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RESIDENTIAL MILIEU AND LOCATIONAL SUITABILITY;
A STUDY OF SELECTED ELDERLY RESIDENTS IN
NON-PROFIT CARE FACILITIES WITHIN GREATER VANCOUVER

by



ARTHUR LAURENCE FALICK

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Department of GEOGRAPHY

The University of British Columbia
2075 Wesbrook Place
Vancouver, Canada
V6T 1W5

Date 20/4/80

ABSTRACT

As the age structure of Canadian society changes in the ensuing decades, housing and caring for the elderly will undoubtedly take on increased significance, and consequently, it is crucial that our social institutions begin to prepare now for this change. This thesis focuses upon the opinions of a selected number of residents of fifteen Personal and Intermediate Care Facilities operated by non-profit organisations within the Greater Vancouver Regional District, which are now an integral part of the recently inaugurated Long Term Care Program in British Columbia.

An initial fundamental premise of the research was that a poor location, one which serves to physically isolate residents and reduce their interaction with the wider community, would likely engender social isolation with a concomitant reduction in individual well-being. While geographers and others have developed location - allocation algorithms for determining the optimal location of e.g. health facilities, a notable deficiency of such analytical methods is their lack of attention to the needs and opinions of those whom the facilities are designed to serve. In an attempt to rectify this situation a survey of fifteen per cent of the residents in each of the selected institutions was conducted to improve our understanding of how well the facilities were serving the occupants, and in particular, whether or not they are well situated with respect to the locational preferences of the elderly. It has been argued that the space - occupancy behaviour of the elderly is extremely sensitive to their surroundings and that the location of structures and spaces assumes greater significance especially when the constraints on mobility

Abstract Contd.

are taken into account. These and associated questions are addressed through the analysis of the responses to the questionnaire which was administered.

In evaluating a person's degree of residential satisfaction, it is unrealistic to separate the dwelling unit from its surroundings or its locality. Both are an integral part of what has here been termed "residential milieu" which includes both the institutional milieu and those parts of the surrounding area which the individual uses to satisfy his or her physical and psycho-social needs. The results generally confirm the notion that life satisfaction is positively related to the level of residential satisfaction and mobility. While the respondents' assessment of the surrounding area is less centrally related to their sense of well-being we are reluctant to conclude that the location of a care facility is unimportant.

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CHAPTER ONE

INTRODUCTION

Age, like woman, requires fit surroundings.
Emerson (1886)

Purpose

There is a growing body of gerontological literature which focuses upon the complex interactions between man and his environment (Pastalan and Carson, 1970), a theme which has long been central to geographical analysis (White, 1974). The concept of home range (Stea, 1970), or what will be defined here as the residential milieu, has been used to describe the extent and differentiation of behaviour in terms of origin and destinations, patterns of movement, occupancy, and usage of various places:

(Home range) is also a cognitive entity, a conceptual gestalt built up of interstices in the behavioral pattern ("invisible landscapes"), of knowledge of places once visited or lived in, and of locational goals realizable within the scope of the individual's plans. The conceptual extensity or differentiation of home range may vary from time to time within a developmental stage.

(Stea, pp. 139-14)

In essence, residential milieu includes the dwelling unit and those parts of the surrounding area which the individual uses to satisfy his physical and social needs. In the case of those who lack the ability to interact with their surroundings, the concept can be used to apply to those portions of the environment which the individual perceives as having resources which are at least potentially able to satisfy his needs.

With the onset of advancing years, there is a tendency for the home range to contract as the individual's mastery over the wider environment diminishes. An older person thus often comes to rely much more upon his immediate surroundings to cater to his housing and psycho-social needs. Moreover, for those who require some form of institutional care, the dependence upon the residence and the immediate surroundings can be even more marked, particularly when mobility is reduced through poor health. It is therefore extremely important that the residential milieu of institutions be as supportive and responsive to the total needs of the elderly residents as possible (Kahana, 1971).

In this thesis, attention will be focussed upon institutional settings through a study of a representative sample of non-profit Personal and Intermediate Care Facilities within the Greater Vancouver Regional District. Two reasons dictated the choice of non-profit institutions for study. Firstly, the sheer number of private nursing care homes precluded representative analysis and interviews in the time available. Secondly, Central Mortgage and Housing Corporation (C.M.H.C.), the federal housing agency, has expressed interest in research

on care facilities in British Columbia. Given a new direction in provincial policies, there is currently a diminished interest in housing the elderly through the construction of new self-contained housing, especially in the larger metropolitan centres. Greater attention is now being given to the provision of an integrated range of care facilities for those elderly no longer able or willing to maintain an independent residence. Since C.M.H.C. provides financial assistance to non-profit organizations to construct care facilities, the potential to make a contribution to federal policy-making exists by investigating non-profit institutions.

These institutions (care facilities) are now part of the recently inaugurated (January 1, 1978) Long Term Care Program in British Columbia. This program is intended to provide a continuum of care for those who cannot live independently without help, because of health-related problems which do not warrant admission to an acute care hospital. The Provincial Department of Health and the Department of Human Resources define Personal Care as care required by persons whose physical disabilities are such that their primary need is for room and board, limited lay supervision, assistance with some of the activities of daily living and a planned programme of social and recreational activities. Persons in need of Intermediate Care require daily nursing supervision in addition to the services offered to Personal Care residents. They are generally less independent and have more health-related problems, often exhibiting greater problems with mobility than those at the Personal Care level.

The former head of the Long Term Care Program for the city of Vancouver estimated that there were over 65,000 people over the age of 65 in the city, of whom about 8% would be expected to need care services (approximately 4,500 to 5,000). The projected figure for 1978 was 7,500 and it was expected that this would rise to around 10,000 by the end of the decade. More generally, there are now approximately 87 non-profit institutions involved in the programme throughout the province. But, there appears to be a lack of detailed specifications concerning what types of locations would be most suitable for the residents, nor are the locational criteria used to determine the appropriateness of a site readily available. This lack of knowledge is partly offset by the reliance on the non-profit approach, as the sponsors are viewed as being more sensitive to their clients' needs and local conditions (Mercer, 1978).

At present, most aspects of the residential milieu of the institutions within the Greater Vancouver area remain largely unexplored. Few guidelines exist for determining what constitutes a suitable milieu, and although a number of locational factors appear to be at work, one of the most important determinants for the siting of the institutions would seem to be the availability of land at relatively low cost. The principal aims of this research are to collect and interpret information on the characteristics and behaviours of the residents within certain of the institutions, and to assess the locational suitability of their dwelling units through an analysis of measures of residential and life

satisfaction, mobility and the residents' evaluation of the local environment. The primary methodological emphasis of this work is oriented to incorporate the views and opinions of the residents themselves, and as a result, these various measures were administered in the context of interviews with samples of the residents drawn from the selected institutions.

A basic initial premise was that an appropriate milieu is one in which the diverse needs of the residents can be met either within the residence or else in the surrounding neighbourhood. An inability on the part of the residents to interact with the local environment and to maintain or develop social contacts outside of the residence (as well as inside), is assumed to be detrimental to their social well-being, which could possibly accentuate or reinforce physical and social isolation. This assumption has been discussed by Lawton and Simon (1968), who argue that space-occupancy behaviour of older people is very sensitive to the nature of the physical surroundings, suggesting that the location of spaces and structures assumes heightened importance when the frequent limitations on mobility of the aged are considered. In discussing the older person's sensitivity to environmental variation, they develop the "environmental docility" hypothesis which states that:

The greater the degree of competence of the organism, the less will be the proportion of variance in behaviour due to environmental factors. Conversely, limitations in health, cognitive skills, ego strength, status, social role performance, or degree of cultural evolution will tend to heighten the docility of the person in the face of environmental constraints and influences.

(Lawton and Simon, p. 108)

Lawton (1970) suggests that the older person is thus more sensitive to change in the environment than people in mid-life because he is likely to have experienced some kind of reduction in competence. However, there is little evidence in the literature to indicate that the nature of the interactions with the environment are the same for the institutionalized elderly as for the non-institutionalized. The principal focus of attention having been upon the housing and psychosocial needs of the independent elderly, little is known about the particular needs and preferences of those who are no longer able to fully look after themselves. Because of the nature of their infirmities, the ability of many of the residents in institutions to retain mastery of their environment diminishes, often with a concomittant constriction of their home range. Thus, it is expected that where the residential milieu is congruent with the needs of the residents, their mobility and perceived levels of satisfaction (residential and psycho-social) will be high, whereas marginal milieux will be rated less favourably. The availability of, and proximity to desired community services is therefore regarded as essential for the continued well-being of the residents, and it is suggested that, for those who cannot make use of the local environment because of their infirmities, the dwelling unit should have the resources to compensate for this loss. Thus, the central objective of this study is to determine whether or not the non-profit institutions are suitably situated with respect to the residential and social needs of their residents.

The Psycho-Social Needs of the Aged:
Neighbourhood and Community Settings

Within the last two and a half decades, dramatic changes have occurred which have modified the social, economic and political ways of life in western industrialized societies, and these in turn have affected the physical environment within which the changes have taken place. Unfortunately, in many instances, the well-being of older people has lagged behind the general improvements in the rising standards of living, to the extent that many aspects of the present environment are not ideally suited to the patterns of life in later maturity and old age. Since the elderly exhibit diverse lifestyles and have differing amounts of resources to satisfy their needs and goals, there is, as Golant (1976) suggests, considerable variation in the community facilities and services that are both required and preferred by different sub-groups. He advocates that the residential setting which, it is argued here, is analogous to the concept of milieu, should be able to accommodate the changing effectiveness and competency of the older person to realize his needs:

The successful adaptation to old age may require him to cope with declining physical energy, poorer health, smaller financial funds, lower social status, a sudden loss of spouse or good friends, or a general decline in his ability to deal with complex situations. The physical attributes and social environment of the residential setting should help facilitate the older person's adjustment to those critical events.

(Golant, p. 387)

The question of the importance of the local environment in providing support for the elderly has also been discussed by

Vivrett (1966), who argues that the psycho-social needs of the older person pertain firstly to his individualized and habitualized patterns of daily living, and secondly, to his relationship to significant others in the community. As a result, there is a marked tendency for the person to wish to remain amid familiar surroundings to compensate for the loneliness caused by the narrowing circle of friends which often accompanies old age.

The particular needs of the elderly remain largely ill-defined however, and there seems to be little agreement as to the definition and scope of social services; although Beattie (1976) offers one useful definition:

. . . organized societal approaches to the amelioration or eradication of those conditions which are viewed at any historical point of time as unacceptable . . . (and) which can be applied to improve the social functioning and self-actualization of the older individual, his family, or community.

(Beattie, p. 619)

Beattie also relates, in an earlier context, specific levels of services for the aged to the particular problems that confront old people, differentiating (a) basic services, (b) adjustment and integration services, (c) support services, (d) congregate and shelter care services and (e) protective services, (Beattie, 1965). Two somewhat similar typologies have been developed, based on the concept of "human needs." For example, Cohen (1965) classifies services on the basis of financial assistance; medical orientation; enhancement of social contact and participation, and socially supportive. Lowy (1969) employs a classification based on "need areas," such as food,

clothing, shelter, sexual, psychological-emotional-spiritual, health, economic, social, cultural and political.

The consensus of the relevant literature is that a wide range of services must be available when people need them; they ought to be accessible, preferably in geographical proximity to the place of residence, and they should be acceptable to the users. Whenever possible, it is suggested that the services should be designed for use by the whole community, thereby enhancing the opportunity for the continued integration of the elderly. As Lowy (1969) suggests:

Continuity, comprehensiveness and co-ordination . . . are the criteria in the development and evaluation of a network of services answering to the needs of a "whole person" and through an holistic approach will counteract a prevailing practice of fragmentation and discontinuity.
(Lowy, p. 29)

In summary, it may be suggested that the suitability of the residential milieu for the aged, outside of the residence, is contingent upon the availability and accessibility of life-sustaining and life-enriching social services, designed to support the elderly in comfort and dignity wherever they live. As Brophy (1961) points out, the fears of loneliness and change which many older people face can be minimized. For instance, environments yielding adequate transportation and accessibility to shops, hospitals and clinics, to institutions such as churches, community centres, leisure centres and similar supportive services, can compensate for the contraction of the home range.

The Housing Needs of the Elderly

What does housing mean to the elderly? Aside from his spouse, housing is probably the single most important element in the life of an older person.

(Proceedings of the 1971 White House Conference on Aging, 1973)

The issue of the housing needs of the elderly has received considerable attention within social gerontology since the early 1960's, and to a lesser extent, more recently, in social geography. International meetings have brought together planners, researchers, architects and service providers, with the intent of working out solutions to the housing problems facing the elderly (Byerts, 1973, 1974). Attention has however, been focused largely upon the independent, mobile elderly person, not recognising the particular situation of the infirm and institutionalized.

The problem of identifying the housing needs is complex. Golant (1976) recognizes seven categories of needs or problems: spatial accessibility, architectural design and quality, the maintenance and cost of the residence, the availability of facilities and services (including specialized services), social support and the general characteristics of the neighbourhood setting. Similarly, Carp's (1976) essay on the housing and living environments of older people reinforces the notion that the effects of housing upon the social well-being of the elderly are inextricably linked to the other aspects of the residential milieu. As Turano further observes:

. . . . The location of a site is not the most important thing. As long as it is near public transportation, near younger residential groups, and all the other necessary recreational, health and social facilities are conveniently near, the cost is the main deciding factor. But, what you DO with the site once you have it--how you develop it, how you make it into a Living Site--that is the most important thing.

He argues that although the issue of where to build is fraught with a number of problems, such as zoning regulations, design standards and social phenomena such as stratification by age and economic status, site selection often ignores the types of future occupants, being determined rather by cost. This however, can have deleterious effects on the well-being of the aged if they are placed in settings which are incongruous with their needs or resources. Nonetheless, despite the interest which has been shown on the topic of housing, relatively little is known about the impact of the residential milieu upon the well-being of the majority of older people, although the home, being tangible evidence of a person's home range, can be instrumental in achieving many of the milieu requirements. Golant suggests that four of the more important requirements are (a) independence, (b) security, (c) environmental mastery, and (d) the maintenance of a positive self-image (Golant, 1976).

Housing is an equally important element in the formulation of social policy, yet the objectives of such policies are very often no more than vague expressions of sentiment and hope. "Improving the quality of life" and "providing stimulation, meaningful interaction and dignity" are limited

in value as statements of intent without specific implementable guidelines.

Although residents of institutions for the elderly make up only 7% of Canada's elderly population, they are a group which exemplify the problems of vulnerability facing many people in their later years. Traditionally, the institution has been the final residence for people no longer able to function in the community, because of economic, social, physical or psychological infirmities. However, research findings on the effects of institutionalization remain inconclusive, despite the fact that matching individual characteristics and environmental settings is especially acute for the institutionalized elderly individual. As Kahana (1971) observes:

The optimal type of institutional care may (then) be seen as that responding to the needs of the aging individual. Since the needs of the individual may undergo many changes in the course of institutional living, such environments must be flexible by definition.

Housing Needs in an Institutional Milieu

In Canada, the building of specialized accommodation for seniors is a relatively recent phenomenon which has come about in response to changing demographic patterns, lifestyles and social legislation, and as a result of the greater acceptance of community responsibility for the welfare of the aged. Attempts are being made to move away from the traditionally custodial orientation of the institutions towards a more rehabilitative residential emphasis. Until now, however, these efforts have been confounded by institutional constraints.

Aulinger (1979) considers that there are essentially three major problems with which residents have to contend. Firstly, there is an abrupt change in routine as the style of living is radically different from that to which the individual was previously accustomed. Secondly, residents must cope with the fact that their active role in society has greatly decreased, often with an accompanying loss of social interaction. The third problem, which is perhaps the most difficult to resolve, is that the resident must cope with the individual and/or cultural stigma attached to institutional living--a stigma that to many connotes defeat in the struggle to maintain an independent residence, lack of financial independence, and/or, rejection by family and friends. To many the word "institution" carries negative overtones, particularly in a society which promotes individuality. The need to turn to others for care and to surrender the direction of one's personal life are, according to Marcovitz (1969), the most profound negative effects of institutionalization. As Brody (1969) points out, other detrimental factors are depersonalization, the intermixing of the mentally impaired with the mentally sound, and geographical and social distancing from significant others. If the institutions are not to end up as mere dumping grounds, the importance of planning appropriate milieux must be recognized. The implications of providing "the right services to the right person at the right time" implies the development of a range of opportunities and a knowledge of the needs and particulars of the population being served.

In planning environments for the elderly, it makes no sense to dichotomize between the residential and community settings. In comparison to any other social group, the elderly are as sensitive, if not more so, to their social environment. They can be victimized by uncongenial environments when they are rendered vulnerable by poor physical condition, prejudice or situational isolation.

Recent research efforts have attempted to measure the suitability of environmental settings by determining the extent to which they obviate or minimize the need for services and facilitate the development, maintenance and delivery of those that are required. The needs however, remain ill-defined, as do the guidelines for the effective provision and use of services. Furthermore, research and discussion has tended to centre on those architectural and design specifications considered important in the adjustment of residents to their infirmities. If the site of an institution is chosen carefully, independence may well be increased (Gutman, 1975b). However, few guidelines exist in British Columbia for determining what constitutes a suitable institutional setting for elderly people. For example, it is assumed that an appropriate site will have access to shops, parks, senior centres, public transit routes and social contacts. The services should also be within close proximity to the institution to accommodate the infirm. Niebanck (1965) has argued that the housing unit should not be discussed in isolation, but should be related to its situation within the neighbourhood. In the analysis of location as a determinant of the quality of life

of the elderly, he proposed a series of "critical distance" measures (Figure 1) for selected services considered to be important to the elderly. Although this approach represents what little research there is on the topic, its utility is limited if distance or location is studied in isolation from the other social, political and economic conditions which exist.

In short, a number of deficiencies characterize the literature which deals with the suitability of residential milieu for the aged. Little emphasis has been placed on the importance of spatial and social factors involved in the site selection process. Design considerations have preoccupied much of the research which in turn is heavily biased toward consideration of the independent, non-institutionalized. There is a tendency for researchers and practitioners to overlook the valuable insights which residents can provide. The result is that analyses tend to be limited and often do not reflect the complex needs and preferences of this heterogeneous group. Consequently, the government agencies have few guidelines upon which to base their decisions.

Yet, environmental aspects do not appear to be given a high priority, and as was stated by an administrator of the Long Term Care Program:

Our major priority is providing care and then we worry about appropriate placement.

(Sorochoan, 1979)

The lack of detailed knowledge about the most effective ways of supporting residents of institutions, and what should be done to make the final years as satisfying as

FIGURE 1

CRITICAL DISTANCE MEASURES TO SELECTED FACILITIES

Facility	Rank of Importance ₁	Critical Distance ₂	Recommended Distance ₃
Grocery Store	1	2-3 blocks	1 block
Bus stop	2	1-2 blocks	adjacent to site
House of worship	3	1/4 - 1/2 mile	1/2 mile
Drug store	4	3 blocks	1 block
Clinic or hospital	5	1/4 - 1/2 mile	1 mile
Bank	6	1/4 mile	1/4 mile
Social centre	7	indeterminate	on site if feasible
Library	8	1 mile	1/2 mile
News-cigar-store	9	1/4 mile	1/4 mile
Restaurant	10	1/4 - 1/2 mile	no consensus
Movie house	11	1 mile	1 mile
Bar	12	indeterminate	no importance

- Notes:
1. Based on the number of time facility mentioned as "important" in the location of a housing development for the elderly.
 2. Based on the actual distance from a given facility in cases where dissatisfaction had been expressed by the residents.
 3. Based on the apparent consensus of the respondents as to the proper distance to each facility.

Source: Paul Niebanck and John B. Pope The Elderly in Older Urban Areas (Philadelphia: University of Pennsylvania, Institute for Environmental Studies, 1965) p. 64

possible is a sad commentary upon contemporary society. Considering the current undervalued status of the elderly, and the stigma attached to growing old, it is hard to reconcile the fact that the majority of the people who took part in the study were the pioneers of this nation. The implicit value orientation adopted in this study, revolves around the question of whether we are fulfilling our moral obligation to support and maintain a meaningful existence for those elderly people in the community who have to rely upon the social structure for their needs.

Organization of the Thesis

In Chapter Two, the research design employed in the study will be discussed. Some of the more salient methodological issues which have arisen will also be addressed. The results of the interviews with the residents from the fifteen institutions will be presented in Chapter Three, and the contextual data gathered from the field work will be analyzed. An evaluation of the suitability of the various residential milieux will be undertaken in Chapter Four, based on the results of the data analyses. Where applicable, the results of other research in social gerontology and geography will be incorporated. The final chapter will discuss the conclusions from the research, and where possible, will propose modifications or changes to the existing situation.

CHAPTER TWO

METHODOLOGY

Despite the fact that there is a growing awareness of the special needs of elderly people in modern industrialized societies, research efforts lag behind practical everyday attempts to improve the current situation. In geography, there has yet to be developed theories and methodological guidelines which can be used to study the nature and effects of the aging process. This lack is particularly evident in research pertaining to the residential and social needs and preferences of elderly residents of care institutions.

Although questions have been raised in the literature concerning the utility of involving the residents' responses in social gerontological research (Fowler, 1970), it was decided for this research that their opinions should be a major part of the evaluative process. A questionnaire for residents was therefore designed and administered. In addition, data and opinions were collected from the administrators of the institutions, a responsible official of each of the sponsoring organizations, and the co-ordinators of the new Long Term Care Program in Vancouver.

Selection of Care Facilities to be Studied

From information supplied by the Community Care Facilities Licensing Board, a master list of all non-profit Personal and Intermediate Care Facilities in the G.V.R.D. was created; for the location of these residences see Figure 2. Of the total number of facilities ($n = 27$), seventeen were initially invited to participate in the study. These seventeen were selected so as to reflect the spatial distribution of non-profit institutions throughout the G.V.R.D., and to reflect variations in size and in sponsorship affiliation. It transpired that some of the original information concerning the type and size of resident population was inaccurate, and thus, substitutions had to be made in the original sample. Also, two institutions declined to participate. Since they could not be replaced with institutions of comparable location, size and sponsorship, the final sample consisted of fifteen institutions. Seven were affiliated with religious groups (e.g., Catholic, Baptist and Salvation Army), four were sponsored by ethnic organizations (e.g., Chinese, Jewish, French Canadian and German Canadian), and the remaining four were linked to community societies (Action Line Housing Society, Kiwanis Senior Citizens' Housing Society and the Dogwood Lodge Society (2)). The locations of the selected institutions are shown in Figure 2, and Table 1 lists their names and sponsorship affiliations, together with an alphabetical identifier.

FIGURE 2

Non-profit Personal and Intermediate care institutions
in the Greater Vancouver Regional District.

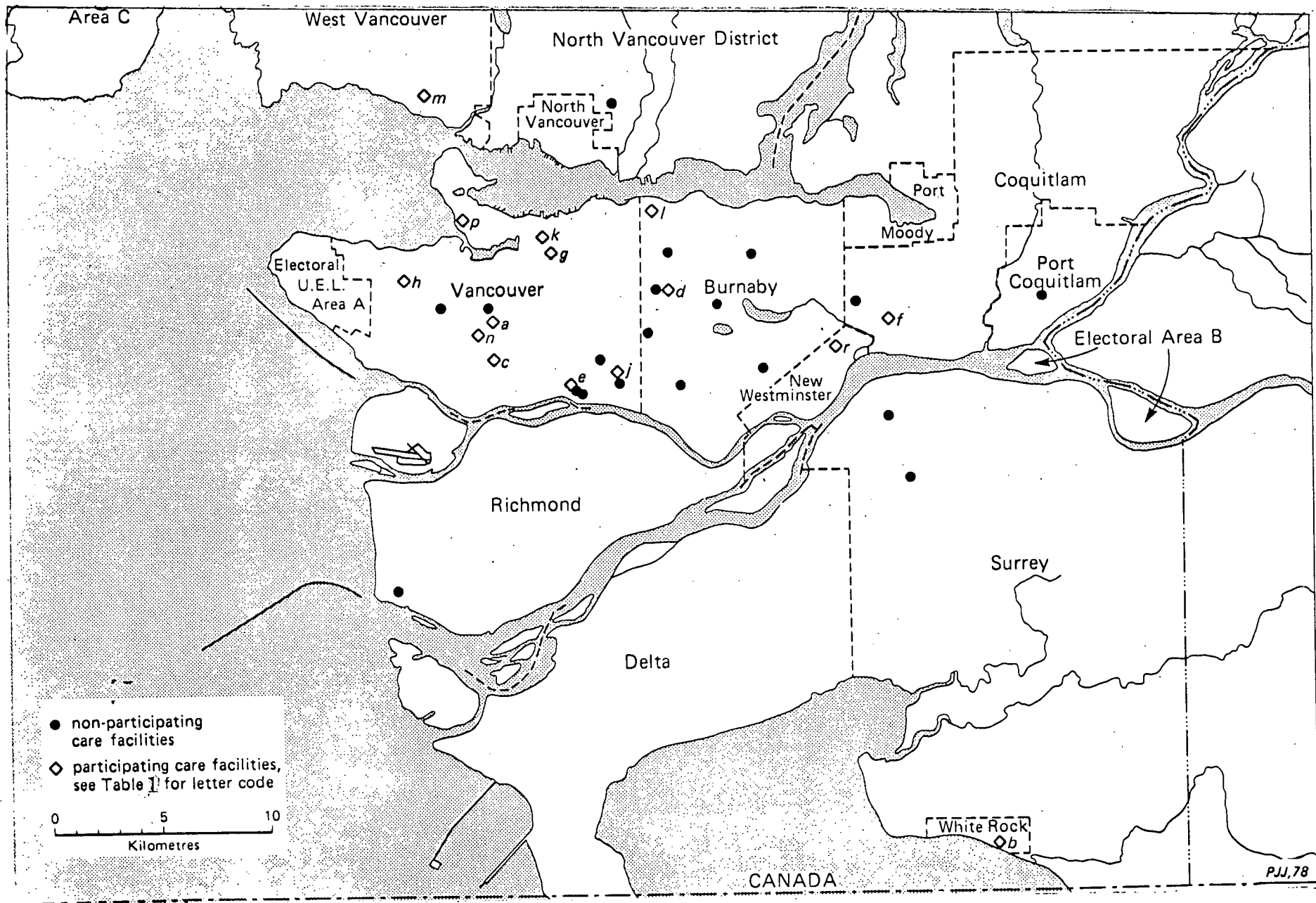


TABLE 1

Institutions under study by sponsorship type and municipality

<u>(a) Religious sponsorship</u>	<u>Alphabetic Identifier^a</u>
Youville Residence, Vancouver (R.C.)	A
Evergreen Baptist Home, White Rock (Bapt.)	B
Grandview Towers, No. 2, Vancouver (Bapt.)	G
Blenheim Lodge, Vancouver (Christ. Brethren)	H
Duke Residence, Vancouver (R.C.)	P
Buchanan Memorial Sunset Lodge, New Westminster (Sal. Arm.)	R
Salvation Army Home for Senior Citizens, Vancouver (Sal. Arm.)	J
 <u>(b) Ethnic sponsorship</u>	
Louis Brier Home, Vancouver (Jewish) ^b	N
Villa Cathay, Vancouver (Chinese)	K
German Canadian Benevolent Society, Vancouver (German)	E
Foyer Maillard, Coquitlam (French-Cdn.)	F
 <u>(c) Independent sponsorship</u>	
Dogwood Lodge, Vancouver	C
Dogwood Lodge, Burnaby	D
Seton Villa, Burnaby	L
Kiwanis Residence, West Vancouver	M

Notes:

- a. The alphabetic identifier is used throughout this study when referring to a particular institution.
- b. Statistics Canada uses Jewish to denote both a religious denomination and an ethnic group; for this study, it is assigned the ethnic denotation.

Selection of Respondents

In the initial stages of the research design, it was determined that upon receiving permission from the administration to conduct the survey, a 25% random sample was to be drawn from each institution. The mental and physical condition of the individuals selected were then to be checked with the supervisory staff using a specially designed form (see Appendix 1) which contained some questions extracted from the Long Term Care Program assessment form. Anyone who was considered confused or whose knowledge and use of the surrounding neighbourhood was impeded by their infirmities was to be excluded from the sample. The next step of the respondent selection process called for a letter of introduction (Appendix 2) to be mailed to ~~sixty percent~~ of the residents in each institution's sample. In the letter the purpose of the study and the content areas of the questionnaire were explained, and also, that if the resident agreed to participate, an interview was to be conducted shortly thereafter. If the resident decided to decline, a substitute from the back-up 40% was to be contacted.

This procedure quickly proved to be impractical as too much of the staff's time was being taken up generating the samples, and also, because a significant proportion of the residents seemed worried that their names were known to the researchers prior to any personal contact. In order to overcome these difficulties the selection criteria were modified and a new procedure adopted. A list of those

residents who met the selection requirements was obtained from the administrator and the interviewers went to each of the rooms with a senior staff member. The nature of the study was explained and the interviewer's credentials verified. Thus, should the resident decline, they did not have to feel intimidated by the presence of an unknown person at their door. A considerable amount of time was saved using this procedure and the staff were all extremely co-operative in providing as varied a cross-section of respondents as they could, recognizing that they knew the residents' idiosyncracies more intimately and could divert the interviewers from any individual whom they thought might be perturbed by the intrusion. It is felt that there was no undue bias in the selection process and that every effort was made to supply the variety of residents requested. This procedure yielded a respondent set of 238 persons.

Administration of the Residents' Questionnaire

The questionnaires were completed in a private place of the resident's choice within the institution, in the presence of an interviewer and anyone else desired by the respondent. Seven interviewers participated in the study all of whom underwent an initial training period to familiarize them with the questionnaire content, and to establish a standardized interviewing technique. As principal researcher, the author conducted interviews in all of the institutions. A research assistant was involved in a third of the interviews

in five of the institutions, and five women students, whose ages ranged from twenty to fifty, interviewed in four institutions. The interviews were designed to be approximately forty minutes in duration, and could be terminated at any time by the respondents, who were free to refuse to answer any of the questions they considered inappropriate.

Content and Structure of the Residents' Questionnaire¹

In addition to securing standard demographic descriptive information on the residents' age, sex, ethnicity and marital status, the questionnaire was designed to yield data on four substantive topics. Two of these related to the primarily geographical themes of mobility and environmental evaluation, while the other two dealt with residential and life satisfaction (Appendix 3). Under the general theme of residential satisfaction were questions dealing with the motivations and pathways into the particular institutions. Residents were asked to indicate the primary reasons for leaving their previous residence, and why they chose the specific institution. They were also asked to indicate their awareness of the programmes and activities which were available to them within the institution. In addition to questions relating to various aspects of life satisfaction, nine of

¹Resources employed in the design of the questionnaire included the work of Audain (1973), Gutman (1975a) and Cleland et. al. (1977).

the twelve items of Wood et al.'s (1969) index of life satisfaction were used to derive a crude index which was more appropriate for residents in institutions (see Appendix 3). The questions related to mobility were designed to determine both the incidence and types of activity carried on outside the building. These were interspersed with questions about the respondents' awareness of and satisfaction with the neighbourhood immediately surrounding the building, thus permitting an environmental evaluation for each of the institutions.

Throughout the questionnaire there was a combination of open-ended and multiple-choice items, and the emphasis was on allowing the respondents as much opportunity as possible to express their opinions.

Other Sources of Data

In an attempt to gain as detailed an insight into the locational suitability of the institutions as possible, three additional sets of interviews were conducted. The administrators of all but four of the institutions responded to a request to provide information about the desirability of the sites; to verify that the residents' perceptions of the availability and proximity of the community services were in fact accurate; and, to outline what some of the major administrative problems were in running a non-profit institution. They were also questioned as to how important they felt the location of the residence was, and to determine what in their judgement, was the approximate proportion of the residents

actually making use of the surrounding neighbourhood. Data were also obtained on the demographic characteristics of the residents in each institution, and what preference, if any, was given to particular types of elderly people such as individuals who were in some way socially affiliated with the sponsoring organization. The question of how to provide a home-like atmosphere rather than an institutional or hospital environment was also discussed. It was primarily through these relatively lengthy discussions with the administrators and by subjective observations, that a "feel" for the institutions was developed. Gaining an appreciation of the constraints under which the various places had to operate facilitated a greater understanding of the questionnaire responses.

A brief questionnaire was mailed to a member of the sponsoring organization who held a responsible position at the time the initial site selection process was undertaken. One of the central questions asked the person to explain, as far as possible, the development process whereby the institution was established, the site selected, and the significance of any other factors which had an influence upon the location of the institution. As a corollary, they were requested to explain what criteria they thought should be employed were a new facility to be built by their organization. Attempts were also made to discover both from the sponsors and the administrators what degree of liaison existed between the various non-profit organizations and what, in

their opinions, were the most prevalent problems confronting their residents at the present time.

Informal interviews were also conducted with officials of the Central Mortgage and Housing Corporation and the Long Term Care Program to try to establish what guidelines were used to approve or reject proposed sites, and to determine the government's assessment of the existing residences.

The remaining data collected for the evaluation involved a geographical reconnaissance of the situation of each of the institutions. A considerable amount of time was spent walking around the neighbourhoods trying to determine if there were significant environmental barriers which could impede the residents' mobility, and to ascertain from observation and by questioning shopkeepers and local employees, whether or not there was much contact between the residents and the local community. This information was augmented where possible by data from the local planning offices.

Methodological Issues

As many of the problems affecting older people originate not only in changes in mental and physical capacities, but also in changes in social opportunity, both individual and social factors which affect their life-chances need to be identified. The most significant implications for methodology in this respect involve defining the issues under consideration and producing effective and reliable measurements.

Establishing a precise research design proved to be one of the most difficult aspects because of the lack of any detailed information on the nature of residential care institutions for the elderly. The pre-theoretical assumptions adopted at the outset of the study were by necessity loosely defined, and in effect, one of the primary reasons for the work was to attempt to organize and interpret relatively large amount of diffuse information concerning those who live in such institutions.

The relative advantages of having a sample selected from a number of distinct locations must be balanced against the lack of detailed information and description afforded an in-depth analysis in one location. However, as the aim of the study was to undertake an evaluation of the suitability of the residential milieu of groups of residents living in different locations, it was felt that the former approach would be more appropriate, despite its limitations in terms of a deep understanding of specific places and their residents.

An issue of methodological import which is relevant to the current study is the use of interdisciplinary approaches to the study of the aging process. At present, the field of social gerontology is theoretically underdeveloped, and as Archae (1976) suggests, research is generally characterized by:

. . . a situation where discrete packages of knowledge and distinct rules for proper scientific conduct have been inherited from such diverse parent disciplines that no position or family of positions on what to look for or how to look at it can attract enough advocates to enforce their own standards for scientific content or conduct.

He goes on to argue that there are fundamental differences in the ontological commitments of the various disciplines, and that these differences determine the appropriate models of knowledge and the methodological procedures employed in a given piece of research. Thus, there are important motivational differences which arise because the disciplines have differing views of the elderly, and consequently, differing methods for defining the problem areas, and the tools for their analysis (Baltes, 1977). The result is that much of the research is multi-disciplinary and discrete, rather than being truly inter-disciplinary. This problem is particularly evident in the current geographical analyses of the elderly. Although research into the spatial aspects of aging has been produced in the last five years (e.g. Golant, 1976, 1977, 1979, Peet and Rowles, 1974, Rowles, 1978, Wiseman, 1979), it has been characterized by a lack of conceptual clarity and interdisciplinary communication. As a result, there appears to be little complementarity or comparability among the studies, and as yet, no clear statements have been made delimiting the areas where geographers would be most appropriately qualified to conduct gerontological research. Although it is difficult to place the current study within strict disciplinary parameters, it is argued that the evaluation is concerned with social-gerontological issues, the fieldwork was conducted using a geographical perspective, and has incorporated literature from both multi- and inter-disciplinary gerontological research.

CHAPTER THREE

ANALYSIS AND RESULTS

The presentation of the results begins with a description of the sociodemographic characteristics of the sample as a whole - their age, sex, marital status, number of living children, level of care and place of birth.

This is followed by a description of findings from each of the four substantive topic areas of the questionnaire - residential satisfaction, life satisfaction, mobility and environmental evaluation. The final portion of the chapter presents the results of statistical analyses performed on the data in order to ascertain the relationships between the four topic areas, whether there were significant differences between the responses of those in Personal as compared to Intermediate care, or between the fifteen different institutions included in the study. Tables showing responses for each of the individual institutions are included in Appendices 4 to 8.

Sociodemographic Data

This section will describe the sociodemographic characteristics of the sample as a whole to clearly identify the nature of this particularistic population.

Age

Approximately three quarters of the residents sampled are 75 years of age or older (Table 2), although there is considerable variation in the age distribution of the sub-samples drawn from each of the fifteen institutions (Appendix 4). The selection procedures yielded a number of residents under 65 years of age (5 per cent). Though a minority group as a result of living in homes which cater primarily to the needs of the elderly (commonly defined as aged 65 or older), these respondents were included in the subsequent analyses.

Sex

The sex composition of the respondents reveals a male-female ratio of about 1 to 3 (Table 3) which is typical in retirement housing (Gutman, 1975a); again there are noticeable differences in the composition of the sub-samples drawn from the fifteen institutions (Appendix 5). Two of the institutions are for women only (P and R) and as indicated in the appendix, in two cases (B and N), the samples selected involved only women.

Marital Status

As might be expected given the age distribution and differences in male and female life expectancy, a large proportion 70% of the residents are widowed (Table 4) of the

TABLE 2

Age composition of the sample

50-54	1.2%	Age Range 50-100 yr
55-59	0.8	
60-64	2.8	
65-69	5.0	
70-74	10.6	Mean Age 80.69 yrs
75-79	14.3	s.d. 8.47 yrs
80-84	26.5	
85-89	22.7	
90-94	10.9	
95-99	1.2	
100-	0.4	
no answer	3.4	

TABLE 3

Sex composition of the sample

Male	27.7%
Female	72.3

TABLE 4

Marital status

Married	8.0%
Widowed	71.0
Divorced	11.8
Never Married	9.2

TABLE 5

Number of living children

None	34%
1	19.3
2	18.1
3	10.9
4	10.5
5	2.5
6	4.2
7	0.4

remaining 30 per cent, roughly a third are presently married, a third have never been married and a third are divorced. As with the age and sex composition, there is some variation between each of the samples, but the overall data would seem to be consistent with other studies of the institutionalised elderly (Townsend 1962, Lieberman, 1969).

Number of Living Children

A significant proportion of the respondents, over one third, have no living children (Table 5), and approximately 20 per cent have one child. The remaining 50 per cent have two or more children. In 70 per cent of the cases, in other words, there is potential for parent-child interaction, although as will be shown subsequently, this potential is not always realised.

Level of Care

Of the fifteen institutions surveyed, seven provide only Personal care and two provide only Intermediate care.¹ The other six institutions provide both levels of care. As indicated in Table 6, two thirds of the respondents receive Personal care (n=157) and the remainder (n=81) Intermediate care.

Note 1: This is attributable to the admissions policy in the institutions. However, the trend would seem to be toward providing both levels of care in the future, as a result of the recognition that individuals fluctuate between the levels thus avoiding major relocation.

Place of Birth and Location of Previous Residence

The sample reflects a wide range of ethnic backgrounds, which is characteristic of the nation as a whole. However, as the data on the location of their previous residence show, most of the respondents have been living in Canada for a considerable number of years. Only 40 per cent of the respondents in the overall sample indicated that they were born in Canada (Table 7), either within British Columbia (7.6 per cent) or in the other provinces (32.8 per cent), whereas approximately one third were born in the United Kingdom. Of the remainder, 15.5 per cent were European and 6.3 per cent were of Asian origin.

As shown in Table 8, when asked to state where they had lived for the past five years, less than one per cent indicated that they had lived outside of Canada during that period. Less than 2 per cent of the sample (1.2 per cent) lived outside of British Columbia over the five years, and it would appear that the overwhelming majority (95 per cent) had been living within the Greater Vancouver Regional District. Moreover, almost three quarters of the respondents actually lived in the same municipality as the institution in which they are now living. Thus, the respondents are considerably more "local" than the data on nativity would seem to suggest. It is worth noting here that approximately one fifth of the respondents had previously lived in another care home before entering their present residence, suggesting that there is a certain degree of flexibility within the system to allow for changing preferences and relocation if desired.

TABLE 6

<u>Care type</u>	<u>Absolute frequency</u>	<u>Percent</u>
Personal care	157	66.0
Intermediate care	81	34.0

TABLE 7

<u>Place of birth</u>	
British Columbia	7.6%
Elsewhere in Canada	32.8
United Kingdom	30.7
Western Europe	8.4
Eastern Europe	7.1
Asia	6.3
Other	6.7
No answer	0.4

TABLE 8

<u>Previous address</u>	
Same planning area	18.9%
Same municipality	53.4
Elsewhere within GVRD	23.1
Elsewhere in B.C.	1.7
Elsewhere in Canada	0.8
United Kingdom	0.4
No answer	1.7

Findings Related to the Four Topic Areas of the Questionnaire

In an attempt to ascertain whether or not the respondents in the fifteen institutions were satisfied with the location and situation of their respective homes, questions relating to levels of residential and life satisfaction within the buildings were devised. Similarly, questions relating to the suitability of the neighborhoods surrounding the institutions were designed, and will be subsumed under the general headings of mobility and environmental evaluation. Thus, throughout the questionnaire, the questions relate to the four major themes, and although these have been organised on an intuitive basis, they all address the question of the satisfaction with, and suitability of the residential milieu. The questions in each of the four thematic areas and the description of the responses given to them will be addressed systematically.

Residential Satisfaction

One of the initial questions asked of the respondents was how satisfied they were generally with living in the particular institution (Appendix 3, Q.11). Over three quarters of the sample indicated that they were very satisfied (79.4 per cent) under a fifth were moderately satisfied (17.6 per cent) and only a very few were very dissatisfied (1.3 per cent).

When asked how well the needs of the elderly people were looked after in the institution (Q.52), 83.2 per cent replied, "very well" and 16 per cent, "adequately."

These data are reinforced by the responses to a question (Q.13) which asked the respondents to indicate whether they would choose to live in their present residence or move elsewhere were they given the opportunity. Eighty-two per cent indicated that they would prefer to remain where they were, and only 16 per cent preferred to live elsewhere, although it should be noted that the question is slightly ambiguous.

It does not appear clear whether "elsewhere" refers to another institution or whether it refers to a different type of residential setting. While one should be cautious in interpreting these data they suggest that residential satisfaction was relatively high across the institutions.

The most frequently reported reasons why the respondents were satisfied with their present residence illustrate the overall satisfaction with the physical plant and with the staff and the administration (Table 9). In an open-ended question (Q.12) in which respondents were asked to say why they were satisfied with living where they were, over half alluded to the pleasant atmosphere in the building. The importance of the atmosphere was also reported in the reasons why people preferred to live in their present residence rather than moving elsewhere (Table 10, Q.13).

The data would seem to indicate that the respondents are most happy with the health-care component of the institutions. In a series of open-ended questions (Q.44-46) the respondents were asked to state what they liked most and least about the institution and what they thought could be done to

TABLE 9

Reasons for satisfaction with residence

Staff good	11%
Everything provided	10
High quality of physical plant	10
Well run	10
Good atmosphere	9
Good location for seniors	7
Perfect for an institution	5
It's home	5
Very clean	4
Religious place	3
Would prefer independence	3
Feel happy here	3
Organisation good	3

Note: A maximum of five reasons were coded for each respondent. The percentages are number of times a reason was mentioned in proportion to the total number of reasons given. Only reasons which represent 3 percent or more of the total responses given are tabled. In this instance, these account for 80 percent of all responses.

TABLE 10

Reasons for preferring to live in present residence or elsewhere

Place has everything	21%
Happy here	16
Staff good	13
People friendly	11
Would prefer independence	6
Wish to be near family	4
Residence is close to family	4
Good location for seniors	4
Want to be in own home	4

Note: A maximum of three reasons were coded for each respondent. The procedure for calculating percentages was similar to that noted in Table 9. In this case, these responses account for 83 percent of all responses given.

TABLE 11

Most frequently stated reasons for residential satisfaction

Staff	20%
Atmosphere	15
Everything	14
Level of care	11
Religious aspects	7
Cleanliness	6
Quality of rooms	5
Activities within building	5
Food	4
Location	3
Freedom to do what I want	3

Note: A maximum of three reasons were coded for each respondent. The procedure for calculating percentages was similar to that noted in Table 9. In this case, these responses account for 93 percent of all responses given.

TABLE 12

Most frequently stated reasons for residential dissatisfaction

Mixing senile with alert	18%
Having to be looked after	16
Nothing to do	11
Being in an institution	8
Too much organisation	7
Food	6
Change physical layout of bldg.	5
Bad location	3
Poor transportation, isolation	3
No privacy	3
Sharing a room	3
Dissatisfied with LTC Program	3
Problems with staff	3
Insufficient interaction with residents	3

Note: A maximum of three reasons were coded for each respondent. The procedure for calculating percentages was similar to that noted in Table 9. In this case, these responses account for 92 percent of all reasons given.

make the place more satisfying to live in. Of the reasons given for satisfaction, the staff, the overall atmosphere and the level of care were most frequently mentioned (Table 11) and of the reasons given for being dissatisfied, the mixing of senile and alert residents, having to be looked after, having nothing to do and being in an institution were most frequently mentioned (Table 12). When suggestions were made concerning improvements to the institutional milieu (Table 13) they were divided between improvements in the building and the organisation and improvements to the local neighborhoods. It should be noted that there were relatively few responses to this question (of a possible 714 responses, only 147 were actually recorded).

As mentioned, the health-care component was given as an important positive factor in residential satisfaction and as can be seen in Tables 14 and 15, it was health-related problems and the availability of nursing supervision which led a high proportion of the respondents to leave their previous residence and to choose the particular institutions. The respondents were shown two sets of statements (Q. 16 and 17) and were asked to indicate the three most important reasons for leaving where they lived before and the three most important reasons for choosing their present residence. The difficulty of looking after their previous residence, a change in their health or physical status and as a result of medical advice were the most frequent responses to Question 16 (Table 14). The quality of

TABLE 13

Suggested improvements to institutional milieu

More local services	17.7%
Separate senile and alert	16.3
Changes in physical plant	13.6
More inside activities	10.2
Better public transportation	9.5
More outside activities	6.8
More staff	6.1
More personal freedom in bldg.	5.4
More friends	5.4
More privacy	4.8
Change structure of staff	4.1

Note: A maximum of three reasons were coded for each respondent. The procedure for calculating percentages was similar to that noted in Table 9. In this instance these responses account for all the responses given.

TABLE 14

Reasons for leaving previous residence

Difficulty in looking after previous residence	26.1%
Change in health or physical status	24.8
Medical advice	19.1
Possible future need for medical help	7.0
Loneliness	6.0
Dissatisfaction with previous residence	3.3

Note: A maximum of three reasons were coded for each respondent. The procedure for calculating percentages was similar to that noted in Table 9. In this case, these responses account for 86.3 percent of all the responses given.

the dwelling unit, the fact that they were recommended to go to the institution and the availability of medical services and meals on the premises were the reasons given for choosing the particular place (Table 15).

Examination of the data relating to residential satisfaction would seem to suggest that the necessity of being in an institution because of either physical or psycho-social problems is more prevalent than the desire to choose the institution as a retirement setting. As a result, satisfaction seems to be measured in terms of the supervision and care provided. This assumption is backed up by the results to Question 48, in which the respondents were asked to state how many hours they spent in their own room in an average day (Table 16) and what they did there; the time spent in the room was based on a 12 hour period which did not include meals or sleeping time. Almost two thirds of the respondents spent between six and twelve hours in their room in an average day, and in fact, less than one fifth spent more than three hours outside their door. Resting, reading, watching television and listening to the radio were the most frequently stated activities carried on in the rooms and as will be discussed subsequently, having nothing to do was a common complaint among many.

Thus, it is not absolutely clear how to interpret the relatively high levels of residential satisfaction based on the responses to a number of questions ostensibly relating to the same theme. The question of how much the quality of life

TABLE 15

Reasons for choosing present residence

Quality of dwelling unit	18.3%
Recommended	11.8
Medical facilities there	10.6
Availability of meals	10.5
Religious reasons	6.5
Familiar neighbourhood	6.3
Children there	5.6
Cost	5.0
Housekeeping facilities there	5.0
Friends or relatives there	4.8
Family made choice	4.3
Ethnic reasons	3.2

Note: A maximum of three reasons were coded for each respondent. The procedure for calculating percentages was similar to that noted in Table 9. In this case, their responses account for 91.9 percent of all responses given.

TABLE 16

Number of hours per day spent in own room

<u>Hours</u>	<u>Proportion</u>	<u>Hours</u>	<u>Proportion</u>
1	2.9%	7	7.6%
2	6.7	8	11.3
3	2.9	9	3.8
4	13.9	10	11.8
5	9.2	11	2.1
6	22.3	12	1.7
		no answer	3.8

Note: Number of hours were based on a 12 hour period which did not include meals or sleeping time.

TABLE 17

Problems faced in daily living

Medical	50.1%
Loneliness	10.4
Immobility	8.1
No place to go	7.8
Nothing to do	7.5

Note: A maximum of three problems were coded for each respondent. The procedure for calculating percentages was similar to that noted in Table 9. In this case, these responses account for 83.9 percent mentioned.

is determined by the quality of care provided is open to debate and will be addressed in the discussion.

Life Satisfaction

The suitability of the residential milieu is governed not only by the residents' satisfaction with the institution, the quality of the physical plant and the facilities on hand, but also by the satisfaction within the building. In this context, an attempt was made to ascertain the general quality of life of the respondents by asking a series of questions about their life satisfaction levels. The first of these (Q. 8) asked them to rate their relationship with their family. 45.8 per cent indicated that the relationship was excellent, 28.6 per cent said it was on the whole good, and 8.4 per cent admitted to either a fair (5.9 per cent) or a poor one (2.5 per cent) - a sizeable proportion (17.2 per cent) did not respond and reflects the fact that some respondents now have no family.

When asked how satisfied they felt at the present time (Q. 42), over three quarters reported that they were very satisfied (23.1 per cent) or satisfied (54.6 per cent), and one fifth stated that they were dissatisfied. The remaining 2 per cent were very dissatisfied.

The respondents were asked to evaluate their own health status at the present time (Q. 49) and in an open-ended question (Q. 40), were asked to relate what kinds of problems they faced in their daily lives. It was assumed that a general impression of life satisfaction could be ascertained from these data. Again almost two thirds of the overall sample felt that their health status was excellent or good, 28.6 per cent

considered themselves to be "fair," and less than one tenth reported their health was poor. It should however be borne in mind that all of the respondents were in need of at least some form of medical care and supervision, and thus their responses to this question should be interpreted contextually.

The problems which the respondents indicated they faced in their daily lives are reported in Table 17. Medically related problems and loneliness were the two most frequently stated problems (59.1 per cent and 10.4 per cent respectively) but immobility and having either no place to go, or nothing to do, figured prominently (18.9 per cent). The responses to Question 39, which asked, "In general, would you say that most days you have plenty to do " was answered negatively by about a fifth of the respondents. The main complaints were that there was no place for them to go, or else they felt that there was nothing to do, and so they simply did not go out.

A series of statements drawn from the Life Satisfaction Index (Wood et al., 1969) was shown to the respondents (Q. 41) and they were asked to indicate whether they agreed or disagreed with the items. The interviewer read each of the statements and recorded the preference given. Responses indicative of satisfaction were scored 1 (items 1, 2, 3, 5 and 6), and those indicating dissatisfaction were scored 2. Thus, the cumulative scores ranged from 9 (indicative of a high level of life satisfaction) to 18. As reported in Table 18, 71 per cent of the respondents had scores in the 9 to 13 range, suggesting that

TABLE 18

Life satisfaction scores

9	High satisfaction	12.6%
10		20.6
11		15.5
12		12.2
13		10.1
14		12.2
15		11.3
16		0.8
17		0.8
18	Low satisfaction	0.0
	no answer	3.8

TABLE 19

Perceived changes since moving into residence

	<u>More</u>	<u>Same</u>	<u>Less</u>	<u>No answer</u>
Feel safe	66.8	29.4	2.9	0.8
Worry	39.1	39.5	19.3	2.1
Energy	18.5	26.5	54.6	0.4
Health	28.6	42.9	27.7	0.8
Active	14.7	22.3	61.8	1.3
Friends	29.4	29.8	37.0	3.8
Eat	48.7	31.9	17.6	1.7
See children ^a	21.0	54.8	24.2	0.0
See relatives	14.3	64.1	21.4	0.0
Sleep	30.3	50.8	16.4	2.5
Go outside	14.7	30.7	53.4	1.3
Happiness	37.8	47.1	13.0	2.1
Dress up	18.9	69.7	8.4	2.9

Notes:

- a. These proportions are based on n = 157; that is the number of respondents with living children.

life satisfaction levels were relatively high in the institutions.

Also included in the theme of life satisfaction was a question designed to find out whether the respondents felt that they had changed in significant ways since moving into the institution (Q. 43). The respondents were asked to indicate whether they felt more safe, less safe or the same since moving into the institution. 66.8 per cent reported that they felt more safe (Table 19); 48.7 felt that they ate better; 37.8 per cent were more happy and 30.3 per cent slept better. On the other hand, 54.6 per cent felt that they had less energy; 61.8 per cent were less active; 37. per cent had less friends and 53.4 per cent went out less. Over half of the respondents saw their children and their relatives the same amount of time they did prior to moving in, and 42.9 per cent stated that their health had remained about the same. It is somewhat difficult to draw conclusions from the data except to point out that overall, health-related items show up less favourably as exemplified in the fact that 61.8 per cent of the respondents felt less active.

As mentioned in Table 19, over half of the respondents felt that they had the same amount of contact with their relatives and children as they had prior to moving into the institution. It is assumed for the purposes of argument here, that contact with relatives, family and friends has a positive effect upon life satisfaction, and as a result, analysis of Table 20 indicates that there is significant variation in the amount of

contact among the fifteen sub-samples. The respondents were initially asked if they had any living children, and if so, the amount of contact they had per month with them. They were also asked to indicate where their children lived, to ascertain the proportion of children living within the Greater Vancouver Regional District (Q. 4 and 5). The respondents were also asked to indicate which of their relatives or friends they were in contact with once per month or more often, and of them, how many resided within the G.V.R.D. (Q. 6 and 7).

As indicated in the section describing sociodemographic characteristics of respondents, 66 per cent had one or more living children. Of those with children, almost all (98 per cent) reported that they were in contact with one or more of them once a month or more frequently. There was also evidence of a considerable degree of contact with other relatives and friends. As shown in Table 20, approximately two thirds of the respondents were in contact with one or more of their relatives and two thirds with one or more of their friends once a month or more frequently. It seems, in other words, that contrary to popular belief, for the majority of respondents movement into an institution did not represent divorce from family and friends.

So far in the data, the concern has been to discern the appropriateness of the residential milieu by considering the levels of satisfaction with and within the institutions. Attention will now be directed towards the respondents' ability

TABLE 20

Percentage of respondents in contact once a month or more frequently with 0-9 of their offspring, other relatives and friends.

<u>Number in contact with</u>	<u>Offspring</u> ¹	<u>Other Relatives</u>	<u>Friends</u>
0	1.9%	37.8%	39.9%
1	32.4	23.1	11.3
2	33.1	16.0	16.8
3	15.3	6.7	4.6
4	13.4	5.5	2.9
5	1.9	2.9	2.9
6	1.9	3.4	2.5
7	0	0	0.4
8	0	2.1	2.9
9	0	2.5	15.5

Note:

1. Percentages in Column 2 are based on an N of 157, the number of respondents having one or more living children.

to make use of the surrounding neighborhood, and their evaluation of the local environments.

Mobility

In each of the fifteen institutions involved in the study, the administration actively encouraged the residents, where possible, to go outside of the buildings from time to time, and to make use of the surrounding neighborhood facilities. However, as the data to be presented will show patterns of mobility varied considerably throughout the sample, due to age-related and health-related problems, and also in part, due to the fact that as a number of the respondents mentioned, there was either nothing very much to do or no place for them to go to.

Each of the respondents was asked whether they could go out into the street by themselves (Q. 23), and whether in fact they did go out (Q. 24). Over three quarters of the respondents said they were able to go into the street alone (76.1 per cent) but only 61.3 per cent do go out alone. Going some distance is less easy, as just under half (46.2 per cent) said they were able to go six blocks and back again by themselves for some reason or another (e.g. a purchase or a walk to the park).

In response to the question "How many times in a week do you go outside " (Q. 26), 42.9 per cent indicated that they went out at the most once per week, and only 16.8 per cent indicated that they went out, on average, at least once per day (Table 21). Walking within the grounds of the institution was regarded as going outside in the present context.

Consequently, in order to gain a more detailed insight into

TABLE 21

Number of trips outside residence per week

0-1	42.9%
2-3	21.0
4-5	10.9
6-7	8.0
+7	16.8
no answer	0.4

TABLE 22

Frequency of activities outside (Average month)

	Never	1	2	3	4	5	6	7	8	9
Drives with family	44.1	18.9	11.8	8.0	12.6	2.5	1.3	0.4	0	0.4
Go window shopping	57.6	11.8	9.7	2.9	8.8	3.4	0.8	2.1	1.7	1.3
Organised bus drives	62.2	23.1	8.4	1.3	3.8	0.4	0.4	0	0.4	0
Visit friends	65.1	6.7	9.7	5.0	9.7	1.3	0.4	0.4	1.3	0.4
Medical trips	66.8	23.1	5.5	2.1	2.1	0	0	0	0	0.4
Eat outside residence	68.1	13.4	8.0	2.9	5.9	1.7	0	0	0	0
Club/meeting	77.7	5.0	6.3	1.3	6.7	0.4	0.4	0	1.3	0.8
Bingo	84.5	0.8	3.8	0.8	8.8	0.4	0.8	0	0	0
Do volunteer work	89.9	0.8	5.0	0.4	1.7	0.4	0	0	0.8	0.8
Sports event	91.2	2.9	0.8	0.8	2.1	0.8	0.8	0	0.4	0
Active sport	95.4	1.7	1.3	0	0.8	0	0.4	0	0.4	0
Go to a bar	95.8	0	2.1	0	0.8	0	0.4	0	0.4	0.4

TABLE 23

Frequency of public transit trips

Never	61.3%
1-2	25.6
3-4	5.1
5-6	2.1
7+	3.8
no answer	2.1

the types of activities carried on outside the institutions, and the frequency of visits to local services and facilities, Questions 37 and 38 were administered. The respondents were asked to explain what they did outside the building, and to indicate approximately how many times in a month they visited specific community facilities, as shown in Table 22.

The data show that 44.1 per cent never went out for a drive with their family; 57.6 per cent never went shopping or window shopping; 62.2 per cent never went on bus outings organised by the residence; 65.1 per cent never visited friends outside; 66.8 per cent never went out on medically related trips and 68.1 per cent never ate out at a restaurant or cafe. Well over three quarters of all the respondents never attended clubs or meetings (77.7 per cent); played bingo outside (95.8 per cent) or were involved with any sporting activities. Thus, the overall picture which emerges is that a significantly high proportion of the respondents remain within the institutions for the most part (Appendix 11).

One confusing aspect of the data is that 63.4 per cent of the respondents reported that they felt that there were enough things for them to occupy their day in the area immediately around the institutions. It is suggested that this could be interpreted to mean that they felt there was enough to do if they were able or willing to go outside.

Data were collected on the availability and use of both public and private modes of transportation in the attempt to determine patterns of mobility. The respondents were asked whether they had regular help from a friend or relative in

getting to the places they most want to go (Q. 29). 65.1 per cent reported that they had help if they needed it. Also, a third of the sample indicated that they had available and used a volunteer or professionally staffed transportation service associated with the institution. Use of the public transit system varied from place to place, but on average, slightly over one third of the respondents used the bus at least once per week (Table 23), whereas 63.1 never used the bus service despite ease of access to a bus route. 90 per cent indicated that there was a bus stop within two blocks of the institutions. Over half of those interviewed indicated that they experienced problems using the buses, especially getting on and off, although somewhat paradoxically in responding to a question asking specifically how good was the public transit in their area, 61 per cent viewed the bus service as excellent (Q.23).

Environmental Evaluation

The final thematic section involves the respondents' attitudes toward the neighborhoods in which they were living. Questions were designed to elicit information on the relative accessibility of selected community services and facilities, as perceived by the respondents. There were also a series of questions which involved the overall levels of satisfaction with the quality of the various neighborhoods. The respondents were asked to indicate if they were generally satisfied with the location of the institution in question. Over three quarters rated the area around the buildings very highly (Q. 10 and Q.36)

TABLE 24

Satisfaction with landscape around building

	<u>Satisfied</u>	<u>Dissatisfied</u>	<u>Don't know & no answer</u>
Landscaping	92.4%	2.5%	5.0
Sidewalk condition	87.0	1.7	11.3
Traffic noise	80.7	15.5	3.8
Traffic hazard	71.0	14.3	14.7
Safety from crime	68.9	8.4	22.7
Shopping facilities	46.6	21.0	32.4
Entertainment facil.	36.5	16.4	47.9
Does neighbourhood cater to your needs?	42.9	12.6	44.6

TABLE 25

Perceived accessibility to community facilities

	<u>Easy Walk</u>	<u>Bus</u>	<u>Difficult Walk/Bus</u>	<u>Not Avail.</u>	<u>Don't know & no answer</u>
Shopping places	31.9%	43.7%	11.8%	4.2%	8.4%
Variety/ Corner store	45.4	27.3	9.7	7.6	10.1
Medical office	27.3	30.7	16.4	4.6	21.0
Church	37.0	25.6	9.1	3.5	26.0
Hospital	25.6	30.7	16.8	9.7	17.2
Library	30.7	30.3	7.1	7.1	24.8
Park	45.4	19.3	12.6	5.5	17.2
Senior Centre	12.2	38.2	12.2	4.2	33.2
Community Centre	15.1	36.6	10.1	4.6	33.6

TABLE 26

Canonical analysis of life satisfaction (Set 1) versus
residential satisfaction (Set 2)

Canonical correlation 0.526. Significance 0.001.

Coefficients for canonical variables

Set 1	Set 2
LOT2D0 -0.505	ROOMHR -0.718
SAT2DA -0.492	PRESRES -0.489
HEALST -0.381	NEEDOK -0.387

Note: Canonical coefficients are reported only for those variables with coefficients of ± 0.3 in Tables 26 to 33.

indicating high levels of satisfaction with the landscaping, paths and seating areas around the buildings, the safety from crime and traffic and the lack of traffic noise (Table 24). 85.3 percent indicated that they were satisfied with the location in terms of the availability of services and facilities in the local area (Q.28) but as shown in Table 25 perceived accessibility varied depending on the type of facility and also on the location of the institution (Appendix 12).

The general impression of the respondents' evaluation of the local environment is that although they are relatively familiar and satisfied with the location of the institutions, there appears to be little interaction with the surrounding neighborhood for many. Because the patterns of mobility reflected a tendency toward remaining within the institution, it would appear that the environmental components of the residential milieu are not being used to their capacity. As will be discussed, this may have deleterious effects on the psychosocial well-being of some of the respondents.

Statistical Analyses

The remainder of the chapter describes the statistical analyses which were performed. These included canonical correlations, multiple regression analyses and Pearson product moment correlations. In addition, discriminant analyses were performed on the principal themes to establish if there were significant differences in the responses of individuals

receiving different types of care and if there were significantly different responses to questions in the various institutions.

Canonical Correlations¹

A total of fourteen canonical correlations were performed using data from the four substantive themes, and also, using data on the presence of facilities within the building (Q. 47), the proximity to community services (Q. 15) and the amount of contact per month with children, family and friends. (Qs. 5 - 7).

Note 1: Canonical correlation analysis takes as its basic input two sets of variables which can be given theoretical meaning as sets, and derives a linear combination from each of the sets of variables in such a way that the correlation between the two linear combinations is maximised (Nie et al., 1970). There are two differing approaches in the literature concerning the interpretation of the canonical variates. The interpretation of the weights associated with the variates is critical for the selection of variables for the regression and correlation analyses in the present study, and although it is recognised that there is one school of thought which cautions against interpreting directly the canonical weights (e.g. Levine, 1977 and Draper, 1966), in the present context a particular strategy has been followed which is recommended by certain texts (e.g. Harris, 1975) and which has been used in Geography (e.g. Berry's work in L.J. King, 1975).

Table 26 shows the results of the canonical correlation analysis of the respondents' satisfaction with their residence and measures of life satisfaction. The variables in the residential satisfaction set included questions on the respondents' perceived satisfaction with their residence, their preference for living where they were or elsewhere, how well they felt the needs of older people were being looked after and the amount of time they spent in their room (Qs. 11, 13, 48 and 52; see also Appendix 13). The life satisfaction measures included questions on the respondents' relationship with their family, the score on the life satisfaction index, the perceived health status and satisfaction at the time of the interview, and finally, whether they felt they had plenty to do most days (Qs. 8, 42, 49 and 39). The null hypothesis stated that there would be no significant relationship between residential and life-satisfaction, and this was rejected at the 0.001 level of significance. The canonical variates would seem to be identifying a tendency for those residents who stated that they had plenty to do most days, were satisfied with their life at the present time and who perceived their health status to be good, to spend less hours in their rooms, to prefer to remain in their present residence and to feel that the needs of elderly residents in the institutions were being looked after.

In the relationship between residential satisfaction and mobility (Table 27), there would appear to be a significant correlation between the amount of time spent outside, the ability to go outside and the number of sports events attended and the hours respondents spent in their rooms, as well as the degree of residential satisfaction. There are also a series of correlations in the Table which make no sense to the researcher, but it should be noted that the function of the canonical

TABLE 27

Canonical analysis of residential satisfaction (set 1) versus mobility (set 2)

<u>Canonical correlations</u>		<u>Significance</u>
First	0.498	0.001
Second	0.416	0.029

Coefficients for canonical variables.

Set 1

<u>First correlation</u>	<u>Second correlation</u>
ROOMHR -0.744	RESSAT 0.908
RESSAT -0.554	ROOMHR 0.737

Set 2

<u>First correlation</u>	<u>Second correlation</u>
TIMEOUT 0.634	DOOUT -0.644
ACTIVE -0.549	CLUB -0.563
DOOUT 0.537	
CANOUT -0.419	
SPORT 0.394	

Note: Since there are two significant canonical correlations reported, there are two groups of coefficients, one for each analysis.

TABLE 28

Canonical analysis of residential satisfaction (set 1) versus environmental evaluation (set 2)

<u>Canonical correlation</u>	0.656	<u>Significance</u>	0.003
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Coefficients for canonical variables

Set 1	Set 2
RESSAT -0.658	SIDWAL -0.410
ROOMHR -0.593	CRIME -0.321
	LANSCA -0.296

correlation analysis is to manipulate intercorrelations among variables to see if a particular type of patterning exists. These may not always lend themselves to meaningful interpretations.

A significant set of results were obtained in the correlation analysis between residential satisfaction and environmental evaluation ($p < 0.05$). There appears to be a correlation between the satisfaction with the condition of the sidewalks around the building; the feeling that there was a problem with crime in the area; and a general dissatisfaction with the landscaping, paths and seating in the outdoor area and the respondents' dissatisfaction with the institution and the greater number of hours spent in their rooms (Table 28).

The final canonical correlation which involved the variables in the residential satisfaction theme was only significant at the 0.07 level, but will be described since it suggests some interesting trends (Table 29). The null hypothesis stated that there was no significant relationship between residential satisfaction and the presence of selected facilities within the buildings. The data seem to indicate that there is a tendency for respondents to spend more hours in their room and to prefer to live elsewhere, especially in institutions in which there is an absence of activities within the building such as a crafts room, a games room, a coffee shop or a volunteer transportation service.

A significant correlation was produced in the canonical analysis of the mobility variables and the measures of life satisfaction (Table 30). There appears to be a relationship between an ability to go outside, having enough to do to occupy the day; going for drives with the family; playing less bingo and having help from relatives and friends with transportation. There is also a tendency to feel more satisfied with life at the present time and to perceive that one's health status is good ($p < 0.05$).

TABLE 29

Canonical analysis of residential satisfaction (set 1) versus the presence of facilities within the residence (set 2)

Canonical correlation 0.491 Significance 0.07

Coefficients for canonical variables

Set 1		Set 2	
ROOMHR	-0.898	PRITEL	0.627
NEEDOK	0.591	VOLVIS	0.515
PRESRES	-0.363	CRAFTS	-0.339
		CARDS	-0.337
		COFFEER	-0.303
		VOLTRA	-0.302

TABLE 30

Canonical analysis of mobility (set 1) versus life satisfaction (set 2)

Canonical correlation 0.496 Significance 0.023

Coefficients for canonical variables

Set 1		Set 2	
CANOUT	0.576	SAT2DA	0.502
ENU2DO	0.435	HEALST	0.445
FAMDRI	-0.412		
BINGO	0.356		
MOBAID	0.300		

TABLE 31

Canonical analysis of mobility (set 1) versus proximity of community services (set 2)

Canonical correlation 0.640 Significance 0.001

Coefficients for canonical variables

Set 1		Set 2	
CANOUT	0.665	PROSHO	-0.902
VISITFR	-0.541	LIBRAR	0.886
DOOUT	-0.516	VARSTO	0.469
ACTIVE	0.502	MEDOFF	-0.444
SIXBLS	0.321	CHURCH	0.407
		SEMCEN	-0.342

The mobility variables were also correlated with questions relating to the proximity to community services ($p < 0.001$). There seems to be a tendency for respondents who stated that they could go out as far as six blocks and back, but who in fact did not go out much and did not visit their friends often, to perceive that shops, medical offices and senior centres were not easily accessible; although libraries, corner stores and churches were within relatively easy access (Table 31).

The remaining canonical analyses which produced significant results involved the degree of contact which the respondents had with their children, relatives and friends. Those who indicated that they had a good relationship with their family, and who were satisfied at the time tended to have a greater amount of contact with their children and relatives (Table 32). Similarly, three coefficients of canonical correlation were statistically significant at the 0.001 level in the relationship between the number of children, relatives and friends who were in contact once per month with the respondents, and of those, the number who lived within the Greater Vancouver District (Table 33). It would appear from the Table that the more the residents were in contact with their significant others, the more likely it was that the children, relatives and friends resided in the G.V.R.D.

Six canonical analyses did not produce significant results.. These involved the life satisfaction variables and their intercorrelation with the variables addressing mobility, environmental evaluation, the presence of facilities within the building and community services in the local neighborhood; the correlations of the environmental evaluation set with mobility and the presence of community services and the correlates of residential satisfaction with the availability of community services.

TABLE 32

Canonical analysis of life satisfaction (set 1) versus contact with children, relatives and friends (set 2)

First canonical correlation 0.360 Significance 0.001

Coefficients for canonical variables

Set 1		Set 2	
FAMREL	-0.879	KIDCONT	0.848
SAT2DA	-0.332	RELATS	0.478
LOT2DO	-0.318		

Second canonical correlation 0.272 Significance 0.036

Coefficients for canonical variables

Set 1		Set 2	
LISAT	0.779	CHUGVD	0.871
SAT2DA	-0.716	KIDGVD	-0.559

TABLE 33

Canonical analysis of contact with children, relatives and friends (set 1) versus contact and living in G.V.R.D. (set 2)

Canonical correlation Significance

First	0.904	0.001
Second	0.651	0.001
Third	0.590	0.001

Coefficients for canonical variables

<u>First correlation</u>	<u>Second correlation</u>	<u>Third correlation</u>
Set 1	Set 1	Set 1
CHUMS 0.876	RELATS -0.889	KIDCONT 0.816
	KIDCONT 0.589	RELATS 0.557
	CHUMS 0.441	CHUMS 0.451
Set 2	Set 2	Set 2
CHUGVD 0.901	RELGVD -0.929	KIDGVD 0.894
	CHUGVD 0.466	RELGVD 0.443
	KIDGVD 0.464	CHUGVD -0.310

Multiple Regression Analyses

Having analysed correlations between sets of variables using the canonical correlation procedure, a number of individual variables which were weighted highly were used in a series of seven multiple regression analyses, of which six were significant. The results of the analyses have been summarised in Tables 34 and 35.

The number of hours which respondents spent in their rooms was considered to be an important variable as it gave insight into the respondents' relative satisfaction (residential and life) and patterns of mobility. As a result, the variable "ROOMHR" (Appendix 14), was used in two analyses as the dependent variable. No significant relationship emerged between the respondents' relationship with their family and the score obtained on the variables derived from the life satisfaction index.

Significant results were obtained for the other three life satisfaction variables "LOT2DO," "HEALTST" and "SAT2DA" ($P < 0.001$).

The variable "LOT2DO" was weighted twice as highly as the other two variables, predicting the situation that the more time the respondents spent in their rooms, the more they felt that they did not have enough to do to occupy their day. The results of the analysis would suggest that the more time the respondents spend in their rooms is predicted by the less they have to do, the more dissatisfied they are with their life at the present time and the poorer they perceive their health status to be.

Of the fifteen variables which dealt with the presence or absence of facilities within the building, eleven significantly predicted the amount of time the residents spent in their own room ($p < 0.05$). The absence of laundry facilities (Table 34), a crafts or sewing room and a greenhouse

TABLE 34

Regression analysis of life satisfaction versus "ROOMHR"

Standardised coefficients of independent variables
(Beta weights)

HEALST	0.171	Significance p	0.0001
LOT2DO	0.234	F	13.376
SAT2DA	0.126	Multiple R	0.383

Stepwise regression analysis of perceived presence of
facilities inside the residence versus "ROOMHR"

Beta weights

PRITEL	0.260		
CRAFTS	-0.166		
GHOUSE	-0.189	Significance p	0.041
INFIRM	0.110	F	2.032
COFFEER	0.067	Multiple R	0.354
LAUNDRY	-0.073		
GUESTR	0.062		
VOLVIS	-0.063		
CARDS	0.061		

Note: Only variables which contributed significantly to the regression equation are included.

strongly predicted more time spent in the room. The absence of an auditorium and a volunteer visiting service were weighted less highly but in the same direction. The presence of a room for playing cards or games predicted less time in the room, as did the presence of a private telephone. Although weighted less than the previous variables, the presence of an infirmary on the site, a coffee shop and a room where guests could sleep over if they needed were significant.

As a check on the previous analyses, the variable "TIMEOUT" was used in a series of three multiple regressions involving two measures of mobility, one of residential satisfaction and one of life satisfaction (Table 35). The variable "CANOUT" and "DOOUT" significantly predicted the amount of time spent outside the building ($p < 0.001$), with "DOOUT" having a weighting nine times greater than "CANOUT". Although the residential satisfaction variable "ROOMHR" and the life satisfaction variable "LISAT" were significant at the 0.001 level, neither attained a coefficient of 0.3 which has been used throughout as the critical level for reporting. However it should be noted that the coefficient for the variable "ROOMHR" was weighted seven times greater than "LISAT" in predicting "TIMEOUT".

Variables relating to the proximity of community services were used to predict the amount of time spent outside ($p < 0.05$). The presence of a community centre and a variety store significantly predicted more time spent outside, whereas the difficulty in getting to a senior citizen's centre and a medical office predicted less time spent outside.

Pearson Correlations

Having analysed how particular variables were predicted by sets of variables using the multiple regression analyses, it was decided to compute

TABLE 35

A. Regression analysis of the proximity to community services
versus "TIMEOUT"

 Standardised coefficients of x-variables
 (Beta weights)

PROSHO	0.074		
VARSTO	-0.252		
MEDOFF	0.243		p 0.019
CHURCH	-0.046		F 2.313
HOSP	-0.090	Multiple	R 0.368
LIBRAR	-0.091		
PARK	0.026		
SENCEN	0.381		
COMCEN	0.481		

B. Regression analysis of (1) "CANOUT, DO OUT" and (2)
"ROOMHR, LISAT" versus "TIMEOUT"

 Beta weights

CANOUT	0.064		p 0.0001
DO OUT	-0.602		F 52.83
		Multiple	R 0.557
LISAT	0.025		p 0.0001
ROOMHR	-0.146		F 13.954
		Multiple	R 0.326

Pearson correlations to establish what relationships if any existed between individual variables. "TIMEOUT" was correlated with respondents' perceived health status, the level of care they were receiving and the amount of time they spent in their rooms (Table 36). Each of the results were significant suggesting potentially important implications for future planning of institutions of this type.

The variable "SIZE" was added to the list of variables used in the questionnaire as it was one of the initial selection criteria. Three correlation analyses were computed and yielded significant results ($p < 0.01$) in two cases ("RESSAT" and "PRESRES"). It would appear that there was a higher level of residential satisfaction in the smaller institutions, but paradoxically, respondents who lived in the smaller places preferred to live elsewhere. There was no significant correlation between the length of time spent in their room and the respondents' perception of how well the needs of older people are looked after, when they were correlated with the variable "SIZE". Similarly, the age of the respondents did not produce significant results with the amount of time spent outside, nor did the life satisfaction score correlate with the amount of time spent in their rooms.

The level of satisfaction with the residence seems to be related to the amount of time spent in the room ($p < 0.001$), and as shown in the Table, higher satisfaction was expressed by respondents spending fewer hours in their rooms. There was also a significant correlation between the level of residential satisfaction and the level of care provided, and as the final significant correlation in Table 36 shows, the level of care was related to the number of hours spent in the room ($p < 0.01$).

Multiple Discriminant Analyses

In the preceeding analyses an attempt has been made to elucidate patterns of relationships on the basis of all the residents' responses. However, important differences which may exist between subgroups are not discernible. Two series of discriminant analyses were therefore performed. The first series involved the variables included in the principal themes of mobility, residential and life satisfaction. The aim of the analyses was to test for significant differences between the two levels of care being provided. The second series was designed to test for differences between the fifteen individual institutions.

A. Difference Between Levels of Care

There would appear to be a tendency for respondents in Personal care to spend more time in their rooms; to be more satisfied with the residence, but to prefer to live elsewhere and to perceive that the needs of older people are being well looked after in the institutions (Table 37). Respondents receiving Intermediate care on the other hand, spend less time in their rooms but appear to be less satisfied with the residences, seeing their needs as not being well looked after; but yet, they express a preference for remaining in their current residence.

Using the level of care to differentiate life satisfaction levels (Table 38), reveals a tendency for Personal care respondents to perceive that since moving into the institutions they worry less; sleep more; have relatively better health; see their children less often; dress up less often, and in general, feel that they do not have plenty to do most days. The analysis would seem to suggest that those in Intermediate care appear to worry more; sleep less and be in poorer health; dress up more

TABLE 36

Pearson product moment correlation analyses: Correlation coefficients and level of significance

<u>Variable pair</u>		<u>Variable pair</u>		<u>Variable pair</u>	
TIMEOUT	-0.140	TIMEOUT	-0.284	TIMEOUT	-0.315
with	(0.05)	with	(0.001)	with	(0.001)
HEALST		CARETY		ROOMHR	
SIZE	0.147	SIZE	-0.122	SIZE	-0.031
with	(0.001)	with	(0.030)	with	(0.317)
RESSAT		PRESRES		ROOMHR	
RESSAT	0.227	CANOUT	0.722	RESSAT	0.114
with	(0.001)	with	(0.001)	with	(0.040)
ROOMHR		DOOUT		CARETY	
ROOMHR	-0.108				
with	(0.049)				
CARETY					

TABLE 37

Discriminant analysis of residential satisfaction by care type

<u>Standardised discriminant Function coefficients</u>	<u>Eigen value</u>	<u>Relative percentage</u>	<u>Canonical correlation</u>
RESSAT 0.692	0.048	100.0	0.215
PRESRES -0.486			
ROOMHR -0.775			
NEEDOK 0.381			
	<u>Wilks' Lambda</u>	<u>Chi-square</u>	<u>Significance</u>
	0.954	11.05	0.026

Centroids of groups

PERSONAL	0.154
INTERMEDIATE	-0.595

TABLE 38

Discriminant analysis of life satisfaction by care type

<u>Standardised discriminant Function coefficients</u>		<u>Eigen value</u>	<u>Relative percentage</u>	<u>Canonical correlation</u>
LOT2DO	0.328	0.149	100.0	0.360
HEALST	-0.503			
CWORRY	0.612			
HEALTH	0.386	<u>Wilks' Lambda</u>	<u>Chi-Square</u>	<u>Significance</u>
SEEKID	0.404	0.871	18.489	0.010
SLEEP	-0.588			
DRESS	0.365			
<u>Centroids of groups</u>				
PERSONAL		0.216		
INTERMEDIATE		-0.595		

TABLE 39

Discriminant analysis of mobility by care type

<u>Standardised discriminant Function coefficients</u>		<u>Eigen value</u>	<u>Relative percentage</u>	<u>Canonical correlation</u>
CANOUT	0.320	0.229	100.0	0.431
TIMEOUT	-0.442			
USEBUS	-0.514			
FAMDRI	0.337	<u>Wilks' Lambda</u>	<u>Chi-square</u>	<u>Significance</u>
		0.814	38.288	0.001
<u>Centroids of groups</u>				
PERSONAL		-0.340		
INTERMEDIATE		0.545		

often than before and have things to do to occupy their time.

When the level of care was used to discriminate the variables in the mobility set, the results seem to show that Personal care respondents could and in fact did, go outside more often (Table 39). They also used the public transit system more, but went less often for drives with their family than did the Intermediate care respondents.

B. Differences Between the Fifteen Institutions

Two significant discriminant functions were produced when the variables in the residential satisfaction set were tested across each of the institutions. In the first function ($p < 0.001$), the amount of time the residents spent in their room seemed to be an important discriminating variable between the fifteen institutions (Table 40). The standardised discriminant function coefficients indicate that this variable was weighted almost twice as highly as the other significant discriminator, the perceived residential satisfaction. In the second discriminant function ($p < 0.05$), it was the variables "NEEDOK" and "PRESRES" which significantly discriminated between the homes (the weighting of the respondents' perception of how well their needs were being looked after being twice that of their preference for remaining in the institution or moving elsewhere).

Two significant functions were obtained in the discriminant analysis of the life satisfaction variables by each institution (Table 41). The life satisfaction score which was adapted from Wood et. al.'s Z-index was the most highly weighted coefficient of the first function, with the perceived health status and reported relationship with the family also being significant discriminators ($p < 0.001$). In the second function,

TABLE 40

Discriminant analysis of residential satisfaction by each residence

<u>Standardised discriminant Function coefficients</u>			<u>Eigen value</u>	<u>Relative percentage</u>	<u>Canonical correlation</u>
	<u>Func 1</u>	<u>Func 2</u>			
			0.352	56.9	0.510
			0.130	21.1	0.340
RESSAT	0.522	0.033			
PRESRES	-0.177	0.463			
ROOMHR	-0.980	-0.185			
NEEDOK	0.240	-0.910			
			<u>Wilks' Lambda</u>	<u>Chi-square</u>	<u>Significance</u>
			0.574	126.260	0.001
			0.776	57.704	0.027

TABLE 41

Discriminant analysis of life satisfaction by each residence

<u>Standardised discriminant Function coefficients</u>			<u>Eigen value</u>	<u>Relative percentage</u>	<u>Canonical correlation</u>
	<u>Func 1</u>	<u>Func 2</u>			
			0.246	42.4	0.444
			0.180	31.1	0.391
FAMREL	0.345	-0.563			
LISAT	0.657	0.130			
SAT2DA	0.057	1.032			
HEALST	0.522	-0.350			
			<u>Wilks' Lambda</u>	<u>Chi-square</u>	<u>Significance</u>
			0.589	99.539	0.001
			0.732	58.407	0.024

the variables, "FAMREL" and "HEALST" were significant at the 0.05 level.

The variables included in the theme of mobility reveal a number of interesting differences between the fifteen institutions (Table 42). Four significant functions were produced, with the variable "SIXBLS" (Q25) being important in each function. It would appear that patterns of mobility are significantly different between the institutions, and as will be discussed in the next chapter, this has important implications for the evaluation of appropriate residential milieux.

The importance of living in the same area as their children and their rating of the surrounding area were the two variables which significantly discriminated between the groups in the first function when the environmental evaluation set were tested ($p < 0.001$). In the second function, the satisfaction with the location in terms of the services and facilities available in the local area ("LOCSAT") was weighted most highly ($p < 0.05$). The preferred neighbours was also a significant discriminator (Table 43).

The final discriminant analyses reveal interesting differences between the fifteen subgroups and the relative presence of services in the area surrounding the institutions (Table 44). In terms of the relative ease of access to neighborhood services, hospitals and libraries were significant discriminators in four of the five functions produced ($p < 0.001$); shopping centres, variety stores and community centres in three functions; and medical offices, parks and senior citizen's centres in two.

TABLE 42

Discriminant analysis of mobility by each residenceStandardised discriminant function coefficients

	<u>Func 1</u>	<u>Func 2</u>	<u>Func 3</u>	<u>Func 4</u>
DOOUT	0.338	-0.575	0.093	0.372
SIXBLS	-0.331	0.555	0.522	-0.680
TIMEOUT	-0.425	0.761	0.003	0.271
MOBAID	-0.047	-0.182	-0.319	-0.591
VOLBUS	-0.762	-0.279	0.014	0.393
USEBUS	-0.211	-0.541	-0.155	-0.556
FAMDRI	-0.194	-0.194	0.618	-0.301

<u>Eigen values</u>	<u>Relative percentage</u>	<u>Canonical correlation</u>
0.656	45.9	0.630
0.303	21.2	0.483
0.165	11.5	0.376
0.156	10.9	0.367

<u>Wilks' Lambda</u>	<u>Chi-square</u>	<u>Significance</u>
0.298	273.743	0.001
0.493	159.692	0.001
0.643	99.760	0.001
0.749	65.252	0.020

TABLE 43

Discriminant analysis of environmental evaluation by each residence

<u>Standardised discriminant Function coefficients</u>	<u>Eigen values</u>	<u>Relative percentage</u>	<u>Canónical correlation</u>
	<u>Func 1</u>	<u>Func 2</u>	
		0.272	43.9
		0.203	32.9
			0.462
			0.411

SAMLOC	0.809	0.277
RATEHE	-0.627	0.346
LOCSAT	0.169	0.449
NEIBPRE	0.078	0.729

<u>Wilks' Lambda</u>	<u>Chi-square</u>	<u>Significance</u>
0.570	98.045	0.001
0.725	56.126	0.037

TABLE 44

Discriminant analysis of proximity to community facilities by
each residence

Standardised discriminant function coefficients

	<u>Func 1</u>	<u>Func 2</u>	<u>Func 3</u>	<u>Func 4</u>	<u>Func 5</u>
PROSHO	0.481	-0.458	0.490	0.102	-0.109
VARSTO	0.489	0.098	0.417	0.368	0.284
MEDOFF	-0.253	-0.427	-0.205	0.220	-0.639
HOSP	0.657	0.401	-0.755	-0.752	-0.084
LIBRAR	-0.451	0.222	-0.397	0.677	-0.759
PARK	-0.117	-0.041	-0.307	0.546	1.195
SENCEN	-0.137	0.231	0.174	-0.517	-0.709
COMCEN	-0.192	-0.853	-0.083	-0.694	0.511
TWOBL5	-0.036	0.352	0.121	-0.005	-0.027

<u>Eigen values</u>	<u>Relative percentage</u>	<u>Canonical correlation</u>
1.805	38.9	0.802
0.792	17.1	0.665
0.640	13.8	0.625
0.557	12.0	0.598
0.392	8.5	0.531

<u>Wilks' Lambda</u>	<u>Chi-square</u>	<u>Significance</u>
0.037	348.368	0.001
0.103	239.560	0.001
0.185	178.006	0.001
0.304	125.801	0.001
0.473	79.106	0.001

CHAPTER FOUR

DISCUSSION AND INTERPRETATION OF FINDINGS

Before focusing upon the discussion of the results reported in Chapter Three, the locational characteristics of the fifteen institutions studied will be examined.

Location Characteristics of the Fifteen Institutions

In discussing the research design, it was noted that a criterion for the selection of an institution was to ensure geographical representation in the sample of facilities equivalent to the distribution of non-profit care institutions throughout the Greater Vancouver Regional District. Nine of the institutions selected are located within the city of Vancouver (Figure 2), ranging from the west end of the downtown core (P-Table 1), through the downtown eastside (K) and as far as the east end of the city limits (G). Institutions C, E and J are situated at the southern limits of the city; A and N are located in the central residential core, and H is situated in the west end towards the University Endowment Lands. The remaining six institutions are located in the

municipalities of Burnaby (L and D), New Westminster (R), Coquitlam (F), West Vancouver (M) and White Rock (B).

The assumption made at the outset of the study that one of the major criteria for site selection was the availability of relatively cheap land seems to have been borne out in the majority of cases. As was frequently mentioned in interviews conducted with the administrators of the institutions, officials of the non-profit sponsoring organizations, representatives of the Long Term Care Program and the Central Mortgage and Housing Corporation, land costs within the G.V.R.D. are extremely high and competition for land is fierce in the residential areas. One of the implications arising from this situation is that pragmatic considerations take precedence over the more ideological questions of siting in the most suitable locations. Budget constraints and steep competition for available space largely determine the decision making and policy considerations involved in the selection of sites, and this in turn directly affects and constrains the administrative organization of the institutions. The result is that, in many instances, the sites are less than optimal and the problem becomes one of compensating for the situational drawbacks, by making the institutions as congenial as is humanly possible.

In the present context, situational drawbacks involve considerations of both the residential and environmental settings, such as the lack of accessibility by transportation; proximity to community services and facilities; barriers to communication (topographical and perceptual); personal

characteristics of the sample population (especially infirmities); the quality of the dwelling units (including design, communal and private spaces, the atmosphere and the administrative expediency of the staff) and the different value orientations of the various organizations involved in the Long Term Care Program.

It is by no means the intention of the present study to criticize or adjudge the quality, standards or organization of the fifteen homes, as it is felt strongly that their contribution to the community and to the residents is invaluable; any such approach would be presumptuous. What will be suggested is that the situational drawbacks outlined affect the optimal suitability of the residential milieu. However, the implicitly critical overtones of such an approach should be viewed within the overall context of the service which the institutions provide. The evidence of a very real concern for enhancing the quality of life for the residents was prevalent in the interviews and discussions conducted, and every possible co-operation and advice were afforded the researchers. The critical nature of the ensuing discussion is intended to highlight areas for future developments and should not be interpreted as an attack on the efforts of those currently involved in caring for the residents.

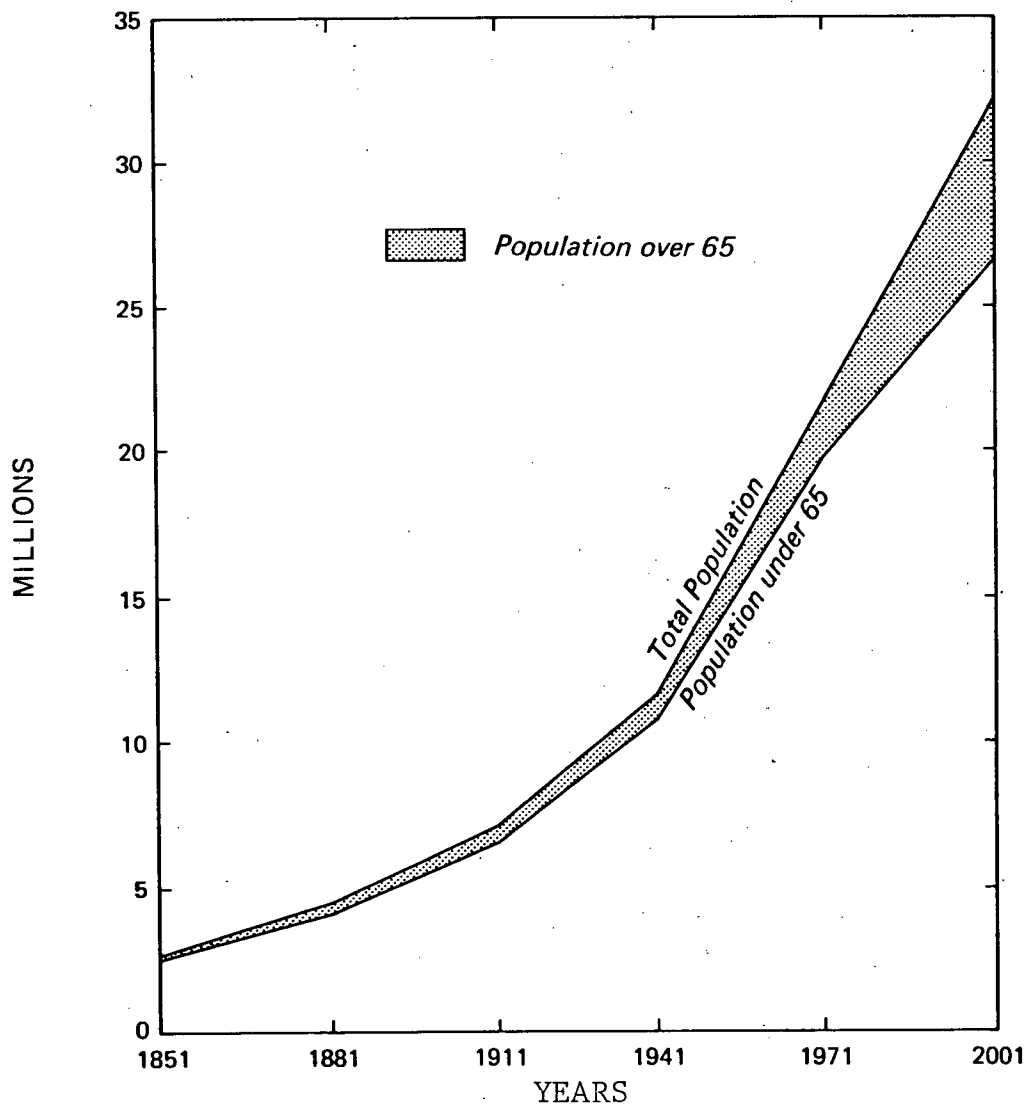
Situational Considerations Affecting
Milieux Suitability

Perhaps the single most important requirement in the provision of care for those elderly people who are no longer able to function independently in their own homes, is a detailed understanding of the nature of the residential population, and what are their special needs in their new setting. This may appear to be nothing more than a statement of the obvious, but in fact, as much of the relevant gerontological literature point out, we do not adequately understand the nature of this very heterogeneous sector of the population. In Canada as a whole, those persons over the age of sixty-five represent over 8% of the total population (over two million people in 1976). Although this proportion is less than in other western industrialized countries (U.S.A. 10.7%, France 13.6%, United Kingdom 14.2% and Sweden 15.1%), as shown in Figure 3 the elderly are one of the fastest growing segments of the Canadian population, and their problems have important national implications. Within the over sixty-five group, the "old old" are growing in number more quickly than the rest, have the greatest probability of illness, and are the most likely to require some form of institutionalization. It is suggested therefore, that in the case of the institutionalized elderly we are dealing with a very distinctive subgroup.

The average age of the respondents interviewed was 80.7 years, and almost three quarters of them were women. In the nation as a whole, almost half of the elderly women are widowed;

Figure 3

Past and Future Growth of Canada's Total Population
and Persons 65 years and older, 1851 - 2001.



Canada's Elderly

Statistics Canada Catalogue No. 98-800E
(Ottawa Queen's Print March 79)

in the institutions sampled, this figure is considerably higher (almost 75% of the respondents are widowed). The social implications of the very uneven sex ratio in each of the institutions appear to be compounded by the wide range of cultural backgrounds which are evident. This situation is particularly significant in British Columbia because of the influx of retired people from other provinces, many of whom were in fact born outside the country (59.5%). Also, the relatively high proportion of the elderly in the province (9.8%) are concentrated in the cities of Vancouver and Victoria, which can in part be attributed to their preference for a mild coastal climate, and the services associated with large urban centres.

As mentioned in the introduction, the proportion of the elderly population who are in need of institutional care in the province is about 7%, and they tend to be considerably older and more vulnerable because of their greater propensity towards illness and infirmity. As a result of their decreased ability to function independently within their own homes, they seek a conducive environment which is inherently protective, but which can fulfill their perceived unmet needs. Kostick (1961) has suggested that one common denominator to all homes for the aged involves the element of a group living experience for the residents. The institution is a microcosm with its own mores and structures; a world created to protect the residents by a team of specially trained personnel. However, it should be noted that there is a tendency for the residents to become separated from the community, and often their families. In the present sample, over one third of the respondents had no living children,

and of those who had children, a proportion had little or no contact with them. A similar pattern was evident in terms of the lack of contact with relatives and friends.

Characteristics of the Respondents Which
Affect Milieux Suitability

The problems of loneliness and social isolation which can pervade institutional living may, in part, be offset by a familiarity with the neighbourhood in which the institution is situated. In the current sample, almost one fifth of the respondents previously lived in the same local planning area as the institution in which they now reside, which may have reduced the problems of adjustment to unfamiliar surroundings for some. Although data were not collected on the question of relocation stress and the traumas associated with adapting to a radically different way of living, it would seem that many of the respondents had prior knowledge of the general locales. Seventy-three percent of those interviewed previously lived in the same municipality as their institution, and 96% had lived within the Greater Vancouver Regional District before entering the institution. This may have made the transition slightly easier to cope with, although the familiarity with the surroundings can only partially offset the radical differences in lifestyle which accompany institutional living.

It is apparent from the responses to the open-ended questions in the survey, and from observation, that the

respondents have to modify a whole pattern of reactions and relationships which they have developed throughout the course of their lives. In the new living situation they must endeavour to live closely with unrelated people. In effect, it is the homogeneity of the institutional way of life and the medically related physical and psycho-social infirmities which would seem to characterize similarities among the respondents. For example, the results of the discriminant analyses in Tables 37 to 39 show a tendency for Personal care respondents to share certain characteristics which differentiate them from the Intermediate care respondents. However, the question which remains to be answered is whether or not the similarities in behavioural patterns can be traced to the expectations of the institutional regimen.

The pattern which seems to emerge from the data is that the Intermediate Care respondents spend considerably more time inside the institutions, with a relatively higher proportion of them stating that they cannot go outside. This is reinforced by the data collected on the frequency of trips made outside the institution. They tend not to use the public transit often, and rely upon their families to provide transportation when they go out. The overall levels of life-satisfaction are somewhat lower than those of the respondents in Personal care, but interestingly, they would prefer to remain where they are rather than move elsewhere. They also seem to feel that they have plenty to do to occupy their days, which may be attributable to the fact that they are in closer contact with the nursing staff, and have a tendency to utilize the

the services and facilities within the building more. This may result in a closer identification with the institution as home.

The Personal care respondents are relatively more mobile and have higher levels of life-satisfaction, which could account for their tendency to prefer to live elsewhere. The higher degree of residential satisfaction may be explained by the fact that they see their needs as being well looked after and they have the security of the on-site medical services should they require them, but at the same time, they are still able to maintain their independence to an extent. They tend to have closer ties with the outside world, being more mobile and in need of less supervision.

Despite the fact that the need for medical care and nursing supervision brings the respondents together and requires their compliance to an institutional regimen, perhaps the single most salient characteristic which pervades the situation is the marked heterogeneity of the sample. Even the most cursory examination of the demographic data shows that differences in personal histories far outweigh the similarities, and questions the validity of trying to impose too many generalizations. To date in the social gerontological literature, too little emphasis has been placed on the important individual differences which exist and which affect the type of residential milieu which is suitable.

Aspects of the Residential Milieux Considered
to be Important by the Respondents

On the surface, it would appear that the majority of the respondents are happy with their living arrangements within the institutions. Over eighty percent of all those interviewed expressed moderate to high satisfaction, intimating that their needs were being well looked after, and that they would rather live where they were than move elsewhere. As mentioned previously, there was a tendency for respondents in Personal care to prefer to remain where they were while proportionately more of those receiving Intermediate care suggested that they would prefer to be living in their own home. There is a possibility however, that these residents may not actually be referring to a dwelling unit. Rather, it is suggested that their desire is for the healthier more independent lifestyle they led before requiring institutional support. It would seem that their present infirmities would preclude the possibility of their remaining at home without constant supervision, and that the feeling of bias against the institution may in part be directed towards their own disabilities.

The quality of the residences was given consistently as an important reason for choosing to enter the homes, as was the availability of medical facilities on the premises. Many of the residents seem to have entered the homes on the recommendation of either their doctor or family, or else, the institution was situated in the neighbourhoods with which some of the respondents were familiar (as in the case of institutions H, N, G and

P). The proximity to children, relatives and friends was also given as an important reason for moving in, and in the case of the ethnic and religious institutions, the stated reasons emphasized the affiliation with the sponsoring organizations. An interesting finding which emerged as an important reason for choosing a particular institution was the availability of meals and housekeeping facilities. These reasons were especially important in institutions P, L, K, G and B, and seemed to be relatively more important than other, locational aspects. Most of the reasons given would seem to reflect the respondents' inability to cope with the more taxing domestic chores as well as the desire to have the necessary medical facilities readily available. In conversations with many of the respondents the feeling of security and of not being an unnecessary burden on their children were also expressed as important reasons for deciding to seek institutional care.

The data also illuminate the principal reasons which resulted in the respondents' decisions to leave their previous homes (Table 14). The difficulty of looking after the home as a result of changes in health and physical status seems to be extremely important. Closely associated with this was the fact that medical problems become more acute with advancing years, and, with the increased propensity for serious falls resulting in broken limbs, many of the respondents were encouraged to seek a more sheltered environment, or else realized that they were no longer able to manage independently. Loneliness was also given as being an important factor, especially after the loss of a spouse.

The reasons given for leaving their previous residence were remarkably consistent across the fifteen institutions, as were the reasons why the respondents preferred to remain where they were or move elsewhere (Table 10). Of those who preferred to remain, many mentioned that the institutions contained everything they needed. They also stated that the good relationships they had with the staff and other residents were important considerations. The desire to be more independent and to live in their own home or nearer to their families were frequently expressed reasons for wanting to live elsewhere.

A somewhat different picture emerges however when one examines the reasons which the respondents gave for their satisfaction with the institutions. The answers do not directly correspond to the reasons given for choosing the particular places. The staff, atmosphere and the level of care were given as the most important considerations (Appendix 6), and although a large proportion of the residents reported that they were satisfied with everything, it was extremely difficult in many cases to obtain more specific answers. Also, the reasons given for dissatisfaction with various aspects seems to contradict the notion that they are in fact satisfied with everything.

The impression which emerges from the data does not seem to reinforce the idea that the respondents regard the institutions as their private domain. Satisfaction seems to be restricted to the quality of the physical plants and to the nature of their relationships with the staff and the administration. There is evidence in the data to support the notion frequently expressed in the literature, that the institutions

are run more along the lines of a hospital than a home, although a number of the administrators stated that they tried to avoid this. The respondents appear to highlight the services and resources available to them, but the feeling of being peripheral as a result of the lack of independence and autonomy was evident in more than one institution. Rather than the respondents being the predominant social force, it is felt that the institutional structure permeates and to an extent dictates the expected and actual way of life. It would appear as if the assessment of satisfaction is measured by the degree to which the respondents see themselves as having become assimilated into the existing structure.

The discriminant analyses involving residential satisfaction variables show that there are significant differences between the fifteen institutions, and these would seem to be related to the availability and satisfaction with the services and activities within the buildings and in the immediate vicinity. The tendency is for low levels of satisfaction to be related to the lack of accessibility and proximity to the desired services, and as can be discerned from the canonical correlations, this seems to result in lower levels of life satisfaction, and more negative assessments of the local environment. Also, where mobility is reduced through infirmities, satisfaction with the residence is lessened. One of the indicators of the unsuitability of the residential settings is the increasing number of hours the respondents spend in their rooms watching television or listening to the radio.

The results of the Pearson correlations would seem to reinforce this assumption as it can be seen that levels of satisfaction were significantly lower for those who spent more time in their rooms.

The reasons given for residential dissatisfaction tend to be related to personal problems, such as the respondents' inability to look after themselves. There was also dissatisfaction voiced about the perceived stigma attached to being in an institution. There was evidence of a strong dislike for mixing senile residents with those who are mentally alert. Some of the respondents remarked that they felt ill at ease with the senile residents, on the basis that what they could see in the senile residents, they could picture in themselves at some future point in time. This is a particularly complex situation to resolve as there are undoubtedly benefits to be derived from continued interaction for the senile residents, and as has been suggested in the gerontological literature, we are not sure whether or not some aspects of senility are in fact socially produced, the result of an inability to adjust to the institutional regime.

The data and findings discussed in this section reinforce the notion that the residential milieux are extremely important aspects of the respondents' satisfaction and psychological well-being. It would appear that the overall level of residential satisfaction is high for the majority of the respondents, but at the same time, it is felt that this is very closely related to the particular conditions which necessitate their being in

an institution. Many of the respondents seem to have few options open to them if there is no one to look after them when they are no longer able to remain in their own homes. The result is that the institution becomes their last home, and they have virtually little alternative but to be as satisfied as they can. However, this does not imply that the living arrangements are the most appropriate to fulfill their social as well as their medical needs.

To review, a number of poignant criticisms were expressed in the interviews concerning the lack of things to do and places to go, and it was evident on a number of occasions that loneliness and a lack of purpose were affecting the well-being of some of the respondents. Levels of satisfaction appeared to be closely related to the supervisory and health-care components in the institutions, but the feeling of security and safety which this afforded was offset by the loss of independence and the stigma associated with being unable to look after oneself. However, very few negative remarks were made about the quality of the institutions, and in fact, many respondents commented upon the highly efficient organization and highlighted the fact that the staff were a major positive influence. It is suggested however, that an examination of the reasons given for the respondents' dissatisfaction may provide useful insights for planning and organizational reconsiderations and could be very useful in helping to formulate more explicit site selection criteria. Although none of the institutions are in completely inappropriate locations, few of them seem to be closely integrated with the surrounding communities. The presence of services and facilities

within the buildings do compensate to an extent, but the problem remains that many of the respondents do not seem to have a variety of opportunities for meaningful social activities.

There is an attendant problem for the eighty and ninety year old residents in that they are not particularly oriented toward leisure activities. Their working lives were in all likelihood characterized by the Protestant Work Ethic, and as a result, there appears to be some difficulty in getting them to participate in leisure pursuits. This pattern appears to be changing with subsequent generations but remains at present one of the most confounding problems for activity directors and therapists.

In the next section the discussion will focus on the relative suitability of the fifteen institutions in terms of their accessibility and proximity to community services and facilities. The respondents' mobility patterns and perceptions of the local environments will be examined, and the implications of situational drawbacks such as topographical and other barriers to communication will be outlined.

The Suitability of the Environmental Milieux

The fifteen institutions have very different locations, ranging from residential neighbourhoods in inner city locales or older suburban areas, to predominately industrial areas to sites which are not particularly appropriate because of barriers or relative isolation. Nonetheless, the majority of the respondents indicated that they were generally satisfied with the local environments, although there may well be a degree of

acquiescence evident, particularly in the responses to questions 10 and 28. A relatively high degree of passivity among residents was observed in each of the institutions surveyed, and it is argued that the high level of satisfaction does not reflect high levels of interaction with the surrounding neighbourhoods. Rather, in the institutions which have dynamic views, and in which there is considerable activity, it is suggested that the more inactive respondents derive their satisfaction from merely watching what goes on around them. For example, institutions J, K, N and P are situated in areas where there is a considerable amount of activity in the immediate neighbourhoods, and it is possible for the respondents to be aware of this from the relative safety of the institutions. On the other hand, institutions A, F, L and M have developed the grounds around the buildings to enable the residents to get outside if they desire, but at the same time, they do not have to worry about managing the busy streets, steep hills and the traffic in the neighbourhoods. In the case of institutions B, H and to an extent G, the local environments do not appear to present major problems for the more mobile residents, although accessibility to local services and facilities can be problematic without transportation, particularly in winter. Institutions C and D are identical buildings but they are situated in vastly different locations, the Vancouver site (C) being in a predominately residential area close to shops, a park and an extended care unit, and is on a major public transit route, whereas the Burnaby location (D), is probably the most disadvantaged of all. The institution was built at the top of a particularly steep incline and

accessibility and proximity to services and facilities are poor. There is an extremely busy street at the bottom of the hill which links up with one of the major freeways in the area, and as a result, crossing the street presents major problems for many residents. The staff also indicated that there was a problem with those residents who had a tendency to wander, suggesting that the area around the institution was hazardous at times for them. Both institutions were designed to be inwardly oriented, the emphasis being on creating self-sufficient communities within the confines of the buildings and grounds. There is therefore less emphasis placed on encouraging residents to use the local neighbourhoods if their infirmities would make this problematic. Thus, it is difficult to assess what the high levels of satisfaction with the local environments refer to, and whether in fact the settings do satisfy the needs of the respondents by providing them with a variety of opportunities to enhance their social well-being.

One very consistent set of responses which seem to accurately reflect the suitability of the local environments concern the respondents' satisfaction with the grounds of the institutions (Q36). The landscaping, paths, seating areas and the condition of the sidewalks around the institutions were consistently regarded as being satisfactory. It would appear that these areas are extensively used by residents when the weather permits, and even those who are not particularly ambulatory have the opportunity of getting outside. Few of the respondents felt that there was a particular problem with traffic around the institutions (Table 24), either in terms

of noise or risk. Those whose rooms faced a major road did mention that on occasion traffic noise bothered them, but this was often qualified anecdotally by some who suggested that a positive consequence of the noise problem was that as long as they could hear the traffic, they were not getting deaf. There also did not appear to be a problem with crime in the area surrounding the institutions, and the security and safety controls seemed to be reassuring to the respondents, although, it was reported that in a few cases, problems had arisen with people posing as legitimate tradesmen or salespersons stealing from the residents. As a consequence of this, there was a very noticeable suspicion of outsiders, until their credentials had been verified, a situation which seemed to provide a common bond among the residents and an identification with the institution as their property to be defended.

It was assumed prior to the investigation that the importance of living in the same general area as their children would be an important aspect of the respondents' perceived satisfaction with the location of the institution. Interestingly, this did not prove to be the case in nine of the fifteen places. The respondents in the ethnic institutions E and F (French and German Canadians) felt that this was only somewhat important whereas the Jewish and Chinese respondents (K and N) thought that it was not at all important. It is interesting to note that each of the four ethnic institutions were situated in areas with significant concentrations of the particular ethnic groups, and thus, the results do not appear to be a function of location. In the other institutions, the majority of

respondents in A and J did not feel that living in the same area as their children was very important, whereas those in G, H and R felt it was somewhat important. The responses to this question (Q9) were compared with the data obtained on the amount of contact respondents had with those of their children who lived in the Greater Vancouver Regional District, and it was surprising to note that the respondents who felt that it was only somewhat important to live in the same area as their children had more than the average number of children living in close proximity.

There exists within the gerontological literature an unresolved debate concerning the type of living arrangements (segregated or integrated) and hence, the type of neighbours preferred by older people. This debate has tended not to include residents of institutions, but as can be discerned from the analysis, opinions on this issue seem to vary widely. Over one third of all those interviewed were indifferent as to the age of their preferred neighbours, and less than 10% expressed a desire to have exclusively younger people. The remaining 60% were divided evenly between those who preferred neighbours of the same age and those who preferred people of different ages. There were again interesting differences in the responses across the fifteen institutions, with more than the average preferring neighbours of the same age in institutions A and C, whereas in B, and to an extent in M, there was a desire for younger neighbours, which in part reflects the composition of the host communities. The tendency in K and L was for a preference for people of different ages whereas respondents in

institution H were divided between those who preferred people of the same age and those who preferred a mixture. Similarly, in N, the division was between neighbours of different ages and those who were indifferent, and in M, between younger people and a mixture. The respondents in the Burnaby location D were completely divided between the range of possible answers, and their responses were very similar to the overall averages outlined above.

It is suggested on the basis of the foregoing discussion that there is no one type of living arrangement which will suit the needs of all of the respondents. It would appear that there is a need for as much variation as possible to ensure that the older people have the choices to suit their preferences. However, at the present time, the demographic composition of areas projected for possible siting of institutions does not seem to be an important consideration, although it could enhance the potential for social interaction between residents and the local community.

The suitability of the environmental milieu is affected not only by the quality of the ground within which the institutions stand, but also by their proximity and accessibility to community services and facilities, and also by the residents' ability and desire to make use of them. As the majority of the residents are in need of at least some form of nursing supervision and medical care, they tend to be less mobile than they were at one time. Many of the people interviewed expressed the idea that their ability to move around in the environment provided both satisfaction and a challenge. Being able

to go outside without assistance was used in some instances as a gauge of how well a person was maintaining at least some independence. The local environment can be an extremely important element in the home range of the residents providing that there are services and facilities within easy access which they can utilize. In an attempt to establish how well suited the local neighbourhoods were to the needs and preferences of the elderly residents, questions were included in the questionnaire concerning the proximity and accessibility of a series of services which were felt to be important (Table 25).

The data suggest that the majority of the services (shops, variety or corner stores, medical offices, churches, hospitals and parks) were relatively accessible either by walking or by public transportation. Almost 90% of the respondents stated that there was a bus stop within two blocks of the institution, and the general impression of the public transit system was favourable. Shopping centres and a variety or corner store appear to be the most accessible to the majority of the respondents, and although parks, churches, hospitals and libraries were not in close proximity, they were accessible by bus. Medical offices, senior citizens' centres and community centres were generally regarded as being difficult to get to, and a relatively high proportion of the respondents did not know if they were available. The results of the discriminant analysis of the presence of community facilities (Table 44) reveal that there were significant differences between each of the institutions. A total of five significant standardized discriminant function coefficients were produced ($r < 0.001$) suggesting that

some of the locations were relatively more advantaged than others. Similar findings were produced from the results of the canonical correlation analysis shown in Table 31. The results show a tendency for senior centres and medical offices to be perceived as not being as accessible as libraries, churches and corner stores by those respondents who seldom left the institutions.

The nine questions which refer directly to the proximity and accessibility of local services and facilities (Q15), were used to derive an overall impression of the suitability of the local neighbourhoods. The results show that the respondents in institutions C, D, G, H, K and M regarded the selected services as being difficult to get to, or else were unavailable or unknown to them. In terms of specific services, investigation revealed that A, J, N and P are situated in locations where services are in closest proximity, although this is not necessarily reflected in the respondents' perceptions.

The results of the respondents' evaluation of the environments surrounding the institutions reveal that they are relatively satisfied with the locations. These perceptions however, do not fully reflect the actual proximity and accessibility. The mobility patterns, which will be discussed shortly, show that there is not a high degree of interaction with the local neighbourhoods. This is antithetical to the perceptions, and in effect, questions the interpretation of the responses at face value. The apparent contradiction can be attributed to a variety of reasons, and in the present context it will be argued that acquiescence and the perceptions of the relatively high proportion of the respondents who do not and cannot leave the

premises, mask the fact that a number of the institutions have comparatively inappropriate locations because of topographical barriers and the respondents' inability to manage their environments.

Mobility Patterns as Indicators of Interaction

It would appear that in all but four of the institutions (E, H, J and N) at least 25% of all the respondents stated that they did not leave the confines of the institutions. In the case of institutions B, C, D, G, K and M at least half of the respondents did not go outside placing more of an onus upon the staff to compensate for the loss. In each of the institutions, with the exception of K, at least two thirds of the respondents indicated that they could go out into the streets by themselves, but more than 25% of those in institutions B, C, D, G, H, K, L, M and R could not walk for six blocks and back if they had to do something. This suggests that if services and facilities are to benefit these people, they should be within this critical distance, although this was not always the case.

The results of the discriminant analysis of mobility patterns by each residence (Table 42) indicates that seven variables significantly discriminated between the fifteen institutions. In fact, four significant functions were produced. The amount of time which respondents spent outside the institution was significant in two of the four functions, and from the data it would seem that an average of 43% of the total sample very rarely went outside. Only in institutions A, E, F, H, J, L, N

and R, did more respondents than average go outside. From the canonical correlation in Table 30, it can be seen that there is a tendency for those who are relatively more mobile to have higher levels of life satisfaction, and thus, it can be suggested that the lower morale evident in almost half the institutions is in part attributable to the fact that the respondents lead more restricted lives. As they are less able to interact with the outside environment, their residential milieux are defined by the dwelling units. As a corollary to this, more respondents in the institutions with more than average numbers of immobile people stated that they did not have enough to do to occupy their days in the local area.

In an effort to obtain an overall impression of the relative patterns of mobility, fifteen questions relating to the theme of mobility were grouped for analysis (Appendix 10). The average responses to the questions were tabulated and each of the institutions were compared to the averages. From the results, it would seem that a higher proportion of the respondents in institution A were more mobile than those in the other places. For example, more respondents than average could and did go out into the streets by themselves, and could walk six blocks and back if necessary. They tended to spend more time outside and felt that there was enough for them to do in the local area. More used the public transit system although more stated that they had trouble using the bus, and a higher proportion went on organized bus outings. This can perhaps be attributable to the fact that fewer than average stated that they had available and used, a volunteer transportation service.

It was also interesting to note that fewer than average numbers went outside either to go shopping or to visit friends, and although 45% went for drives with their families, fewer needed to go on medically related trips.

The respondents in institution C were perhaps the least mobile of the fifteen institutions, but as has been previously pointed out, this may be due in part to the fact that the orientation was toward creating an enclosed community. Considerably fewer than average numbers went outside and this was reflected in the fact that more of the respondents felt that they did not have enough to do to occupy their time in the surrounding neighbourhood.

Three of the variables which significantly differentiated the mobility patterns in the fifteen institutions are the availability of help with transportation by a relative or friend, the number of times the respondents used the public transit, and going for drives with their family during a month (Table 42). There would appear to be a tendency for more of the respondents in A, B, D, F, H and M to receive help with transportation, and as a consequence, more of them went on trips with their families. The results of the analyses indicate that there are important relationships between the amount of time the respondents spend outside the institutions and their mobility patterns. From the Pearson correlations (Table 36), it would appear that especially among the Personal care respondents those who perceived their health status to be good, tended to spend more time outside. The Intermediate care respondents seemed to spend more time in their rooms and stated that their health status was poorer.

It would also seem to be the case that the proximity and accessibility of local services and facilities predicted the amount of time the respondents spent outside (Table 35).

It can be argued from these data that the very favourable perceptions of the environmental settings must be interpreted with caution. The patterns of mobility which can be discerned illustrate the point that interaction with the local neighbourhood presents major problems for a substantial proportion of the respondents. The residential milieux have contracted to such an extent that for many the milieu is the institution.

It would seem to be contingent upon the planners, organizers and administrators to provide environments to help the residents compensate for the loss of contact with the outside. The primary focus should therefore be on finding out what types of locations are best suited to the needs of the relatively immobile. This would seem to run contrary to the criteria currently being adopted, which have more to do with budget considerations than humanistic concerns. Although it is conceded that very few institutions would be built if only optimal sites were chosen, the problem remains that in certain cases the present locations are inappropriate. The social implications of this are that an already vulnerable sector of the community suffer even more. Social isolation is perhaps one of the the most detrimental attributes of institutional living, as for some of the residents it may result in a loss of purpose and the feeling that there is nothing left for them to do. Indications of this were evident in interviews conducted, and can be discerned from responses to the open-ended questions.

One way in which the lack of meaningful social activity is manifest can be seen in the number of hours per day many respondents spend in the solitude of their rooms. This does not deny that many residents prefer and at times need the privacy of their own room, and that there are a number of activities which are carried on in the rooms. Rather, the suggestion is being made that the unintended consequences of being too private can result in the virtual estrangement from the rest of society and the reliance upon the institutional way of life. The situation is made more complex when the privacy is enforced because of an inability to interact with the environment or as a result of the lack of residential and/or neighbourhood services and facilities. From Table 36 it can be seen that there is a higher degree of residential satisfaction shown by those who spend less time in their room. Interestingly, the results of the discriminant analyses suggest that there is a tendency for the respondents in Personal care to spend more hours in their rooms, but this is contrasted with the fact that they are able to leave the institution more often than the Intermediate respondents. They also appear to be relatively more satisfied with their homes, and from the results of the regression analyses, it would seem that the number of hours spent in the room significantly predicts levels of life satisfaction. More exactly, the more time the respondents spend in their rooms, the more likely they are to feel that they do not have enough to do most days, that their health status is poorer, and as a corollary, they are less satisfied with their lives at the present time. The results of the canonical analyses seem to imply that when

there are fewer facilities within the buildings, respondents spend more time in their rooms (Table 34). In short, the argument has been made that in order to prevent social isolation and alienation it is essential to provide appropriate on site facilities to augment or compensate for neighbourhood services. At present however, there are few guidelines available which can be readily implemented, and also, there is little consensus as to what constitutes appropriate services and facilities. The implications which this situation have on the morale of the respondents will now be discussed.

Milieux Suitability and Morale

Morale varied considerably between the fifteen institutions and consequently, an overall impression is difficult to determine. However, one particularly interesting result to emerge was that lower levels of satisfaction were expressed on two of the life satisfaction variables (LISAT and SAT2DA) in the four ethnic institutions. This pattern was not recognizable in any of the other variables, and does not appear to be attributable to any one influence operating in these places.

The majority of the respondents in each of the institutions appear to have a good relationship with their families. From the data it would appear that differences in the amount of contact with children, relatives and friends vary more within each of the institutions than between them, although the proportion of respondents having no contact with their significant others is high. This situation is especially evident in

institutions E, G, K, N and P, whereas respondents in F, H, J and M appear to have considerably more than average contact. With the exception of institution J, this latter group had more direct contact with children, relatives and friends residing within the Greater Vancouver Regional District.

One of the most interesting paradoxes involved the respondents' perceptions of whether or not they have enough to do to occupy their days. Almost 80% stated that they had enough to do, but on closer inspection, this is confounded by responses to other questions. When asked to describe the more important daily problems with which they have to contend, over half the responses reflected the fact that many respondents had neither any place to go, nor anything to do (Table 17). There were also attendant problems of immobility and loneliness, and medically related problems accounted for the other half of the responses. It would appear therefore that a certain discrepancy exists between the perceived levels of life satisfaction (or morale), and the nature and scope of the respondents' problems. Although mention must be made of the remarkable resilience of many of those interviewed, and bearing in mind that passivism may not necessarily result in lower levels of life satisfaction, it remains unclear as to how much the confusing nature of the data can be attributed to the relative inappropriateness of the residential milieu. It is perhaps the case that individual differences in life satisfaction are more important aspects for analysis than group differences, but this would require considerably more detailed investigation of the life-worlds of the individuals than are presently available.

Summary

Analyses of the data reinforces the importance of having appropriate residential milieux to ensure psychosocial well-being. The results indicate that both the residential settings and the neighbourhood environments are perceived as being satisfactory by the respondents, but their ability to utilize them and to maintain meaningful daily activities is constrained by situational drawbacks. These are due in part to the nature of the problems which afflict the respondents, the problems which are attendant in adjusting to the institutional regimen, and those which result from the unsuitability of locations which are chosen for budgetary rather than humanistic reasons. Levels of satisfaction vary considerably reflecting the relative merits and disadvantages in each institution, but the evidence suggests that immobility is a serious problem for a large proportion of the respondents. The social implications of the unintended consequences of providing inappropriate locations have been broached and it is suggested that more investigation is needed in this area if solutions are to be achieved.

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

Throughout the course of this thesis, two principal themes have been explored. Firstly, an attempt has been made to gather, synthesize and analyse information on the characteristics of the respondents which differentiate them from other groups of elderly people. It has been suggested that the residents of institutions are a more vulnerable sector of the community and have particular needs and contrasting preferences. The Long Term Care Program is still in its infancy, and not much is known about how well the psycho-social and, in addition, the health-care needs of the residents are being met within the institutions. Until this study, no attempt has been made to assess the suitability of the locations of the institutions, and there appear to be few clear guidelines as to what constitute appropriate site selection criteria. The social needs and preferences of the residents are ill-defined, as are the types of residential environments most suited to these needs. Much of this information is actually available within each of the institutions, but there is a distinct lack of inter-institutional communication at present

which is hindering the provision of effective solutions and the development of improvements for the future.

The second theme to be explored involved the concept of the residential milieu. It has been argued theoretically, and from the data, that the residential setting and the local environment are particularly important in the lives of the respondents as they define the spatial limits of the home range. In order that the way of life of the residents of institutions does not become characterized by social isolation, loneliness and a lack of purpose, it has been suggested that the milieux must be sensitive to their needs. A number of characteristics and patterns of behaviour have been identified in the data, and an attempt has been made to ascertain how satisfied they are in their present locations. The marked heterogeneity of the population sampled precludes making too many generalizations or recommendations although it has been argued that a variety of milieux are needed, and no single solution to the problems encountered will suffice.

Investigation of the appropriateness of the residential milieux should not be separated from investigation of the well-being and satisfaction of the residents. The psychosocial well-being of the respondents in the study has been shown to be inextricably linked to their social and physical environments and their ability to interact within them. At the present time the orientation of the institutions tends heavily towards the efficient provision of health care for the residents, although this would appear to be, at times, to the exclusion of the development and co-ordination of social

opportunities. As a result of the pragmatic efforts of the decision-makers to secure sites on land which is available and relatively cheap, certain factors affecting the social well-being of the residents have been overlooked.

The need for a more detailed understanding of those aspects of the elderly which result in their requiring specialized consideration was set out at the beginning of Chapter Four. It would appear from the data that two general types of respondents can be differentiated, and that their particular characteristics have important implications for the types of residential milieux which best suit their needs. These two groups do not necessarily need totally different types of residential settings; with the appropriate planning and service delivery systems, their needs can be met simultaneously. The basic assumption underlying the ensuing discussion is that because of the tendency of elderly people to become more frail with advancing years, and more susceptible to environmental constraints, their home range contracts. In the case of those respondents who were virtually immobile, the contraction can be so severe as to reduce the home range to the confines of the dwelling unit. This becomes their residential milieu, and as a result, their total needs must be met within the building. However, because of the emphasis on the provision of health-care, the overall quality of life may not be as varied and meaningful for these respondents. Attempts are made to provide activities and services within the buildings, but the responses to questions in the survey do not reflect the fact that the institutions compensate for

this loss to the extent that they might were they less constrained by locational factors and budget considerations. The routine of the institutional regime to an extent determines the way of life of those who do not leave the institutions, and it would not appear at present that the widest possible range of social opportunities are provided. This can be attributed partly to the fact that we do not as yet fully understand the complex nature of the residents in institutional settings, nor what services and facilities should be provided to enhance the quality of their remaining years. The immobile respondents typify the problems of many elderly people still residing in their own homes, and solutions to their problems can have wider implications, but until more evidence is available, the appropriate residential milieux for them remain unclear. It has been suggested in the present context however, that the existing locations are less than optimal for many.

The second broad group which can be differentiated from the results of the data are those respondents who are relatively more mobile. It is apparent that they experience many problems in their efforts to remain integrated with the surrounding community. For this group, the residential milieux involve the dwelling unit and the local environment, and consequently, the present criteria used to select sites for the institutions have important social implications for them. Environmental barriers, whether they are perceived or actual, have an effect upon the amount and types of meaningful activities which the respondents can pursue. Topographical barriers and the lack of accessibility or proximity to local services and facilities

III

can result in their virtual imprisonment in an environment they are unable to utilize. The frustration associated with such a situation was expressed on more than one occasion, and would appear to be an important source of dissatisfaction and concern.

The institutions under review are not designed to be total, and it is the policy of the staff and administration to encourage those who are able, to maintain as much contact as possible with the local community. However, these efforts are futile if the locations of the institutions are inappropriate to the needs and preferences of the residents, or if the local services and facilities are not present. In situations in which the mobile respondents cannot, or fail to make use of their surroundings, they are as socially constricted as the more immobile, and tend to remain relatively inactive within the buildings. As the data show, the problem is made more complicated and frustrating when local services exist but are not accessible to those who have no transportation available.

It has been argued from the analyses that considerably more emphasis be placed on the development and maintenance of social activities for the respondents, both within the institutions and in the immediate neighbourhoods. This means that the design specifications, site selection criteria, budget considerations and orientation of those concerned with enhancing the quality of life and developing Living Sites for the elderly in the institutions should be as concerned with social aspects as with health care. One way in which this may be effectively produced is by the provision of residential milieux which are integrated within the larger communities.

There are important contributions which geographers can make to the study of the spatial characteristics of the elderly. The perspectives currently being developed in the fields of social geography and to an extent in locational analysis provide a useful medium through which to analyse the complex inter-relationships between man and his physical and social environment. This is perhaps even more crucial when one is dealing with the institutionalized elderly as their interaction with their constricted surroundings is vital for the maintenance of meaningful daily activities. It is therefore the conclusion of this study that more research be focused on the study of the inter-relationships of the individuals within the context of their living space and life histories to ascertain their needs and preferences, and how best to accommodate them within the larger social structure.

APPENDIX I

SAMPLE SELECTION DATA FORM

SAMPLE SELECTION DATA

This information is to be collected from the Administrator/Manager of the residence.

1. Resident's name: _____ For Office Use Only
2. Room Number: _____ 1. Subject I.D. _____
3. Telephone Number: _____ 2. Facility I.D. _____
4. Name of Facility: _____
5. Date of resident's admission _____
6. Resident's level of care: (1) _____ Personal Care (2) _____ Intermediate Care
7. Date of last assessment: _____
8. Country of origin: _____
9. Date of birth: _____

Health Functioning (compared to normal functioning)?

A. COMMUNICATION

10. Ability to see (with glasses if worn):
- (1) _____ Normal (2) _____ Limited Vision Can (3) _____ Adequate for
read, watch T.V. Personal safety
- (4) _____ Dist. only (5) _____ Totally blind
light & dark
11. Ability to Hear (with hearing aid if worn):
- (1) _____ Normal (2) _____ Limited Hearing (3) _____ Adequate for
Personal safety
- (4) _____ Almost totally deaf (5) _____ Totally deaf
12. Ability to speak or understand English:
- (1) _____ words fully understandable (2) _____ words mostly understandable (3) _____ words partially understandable
- (4) _____ words not understandable (5) _____ other language spoken

B. PERSONAL FUNCTION

13. Ambulation: (1) _____ Fully ambulatory
Independent only with: (2) _____ Cane Requires Assistance (6) _____ on the _____ level
(3) _____ Walker (7) _____ on stairs
(4) _____ Crutches (8) _____ immobile
(5) _____ Wheelchair

C. MENTAL FUNCTION

- | | | | | |
|-------------------------|--|--|--|--|
| 14. Comprehension | | | | |
| 15. Memory | | | | |
| 16. Self direction | | | | |
| 17. Reality Orientation | | | | |
| 18. Emotional Stability | | | | |

D. PROBLEM BEHAVIOURS

19. _____ Antisocial
20. _____ Violent and Destructive
21. _____ Inappropriate Habits/Manners
22. _____ Attention Demanding
23. _____ Withdrawn
24. _____ Hyperactive
25. _____ Wandering
26. _____ Other, specify

E. SOCIAL FACTORY/GENERAL INFORMATION

27. Ability to shop:

- (1) _____ Requires no help (2) _____ Shops independently small items (3) _____ Needs to be accompanied
(4) _____ Completely unable physically to shop (5) _____ Mentally unable to shop

28. Ability to travel:

- (1) _____ Able to travel (2) _____ Utilizes own travel - taxi but not bus (3) _____ Travels if accompanied
(4) _____ Physically unable to travel (5) _____ Mentally unable to travel

29. Ability to use the telephone:

- (1) _____ Requires no help (2) _____ Dials a few well known numbers (3) _____ Answers, phone does not dial
(4) _____ Physically unable to use telephone (5) _____ Mentally unable to use telephone

F. SUPPORT FROM FAMILY AND FRIENDS

1. _____ Assistance with daily living (A.D.L.)
2. _____ Assistance with Transportation
3. _____ General Encouragement and friendship

G. SOCIAL CONTACTS - Describe Applicant's involvement with community groups/ individuals. Note degree of social isolation.

APPENDIX 2

LETTER CONTACTING RESIDENTS

THE UNIVERSITY OF BRITISH COLUMBIA
2075 WESBROOK MALL
VANCOUVER, B.C., CANADA
V6T 1W5

DEPARTMENT OF PSYCHOLOGY

Dr. John Mercer, of the U.B.C. Geography Department and I are planning to conduct a study in August and September of the locational needs and preferences of residents in personal and intermediate care.

What we intend to do in this study is to interview a sample of residents of care facilities of various size and in various locations in the Greater Vancouver area. We would like very much to include your opinions in our study.

The interview will take approximately one hour, and will be conducted in the privacy of your room or some other private place in the building if you do not live alone. In it we will ask for some information about you personally - for example, your age, sex and marital status, what area you lived in before and how you came to move into your present residence. We will also ask your opinion about facilities and services offered in your residence and the neighbourhood surrounding it and what facilities and services you would like to have that are not now available to you.

The information that you give us will be kept strictly confidential. It is for research purposes only and will not be seen by the management of your residence or anyone else other than the study staff. Your name will not appear on any data. You don't have to answer any questions you don't want to answer, and you may end the interview at any time if you feel tired or for any other reason you would like to stop.

Within the next two or three days one of our staff will phone you to answer any questions that you may have about the study and to arrange a convenient time for an interview.

The information gathered from you and others cooperating in the study will be analyzed and will be used for the guidance of government officials, non-profit societies and others concerned with housing and care for older people.

If, when the study is complete, you would like to have a copy of the summary report, we should be pleased to see that you receive one.

Yours sincerely, _____

Gloria M. Gutman, Ph.D.
Assistant Professor

APPENDIX 3

RESIDENTS' INTERVIEW SCHEDULE

8. In general, how do you rate your relationship with your family? Would you say it was

(1)___Excellent (2)___Good (3)___Fair (4)___Poor

9. How important is it for you to live in the same area as your children:

(1)___Very important (2)___Somewhat important (3)___Not important?

C. NATURE AND LEVELS OF PERSONAL MOVEMENT IN LOCAL AREA

a) AWARENESS OF LOCAL SERVICES AND FACILITIES

10. In general, how would you rate the area right around _____ (Name) _____ as a place to live? (Record all comments)

(1)___Excellent (2)___Good (3)___Fair (4)___Poor (5)___Very poor

11. In general, how satisfied are you with living here?

(1)___Very Satisfied (2)___Moderately satisfied (3)___Very dissatisfied

12. Why do you feel that way about _____ (Name)?

13. If the opportunity was available, would you rather live in _____ (Name) _____ or somewhere else? (Probe for reasons)

_____ Present Residence _____ Elsewhere

Reasons:

14. If you could choose to live anywhere within the Lower Mainland, would you prefer that your neighbours were :-

1. _____ Mostly the same age as you
2. _____ Mostly younger than you are or
3. _____ Of different ages?
4. (4) _____ (Do not read) 4. Indifferent

15. We want to find out how close some important services and facilities are to _____ (Name). I am going to describe some services and facilities to you, and I would like you to tell me how close they are to here; whether it is easy for you to walk to them; if you need to take a bus to get to them, or if they are not provided in the local area.

	Easy Walk	Easy Access by Public Transport	Difficult by Public Transport or Walking	No such Facility available	Don't Know
<u>Faculty/Service</u>	(1)	(2)	(3)	(4)	(5)
1. Shopping Centre	_____	_____	_____	_____	_____
2. Variety/corner store	_____	_____	_____	_____	_____
3. Medical Office/clinic	_____	_____	_____	_____	_____
4. Major denominational churches	_____	_____	_____	_____	_____
5. Hospital	_____	_____	_____	_____	_____
6. Library	_____	_____	_____	_____	_____
7. Park	_____	_____	_____	_____	_____
8. Senior citizen centre	_____	_____	_____	_____	_____
9. Community centre	_____	_____	_____	_____	_____

D. MOTIVATIONS AND PATHWAYS INTO PERSONAL/INTERMEDIATE CARE FACILITY AND BASES OF SITE SELECTION

16. Can you identify (on the card provided) the three most important reasons for leaving where you lived before?

1. _____ Medical Advice
2. _____ Dissatisfaction with previous area in which I was living
3. _____ Financial Reasons
4. _____ Difficulty in looking after my previous residence
5. _____ Possible future need for medical help
6. _____ Change in my health or physical strength
7. _____ Loneliness
8. _____ Need for more privacy
9. _____ Wish to be with people of my own age
10. _____ Other reasons (specify)

17. Can you now identify the 3 most important reasons for choosing _____ (Name) (show card B)

1. _____ Cost
2. _____ Children or relatives close by
3. _____ Friends or relatives moving in or already there
4. _____ Familiar neighbourhood
5. _____ Nearness to facilities (shops etc)
6. _____ Quality of dwelling unit
7. _____ Recreational facilities and activities available on site
8. _____ Medical facilities on premises
9. _____ Availability of housekeeping facilities3services
10. _____ Availability of meals on premises
11. _____ It was the only one available
12. _____ Other reasons - specify)

E. RESIDENTIAL HISTORY PRIOR TO MOVE INTO PRESENT RESIDENCE

18. Where have you lived for the last 5 years?
19. When did you move into _____ (name)?
 (1) _____ Date
 (2) _____ Previous Address (street intersection will suffice)
20. Have you previously lived in a Personal or Intermediate Care Facility?
 (1) _____ Yes (2) _____ No
21. If yes, where was this? _____ Location
22. Why did you leave that development? _____ (Specify)

F. PERSONAL MOBILITY

23. Can you go out into the street(s) by yourself? (1) _____ Yes (2) _____ No
24. Do you go out into the street(s) by yourself? (1) _____ Yes (2) _____ No
25. If you had to walk for 6 blocks to do something, could you walk there, and back by yourself? (1) _____ Yes (2) _____ No

G. USES OF LOCAL SERVICES AND FACILITIES

26. How many times a week do you leave _____ (Name) and go outside?
 (1) _____ 0-1 (2) _____ 2-3 (3) _____ 4-5 (4) _____ 6-7 (5) _____ +7
27. Are there enough things for you to occupy your day in the area _____ immediately around
 _____ (Name). (1) _____ Yes (2) _____ No

If no, probe for reasons.

28. In general, are you satisfied with the location of _____ (Name) in terms of the services and facilities which are provided locally?
 (1) _____ Yes (2) _____ No
 If no, probe for reasons.

29. Do you have regular help from a friend or a relative in getting to any of the places you most want to get to? (1) _____ Yes (2) _____ No

30. How do they help you? (who helps) a) _____ relative: b) _____ child:
c) _____ other
31. Do you regularly have available and use a volunteer transportation system (or professionally staffed one) - driver, special bus, etc. - to get to places you especially want to go to?
1. _____ available and use
 2. _____ available and do not use - (probe for why)
 3. _____ not available
 4. _____ don't know
32. How good is the public transport in this area?
- (1) _____ excellent (2) _____ fair (3) _____ poor
33. Is there a bus service close by (within 2 blocks)? (1) _____ yes (2) _____ no
34. How often do you use the bus in an average week? Do you use it:
- (1) _____ never (2) _____ 1-2 times (3) _____ 3-4 times (4) _____ 4-5 times
(5) _____ 5-6 times (6) _____ +7 times
35. Do you have any trouble using the bus? (1) _____ yes (2) _____ no
(If yes ask: What type of trouble do you have using the bus)
36. There are a few things about this neighbourhood that I would like your ideas on. For each of the things I mention please tell me if you are satisfied or dissatisfied, and if dissatisfied what's wrong with the way it is now. Are you satisfied or dissatisfied with (read each item below - if dissatisfied probe for what is wrong)

S. D. K. What's
Wrong

- | | | | |
|--|-------|-------|-------|
| 1. the landscaping, paths and seating in the outdoor area surrounding the building. | _____ | _____ | _____ |
| 2. the way the sidewalks are kept up. How good is the <u>condition</u> of the sidewalks around here? | _____ | _____ | _____ |
| 3. What about the amount of noise from traffic, trains, airplanes, industry and things like that? | _____ | _____ | _____ |
| 4. Is the traffic a hazard around here? | _____ | _____ | _____ |
| 5. How safe is this area from crime, vandalism, etc. | _____ | _____ | _____ |
| 6. How satisfied are you with the shopping places in this area? | _____ | _____ | _____ |
| 7. How satisfied are you with the entertainment facilities in this area? | _____ | _____ | _____ |
| 8. Does the neighbourhood cater to your needs? | _____ | _____ | _____ |

37. I would like to ask some questions about the way in which you spend your time. Now, approximately how many times a month do you go outside the residence to:

Times a Month

- | | |
|--|-----------|
| 1. attend clubs, lodges, or other meetings | (1) _____ |
| 2. attend a sports event | (2) _____ |
| 3. swim, bowl or take part in other indoor or outdoor sports (specify) | (3) _____ |
| 4. play bingo | (4) _____ |
| 5. visit or entertain friends (specify) | (5) _____ |
| 6. do volunteer work | (6) _____ |
| 7. eat out at a restaurant or cafe | (7) _____ |
| 8. go to a bar or pub/lounge etc. (outside building) | (8) _____ |
| 9. go shopping, whether it be window shopping or visits to the nearest store | (9) _____ |

38. During the past month, how many times did you go: Times a Month

- | | |
|--|-----------|
| 1. outwith your family, for a visit or a drive etc | (1) _____ |
| 2. on trips or excursions (bus trips or trips other than with family) | (2) _____ |
| 3. on medically related trips (e.g. to dentist, ophthalmologist, etc.) | (3) _____ |

39. In general, would you say that most days you have plenty to do?

(1) Yes (2) No

If no, can you tell me why this is so. (probe)

40. We would like to know what sorts of problems you have to deal with in your daily life. Can you tell me in your own words what some of the more important problems that you face these days are? (probe)

41. Life Satisfaction Index

Could you please tell me if you agree or disagree with the following statements. There are no right or wrong answers, we merely want your opinion. (Ask: Do you think that)

Agree Disagree

(1) (2)

- | | | |
|--|-------|-------|
| 1. As you grow older, things seem better than you thought they would be? | _____ | _____ |
| 2. You have had more breaks in life than other people you know? | _____ | _____ |
| 3. You are just as happy as when you were younger? | _____ | _____ |
| 4. Most of the things you do are boring and monotonous? | _____ | _____ |
| 5. The things you do are as interesting to you as they ever were? | _____ | _____ |
| 6. As you look back on your life you are fairly well satisfied? | _____ | _____ |

41 /-

<u>Agree</u>	<u>Disagree</u>
(1)	(2)

7. You have made plans for things you will be doing a month or year from now? _____
8. When you look back over your life, you didn't get most of the important things you wanted _____
9. Compared to other people, you get down in the dumps, quite often. _____
42. How satisfied are you with your life today?
 (1) _____ very satisfied (2) _____ satisfied (3) _____ somewhat dissatisfied
 (4) _____ very dissatisfied.
43. Would you say that you have changed in any of the following ways since you have moved into _____ (name)?
- | | 1 | 2 | 3 |
|------------------------------------|------------------|------------------|----------|
| 1. Do you feel | more safe () | less safe () | same () |
| 2. Do you worry | less () | more () | same () |
| 3. Do you have | more energy () | less energy () | same () |
| 4. Is your health | better () | worse () | same () |
| 5. Are you | more active () | less active () | same () |
| 6. Do you have | more friends () | less friends () | same () |
| 7. Do you eat | better () | worse () | same () |
| 8. Do you see your children | more often () | less often () | same () |
| 9. Do you see your close relatives | more often () | less often () | same () |
| 10. Do you sleep | better () | less often () | same () |
| 11. Do you go out | more often () | less often () | same () |
| 12. Are you generally | happier () | less happy () | same () |
| 13. Do you dress up | more often () | less often () | same () |

H. AWARENESS AND USE OF PROGRAMMES AND ACTIVITIES SCHEDULES
WITHIN (NAME)

44. What do you like most about _____ (name)?
45. What do you think you like least of all in _____ (name)?
46. What do you think could be done to make _____ (name)
 better and more satisfying for you? (probe)

47. In terms of the services and facilities provided within the building, could you tell me which of the following exist, and also which services now lacking you feel would be useful?

Service/Facility	check if in <u>development</u>	check if not in but feels would <u>be useful</u>	don't <u>know</u>
1. crafts/sewing room	_____	_____	_____
2. laundry facility	_____	_____	_____
3. beauty shot	_____	_____	_____
4. library room	_____	_____	_____
5. greenhouse	_____	_____	_____
6. special garden plots	_____	_____	_____
7. guest room(s)	_____	_____	_____
8. separate card, chess etc room	_____	_____	_____
9. telephone in each room	_____	_____	_____
10. coffee shop	_____	_____	_____
11. auditorium	_____	_____	_____
12. does a mobile library visit?	_____	_____	_____
13. is there a volunteer transportation service?	_____	_____	_____
14. is there a volunteer friendly visiting service available?	_____	_____	_____
15. religious service	_____	_____	_____
16.. infirmary where a person could go for a few days or weeks if he gets sick and then move back to his own room	_____	_____	_____

48. (a) In an average day, about how much time do you spend in your room? ____
(b) What do you do there?

Before finishing the interview, I would like to ask just a few more questions about you yourself.

HEALTH STATUS

49. Compared to most people your age, how would you rate your health at the present time?

Would you say it was

1. excellent	_____
2. good	_____
3. fair	_____
4. poor	_____
5. very poor	_____

EMPLOYMENT STATUS

50. At the present time do you do any work for which you get paid?

(1) ____ Yes (2) ____ No

If Yes, specify type of work _____
and whether it is (1) _____ full time or (2) _____ part time

51. Before retirement, what was your and/or your spouse's occupation? _____
52. About how well would you say the needs of elderly people are looked after in _____ (Name). Would you say very well, adequately, or not very well?
- (1) _____ very well (2) _____ adequately (3) _____ not very well
53. Finally, we are not interested in how much money you have coming in each month, but we would like to know what are your sources of financial support. As I read off the following list, can you tell me if any of the items are a source of income?

	<u>YES</u>	<u>NO</u>
	(1)	(2)
1. Canada Pension Plan	_____	_____
2. Private Pension	_____	_____
3. Wages	_____	_____
4. Investment Income Sources	_____	_____
5. Annuities	_____	_____
6. Help from your children	_____	_____
7. Other (specify)	_____	_____

INTERVIEWER RATING

54. After hearing the respondents answers to all of these questions, how would you say he or she feels about life as a whole?
- 1) _____ completely satisfied, no reservations or problems
- 2) _____ generally satisfied and happy but with minor problems
- 3) _____ fairly satisfied but with some fairly major problems
- 4) _____ neutral
- 5) _____ somewhat dissatisfied but with a number of good things going
- 6) _____ generally dissatisfied but happy with a few things
- 7) _____ completely dissatisfied, could see nothing right with life
55. Overall, how great was the respondent's interest in the interview?
- (1) _____ very high (2) _____ above average (3) _____ often sincere
57. Additional comments:

APPENDIX 4

AGE DISTRIBUTION BY RESIDENCE

Age distribution by residence

<u>Age Cohort</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>	<u>N</u>	<u>P</u>	<u>R</u>
50-54		4.8		5.0							7.7				
55-59				5.0						6.3					
60-65			4.8	10.0	5.0		5.6			6.3	7.7				25.0
65-69			4.8	5.0		15.0	5.6		11.8	12.6	7.7				
70-74	18-1		14.4	15.0	10.0	20.0	5.6	5.6	11.8	12.6	15.4				
75-79	9.0	14.3	9.6	20.0	15.0	15.0	22.3	22.3	5.9	18.8	7.7	16.6	22.2	14.3	25.0
80-84	36.3	14.4	23.0	5.0	40.0	25.0	39.0	16.8	23.6	12.6	23.1	41.6	25.0	42.9	25.0
85-89	27.2	52.4	9.5		20.0	10.0	11.2	33.4	29.5	18.8	30.8	16.7	50.0	28.6	25.0
90-94	4.5	4.8	14.4	15.0	10.0	15.0	11.2	22.3	11.8	12.6		14.9			
95-99		9.5	4.8												
100				3.0											

No	4.5	0.0	14.3	5.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0	11.1	14.3	0.0
Answer															

APPENDIX 5

SEX DISTRIBUTION BY RESIDENCE

Sex Distribution by Residence

<u>Facility</u>	<u>Male</u>	<u>Female</u>	<u>Sample Size</u>
A	22.7%	77.3%	22
B	0	100.0	21
C	33.3	66.7	21
D	35.0	65.0	20
E	40.0	60.0	20
F	30.0	70.0	20
G	22.2	77.8	18
H	33.3	66.7	18
J	41.2	58.8	17
K	43.8	56.3	16
L	53.8	46.2	13
M	16.7	83.3	12
N	0	100.0	9
P	0	100.0	7
R	0	100.0	4
All Facilities	27.7	72.3	238

APPENDIX 6

REASONS FOR SATISFACTION WITH EACH RESIDENCE

Reasons for Satisfaction with each residence

<u>Residence</u>	<u>Reason 1</u>	<u>Reason 2</u>	<u>Reason 3</u>	<u>Reason 4</u>	<u>Reason 5</u>
A	Staff	Atmos- phere	All	Care	Religion
B	Care	"	All	Staff	Own Room
C	Staff	All	Food	Atmos- phere	
D	"	"	Atmos- phere	Own Room	Freedom
E	"	Atmos- phere	Clean	All	Activities in Bldg.
F	"	"	All	Care	Atmos- phere
G	"	All	Religion	Food	Care
H	Atmos- phere	Staff	All	Religion	"
J	Religion	All	Atmos- phere	Staff	Own Room
K	Care	Activities in Bldg.	All		
L	Own Room	Staff	Activities in Bldg.	All	
M	Staff	Care	Atmos- phere	"	
N	Religion	Staff	"		
P	All	Staff			
R	Clean	Atmos- phere	Care		

Question asked: What do you like most about (name of Residence)?

APPENDIX 7

REASONS FOR DISSATISFACTION WITH EACH INSTITUTION

Reasons for dissatisfaction with each institution

<u>Residence</u>	<u>Reason 1</u>	<u>Reason 2</u>	<u>Reason 3</u>	<u>Reason 4</u>	<u>Reason 5</u>
A	Organ- isation	Mixing senile-alert	Food	No longer independent	
B	Mixing senile-alert	No longer independent	Nothing to do	Being in institution	Organisation
C	"	"	Being in institution	Nothing to do	"
D	"	"	Organisation	Food	Change Bldg.
E	"	"	Nothing to do	Organisation	Food
F	No longer independent	Nothing to do	Mixing senile-alert	Being in institution	Change Bldg.
G	Mixing senile-alert	"	Being in institution		
H	No longer independent	Organisation	Nothing to do	Food	Mixing senile-alert
J	"	Mixing senile-alert	"	Being in institution	Food
K	"	Being in institution			
L	Mixing senile-alert	Nothing to	Food	Change Bldg.	
M	Being in institution	Organisation	No longer independent	Food	Nothing to do
N	Nothing to	Food	"	Want family closer	Don't get out
P	No longer independent	Noise	Bad location		
R	Nothing to do	Change Bldg.			

Question asked: What do you like least of all in (name of residence)?

APPENDIX 8

NUMBER OF HOURS PER DAY SPENT IN THE ROOM BY RESIDENCE

Number of hours per day spent in the room by residence

<u>Hours</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>	<u>N</u>	<u>P</u>	<u>R</u>
1			14.3	15.0							7.7				
2			42.9	20.0	10.0			5.6							
3	13.6			10.0				5.6						14.3	
4	27.3	14.3	14.3	10.0	15.0	20.0	5.6	22.2			38.5		22.2		
5	13.6	4.8	4.8	10.0	10.0	15.0	5.6	31.1	11.8		7.7		11.1	14.3	50.0
6	18.2	23.8	4.8	10.0	50.0	40.0	11.1	27.8	35.3	12.5	7.7	25.0	44.4		
7	13.6	9.5		5.0			11.1		17.6	6.3	7.7	25.0	22.2		
8	9.1	4.8	4.8	5.0	5.0	15.0	27.8	16.7	23.5	12.5	15.3	8.3		14.3	
9		4.8	4.8		5.0			11.1		12.5		8.3			25.0
10	4.5	38.1		5.0	5.0	10.0			11.8	25.0	15.4	33.3		28.6	25.0
11-12							16.7			31.3				14.3	
No Answer	0.0	0.0	9.3	10.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0	0.0	0.0	14.3	0.0
Mean	5.4	7.5	3.2	4.0	5.7	6.2	7.9	5.7	7.0	9.3	5.8	8.0	5.7	8.0	7.2
S.D.	1.9	2.3	2.3	2.6	2.0	1.8	2.5	26.1	1.5	1.8	2.7	1.7	1.1	3.4	2.6

APPENDIX 9

PERCEIVED PRESENCE OF SERVICES WITHIN EACH BUILDING

Perceived presence of services within each building

<u>Facility</u>	<u>Present</u>	<u>Not Present</u>	<u>Don't know</u>
A	49.4	44.8	5.8
B	74.3	23.2	2.2
C	52.4	37.1	10.2
D	49.0	44.7	6.3
E	53.7	19.7	26.7
F	59.0	26.7	14.3
G	57.4	27.0	15.6
H	49.6	28.1	22.2
J	60.4	30.2	9.4
K	37.5	28.7	33.7
L	68.2	22.1	9.7
M	55.0	23.9	21.1
N	49.6	41.5	8.9
P	43.8	41.0	15.2
R	60.0	28.3	11.7

Note: List of services about which respondents were asked:

Crafts Room	Garden Plots	Auditorium
Laundry	Guest Room	Mobile Library
Beauty Salon	Card Room	Volunteer transportation
Library	Private telephone	Volunteer visiting
Greenhouse	Coffee Room	Infirmary

APPENDIX 10

FREQUENCY OF JOURNEYS OUTSIDE EACH RESIDENCE

Frequency of journeys outside each residence

CANOUT	76.1%	Yes	+	-	-	=	+	-	-	+	+	-	-	-	+	+	+
DOOUT	61.3	Yes	+	-	-	=	++	A	-	++	++	=	A	-	++	A	++
SIXBLS	42.0	Yes	+	-	-	=	++	+	-	++	++	+	-	A	+	++	A
TIMEOUT	42.9	0-1	+	-	=	-	+	++	-	++	++	=	+	-	++	A	+
ENU2DO	63.4	Yes	+	=	=	-	+	+	+	A	+	+	+	+	+	+	-
MOBAID	65.1	Yes	+	+	-	+	=	+	=	+	A	-	-	++	-	-	=
TRUBUS	47.1	Yes	+	-	++	A	-	++	+	-	+	-	++	++	+	=	++
USEBUS	61.0	Never	+	-	-	-	++	=	A	++	+	+	+	=	++	=	++
VOLBUS	72.4	Never	=	+	+	-	=	++	=	=	++	A	++	-	A	=	++
CLUB	77.0	Never	+	-	+	+	+	-	=	-	+	++	-	=	=	=	+
VISITFR	65.1	Never	-	+	-	+	-	-	-	+	+	-	+	++	=	+	++
GOSHOP	57.6	Never	-	++	-	+	A	A	+	=	-	++	-	A	+	A	=
FAMDRI	44.1	Never	A	+	-	++	-	A	-	+	-	-	++	++	-	=	=
BUSDRI	62.2	Never	+	-	+	-	+	+	-	+	+	-	+	=	+	=	=
MEDDRI	66.8	Never	-	+	-	-	-	-	+	-	-	+	++	+	-	-	+

NOTE: + ≡ Average - ≡ Average A ≡ Average

From USEBUS to MEDDRI: - ≡ Less Use + ≡ More Use

APPENDIX 11

SATISFACTION WITH SURROUNDING ENVIRONMENT BY RESIDENCE

Satisfaction with surrounding environment by residence

<u>Facility</u>	<u>Satisfied</u>	<u>Dissatisfied</u>	<u>Don't know - No Answer</u>
A	77.3	8.5	14.2
B	68.5	8.3	23.2
C	60.7	11.9	27.4
D	63.1	18.1	18.7
E	66.9	17.1	15.6
F	66.9	8.7	24.3
G	56.3	7.6	36.2
H	67.4	21.5	11.1
J	56.6	7.4	36.1
K	70.3	3.9	25.8
L	71.2	11.5	17.3
M	71.9	3.1	25.1
N	66.7	12.5	20.9
P	50.0	23.2	26.8
R	56.3	18.7	25.0

NOTE: Elements of the environment comprise the following items:

Landscaping, paths and seating	Safety from crime
Condition of sidewalks	Shopping places
Noise from traffic, etc.	Entertainment facilities
Traffic as hazard	Neighbourhood overall

This is a composite measure for each residence. For each item (8), the number of residents (M) could give one of three responses. Thus, the response set across all items is $8 \times M$. "Satisfied" is coded 1 and the total number of such responses is then expressed as a proportion of $8 \times M$. Similarly, for Dissatisfaction (2) and Don't Know (3).

APPENDIX 12

PERCEIVED PROXIMITY AND ACCESS TO LOCAL SERVICES BY RESIDENCE

Perceived proximity and access to local services by residence

<u>Facility</u>	<u>Easy Walk</u>	<u>Easy Bus</u>	<u>Difficult Walk/Bus</u>	<u>Not Available</u>	<u>Don't Know & No Answer</u>
A	55.1	34.3	2.0	0.5	8.1
B	34.9	49.2	1.6	0.0	14.3
C	26.5	14.3	16.4	6.3	36.5
D	4.4	41.7	16.1	17.2	20.5
E	15.6	50.7	3.3	9.4	21.1
F	10.6	53.9	30.3	0.0	5.6
G	26.5	21.0	10.5	8.6	33.3
H	29.6	15.4	11.1	20.4	23.4
J	72.5	19.6	3.3	0.0	4.6
K	13.9	16.7	20.1	0.0	49.4
L	12.8	40.2	11.1	7.7	28.3
M	25.0	14.8	37.0	2.8	20.3
N	54.3	33.3	0.0	1.2	11.1
P	60.3	15.9	0.0	0.0	23.8
R	50.0	22.2	5.6	0.0	22.2

Note: Local services include the following items:

Shopping Centre	Library
Variety or corner store	Park
Medical office/clinic	Senior Citizen Centre
Churches	Community Centre
Hospital	

This is a composite measure for each residence. For each item (9), the number of residents could give one of five responses. Thus, the response set across all items is 9 x M. "Easy Walk" is coded 1 and the total number of such coded responses is then expressed as a proportion of 9 x M. Similarly, for Easy Bus (2), Difficult Walk/Bus (3), Not Available (4), and Don't Know (5).

APPENDIX 13

ACRONYMS AND VARIABLES BY SUBSTANTIVE THEME

Acronyms and Variables by Substantive Theme

DEMOGRAPHIC DESCRIPTION

<u>Acronym</u>	<u>Variable</u>
Age	Age in Years
Sex	Sex composition
Carety	Level of Care
Born	Place of birth
Kids	Number of living children
Maritst	Marital Status
PREVADA	Previous address
Date in	Date of moving into institution
Reshl-Resh5	Where lived for last 5 years
PICFB4	Have you lived in an institution before?

RESIDENTIAL SATISFACTION

<u>Acronym</u>	<u>Variable</u>
RESSAT	How satisfied with living here?
PRESRES	Would you prefer living here or elsewhere?
ROOMHR	How many hours per day spent in own room
NEEDOK	How well are the needs of the older people met in the institution?
WHYSAT	Reasons for satisfaction with residence
YPRES	Reasons for preferring to live here or elsewhere
LEAVF-S-T	Reasons for leaving previous residence
PREFA-B-C	Reasons for choosing present residence
LIKRESF-S-T	What do you like most about residence?
NOLIKEF-S-T	What do you like least about residence?
BETTERF-S-T	What could be done to make residence better?
WHATDOA-TO-E	What do you do in your room?
CRAFTS	Is there a crafts room in the residence?
LAUNDRY	Are there laundry facilities?
BEAUTY	Is there a beauty salon?

AcronymVariable

Library	Is there a library?
GHOUSE	Is there a greenhouse?
GDNPLOT	Are there special garden plots?
GUESTR	Is there a guest sleeping room?
CARDS	Is there a separate games room?
PRITEL	Do you have a private telephone?
COFFEER	Is there a coffee room available?
AUDIT	Is there an auditorium?
MOBLIB	Does a mobile library visit?
VOLTRA	Is there a volunteer transport service?
VOLVIS	Is there a volunteer visiting service?
INFIRM	Is there an infirmary in the residence?

MOBILITYAcronymVariable

CANOUT	Can you go outside by yourself?
DOOUT	Do you go out?
SIXBLS	Can you walk six blocks and back?
TIMEOUT	How many times per week do you go out?
ENU2DO	Are there enough things to occupy your day outside?
MOBAID	Do you get help getting places you want to go?
HOWAID	How do you get help?
VOLBUS	Do you use the volunteer transport service?
USEBUS	Do you use the public transport system
TRUBUS	Do you have trouble using the bus?
YTRUB	What sort of trouble?
CLUB	How many times in a month do you: attend clubs?
SPORT	attend sports?
ACTIVE	take part in sports
BINGO	play bingo?
VISITFR	visit friends?
VOLUNT	do volunteer work?
EATOUT	eat outside?
PUB	got to a pub-bar?
GOSHOP	go shopping (window)?
FAMDRI	go out with family?
BUSDRI	go for a bus drive?
MEDDRI	go on medical trips?

ENVIRONMENTAL EVALUATION

<u>Acronym</u>	<u>Variable</u>
SAMLOC	How important is it to live in same area as your children?
RATEHE	How do you rate area around residence?
LOCSAT	How satisfied with location re local services - facilities?
NEIBPRE	What age neighbours do you prefer?
TWOBL5	Is bus service within two blocks?
PUBBUS	How good is public transit?
PROSHO	How close and accessible are the following:
VARSTO	Shopping Centre?
MEDOFF	Variety-corner store?
CHURCH	Medical office?
HOSP	Church?
LIBRAR	Hospital?
PARK	Library?
SENCEN	Park?
COMCEN	Senior citizen centre?
	Community Centre?
	How satisfied are you with these features of the neighbourhood?
LANSKA	Landscaping, seating around the residence
SIDWAL	Condition of sidewalks
TRAFNO	Amount of noise from traffic etc.
TRAFHA	Traffic as a hazard
CRIME	Safety of the area
SHOPSA	Shopping places
ENTFAC	Entertainment
NEBNEED	Neighbourhood catering to needs

LIFE SATISFACTION

AcronymVariable

FAMREL	How would you rate your relationship with Family?
LOT2DO	Do you have plenty to do most days?
LISAT	Life satisfaction index score
SAT2DA	How satisfied are you with life today?
HEALST	How would you vote your health?
KIDCONT	Children in contact with per month
KIDGVD	Children in contact living in G.V.R.D.
RELATS	Relatives in contact with per month
RELGVD	Relatives in contact living in G.V.R.D.
CHUMS	Friends in contact with per month
CHUGVD	Friends in contact living in G.V.R.D.
PROBSF-S-T	What sorts of daily problems do you have?
YNODOA-B	Why do you not have plenty to do?
CSAFE	Do you feel more safe, less safe or the same since moving in?
CWORRY	Do you worry more, less same?
CENERGY	Do you have more, less, same energy?
HEALTH	Is your health better, worse, same?
ACTION	Are you more active; less, same?
FRIEND	Do you have more, less same Friends?
EAT	Do you eat better, worse, same?
SEEKID	Do you see your children, more, less, same?
SEEREL	Do you see your relatives more, less, same?
SLEEP	Do you sleep better, worse same?
GO OUT	Do you go out more, less, same?
HAPPY	Are you more, less, same, happy?
DRESS	Do you dress up more, less, same?

BIBLIOGRAPHY

- Archae, J. "Applied Interdisciplinary Research on Environment and Aging: Conceptual and Methodological Conflicts." in Theory Development in Environment and Aging: Report from a conference held at Kansas State University, April 1974. Gerontological Society, Washington D.C., 1974.
- Audain, M. Beyond Shelter. A Study of National Housing Act Financed Housing for the Elderly. The Canadian Council on Social Development, 1974.
- Aulinger, R. Paper presented at an interprofessional course on contemporary issues in caring for the elderly, held at The University of British Columbia, Health Sciences Center, February 16 and 17, 1979.
- Baltes, P. B. et al. Life-Span Developmental Psychology: Introduction to Research Methods. Brookes: Cole California, 1977.
- Beattie, Jr. W. M. "Matching Services to Individual Needs of the Aging," Selected Readings in Aging. Curriculum Project in Applied Gerontology, Gerontological Society Inc., Washington, D.C., pp. 2, 14-16, 1965.
- Brody, E. "Congregate Care Facilities and Mental Health of the Elderly," Aging and Human Development Vol. 1, pp. 279-321, 1969.
- Brophy, A. M. "Community Facilities and Services." Pp. 13-83 in Building for Older People: Location Construction, Financing, Administration. National Council on Aging: Washington, 1961.
- Byerts, T. Environmental research and aging: a report from an interdisciplinary research development conference, May 1973, St. Louis, Missouri; sponsored by the gerontological society, Washington D.C., 1973.
- Byerts, T. Housing and environment for the elderly: proceedings from a conference on behavioral research utilization and environmental policy, December, 1971, San Juan, Puerto Rico, Washington: Gerontological Society, 1973.

- Carp, F. "User Evaluation of Housing for the Elderly." The Gerontologist, 16, pp. 243-249, 1976.
- Cohen, Elias S. "The Range of Housing to Meet the Needs of Older People," Planning Welfare Services for Older People, U.S. Department of Health, Education and Welfare, Committee on Human Development, University of Chicago, pp. 52, 1965.
- Community Care Facilities Licensing Act section 16. Province of British Columbia, Ministry of Health Long Term Care Program. Parliament Buildings, Victoria, British Columbia, 1977.
- Cleland, E. A., R. J. Stimson and A. J. Goldsworthy. Suburban Health Care Behaviour in Adelaide. Centre for Applied Social and Survey Research Monograph Series, No. 2. School of Social Sciences, The Flinders University of South Australia, 1977.
- Fowler, Jr. F. J. "Knowledge, Need, and the Use of Services Among the Aged." Pp. 77-88 in Health Care Services for the Aged. Report on the 19th Annual Southern Conference on Gerontology held at The University of Florida, February 1-3, 1970.
- Golant, S. M. "Housing and Transportation Problems of the Elderly." Pp. 379-422 in Urban Policymaking and Metropolitan Dynamics, A Comparative Geographical Analysis, edited by J. S. Adams. Cambridge, Mass.: Ballinger, 1976.
- Golant, S. M. "Intra Urban Transportation Needs and Problems of the Elderly" in M. Powell Lewton, R. J. Newcomer, and Thomas Byerts, Planning for an Aging Society. Stroudsburg, Pennsylvania: Dowden Hutchinson & Ross, 1977.
- Golant, S. M., Ed. Location and Environment of the Elderly Population. Washington, D.C.: V. H. Winston and Sons, 1979
- Gutman, G. M. "Similarities and differences between applicants for self-contained suites, applicants for board, residence, and non-applicants." Centre for Continuing Education, University of British Columbia, 1975a.

- Gutman, G.M. "Accommodation for Seniors: Information Kit." Central Mortgage and Housing Corporation, Centre for Continuing Education, University of British Columbia, 1975
- Harris, R.J. A Primer of Multivariate Statistics. New York, Academic Press, 1975
- Kahana, E. "Emerging Issues in Institutional Services for the Aging." Gerontologist, Spring, Part 1, pp. 51-58, 1971.
- Kostick, A. "A concept of the purpose and function of a home for the aged." Pp. 1L-4L in Building for Older People: Location Construction, Financing, Administration, National Council on Aging: Washington, 1961.
- Lawton, M.P. & Simon, B. "The Ecology of Social Relationships in Housing for the Elderly." Gerontologist 8, 2, pp. 108-115, 1968.
- Lawton, M.P. "Ecology and Aging" in Spatial Behaviour of Older People, edited by Pastalan L.A. and D.H. Carson. Wayne State University, Institute of Gerontology, Ann Arbor, Michigan, 1970.
- Lieberman, Morton A. "Institutionalization of the Aged: Effects on Behaviour," Jnl. Gerontology, 24, 3, pp. 330, 1969.
- Lowy, L. "Models for Organization of Services to the Aging." Aging and Human Development 1, pp. 21-36, 1969
- Marcovitz, E. "Aggression dignity and violence." Paper presented at annual meeting of the Pennsylvania State Psychiatric Society, Hershey, 1969.
- Mercer, J. "Locational Consequences of Housing Policies for Low-Income Elderly: the Case of Vancouver, B.C." Unpublished Paper University of British Columbia, Department of Geography, 1978.
- McLean, T. "Long Term Care." Urban Reader Vol. 6, no. 1, pp. 4-7, 1978.
- Nie, N.H., Hull, C.H., Steinbrenner, K., and Bent, D.H. Statistical Package for the Social Sciences, Second Edition, McGraw-Hill, 1970.
- Niebanck, P., & Pope, J.N. "Social and Psychological Needs and Resources," in The Elderly in Older Urban Areas, University of Pennsylvania, 1965.

- Pastalan, L.A. & Carson, D.H. Spatial Behaviour of Older People. Wayne State University, Institute of Gerontology, Ann Arbor, Michigan, 1970.
- Peet, R. & Graham Rowles. "Geographical Aspects of Aging." Geographical Review. 64:2, pp. 287-289, 1974.
- Proceedings of the 1971 White House Conference on Aging, 1973. Washington D.C.: White House Conference on Aging.
- Rowles, G.D. Prisoners of Space? Exploring the Geographical Experience of Older People. Boulder, Colorado: Westview Press, 1978.
- Sorochan, M. Extract from The Courier, 69, 36, May 3, 1979, Vancouver, British Columbia, pp. 1-2, 1979.
- Stea, D. "Home Range and Use of Space," in Spatial Behaviour of Older People edited by Pastalan, L.A. and D.H. Carson. Wayne State University, Institute of Gerontology, Ann Arbor, Michigan, 1970.
- Townsend, P. The Last Refuge: A survey of Residential Institutions and Homes for the Aged in England and Wales, London, Routledge and Kegan Paul, 1962.
- Turano, E.N. "Site Selection and Development." Pp. 1c-10c Building for Older People: Location, Construction, Financing, Administration. National Council on Aging Washington, 1961
- Vivrett, W.K. "Environmental Needs of Older People and implications for Housing." Pp. 1c-15c in Building for Older People: Location, Construction, Financing, Administration. National Council on Aging: Washington, 1961.
- White, G.F. Natural Hazards, Local, National, Global, edited by Gilbert F. White. New York: Oxford University Press, 1974.
- Wiseman, R.F. Spatial Aspects of Aging, Washington: Association of American Geographers Resource Paper, 78-4, 1979.
- Wood, V., Wylie M.L. and Sheafor, B. "An analyses of a shorter self-report measure of life satisfaction: correlation with rated judgement." Journal of Gerontology Vol.24 (1969) 465-469.