.

In addition, analysis of field notes suggests that the life experiences of today's seniors (such as the Great Depression and the World Wars) may contribute to a lower minimum level of acceptable living standards than might be present among future cohorts of elderly. This is compounded by the relative advances that many elderly believe they have

enjoyed due to welfare and substantial increases in standard of living when they compare their lives to the lives of their parents. In this sense, this low level of relative deprivation has led to acceptance of living standards that today's youth may label as unacceptable (see Easterlin, 1978). Again, this may partly explain older persons' apparent passivity in household decision-making.

It is clear, however, that more work is required to isolate the other dimensions of elderly persons' decision-making. In particular, work is needed to promote a better understanding of how these decisions come about, and more specifically, the identification of threshold levels and other motivating forces involved in the prompting of active decision-making.

The field notes did lend some support to the view that living arrangement decisions among the elderly often involve a fair degree of procrastination. When inspired to actively consider options, it is done by considering the perceived costs and benefits of only what are seen as viable options, probably because decision-making involves time, energy, and stress. The decision-making itself is laced with attitudes and values that originate through life experiences and the internalization of social norms, both of which appear to be reflected in personal preferences. In this sense, it is important to analyze household decision-making among the elderly in its proper social context such that its dynamic and complex nature is captured.

This thesis suggests directions for further theoretical and empirical advances in the realm of household decision-making. In response to the limitations and inadequacies of census data, this work illustrates that the collection of new data can provide better answers to the research questions arising in this field. It is clear that increased understanding and knowledge of living arrangement choice is contingent on the inclusion of sociological variables as well as the usual demographic and economic components that are more easily measured and tested. This entails the inclusion of both micro and macro level processes, which can be more easily understood when synthesized within one theoretical model.

APPENDIX I

UNIVERSITY OF WESTERN ONTARIO

CHOICES OF LIVING ARRANGEMENTS AMONG THE ELDERLY

INTERVIEW SCHEDULE, 1983

Name of Interviewer _____

Respondent # _____

Date of Interview _____

Commencing Time _____

Personal Information (All parts to be filled out by Interviewer)

1. Sex of Respondent (1) Male (2) Female

2. Age _____

3. Marital Status

(1) Single (4) Divorced
(2) Married (5) Widowed
(3) Separated (6) Common Law

4. Is Canada your country of birth?

(1) Yes
(2) No

5. How long have you lived in Canada? Years _____

6. In addition to being a Canadian or living in Canada, what is your main ancestry or ethnic group?

(1) British (includes England, Scotland and Wales)
(2) French (6) American (11) Other _____ (specify)
(3) German (7) Jewish
(4) Irish (8) Greek (98) Don't know
(5) Italian (9) Chinese (99) No answer
(10) Japanese

7. What language do you usually speak at home?

(1) English (5) Other _____ (specify)
(2) French
(3) German (98) Don't know
(4) Italian (99) No answer

8. Which religious group do you consider yourself belonging to?

(1) Protestant (5) Other _____ (specify)
(2) Catholic
(3) Jewish (98) Don't know
(4) No religion (99) No answer

9. What was the highest level of education completed? (or equivalent of Ontario system)

(1)	Grade 6	(9)	1st year College or University
(2)	Grade 7	(10)	2nd year College or University
(3)	Grade 8	(11)	3rd year College or University
(4)	Grade 9	(12)	4th year College or University
(5)	Grade 10	(13)	5 or more years of College or
(6)	Grade 11		University
(7)	Grade 12	(98)	Don't know
(8)	Grade 13	(99)	No answer

10. How many years have you lived at the present address?

_____ (98) Don't know (99) No answer

11. How many times have you moved over the past 5 years?

_____ (97) Not Applicable (98) Don't know (99) No answer

Current Household Status

12. With whom do you share this home or apartment? (1) No one (2) With others

(If "with others")

	Relationship	Sex	Age	M.S.
a)				
b)				
c)				
d)				
e)				
f)				
g)				
h)				

(Place the respondent into one of the following groups:)

13. (1) Living alone
(2) Living only with spouse in own household
(3) Living with others in own household (with or without spouse)
(4) Living in others' household (with or without spouse)

14. Roughly how long have you been (fill in with appropriate category from #13)?

_____
(specify month/yr)

(If live alone go to #17; if live with others:)

15. Sometimes living arrangements affect the degree to which a person feels accepted in a household. Do you feel you really belong in this household or do you feel a little bit like an outsider?

(1) Really belong
(2) Neutral
(3) Bit of an outsider
(98) Don't know
(99) No answer

16. A lot of people feel that they don't play an important enough role in their present household. How useful do you feel in your present household?

(1) Very useful
(2) Somewhat useful
(3) Not very useful
(98) Don't know
(99) No answer

17. Who bears the major financial (i.e., pays rent or mortgage or owns house) responsibility for this household? (self or one of persons listed above)

(1) Respondent
(2) Person listed above _____ (specify)
(3) Combination _____ (specify)
(4) Other _____ (specify)

18. From time to time, it often happens that people change their living arrangements (whom they live with). If you should have occasion to do so, what alternative living arrangement(s) do you visualize?

a) _____
b) _____
c) _____

(99) No answer

19. How satisfied do you think you would be in each of the alternatives?

(1) Very satisfied
(2) Satisfied
(3) Neutral
(4) Dissatisfied
(5) Very dissatisfied
(98) Don't know
(99) No answer

alternative a) _____

b) _____

c) _____

Past Household Statuses

20. (If residence in current household is less than 5 years): Where were you living before you joined this current household?

(1) In own household with spouse
(2) In own household, alone
(3) With other relative (specify) _____
(4) With a friend
(5) In institution
(6) Other
(7) Not applicable
(8) Don't know
(9) No answer

21. Were there ever times in your life when you did not live with family or relatives, for example, alone, in school dormitory, with a friend, in the military?

(1) Yes (2) No

If Yes, let's take these one at a time:

1a (specify: alone, dorm, etc.) _____

1b Can you remember about how old you were at the time? _____

1c About how long did this arrangement last? _____

2a (specify: alone, dorm, etc.) _____

2b Can you remember about how old you were at the time? _____

2c About how long did this arrangement last? _____

3a (specify: alone, dorm, etc.) _____

3b Can you remember about how old you were at the time? _____

3c About how long did this arrangement last? _____

22. Could you tell us about what age you were when you moved out of your parents' home? _____
(98) Don't know
(99) No answer

23. Have you spent much time recently thinking about changing your present living arrangement, that is, whom you live with?

(1) None at all
(2) Very little time
(3) A fair amount of time
(4) A lot of time
(98) Don't know
(99) No answer

If (1) or (2), go to #27

If (3) or (4),

24. Could you describe your intentions about changing your present living arrangement? **(Specify type of residence and whom they intend to live with)**

_____

_____
(open)

25. What would you say are the main reasons for the change?

_____

_____
(open)

26. Do you feel this change would be an improvement over your present situation?

(1) Definitely
(2) Probably
(3) Unlikely
(4) Definitely not
(98) Don't know
(99) No answer

27. Could you please tell us what type of residence you live in presently?

(1) Apartment or duplex
(2) Rented house
(3) Owned house
(4) Senior citizen's apartment
(5) Home for aged
(6) Nursing home
(7) Other _____ (specify)
(98) Don't know
(99) No answer

28. Often the amount of space in a residence places limits on the number of people that can live there. Could you tell us how many of the following specific rooms are in your residence?

_____ (1) Bedroom(s)

_____ (2) Kitchen(s)

_____ (3) Bathroom(s)

_____ (4) Living room(s)

_____ (98) Don't know

_____ (99) No answer

(Omit if live alone or with spouse only:)

29. Could you also tell us the total number of rooms that are for your own private use? # _____

(Everyone:)

30. Do you intend to remain at your present address?

(1) Definitely
(2) Probably
(3) Unlikely
(4) Definitely not
(98) Don't know
(99) No answer

31. How do you feel about your present neighbourhood?

(1) Very satisfied
(2) Satisfied
(3) Neutral
(4) Dissatisfied
(5) Very dissatisfied
(98) Don't know
(99) No answer.

32. Could you tell us about the reasons for your satisfaction of dissatisfaction? (Open question)

_____

_____

_____

33. How do you feel about your present house or apartment?

(1) Very satisfied
(2) Satisfied
(3) Neutral
(4) Dissatisfied
(5) Very dissatisfied
(98) Don't know
(99) No answer

34. Could you tell us about the reasons for your satisfaction or dissatisfaction? (Open question)

35. How do you feel about your present living arrangement?

(1)	Very satisfied	(5)	Very dissatisfied
(2)	Satisfied	(98)	Don't know
(3)	Neutral	(99)	No answer
(4)	Dissatisfied		

36. Again, could you give the reasons for your satisfaction or dissatisfaction? (Open question)

INTRODUCTION: Now I would like to ask you about your original reasons for deciding to live at your present residence.

37. If you think back to the time when you made the decision to live here, could you indicate which of the following reasons were important to you? Please include any that you feel are important but are not listed.

_____ (1) Financial reasons _____ (specify)

_____ (2) Near children/relatives

_____ (3) Near friends

_____ (4) Near medical facilities

_____ (5) Easily maintainable

_____ (6) Close to shopping, transportation and entertainment

_____ (7) Always lived there

_____ (8) Close to certain organizations (eg. Church, Co-op, Political,...)

_____ (9) Fond of the neighbourhood

_____ (10) Live with adult children

_____ (11) Other _____ (specify)

_____ (12) Other _____ (specify)

_____ (98) Don't know

_____ (99) No answer

38. Could you please rank the three most important reasons in order?

(1) _____

(2) _____

(3) _____

(98) Don't know

(99) No answer

39. Did anyone else help you decide where to live?

(1) Yes
(2) No

If Yes to #46,

40. Could you tell us who this would be?

_____
(specify)

Now we would like to ask you a few questions about your preferences about living arrangements and about moving.

41. If money wasn't a problem, would you change residences?

(1) Definitely yes
(2) Probably
(3) Unlikely
(4) Definitely not
(98) Don't know
(99) No answer

42. Most of us have to make certain compromises concerning our living arrangements. However, if you had a free choice, whom would you want to live with not including a spouse?

_____
(Specify relationship(s) to respondent)

(98) Don't know
(99) No answer

43. Could you tell us why you prefer this arrangement?

_____

_____

44. Overall, how do you feel about living with adult children?

(1) Preferable
(2) --
(3) Neutral
(4) --
(5) Not preferable
(97) No applicable
(98) Don't know
(99) No answer

(If (97), go to #46)

45. Could you elaborate on why you prefer or don't prefer this living arrangement?

_____

46. What about living with one or more friends?

(1)	Preferable	(5)	Not preferable
(2)	--	(98)	Don't know
(3)	Neutral	(99)	No answer
(4)	--		

47. Could you again elaborate on why you feel this way?

(For those living alone or with spouse)

48. Do you feel that any of your adult children, close relatives, or friends would like you to live with them?

(1)	Definitely	(4)	Definitely not
(2)	Probably	(98)	Don't know
(3)	Unlikely	(99)	No answer

49. If (1) or (2), could you tell us who this would be?

_____
(Specify relationship to respondent)

(For those living with kin or non-relatives)

50. All things considered, do you think that the others in this household prefer this living arrangement?

(1)	Definitely	(4)	Definitely not
(2)	Probably	(98)	Don't know
(3)	Unlikely	(99)	No answer

Visiting and Family Supports

51. Could you tell us how many living children you have?

_____

If "none" for #51, go to #78

Could you please answer the following questions for each of your children. Start with the child living closest to you (or with you) and work through to the furthest. Please include only up to the nearest four (4) children.

		a) Child 1 (Nearest)	b) Child 2	c) Child 3	d) Child 4
52.	Sex: 1 Male 2 Female (98) Don't know (99) No answer				
53.	Age (in years) (98) Don't know (99) No answer				
54.	Marital Status: 1 Single 2 Married (including common-law) 3 Divorced/Separated 4 Widowed 5 Living Together (98) Don't know (99) No answer				
55.	Have any of these children been re-married? 1 Yes 2 No (98) Don't know (99) No answer				

(cont'd)

		a) Child 1 (Nearest)	b) Child 2	c) Child 3	d) Child 4
56.	How near to you does your child live (time to get there)? 1 Live together 2 An adjacent dwelling 3 Within walking distance 4 Less than an hour's drive 5 Less than a day's drive 6 A day's drive 7 More than a day's drive 8 Outside continental North America (98) Don't know (99) No answer				
57.	Does this child live in a(n): 1 Apartment 2 Townhouse 3 House (98) Don't know (99) No answer				
58.	How many children does he/she have? (98) Don't know (99) No answer				
59.	What is their age range? (98) Don't know (99) No answer				
60.	Daughters only Is you daughter employed? 1 Yes 2 No (98) Don't know (99) No answer				

(cont'd)

INTERVIEWER: Frequency code: "how often" questions:
1 Daily, (every day, almost everyday)
2 Two or three times per week
3 Once per week
4 Several times a month
5 Once per month
6 Several times a year
7 Once a year
8 Almost never/never

		a) Child 1, (Nearest)	b) Child 2	c) Child 3	d) Child 4
61.	If yes, how many hours a week does she work? (98) Don't know (99) No answer				
62.	For sons only What is your son's occupation? (98) Don't know (99) No answer				
63.	What is his highest level of education? (98) Don't know (99) No answer				
64.	For both sons/daughters: It seems that younger generations of today need a lot more income than the old days. Could you tell us what letter on the card approximates your son's/daughter's total family income?				
65.	How often do you talk to each other on the phone? (98) Don't know (99) No answer				

(cont'd)

		a) Child 1 (Nearest)	b) Child 2	c) Child 3.	d) Child 4
66.	How often do you exchange letters? (98) Don't know (99) No answer				
67.	How often do you talk over things that are important to you? (98) Don't know (99) No answer				
68.	How often do you see (spend time with) this child? (98) Don't know (99) No answer				
69.	How often do you see him/her for overnight visits, if at all? (98) Don't know (99) No answer				
70.	How often do you go away on vacations such as trips, camping, cottages, with each other? (98) Don't know (99) No answer				

Could you please answer the following questions for your daughters in-law and sons in-law. Please include only those currently living with the adult children previously discussed, beginning with the nearest.

*(Place information in column coinciding with marriage partner)

		a) son/daughter -in-law 1	b) son/daughter -in-law 2	c) son/daughter -in-law 3	d) son/daughter -in-law 4
71.	Sex: 1 Male 2 Female				
72.	Age (in years) (98) Don't know (99) No answer				
73.	Daughters-in-law only Is your daughter-in-law employed? 1 Yes 2 No (98) Don't know (99) No answer				
74.	If yes, how many hours a week does she work? (98) Don't know (99) No answer				
75.	Sons-in-law only What is your son-in-law's occupation? (98) Don't know (99) No answer				
76.	What is his highest level of education? (98) Don't know (99) No answer				

(If they have more than 4 living children)

77. Would you consider co-residing with any of your other children not included in the previous section?

(1) Yes (2) Uncertain (3) No (99) No answer

78. When you have a problem, who are you most apt to discuss your problem with, not including a spouse?

(1) Child(ren)
(2) Grandchild(ren)
(3) Brother/sister
(4) Other relative
(5) Friend(s)
(6) Other _____ (specify)
(7) No one
(98) Don't know
(99) No answer

79. Is this usually a:

(1) Male
(2) Female

80. What is their age or age range if more than one person? _____

81. About how many times per month/year do you see the following? (Indicate number in blank: specify if per month or year). (Put NA if not applicable, DK if don't know).

(1) _____ Child(ren)
(2) _____ Grandchild(ren)
(3) _____ Brother(s)/sister(s)
(4) _____ Other relative(s)
(5) _____ Friend(s)
(6) _____ Others (specify)
(7) _____ No one
(98) _____ Don't know
(99) _____ No answer

If "no one" for #81, go to #86

82. Often people receive help from family, friends, or social services. Do family members, friends, or others specifically help you with any activities of daily living?

(1) Usually
(2) Sometimes
(3) Never

If (3) Never, go to #86)

83. What do(es) he/she/they commonly help you with?

(1) ____ Housekeeping
(2) ____ Shopping
(3) ____ Transportation
(4) ____ Meal preparation
(5) ____ Laundry
(6) ____ Dressing
(7) ____ Bathing
(8) ____ Medicine
(9) ____ Social outings (recreation)
(10) ____ Banking
(11) ____ Other financial items
(12) ____ Gardening
(13) ____ Other _____ (specify)
(98) ____ Don't know
(99) ____ No answer

94. Which of the following people come to help you? (Include number of times per month on average in blank; specify if per month or year).

(1) ____ Child(ren)
(2) ____ Grandchild(ren)
(3) ____ Brother(s)/sister(s)
(4) ____ Daughter(s)-in-law
(5) ____ Other relative(s)
(6) ____ Friend(s)
(7) ____ Other _____ (specify)
(98) ____ Don't know
(99) ____ No answer

85. In general, does the assistance you receive meet your needs?

(1) Always
(2) Most of the time
(3) Not very often
(4) Never
(98) Don't know
(99) No answer

Health

86. Would you rate your general health as:

(1) Excellent
(2) Good
(3) Fair
(4) Poor
(98) Don't know
(99) No answer

87. Would you describe your physical strength and ability to get around?

(1) Excellent	(4) Poor
(2) Good	(98) Don't know
(3) Fair	(99) No answer

If (4),

88. Could you tell us what is the major problem?

_____

_____

89. Do you think that your health has affected the choice of your living arrangement?

(1) Definitely	(4) Definitely not
(2) Probably	(98) Don't know
(3) Unlikely	(99) No answer

If (1) or (2),

90. Could you tell us in what way? (Open question)

_____

_____

91. Has any household member's health affected the choice of your living arrangement?

(1) Definitely	(4) Definitely not
(2) Probably	(98) Don't know
(3) Unlikely	(99) No answer

If (1) or (2),

92. Could you tell us in what way? (Open question)

_____

_____

Domestic Competence

93. Many people have difficulties managing all of the different jobs that have to be done around the house or apartment. How good are you at the following jobs?

____ (1) Preparing meals (purchasing food, cooking, etc.)

a) Can handle easily
b) Some problems

If b, why? _____
i) Never learned
ii) Lack of physical strength or disability
iii) Other (eg. consider men/women's work, not applicable)

____ (2) Laundry, ironing, and sewing
If b, why? _____

____ (3) Household cleaning
If b, why? _____

____ (4) Minor repairs and yard work (switches, washers, gardening, etc.)
If b, why? _____

____ (5) Maintaining and driving a car
If b, why? _____

____ (6) Caring for self and others during minor illness
If b, why? _____

____ (7) Financial responsibilities (budget, taxes, paying bills)
If b, why? _____

At present, who mostly performs these tasks for you?

_____ (1) Preparing meals:
a) I do
b) Other person with whom I live. _____
Specify (by relationship)
c) Other (hired help, etc.)

_____ (2) Laundry, ironing, and sewing _____

_____ (3) Household cleaning _____

_____ (4) Minor repairs and yard work (switches, washers, gardening, etc.)

_____

_____ (5) Maintaining and driving car _____

_____ (6) Caring for self and others during minor illness _____

_____ (7) Financial responsibilities (budget, taxes, paying bills)

_____

94. Do you give assistance of any kind to your kin?

(1) Yes (2) No (98) Don't know (99) No answer

If Yes,

95. Could you tell us what this assistance would entail and how often?

_____

_____

96. Have you considered moving in with any adult children or other relatives to give help?
(1) Yes (98) Don't know
(2) No (99) No answer

97. What kind of help would this be?

_____

_____

Attitude Items

98. Response options:

Strongly agree	(1)
Agree	(2)
Don't know or uncertain	(3)
Disagree	(4)
Strongly disagree	(5)

_____ Most older people would want to live with their sons, daughters, or other relatives if houses provided more privacy and independence (for example, separate bathrooms, kitchen, bedroom, etc.)

_____ If necessary, I would rather have a family member look after me than live in a nursing home.

_____ I'd rather live alone than share a household with someone who is not a relative.

_____ The hardest thing about sharing a household with other family members is the lack of privacy.

_____ It's very difficult for old folks to have a good relationship with their children's new spouses and step-children when there's been a divorce and remarriage.

_____ Older people should live on their own until they simply can't manage it any longer.

_____ When you reach my age, it isn't worth the trouble required to make major changes like moving, establishing new relationships, etc.

_____ A person's children are apt to be so different when they grow up (in income, moral values, recreational interests and hobbies, etc.) that it's hard to share day-to-day living with them in the same household.

_____ One of the problems about moving in with a son or daughter is having to get rid of so many precious possessions accumulated over a lifetime.

_____ It's very difficult to feel useful when moving into the household of adult children or other relatives.

_____ Older people have earned the right to be taken care of in their later years by their kin.

_____ To move into someone else's household, even a son or daughter, means losing one's independence as an adult.

_____ These days people think older persons should take care of themselves in their own households until they can't manage it any longer.

_____ The most important thing in life is being independent, being able to do what you like without having to answer to someone else.

_____ Generally speaking, it's better for an older individual to live with others even if the individual could live alone.

_____ I would say that our family has very strong commitments towards other family members.

_____ In this age of pensions and welfare, it isn't necessary anymore for older persons to be taken care of by their adult children.

_____ If family ties were stronger, there would be a lot more shared living between old and young members of families.

99. Do you receive financial aid in any form from kin?

(1) Yes
(2) No

If Yes,

100. Which number on the card corresponds with that amount?

(a)	Under $1,000	(i)	8,000 to 8,999
(b)	1,000 to 1,999	(j)	9,000 to 9,999
(c)	2,000 to 2,999	(k)	10,000 to 12,999
(d)	3,000 to 3,999	(l)	13,000 to 15,999
(e)	4,000 to 4,999	(m)	16,000 to 18,999
(f)	5,000 to 5,999	(n)	19,000 or more
(g)	6,000 to 6,999	(98)	Don't know
(h)	7,000 to 7,999	(99)	No answer

101. What is your primary source of income?

(1)	Investments	(5)	Disability pension
(2)	Employment	(6)	Other _____
(3)	Old Age Security	(98)	Don't know
(4)	Retirement pension (private or CPP)	(99)	No answer

102. Could you please tell me which letter on this card corresponds to your (and your spouse's) total income, before taxes, in the past year. Be sure to include income received from <u>all</u> sources: social insurance, pensions, support from other family members, bank interests, annuities, any investments...

(a)	No income	(h)	10,000 to 14,999
(b)	Less than $2,000	(i)	15,000 to 19,999
(c)	2,000 to 2,999	(j)	20,000 to 24,999
(d)	3,000 to 3,999	(k)	25,000 to 39,000
(e)	4,000 to 5,999	(l)	40,000 or more
(f)	6,000 to 7,999	(98)	Don't know
(g)	8,000 to 9,999	(99)	No answer

103. Interviewer remarks:

104. Time of completion: _____

APPENDIX II

The University of Western Ontario

Faculty of Social Science
Department of Sociology
London, Canada
N6A 5C2

November 18, 1983

Dear Sir or Madam:

I am writing to ask for your cooperation in a research project on living arrangements among older persons in Canada. For some time, my colleagues and I at the Center for Canadian Population Studies at Western have been studying trends in household formation using data in the Census and similar sources. At this point, we need information that can only be obtained directly from persons such as yourself. In particular, we need information on people's opinions about different living arrangements. In the near future, you will be visited by a graduate student/interviewer from Western, who will request about fifty minutes of your time to answer a series of questions on this and related topics.

Your name has been selected along with several hundred others by a statistical process in which names are chosen purely by chance. The selection was made from a household list of London residents available from the City of London. The sample selection process assures us of a representative cross-section of older persons in London, and your personal co-operation is needed to help us preserve this representativeness in our results. It does not matter what your situation or views may be. Your answers are important to us in trying to arrive at an accurate overall picture.

Any information or opinions you share with us will be held in strictest confidence. No name or other identifying information will appear on the questionnaire. The only results that will be published will be statistical results, such as the percentage of the sample who live by themselves, or the proportion who hold a particular attitude or opinion.

Cont'd. . . ./2

The direct aim of this research is scientific -- a greater understanding of the living arrangements of older Canadians and the factors that affect choices in this matter. We also intend that the resulting knowledge will be useful to individuals and to government and private agencies. The findings will be incorporated in a series of scientific papers, and in a report to the sponsoring agency.

The study is financially supported by the Social Sciences and Humanities Research Council (Ottawa), under its programme of Strategic Grants on population aging. It has been approved by the ethics review committee at the University of Western Ontario. If you should have any further questions about the study or its auspices, please feel free to call us at 679-3607.

Sincerely,

Thomas K. Burch
Professor and Chairman

Andrew V. Wister
Research Associate

TKB:vds

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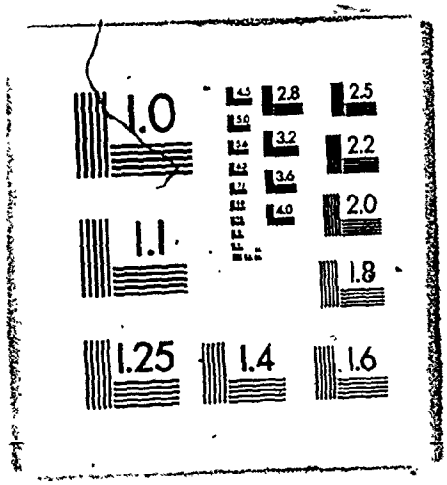

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