

# **SPATIAL MOBILITY PATTERNS OF THE AGED IN CHATSWORTH.**

**by**

**Pretham Chanderjith**

Submitted in part fulfilment of the requirements for the degree of **MASTERS OF ARTS** in the Department of Geography in the Faculty of Arts at the University of Durban-Westville.

**SUPERVISOR : DR B MAHARAJ**

**DECEMBER 1995**

## ABSTRACT

The spatial mobility of the aged has, until recently, been a neglected area of study. Studies by gerontologists focused on housing, health and social services that influenced the quality of life of elderly and ignored spatial mobility. Mobility is an important variable for the aged, to take advantage of the wide variety of shopping, social, cultural and recreational services provided within residential environments. Moreover, for any interaction to take place outside the home, the aged must utilize public transport, motor vehicles or walk.

Apartheid policies with its associated racial discrimination had a major impact on the lives of the aged, especially in black communities. Presently, there is a lack of understanding of the problems of the aged in disadvantaged communities because previous research was conducted mainly in white communities.

In the light of the above, the aim of this study was to determine the spatial mobility patterns of the aged in Chatsworth, Durban, and to identify difficulties encountered when engaging in day to day activities. It is based on the rationale that mobility is a good measure for assessing the quality of life of the aged and determines the mobility patterns of the elderly in terms of time, cost and distance of travel. This study also identifies factors impeding mobility and makes recommendations to improve the spatial mobility of the aged.

The study revealed that the aged in Chatsworth are both mobile and active. It was evident, however, that the aged experienced mobility problems that limited their access to essential services and facilities, because of inefficient transport, low income, lack of facilities and disabilities associated with the ageing process. The underlying feeling of the majority of the respondents was that the transport service in the area should be improved and the state pensions that they received should be increased in order to enhance their mobility and quality of life.

Planners and policy makers must consider the concerns of the aged and respond to their needs so that they can continue to have active and independent lives in the community. The planning process can assist in breaking down barriers that hinder the mobility of the aged, and in so doing give the elderly improved opportunities to enjoy the same quality of life as the rest of society. Assistance with mobility and access to services and facilities will not only increase the range of opportunities for the elderly, but in the long term, reduce the amount of institutional care spent on them. Future generations of elderly people will have higher aspirations, expectations, be better educated and prepared for retirement. Present services and facilities are inadequate to cater for the new generation of elderly people and must be upgraded to cope with, and prevent, similar problems recurring in the future.

## ACKNOWLEDGEMENTS

The compilation of this dissertation was influenced to a large extent by the support and assistance I received from numerous friends and colleagues. I am greatly indebted to the following persons:

1. Dr B Maharaj, who supervised this dissertation. Words cannot adequately express my deep gratitude to Dr Maharaj. His perception, brilliant scholarship and many hours of his invaluable time played an immeasurable role in the completion of this dissertation. The intellectually enriching experience of having the pleasure, privilege and opportunity of working with Dr Maharaj will be long lasting.
2. Professor D V Soni, Head of Department of Geography, for his encouragement, as well as his willingness to permit the use of departmental facilities and equipment.
3. Professor V Moller, for her guidance, encouragement and providing me with numerous articles on the aged.
4. Vadi Moodley, for his incisive suggestions and assistance with the data analysis and proof reading.
5. Indrani Naidoo, who drew up a programme to analyse the data for this study.
6. Yashmin Dukhi, for her assistance in the fieldwork.
7. Jane Nadesan, who was ever willing to help with computer operations.
8. Rajen Chetty, for proof reading the initial draft of the various chapters.
9. Finally I would like to pay a special tribute to my wife, Oushadevi and my children, Kashveera and Shivaan without whose love, tolerance, help and sacrifice nothing would have been possible.

## DEDICATION

***This dissertation is dedicated to my aged parents and Guru Shri Sathya Sai Baba for always keeping my path in life well illuminated.***

***"There are principles to regulate attachment and aversion pertaining to the senses and their objects. One should not come under the control of such attachment and aversion, because they are stumbling blocks on the path of self-realization".***

***BHAGAVAD-GITA (III-34)***

## TABLE OF CONTENTS

	PAGE
Abstract	ii
Acknowledgements	iii
Dedication	iv
List of tables	viii
List of figures	x
List of plates	xi
<b>CHAPTER ONE : INTRODUCTION</b>	
1.1 Preamble	1
1.2 The Aged in South Africa	6
1.3 The Indian Aged in South Africa	15
1.4 Conclusion	17
1.5 Chapter Sequence	18
<b>CHAPTER TWO : CONCEPTUAL FRAMEWORK</b>	
2.1 Introduction	19
2.2 Social Gerontology and Social Geography	20
2.3 Basic Needs of the Aged	23
2.4 Mobility and the Aged	26
2.5 Accessibility and Amenities	29
2.6 Leisure and Recreation	33
2.7 Theories of Ageing	37
2.7.1 Disengagement	38
2.7.2 Activity Theory	39
2.7.3 Other Theories	41
2.8 Ageing in Developed Countries	46
2.9 Ageing in Less Developed Countries	47
2.10 Conclusion	48
<b>CHAPTER THREE : METHODOLOGY</b>	
3.1 Introduction	50
3.2 The Research Imperative	50
3.2.1 Aim	50
3.2.2 Objectives	51
3.2.3 Hypotheses	51
3.3 The Study Area	52
3.4 Sampling Rare Population	57
3.4.1 The Sample Strategy	59
3.5 Data Source	60
3.5.1 Participant-observation	61
3.5.2 Group Discussion	62
3.5.3 Interviews	62

3.6	Questionnaire Design and Format	63
3.7	Interview Techniques and Problems Encountered	65
3.8	Conclusion	65

## **CHAPTER FOUR : THE AGED IN CHATSWORTH**

4.1	Introduction	67
4.2	Socio-Economic and Demographic Characteristics of the Aged in Chatsworth	67
4.2.1	Age-Sex Distribution of Sample	68
4.2.2	Marital Status and Education	69
4.2.3	Income	70
4.2.4	Family Structure	71
4.3	Residential History	72
4.3.1	Period of Stay in Chatsworth	73
4.3.2	Dissatisfaction with Present Accommodation	74
4.4	Needs of the Aged	76
4.4.1	Needs	76
4.5	Living Preferences	79
4.6	Support from Families	80
4.6.1	Financial Contribution to Family Budget	81
4.6.2	Monthly Expenditure	82
4.6.3	Family Support	83
4.6.4	Dependency	85
4.7	Health	86
4.7.1	Health Status	86
4.7.2	Ailments Suffered by Respondents	86
4.8	Mobility	87
4.8.1	Movement in Neighbourhood	88
4.8.2	Movement in House	89
4.9	Transport	89
4.9.1	Frequency of Travel by any Mode of Transport	90
4.9.2	Different Modes of Transport used by the Aged	90
4.9.3	Mode of Transport to Facilities	92
4.9.4	Time Spent Waiting for Public Transport	92
4.9.5	Problems Experienced with Public Transport	92
4.9.6	Efficiency of Public Transport	95
4.10	Leisure and Recreation	95
4.10.1	Household Activities	96
4.10.2	Leisure and Recreational Activities	96
4.11	Access to Amenities	99
4.11.1	Time Taken to Travel to Amenities	99
4.11.2	Public Transport Costs	99
4.11.3	Average Distance to Amenities	100
4.11.4	Frequency of Visits to Amenities and Service Facilities	102
4.12	Service Centres and Other Organizations	102
4.12.1	Membership of Service Centre	102
4.12.2	Service Centre/Club Support and Assistance	104

4.12.3	Suggested Improvements to Service Centre Structure	104
4.12.4	Membership of Other Organizations	106
4.13	Neighbourhood Domain	106
4.13.1	Problems Experienced in Getting Around Chatsworth	107
4.13.2	Fears in Getting Around Chatsworth	109
4.13.3	Quality of Services and Facilities	111
4.13.4	Ratings of Chatsworth as a Place to Live	113
4.13.5	Improvements to Enhance the Quality of Life in Chatsworth	114
4.14	Life in General	115
4.15	Summary and Conclusion	116

## **CHAPTER FIVE : EVALUATION**

5.1	Introduction	119
5.2	Hypothesis One - Needs	120
5.3	Hypothesis Two - Family Support	121
5.4	Hypothesis Three - Health Domain	123
5.5	Hypothesis Four and Five - Transport	124
5.6	Hypothesis Six - Access to Services and Facilities	128
5.7	Hypothesis Seven - Recreational and Leisure	131
5.8	Hypothesis Eight - Neighbourhood	133
5.9	Theoretical Reflections	135
5.10	Conclusion	136

## **CHAPTER SIX : RECOMMENDATIONS AND CONCLUSION**

6.1	Introduction	138
6.2	The Aged and Recent State Policy	138
6.2.1	Future Policies	139
6.3	Recommendations	140
6.3.1	Transport and the Elderly	140
6.3.2	Creating a Better Environment	144
6.3.3	Tax Rebates	148
6.4	Some Research Directions	149
6.5	Conclusion	149

<b>REFERENCES</b>	<b>152</b>
-------------------	------------

<b>APPENDIX 1</b>	<b>168</b>
-------------------	------------

## LIST OF TABLES

TABLE	DESCRIPTION	PAGE
2.1	Maslow's Hierarchy of Human Needs	24
2.2	Public and Private Sector Amenities	32
3.1	Community Areas in Chatsworth	55
3.2	Number of Respondents from Neighbourhood Units	60
4.1	Marital Status	69
4.2	Monthly Income	70
4.3	Income Source	70
4.4	Present and Preferred Family Structure	72
4.5	Reasons for Living in the Present Family Structure	72
4.6	Previous Place of Residence	73
4.7	Period of Stay	74
4.8	Reasons for Living in Present Dwelling	75
4.9	Reasons for Dissatisfaction with Present Dwelling	76
4.10	Ratings of Needs	78
4.11	Satisfaction of Needs	78
4.12	Institution Preferred to Live	80
4.13	Reason for not wanting Financial Support from Families	80
4.14	Reasons for wanting Financial Support from Families	81
4.15	Contribution to Family Budget	81
4.16	Reasons for Contributing to Family Budget	82
4.17	Average Monthly Expenditure	83
4.18	Family Support	84
4.19	Importance of Family Support to Quality of Life	84
4.20	Assistance from Family/Friends	85
4.21	Dependency on Other People	85
4.22	Disabilities	88
4.23	Self Perceived Level of Mobility	88
4.24	Reasons for the Lack of Movement in the House	89
4.25	Different Modes of Transport	91
4.26	Most Common Mode of Transport	91
4.27	Mode of Transport to Facilities	93
4.28	Average Waiting Time for Public Transport	93
4.29	Problems Experienced with Public Transport	95
4.30	Household Activities	97
4.31	Type of Leisure and Recreational Activities	97
4.32	Desired Activities	98
4.33	Reasons for not Engaging in Activities	98
4.34	Travelling Time to Amenities	100
4.35	Transport Costs to Amenities	101
4.36	Distance to Amenities	101
4.37	Frequency of Visits to Amenities	103
4.38	Membership of Service Centres/Clubs	104
4.39	Service Centre's Support	105
4.40	Suggested Changes at Service Centres	105

4.41	Participation in Other Organizations	106
4.42	Problems Experienced with the Physical Structures	107
4.43	Fears Cited in Getting Around Chatsworth	109
4.44	Ratings of Services and Facilities	111
4.45	Reasons for the Desirability of Chatsworth	114
4.46	Negative Features of Chatsworth	114
4.47	Suggestions to Improve the Quality of Life in Chatsworth	116
4.48	Ratings of Satisfaction with Life in General	116

## LIST OF FIGURES

<b>FIGURE</b>	<b>DESCRIPTION</b>	<b>PAGE</b>
1.1	Evolution of Asians and Coloureds Age Structures, 1945-1985	8
1.2	Evolution of Blacks and Whites Age Structures, 1945-1985	9
1.3	Population Aged 65+ as a Percentage of Population, by Race and Total Population: 1945-2035	10
1.4	Growth of the Population Aged 65+, by Race and Total Population: 1945-2035	11
1.5	Projected Age Structures by Race, by 2035	13
2.1	Capability Constraints: A Daily Time Prism	34
2.2	Proposed Motivational Model of Leisure Participation among the Elderly	36
3.1	Location of Chatsworth	53
3.2	The Study Area	54
3.3	Regional Setting of Chatsworth	56
4.1	Age-Sex Distribution of Sample	68
4.2	Level of Education	69
4.3	Tenure	74
4.4	Health Ratings	87
4.5	Frequency of Travel	90
4.6	Ratings of Public Transport	96
4.7	Perception of Residential Environment	110
4.8	Ratings of Chatsworth as a Place to Live	113

## LIST OF PLATES

<b>PLATE</b>	<b>DESCRIPTION</b>	<b>PAGE</b>
4.1	Steep Steps Outside Houses	77
4.2	Steep, Narrow Steps Leading into Buildings	77
4.3	High Steps at the Bus Entrance	94
4.4	High Steps Leading into Mini-bus	94
4.5	High Pavement Kerbs	108
4.6	Poor Pavement Conditions	108
4.7	Lack of Bus Shelters	112
4.8	No bus Shelter at Bus Stop	112

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 PREAMBLE**

The main concern of explanation in Geography during the 1960s was manifest in a strong and widely supported emphasis upon quantitative methods, the use of mathematical models, hypothesis testing and theory building (Taaffe, 1974). During this period geographers gave little attention to the spatial dimension of social problems, leaving such issues to the sociologist and other social scientists. This non-involvement in important social issues was well summed up by Smith (1973) who suggested that the long neglect of social problems by geographers has been rooted in academic inertia in issues which were both politically and morally sensitive.

However, discontent with the positivist approach within Human Geography, led to the emergence of the humanistic and structuralist approaches during the 1970s. During this period Social Geography grew rapidly. Studies on the Geography of Poverty (Morrill and Wohlenburg, 1971), the Geography of Health Care (Shannon and Denver, 1972) and the residential location and spatial behaviour of the elderly (Golant, 1972) are examples of some of the research that emerged as a result of this new awareness.

Towards the end of the eighties several positivist and humanist geographers found common ground for research. This common ground was later defined as a need to

understand individuals within a place, time and space perspective. This paradigm took into account the way people experience, perceive, organise and interact with their environment (Aitken, et al., 1989).

Warnes (1990) developed recommendations for geographical research which helped in the understanding of the personal and social implications of the ageing process. He was keen to promote understanding of the welfare of the aged focused on two broad areas. Firstly, he examined the social and spatial process of ageing, and secondly the geographical implications of ageing in all societies.

Today geographers within the empiricist and positive school have highlighted two broad themes that have dominated the geographical literature on ageing and the elderly. The first concerns the spatial concentrations and distribution of the elderly and how these change over time (Warnes, 1987; 1988; Watkins, 1990; Golant, 1992). The second area of interest centred around transport (mobility) and service provision for the elderly (Curtis, 1989; Meyer, 1981; 1990).

Many studies in the field of Social Geography have assessed socio-economic characteristics (Bohland and Frech, 1982; Bebbington and Davies, 1982) and housing (Mangum, 1982; Bytheway, 1982; Steyn, 1986) in order to ascertain the quality of life of the aged. Although these provide valuable information, they need to be supplemented by other information such as the availability of amenities, levels of access to these amenities and the spatial mobility patterns, issues that have been generally ignored by researchers.

Mobility is a key factor that influences the quality of life of the aged. In order that the aged take advantage of the wide variety of shopping, social, cultural, and recreational activities provided within their environment, they have to be mobile. Furthermore, in order to interact with their environment outside their house the aged must make use of public transport, a private motor vehicle or walk.

Transportation services are important to all population groups, but with respect to the elderly, lack of adequate transportation can have a multiplier effect. Thus, mobility patterns are negatively affected, which in turns brings about greater dependence on others:

Poor quality of transportation services has been an important factor in adversely affecting the quality of life of many elderly, thereby resulting in unnecessary social isolation and the inability of some persons to gain regular access to even minimal life-sustaining functions (Golant, 1972: 129-130).

The elderly, because of their reduced income and escalating fares, experience difficulty paying for public transport (Carp, 1971a). In addition to financial barriers, the elderly who depend on public transportation must endure other difficulties: long waits for public transport, uneven or crowded pavements and lack of bus shelters that result in the aged being exposed to bad weather which can be detrimental to their health. Further, if the elderly wish to travel in rush hour periods, they must endure pushing or crowding and the constant stop and go action of the vehicle. Some of the aged have problems getting on and off buses or negotiating stairs.

The majority of the aged are also faced with the problem of declining health. This

factor has a negative impact on their spatial mobility patterns. Thus, the physical agility and muscular strength of the elderly are reduced to an extent that it makes them more susceptible to pedestrian accidents than any other population group. The aged often experience difficulty crossing busy roads, even those with traffic signals, because they walk slowly or have problems identifying traffic light changes.

Robson (1982) argued that mobility involves the amount of travelling that one undertakes, and spatial mobility measures activities which involve transportation as well as engagement in leisure or recreational activities. Robson (1982) identified three factors that influence the mobility patterns of the aged. Firstly, he argued that the number of social roles possessed by the aged strongly affects both their social contact and spatial mobility. Townsend (1957) and Tunstall (1966) contend that most of the aged have a well-defined weekly routine of "social contacts". A contact was defined as "meeting with another person, usually pre-arranged or customary, at home or outside which involves more than a casual exchange of greeting" (Townsend, 1957:35).

The second factor according to Robson (1982), concerned the health of the aged. Numerous measures of life satisfaction have been designed especially for the aged (Neugarten, Havinghurst and Toblin, 1961; Bradburn and Caploritz, 1965; Lawton, 1975). The scales provided valuable information about the elderly enjoyment, involvement, day-to-day worries and fears, accomplishments, unhappiness, satisfaction and dissatisfaction. The third factor involved the environmental index. The forerunners of the environmental index was Lawton and Kleban (1971) and Schooler

(1969;1970). They sought to distinguish an environmental factor applicable to the elderly. Three environmental factors were distinguished:

- (i) The built physical environment - obtained from questions relating to housing, neighbourhood characteristics and the attractiveness of the area in which the aged reside.
- (ii) The social environment - as defined by distance to, and provision of, essential services and facilities (Peace, 1977).
- (iii) The attitude of the community towards the aged.

These factors are in many ways similar to Bohland and Davis's (1978) four dimension model, which consists of the neighbourhood, physical conditions, convenience and safety.

Geographical literature is placing greater emphasis on the spatial mobility patterns of the aged. The aim is to develop a framework which will show how the constraints of inefficient transportation and poor access to amenities, low income and declining health, affects the mobility of the aged (Hillman, Henderson and Whally, 1976; Hopkin, Robson and Town, 1978; Robson, 1978; Ferreira and Mostert, 1982; Warnes, 1982).

Against this background this study aims to determine the main problems/difficulties influencing the mobility patterns of the aged in Chatsworth, a predominantly Indian residential suburb in Durban.

## 1.2 THE AGED IN SOUTH AFRICA

The study of the aged in South Africa can benefit greatly from the experiences of countries like the United States of America and the United Kingdom. Although none of these countries have the unique blend of first and third world problems of South Africa, the universality of the ageing process ensures that policies and methods successfully applied elsewhere can be adapted and imported into the local circumstances (Steyn, 1986). However, there has to be an element of caution as "third world countries cannot draw extensively from the developed world regarding knowledge on ageing and the elderly" (Warnes, 1988: 477). There is an urgent need to understand elderly people's situation and needs in specific political, economic and cultural complexes as in South Africa.

In South Africa the present situation is that the elderly of the four population groups are at different stages in the ageing process. The black population group is at a rather early stage of demographic transition. The whites are in the most advanced stage and may be characterized as being demographically old. The indians and coloureds occupy an intermediate position: although still demographically young, their age structures have already undergone profound changes (figure 1.1 and figure 1.2) (Ferreira, et al., 1992).

The predicted future scenarios of ageing in South Africa reveal that by 2035 the percentage of elderly people in the total South African population will be below 7,5 percent. However, the numbers of elderly people will be increasing faster than the

numbers of the other age groups. This trend will continue at an alarming pace in the early twenty first century (figure 1.3 and figure 1.4). Moller and Ferreira (1992) argued that South Africa is a country in a transitional phase and data and patterns with regard to the aged are not consistently clear-cut.

As in other African and developing countries it is assumed that in South Africa the traditional role of the family in caring for their aged will avoid many of the problems faced by western countries. With greater numbers of women moving away from their traditional roles as care givers, and by them seeking employment, the high cost of living and the breakdown of the extended family system may result in families not having the necessary resources to care for their aged.

The objective in South Africa is to keep the aged in the community for as long as possible thus prolonging institutionalization. This requires adequate and easy access to the various services and facilities which will enhance the quality of life of the aged. However, in many areas like Chatsworth, there is a lack of adequate planned facilities and support services for the elderly.

The aged in South Africa are not a homogenous groups. The needs, mobility and expectations of the 65-70 group will differ from the "very old" (+85 years). It is therefore critical to understand that the ageing process and its effects on the functional abilities differ in the different groups of aged persons-rather than to stereotype the elderly and assume that they are all alike.

Figure 1.1 Evolution of Asians and Coloured Age Structures, 1945-1985  
(Hofmeyr and Mostert, 1989:9)

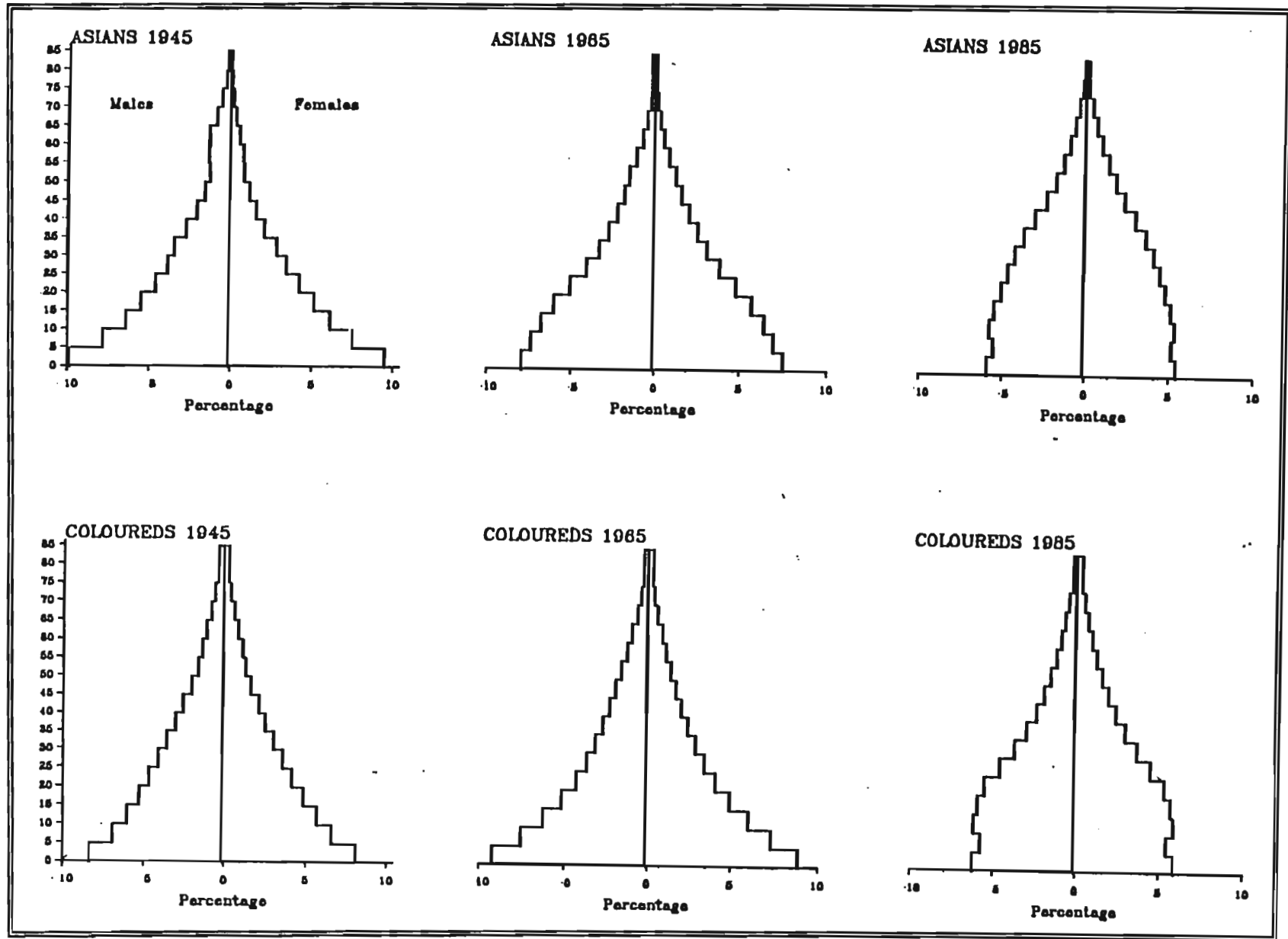
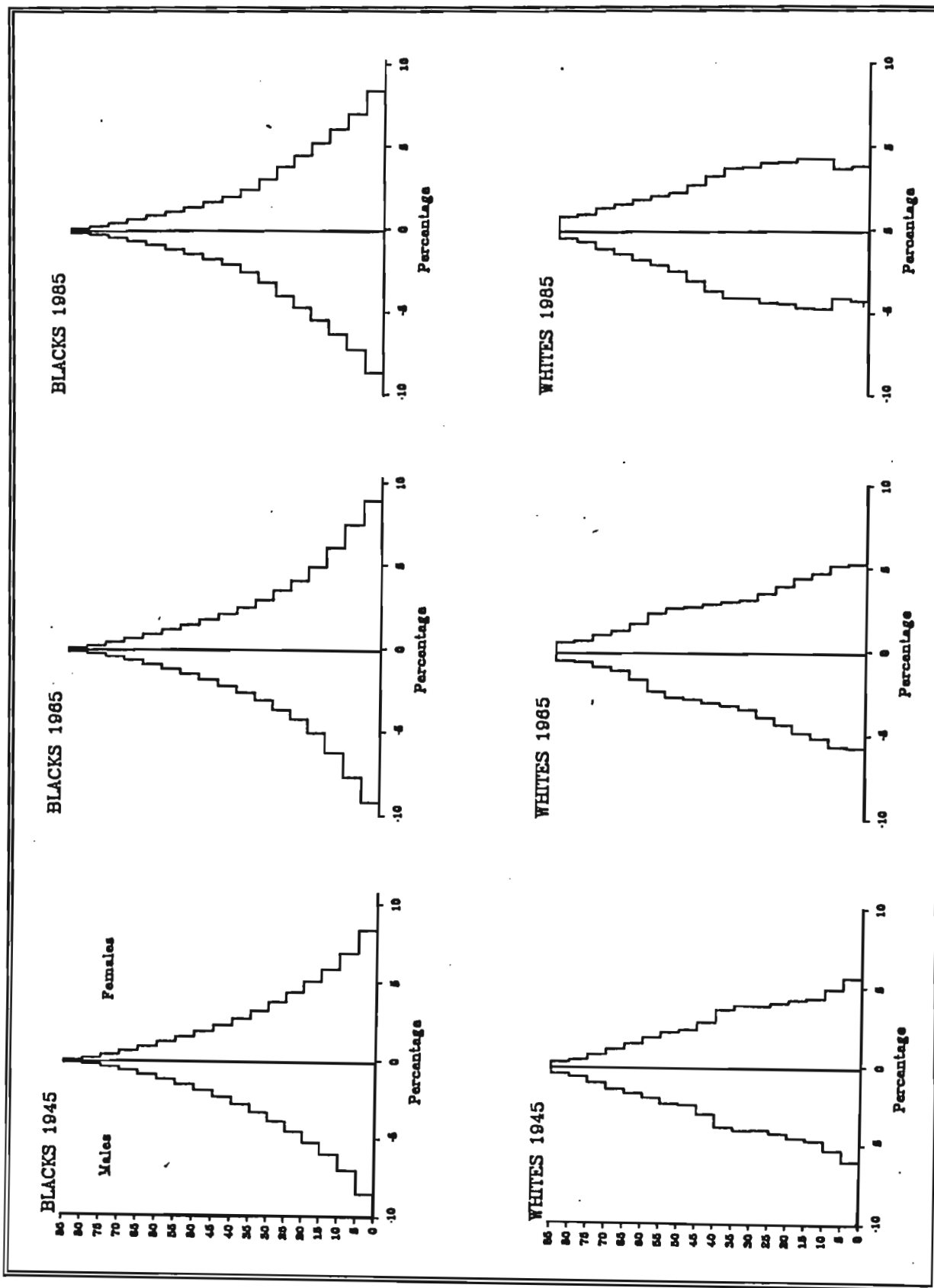
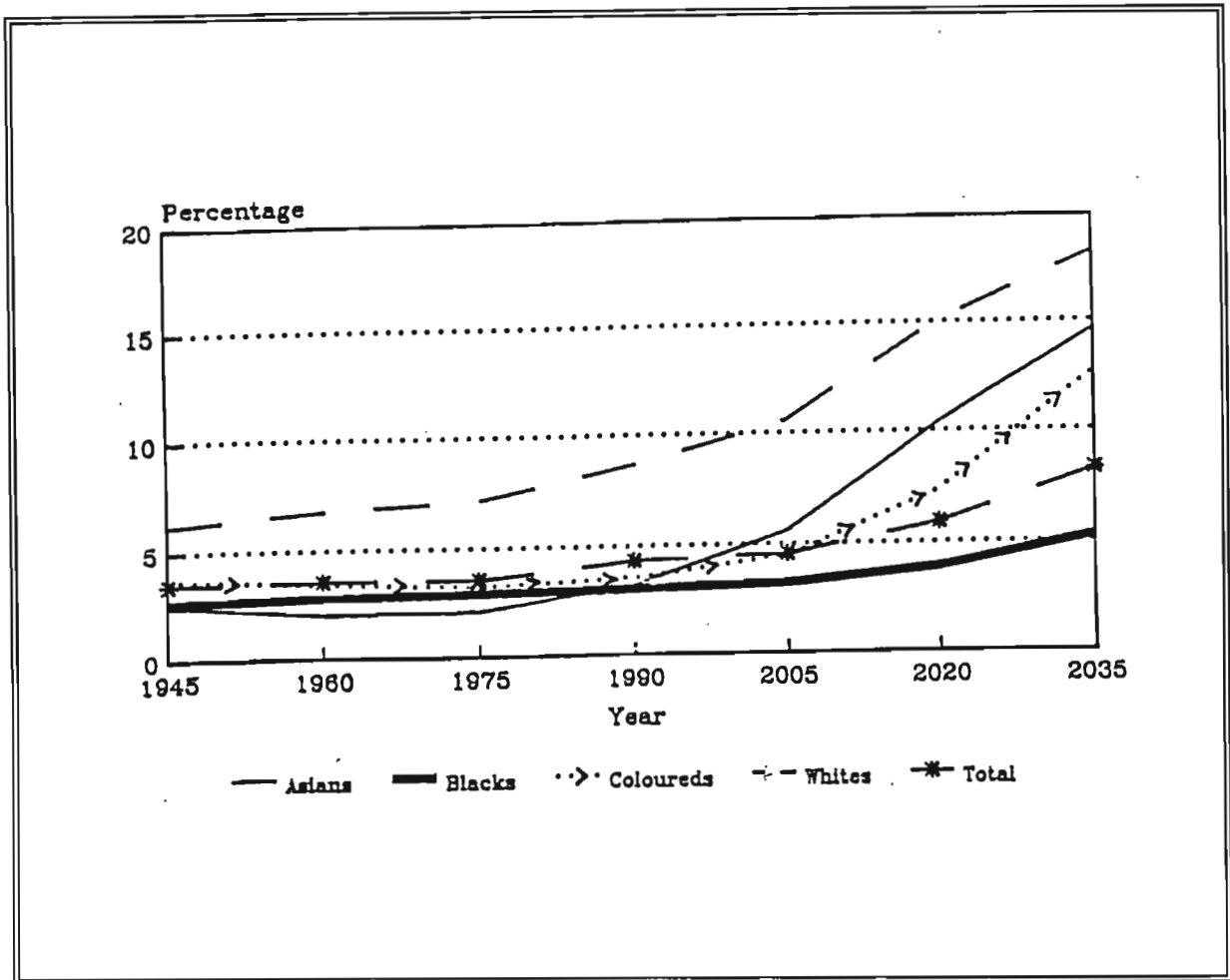


Figure 1.2 Evolution of Blacks and Whites Age Structures, 1945-1985 (Hofmeyr and Mostert, 1989:7)



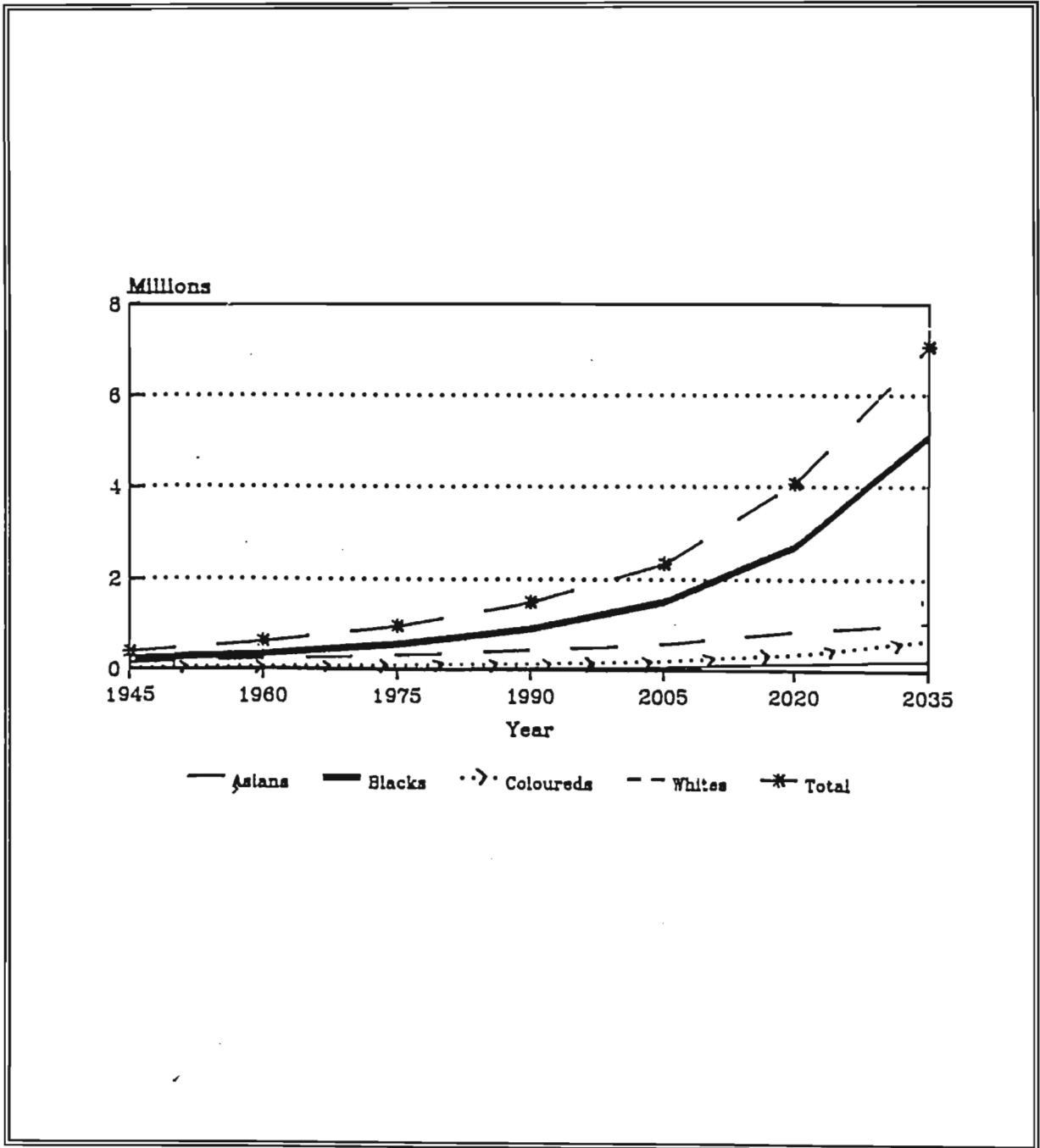
**Figure 1.3 Population Aged 65+ as a Percentage of Population by Race and Total Population; 1945-2035 (Hofmeyr and Mostert, 1989:13)**



The most serious problems that countries like South Africa face is the financial well-being and the impact of the aged on the economy. The economic status of the aged depends on their income. In South Africa no social security system exists. In the apartheid era the country had a legacy of paying extremely low, taxation-based pensions in unequal amounts to eligible persons in the different population groups. In the post-apartheid era the Government of National Unity has declared a policy to achieve parity. However, the burden of providing financial support to the ever increasing number of old people may become too great for the shrinking proportion

of working - age persons to bear (Ferreira, *et al.*, 1992) (figure 1.5).

**Figure 1.4 Growth of the Population Aged 65+ by Race and Total Population; 1945-2035 (Hofmeyr and Mostert, 1989:13)**



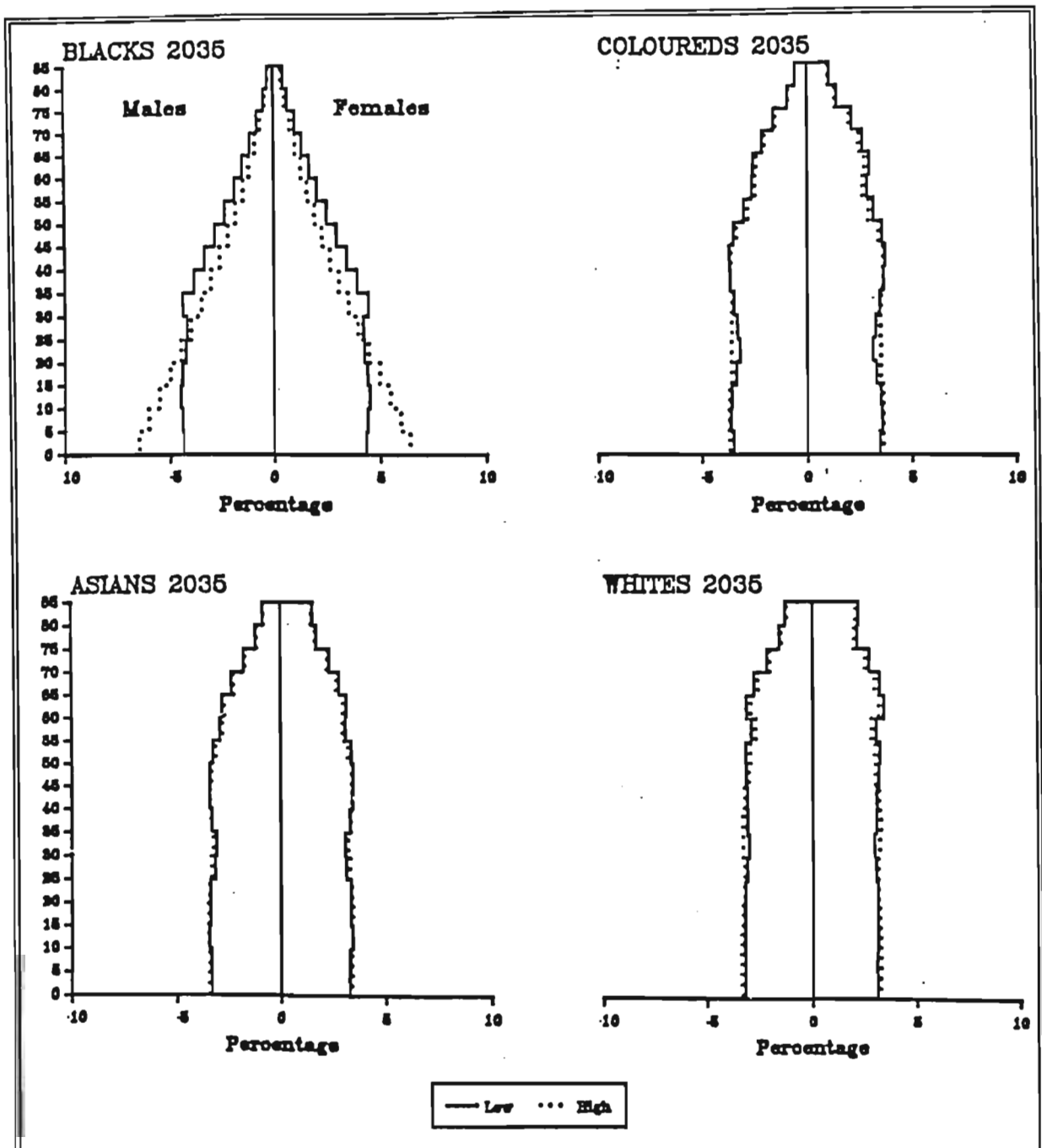
Many South Africans have not yet understood the concept of preparation or provision for life in old age. The attitudes and expectations that the government should provide adequate pensions for all its aged citizens still remain prevalent among the majority of the citizens (Ferreira, 1986).

The present disadvantages that exist in the South African context are linked with a historical legacy of racial discrimination in South Africa. The different levels of poverty amongst the population groups affects all facets of the elderly's lives. These disadvantages stem from the aged's socio-economic and political circumstances. Ferreira, et al. (1992) argued that inequalities exist between the four different racial groups in South Africa. This was as a result of apartheid that safeguarded the interests of whites. It was from these legacies, and from the inadequate provision of services and facilities for the disadvantaged population groups that their current arrangements are derived (Dressel, 1986).

In South Africa the whites have been able to reap appropriate economic returns from their education. The many inequities faced by the disadvantaged groups need to be addressed to diminish hardships that they will experience in later life. It is hoped that the recent political changes in South Africa are signs that equality among the four population groups will prevail.

The socio-economic conditions reflect the unevenness of development of the different population groups. In terms of education, income and health factors the white aged are the most privileged group (Moller and Ferreira, 1992).

Figure 1.5 Projected Age Structures by Race, by 2035 (Hofmeyer and Mostert, 1989: 16).



It is within the context of the above, as South Africa moves into the post-apartheid era, that it becomes increasingly more important that quality of life studies be undertaken especially in respect of the disadvantaged racial groups. Research on

the aged tended to be fragmented, resulting in a lack of understanding of the inequalities that exist in the living circumstances of the aged in other race groups. These inequalities need to be eradicated so as to enhance the quality of life of the aged within the black, coloured and indian communities.

Prior to the 1980s, literature and research in the field of gerontology was limited, when compared to other fields within the social sciences. The past decade has seen tremendous growth in the availability of literature pertaining to ageing in South Africa.

Although there has been a focus on gerontology in South Africa in recent years, reference books on gerontology are limited. Most of the available information has been in the form of research articles, pamphlets, dissertations and theses. Ferreira, *et al.* (1992) detailed their findings from a multidimensional comparative survey of the social and economic circumstances of older persons in the four major racial groups that constitute the South African population. The survey results generally indicated that the elderly population have three main problems:

- (i) The aged are faced with financial difficulties because of negligible provision for old age and a growing inability of the government to provide adequate financial support.
- (ii) The aged have poor access to health care and recreational facilities.
- (iii) A general lack of support services to facilitate living in the community.

Ferreira and Mostert (1986) investigated the effects of environmental barriers on the mobility of the elderly in Durban. They concluded that environmental obstacles or barriers inhibited the mobility of the aged in Durban. This had a negative influence on

the ability of the aged to carry out essential and non-essential activities. Steyn (1986) produced a report entitled, "Housing and the Aged". The report looked at the white aged and their socio-economic characteristics and the role that they played in the urban housing market of Durban. The report also looked at the future needs of the aged which included transportation and medical services.

Chinkanda (1989) sought to ascertain the attitudes of urban blacks towards the care of the aged; the provision of services for the aged; preferences with regard to housing for the aged; and viewpoints concerning who should provide or make provision for old-age pensions.

The findings of this study suggest that the urban black family was ready to share the responsibility of caring for the aged, and that service centres should be established in black residential areas.

Prinsloo, et al. (1989) compared the functional status of two elderly groups (white and coloured) in the Western Cape. This study showed that the two most important variables promoting functional dependence among the white and the coloured elderly in the Western Cape were diminishing economic and social resources. These variables have a profound effect on access to services and mobility patterns.

### **1.3 THE INDIAN AGED IN SOUTH AFRICA**

Nair (1987) examined the social problems associated with the care of the Indian aged.

The focus of this study was on the care of the aged with specific reference to the provision of basic needs. The study showed that although family members were willing to accept the responsibility of caring for the aged, there were indications that pointed to a decline of the extended family system.

Anderson (1983) assessed the accommodation needs and preferences amongst Indian old age pensioners in Durban. This study concluded that the aged experienced accommodation problems primarily due to the collapse of the joint family system. Padayachee (1989) conducted a community-based study of the aged in Lenasia, Johannesburg. The study indicated that although the majority of aged persons in Lenasia live in the community, many maintain a tenuous existence. It was also evident that there was a lack of sufficient resources and support for this section of the population.

A study conducted by Millar (1987) examined the traditional care of the Indian aged in South Africa. Emphasis was directed towards the care and social integration of the aged in society. Jithoo (1975) examined the fission of the Hindu joint family in Durban. The study showed how such factors as apartheid laws, westernisation and family conflicts have eroded the extended family system. Chetty (1980) investigated how the Group Areas Act influenced the development of nuclear families in the Indian community. Mantzaris (1988) conducted a study on the role of religion as a factor affecting the attitudes of South African Indians towards family solidarity and care for the aged. This study showed that the Indian community retained a high degree of respect for the elders.

Oosthuizen and Hofmeyer (1979) conducted a socio-religious survey in Chatsworth. This study revealed the social problems that emerged from the breakdown of the joint family system. Moodley (1992) examined the role of the Indian aged in the transmission of religious and cultural values.

#### **1.4 CONCLUSION**

In the South African situation it is important to keep in mind that the aged, in the future, will differ drastically from the present elderly in terms of socio-economic, educational and socio-demographic characteristics, as well as expectations. Furthermore, the ethnic composition of the elderly population will be different and the aged will live in an environment that is politically, culturally and technologically different from the present situation.

Serious consideration of the above factors must be given to shape future planning of amenities and transport services that will influence the mobility patterns of the aged in South Africa.

The ultimate aim of this study is to determine the spatial mobility patterns of the aged in Chatsworth and its effect on their quality of life. The results obtained will be beneficial to policy makers and town planners because they could ascertain and prioritize the needs of the aged, and plan accordingly, to improve the mobility of the aged and enhance access to services and facilities as well as removing physical barriers in the neighbourhood environment.

This study has adopted a humanist perspective emphasizing the attitudes and perceptions of the elderly so as to measure their quality of life. However, objective indicators such as transport, recreation, health, housing, neighbourhood, services and facilities have also been considered. The aged react to these objective conditions by expressing their satisfaction or dissatisfaction (Goudy, 1977). This provides insight into the mobility, access to amenities and neighbourhood conditions as experienced by the aged.

Warnes (1988) points out that an increasing number of bureaucrats and politicians in countries all over the world are attending to issues relating to ageing without consulting the aged. It is therefore apparent that social inequalities that affect the quality of life of the aged need to be addressed and an equitable distribution of facilities and services needs to be implemented in the near future.

## **1.5 CHAPTER SEQUENCE**

Following the introduction, the conceptual framework for the study is presented in chapter two. The aims and objectives of the study, and the methodology used in the investigation, are explained in chapter three. Chapter four analyses the mobility and activities of the aged. The findings of the study are analysed in chapter five. In chapter six, recommendations and conclusions emanating from the study are presented.

## CHAPTER TWO

### CONCEPTUAL FRAMEWORK

#### 2.1 INTRODUCTION

The dynamic changes in the study of the aged has recently led to researchers devoting their efforts to understand the way in which individuals experience the ageing process from social, political and economic perspectives. Research in this tradition is based on the premise that the phenomenon of ageing cannot be understood in isolation from broader socio-spatial issues that shape and condition "the status, resources and health of the elderly, and even the trajectory of the ageing process itself" (Minkler and Estes, 1991: 21). The spatial aspects of the wider social networks of the aged include: housing, income, activity patterns, transport and mobility.

From a geographical perspective, the transitions of ageing involve three interdependent themes. The first is a change in the individual's transactional relationship with the physical and social milieu. Here concern is with understanding human relationship with places. The second involves the geographical distribution of the aged. In this domain, concern is with description and explanation of spatial patterns. Thirdly, a geographical perspective can help facilitate a more equitable spatial allocation of resources and services (Rowles, 1986). The aim of this chapter is threefold: firstly, to contextualize Social Gerontology as a sub-discipline of Social Geography; secondly, to investigate the various theories on ageing, with emphasis on spatial mobility patterns; and thirdly to review the relevant literature in respect to this

field of study. This chapter is divided into ten sections. The relationship between Social Gerontology and Social Geography, basic needs of the aged, mobility problems experienced by the aged, access to services and facilities, leisure and recreational pursuits of the aged, theories that explain the ageing process, ageing patterns in developed countries and ageing in less developed countries.

## **2.2 SOCIAL GERONTOLOGY AND SOCIAL GEOGRAPHY**

Tibbitts (1960:3) defined Social Gerontology as:

An organized field of knowledge concerned with the behavioural aspects of ageing in the individual, with ageing as a societal phenomenon, and with the interrelationship between the two.

Such a definition encompasses economic and cultural facets of ageing such as retirement, income, mobility, and attitudes toward ageing and activity patterns.

Warnes (1990) states that the main objective of social gerontology is to help in the understanding of the ageing process, of age-related changes in human behaviour, attitudes and circumstances, and of our society's responses to the requirements and preferences of the aged.

It was only in the late nineteenth century that the academic study of the aged and of ageing was given prominence by medical research relating to physiological and biochemical conditions of old age (geriatrics). Later, gerontology emerged, mainly

within the medical profession, as the study of the processes of growing old. Gradually these interests widened and merged with those of social statisticians, to form social gerontology, which deals with social, economic, and demographic conditions of the aged (Warnes, 1982).

The study of ageing and of the aged is not novel to Human Geography. There have been decades of intermittent writing on the subject. The impact of the environment on the aged and their interaction has been a major concern of social gerontologists for several decades (Tibbitts, 1960; Kahana, 1975; Lawton, 1980). Gilbert (1939) paid attention to interest in the retirement function of sea side resorts. Golant (1972) carried out research on the elderly's travel and residential patterns in Toronto. Towards the end of the seventies many geographers focused on the sociological and humanistic aspects of ageing (Wiseman, 1978; Golant, 1979; Paillat, 1979; Warnes, 1981).

Geographical research on activity patterns and travel difficulties as well as the various services required by the aged has been appreciated by the planning and welfare professions (Robson, 1982). Geographers have also learnt a great deal from the existing literature accumulated by architects, social administrators, planners and sociologists. In this way social geography has built a complementary relationship with other social sciences while maintaining its age old concern with place and space. In view of this Warnes (1982:2) was of the opinion that geographers should have done more in the way of research on the geographical aspects of ageing, and lamented the fact that "the subject has given such slight attention to the many geographical aspects

of social gerontology".

Warnes (1982) suggests some reasons for this neglect. Before 1950 many geographers rejected the relevance of social facts to their studies because they could not be expressed tangibly in the environment. This view led to the stunted growth of Social Geography as compared to either Urban or Economic Geography. Today social geographers have widened their interests in society, economics and politics. More recently, many of the social geographers have focused their attention on social problems (Warnes, 1982).

Some notable research in this area include spatial aspects of service provision (Bohland and Frech, 1982) and spatial aspects of the elderly's housing (Mangum, 1982; Rowles, 1986; Golant, 1992; Bond, 1993; Holdsworth and Laws; 1994; Harper and Laws, 1995). Rowles (1986) argued that three interdependent themes characterize research on the aged:

- (i) Age-related changes in the individual's relationship with their environment and locale.
- (ii) The spatial distribution of, and person-environment relations among the aged.
- (iii) Interests in service delivery and personal support.

These three changes clearly relate to the experiential, spatial, analytic and social administrative issues in Human Geography. Given the central issue of this research, it can be argued that the quality of life of the aged is as much, if not more, related to their social isolation or integration and to their physical capacities rather than material

resources. Advances within the discipline of Geography helps to open up new possibilities for geographers interested in ageing as well as to provide new approaches which gerontologists working within other disciplines might beneficially adopt (Harper, 1992). However, of greater concern is the fact that geographers have largely ignored aspects of ageing within the social sciences (Laws, 1993).

Finally, it can be concluded that the geographer's particular interests and techniques would supplement the capacity of social gerontology as an applied science. Further, since social gerontology is noted for its multi-disciplinary character, the contribution from social geography is sure to produce mutual advantages.

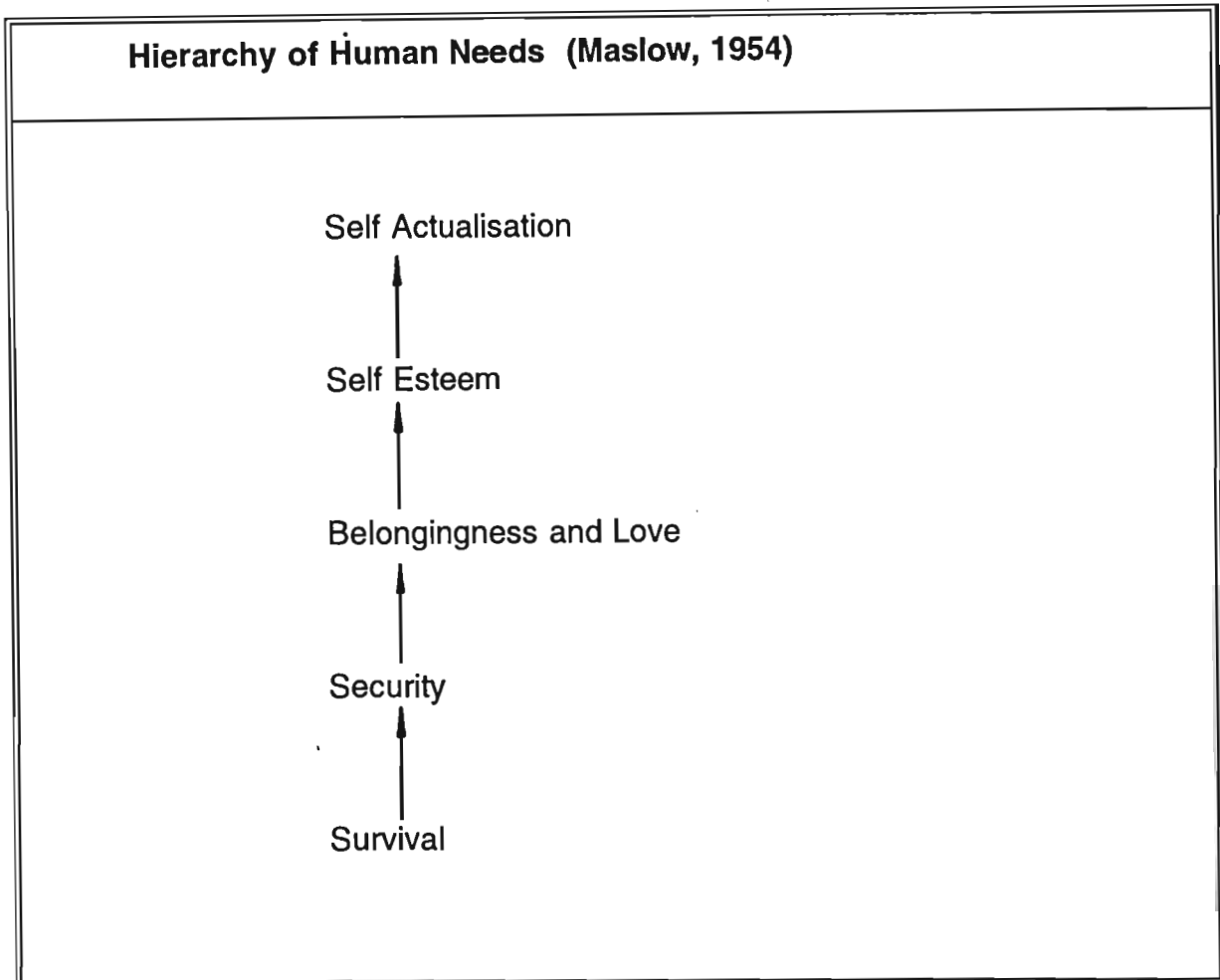
### **2.3 BASIC NEEDS OF THE AGED**

The most often quoted categorisation of human needs is that devised by Maslow in 1954. He divided needs into five basic groups. These five categories are shown in table 2.1. Maslow (1954) argued that once basic needs such as food and shelter are satisfied, higher needs take command and impel man towards new goals. Brody (1974) explained that if the related needs, such as security of income, available health services and adequate food and shelter are satisfied, then they contribute to respect, individualisation and self-determination. Stagner (1970), building on the ideas of Maslow, suggested that the level of satisfaction expressed about an environment reflected the state of social well being of that particular community.

Just as other groups have basic needs, so too, do the aged. Due to various

physiological, psychological and economic limitations which accompany old age, the

**Table 2.1 Maslow's Hierarchy of Human Needs**



elderly find that some of their needs are not met. The problems of the aged are not confined to one or two areas, such as health or social relationship (Hadley, Webb and Farrell, 1975). Some of the changes which occur in the lifestyle of the aged may include:

- (i) Retirement (increase in leisure time).
- (ii) Decrease in mobility (health or financial reasons).

- (iii) Reduction/loss of income.

This has important implications for policy makers, since the satisfaction of the aged with their environment requires that all or as many as possible of their needs be met (Huttman, 1977). According to Huttman (1977) the following needs are important to the aged:

- (i) The need for income assistance.
- (ii) Health needs.
- (iii) Needs centred around difficulties with housing, cooking and shopping.
- (iv) The need for social interaction.
- (v) The need to interact with the environment.
- (vi) The need for accessibility to services or transportation to services.

Chapman (1979) focused his research on the unmet needs of the aged. His study suggested that the following factors resulted in the needs of the aged not being met:

- (i) An inability to communicate their needs with the authorities.
- (ii) A lack of knowledge and awareness on the part of the aged about existing services.
- (iii) Authorities underrating needs expressed by the elderly themselves.
- (iv) Failure to supply requested services on the part of the authorities.
- (v) While poor physical health was not found to be a significant factor affecting the use of services by the aged population in general, it did have a profound influence on those people over eighty years.

The ageing process is often accompanied by increasing handicaps and limitations

such as physical disability or low income. These result, not only in decreased mobility, but can lead to a situation where the needs of the aged are not satisfied.

## **2.4 MOBILITY AND THE AGED**

Mobility is sometimes used to mean the amount of travelling that one does. Warnes (1982:268) cites the description of mobility as given by Hopkin, Robson and Town (1978) who defined mobility as "the ability to travel, whether or not this ability is used". In this description mobility is seen as the sum of the ability to use different modes of transport and of their availability. Mobility is a vital factor that has a profound influence on the quality of life of the aged. If the aged wish to continue living independently then they will have to satisfy their physical, social and psychological needs. These needs include going to the shop, meeting friends and families, seeking medical care and conducting their personal business (Ferreira and Mostert, 1986). Some form of adequate transportation is necessary to meet these requirements. Many of the aged do not have the regular use of a car. Some are dependent on buses or walking. The use of either of these alternatives tend to become more difficult with age. The quality of life of the aged is enhanced by mobility through freedom from isolation and the ability to choose one's range of activities (Wachs, 1979).

Until recently, the mobility and the daily activities of the aged has been a neglected area of study. Gerontologists in the past have avoided studying the mobility patterns of the aged, and had concerned themselves with housing, health and social services that affected the quality of life of the aged. Geographers also failed to see their

contribution to the total upliftment of the aged population. According to Robson (1982:266):

Geographers, and those in related disciplines such as town planning and transport planning, have neglected the effects that their work might have on the activities and quality of life of particular sections of the population, such as old people.

Although growing old does not imply illness, one has to recognise signs of the ageing process. The common complaints suffered by old people are arthritis, rheumatism, cardiac conditions, mental confusion and handicaps such as impaired vision and hearing (Hunt,1978). These conditions have definite implications for the mobility of the aged. Climbing into a bus or a flight of steps become more difficult. Road crossing and driving a car become more dangerous. Furthermore, reduced income due to retirement from work has certain financial implications, thus affecting mobility.

Robson (1982:269) argued that

under these circumstances it is difficult to maintain and run a car or to replace it when its life expires. It also becomes expensive to travel by bus unless concessionary fares are available.

Functional impairments, difficulties in income maintenance, and the characteristics of transportation systems themselves have erected significant barriers to mobility for large sections of the elderly population (Chantilli and Shmelzer, 1971). Immobility results in an impoverishment of all aspects of life. In addition, lack of appropriate transportation constricts the life space of individuals, limits their capacity for self-maintenance, restricts their activities and contacts with other people, and may contribute to their disengagement and alienation from society (Carp, 1971b).

Relative access to the sites of social engagement is significantly influenced by the availability of alternative means of transportation (Ashford and Holloway, 1972). In

communities where public and/or commercial transportation facilities exist, those financially and physically able to use such services can maintain access to social activities in the absence of personal transportation. In communities with poor public and commercial transportation, the availability of personal transportation becomes critical in determining the life space of the aged (Warnes, 1982). Carp (1971a) argued that the greater the distance between residence and the locations of social services, resources, and facilities, the lower the frequency of walking as a means of mobility, and the more dependent the older person is on the availability of transportation for access to these locations.

Thus, the availability of transportation can increase the capacity for mobility among the aged, and expand their range of social interaction. It can also promote a sense of independence and reduce social isolation. According to Warnes (1982) old age has become an important stage in the life-cycle. People are going into this phase of life healthier and thus live longer. Therefore, conditions which permit an active old age should be promoted. This might prevent the elderly from accepting inactivity as an image of old age. Hence, the solution of the problems of the elderly can only be brought about through an interdisciplinary approach. The geographer, planner and the gerontologist must work together with the view to finding solutions to the different problems facing the aged. In so doing they will be able to improve the quality of life of the aged.

Fine (1975:451) describes the interrelations among mobility, health and attitudinal variables in respect to the elderly as follows:

By increasing mobility, which may be postulated to have an indirect effect on health, improved transportation for the aged may also be expected to have an effect on related attitudes, such as life satisfaction and ego identity vs. despair. Given the well-known relationship between psychological and somatic states, an improvement in the psychological sphere should not only contribute to making people feel better, but should also contribute to improved mental and, indirectly, improved physical health. Such improvements could have significant impact on keeping older people self-sufficient in the community for as long as possible - a desirable goal both from the point of view of the individual and the community.

Mobility is therefore a critical factor for the aged who wish to live independently in the community. Many elderly people have difficulty in obtaining a level of mobility that is comparable with the general population. Some experience physical constraints on their mobility, such as poor vision and hearing. Furthermore, perceptual barriers also inhibit the mobility of the elderly. Emotions such as anxiety, fear, which include a fear of crowds, getting lost and physical attacks also act as constraints on mobility (Ferreira and Mostert, 1986). Although ageing is not synonymous with illness and debility, it is important to recognise signs of the ageing process: impaired mobility, mental confusion and handicaps such as impaired vision and hearing (Ferreira and Mostert, 1986). These handicaps have an influence on the mobility of the aged. Mobility restrictions constrict the life-space and narrow their social world. This results in low levels of life satisfaction for the aged, and limited participation in activities such as leisure and recreation.

## **2.5 ACCESSIBILITY AND AMENITIES**

When people are mobile they are able to travel more easily from one place to another.

The term 'accessibility' describes how easy it is to get to a particular place. Accessibility in this context refers to the spatial separation of people from a potential destination and the mobility of the people concerned. In geographical studies 'accessibility' has usually been viewed in terms of how people can get to particular destinations from their place of abode (Warnes, 1982). Accessibility cannot be measured solely in terms of distance. Time as a variable must also be taken into account.

It was found that people over the age of 65 in Britain travel 22 percent fewer kilometres daily than the population as a whole, but spent 12 percent more time doing so (Hopkin, Robson and Town, 1978a). The reason for this was that the elderly people were susceptible to disabilities which constrained their mobility. In this regard Warnes (1981:227) states that "the elderly have a limited range and duration of out-of-home activities". This can be attributed to their preferences, limited roles in society and economy, reduced physical capacities, and other constraints such as income and caring responsibilities (Falcochio and Contilli, 1974; Golant, 1976; Striner, 1978). No matter how modest the social activity, they usually involve some expenditure. Bus fares required to pay visits, the cost of movie tickets and the refreshments offered to a guest are costs incurred in participating in social life. It is these costs that may constitute a formidable barrier for the lower income group.

The use-value of any given residential environment is not only determined by the attributes of the dwelling itself and its associated social milieu, but also by its relative location in terms of shops, schools, parks and medical facilities (William, 1971; Harvey,

1973 ). Access to these amenities is also important to the aged and to their quality of life. Accessibility varies markedly between geographical areas. In the centre of towns, housing and facilities are close by, but in the suburbs housing density is lower and facilities are scattered. In the rural areas this dispersion is even wider. Access measures the degree of opportunity open to any member of society and that includes the aged. In this regard it provides a measure of the extent to which amenities and services available in the environment possess any utility value to the aged. The mere provision of amenities has no utility value to the aged unless the amenities are accessible in terms of such criteria as distance, time, cost and overcoming barriers in the physical environment (Robson, 1982).

According to Hagerstrand (1973a) accessibility has a financial component because an individual must have the necessary resources for reaching a supply point whenever he/she desires to do so. Furthermore, given the necessary resources, the distance/discomfort equation may limit or bar access to an amenity. Ingram (1977) regards accessibility as the inherent characteristic or advantage of a place with respect to overcoming some form of spatially operating source of function, for example time and/or distance. Most definitions of accessibility emphasise the ability to overcome some obstacle whether it is, social, spatial or financial, in order to reach an amenity or service. In the context of this study accessibility refers to the ability of the aged to reach any amenity or service that they may choose in order to improve their quality of life.

Amenities have been provided in most environments to add to the pleasantness of life.

These amenities include day care service centres, parks, shopping and health care facilities. Table 2.2 outlines the various public and private sector amenities that the aged make use of daily. Accessibility to these amenities are essential to the total well-being of the aged.

**Table 2.2 Public and Private Sector Amenities**

<b>Public Sector Amenities</b>	
(i)	Health services - hospitals, clinics, etc.
(ii)	Educational services - libraries, universities, etc.
(iii)	Social services - day care centres for the aged, etc.
(iv)	Recreational and cultural amenities - parks, sports fields, etc.
(v)	Transport and communication - a service which facilitates access to the other amenities as well as other places in the environment.
<b>Private Sector Amenities</b>	
(i)	Retail outlets and commercial centres and the availability of related goods and services.
(ii)	Recreation - these include restaurants, cinemas, etc.
(ii)	Professional and health services - include the doctors, lawyers, etc.

One of the most important factors that affects accessibility is time. Hagerstrand (1970) constructed a model which placed mobility within a space-time framework. He argued that human behaviour was limited by "capability constraints" which in turn limited the activities in which an individual could engage. Capability constraints were spatial as well as temporal, and were responsible for co-ordinating a variety of activities around

what Hagerstrand termed the "home base". The concept is illustrated in figure 2.1, a "time-space prism". The size of the prism will vary with access to the various modes of transport. This is relevant to the aged as they too are faced with certain time constraints: waiting long periods for public transport; distance between place of residence and the bus stop; and the length of the journey. Thus, time has an effect on the spatial mobility patterns of the aged and influences their participation in certain activities.

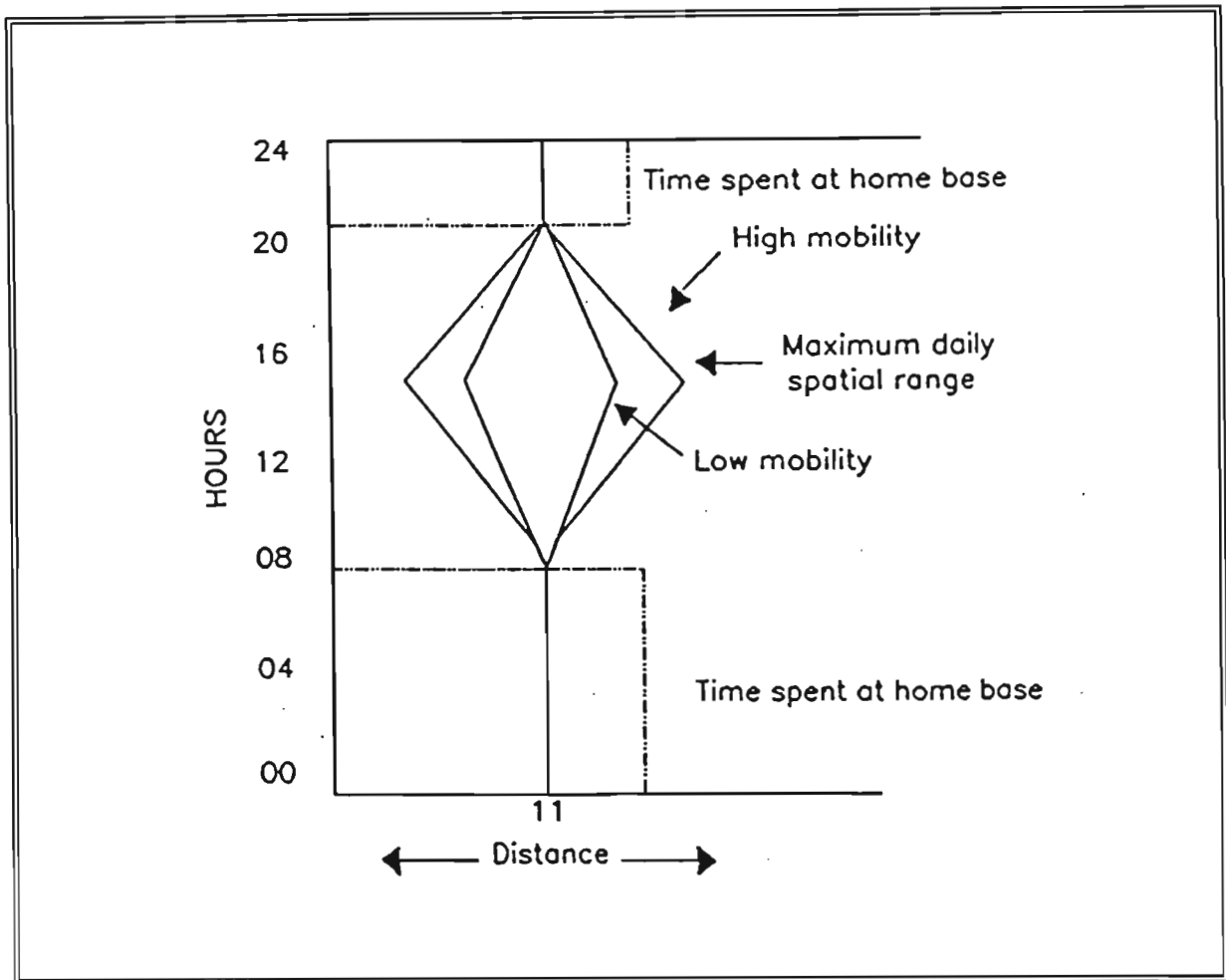
This brief evaluation of what constitutes "access" and "amenities" suggests that access to amenities was vital so that the aged are able to interact with their environment. Furthermore, the extent to which inaccessibility to facilities and mobility constraints contribute to dependence on state services must be estimated so as to secure the maximum benefit for the elderly (Hanson, 1977; Abrams, 1978; Rowles, 1978).

## **2.6 LEISURE AND RECREATION**

A major concern of those who work with older adults is not only that of adding years to life, but also of adding life to years. While the later years of life has been sometimes labelled as "golden years", this period has often been referred to as one of frustration, lack of purpose, declining health, and general neglect by the social system (Mancini and Orthner, 1982). Several social scientists have referred to this phase of life as representing a 'roleless role' (Burgess, 1960; Mancini, 1980). The traditional expectations of older people include inactivity and withdrawal from many of life's roles. Retirement from work makes it difficult for the aged to maintain a

meaningful and active place in society.

Figure 2.1 Capability Constraints: A Daily Time Prism (Hagerstrand,1970:14)



Not all dimensions of life are severely diminished by ageing. One such area is leisure and recreation. This area has the potential to expand as the aged have more time to engage in leisure activities (Riley and Foner, 1968; Damley, 1975; Teague, 1980). Since leisure activities often include social interaction, leisure participation may be particularly beneficial to the elderly because social involvement is considered a key factor to successful ageing (Atchley, 1976; Crandall, 1979; Kelly, et al., 1986).

Hendricks and Hendricks (1976:37) suggest that "the individual is able to construct an extended future if he has access to personally and socially significant types of activity."

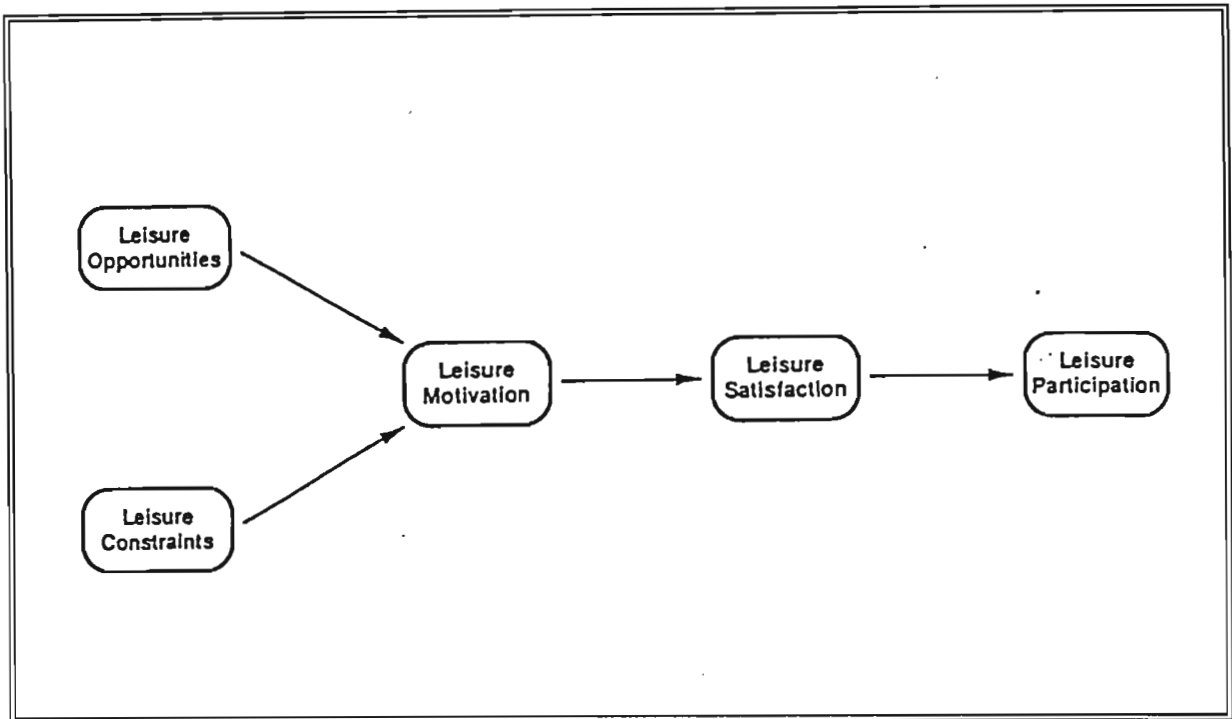
Therefore, it is important to diversify the leisure opportunities of the elderly. This enables the elderly to shape their free time and make it more productive. Leisure interests can provide a sense of continuity, a stretching of the present into the future:

New games, hobbies, and skills offer new challenges to offset some of the setbacks that may be experienced on a day-to-day basis (Mancini and Orthner, 1982:100).

Lipman and Ehrlich (1994) claimed that those who maintain their social contacts and engage in various activities are most successful in leading an active life in their old age. Losier, et al., (1993) argued that among the numerous factors that affect leisure experiences, motivation was the most important. His proposed motivational model of leisure participation among the elderly is presented in figure 2.2 and can be summarized in terms of three basic propositions. The first states that the perception of leisure opportunities and perception of leisure constraints will determine leisure motivation. The second proposition was that leisure motivation will affect leisure satisfaction. Thirdly, leisure satisfaction leads to leisure participation.

However, other factors such as perceived health and socio- demographic variables may also affect leisure satisfaction and leisure participation (Markides and Martin, 1979; Ragheb, 1980; McGuire, 1984; Ouellette, 1986).

**Figure 2.2 Proposed Motivational Model of Leisure Participation among the Elderly (Losier, Bourque and Vallerand, 1993:157)**



The elderly often find themselves in a situation where work, careers and children no longer provide the framework for defining their future. It is during this period that leisure and recreational activities can provide a new framework of interests. Independent activities like reading and sewing offer chances for private reflection and personal growth without the necessity of approval from others (Warnes, 1982). Shared activities, likewise, offer commitments to others that can help build social support networks for the elderly. Whether the activity is a game such as bridge or an organisational activity which involves a religious group, these provide continuity to life in old age.

Many recreational activities such as team sport, games and group visits to the park

include an important social component. Crandall (1979) suggests that social interaction is both a motivation for participation in activities and a source of satisfaction. When friends and family co-operate in recreational activities, they develop a unique bond that is important to the total well-being of the aged (Mancini and Orthner, 1982). The emergence of both the quantity and the quality of relationships are significant indicators of health and well-being (House and Kahn, 1985).

## **2.7 THEORIES OF AGEING**

There are a number of theories that try to explain phenomena and patterns that underlie the ageing process. Social geographers and gerontologists have not been able to formulate any comprehensive and totally adequate theoretical framework on ageing. The reason for this is that theories on ageing involve an analysis of human behaviour which is infinitely complex. Cowgill and Holmes (1972:1) contend that for more than two decades, "the field of gerontology has been floundering towards a coherent and meaningful sociological theory of ageing". Geographers and gerontologists have nevertheless developed a few frameworks that contribute towards an understanding of the ageing process. Despite the absence of consistent empirical support, a fair number of these frameworks have assumed more or less universal application. The two most important ageing theories are the disengagement and activity frameworks.

## 2.7.1 DISENGAGEMENT THEORY

The disengagement theory as defined by its proponents Cumming and Henry (1961), is an invertible process in which the individual and society make a gradual and mutual withdrawal. From their research they concluded that this withdrawal or disengagement was a universal process. They argued that society retracts because of its need to fit younger people into the slots once occupied by older people, no longer as useful or dependable as they were, and in order to maintain the equilibrium of the system. On the other hand the aged choose to retreat because of an awareness of their diminishing capacities (Cumming, et al., 1960; Cumming and Henry, 1961a;b).

Crandall (1980) highlighted four characteristics which underpinned this theory:

- (i) Disengagement was a gradual process, happening as a series of events rather than suddenly.
- (ii) Disengagement was inevitable, as both the concept of disengagement and the process which made it occur were as a result of society's social structure.
- (iii) The process of disengagement was mutually satisfying for both individual and society.
- (iv) Disengagement is the norm, as demonstrated by factors such as mandatory retirement laws and age norms with regard to behaviour.

The disengagement theory represented one of the first positive approaches to old age. It argued that old age was a stage of development that one will have to pass through if one lives long enough. It emphasised that old age had inherent characteristics which were qualitatively different from middle age, that it involved a decline in ego, energy and decreased social interaction as a result of a decline in physical energy or

health problems (Kimmel, 1974).

In short, the disengagement theory emphasised that the accompanying ageing process resulted in the constriction of the life activities in space, physically, socially and psychologically.

The major criticism of disengagement theory is that it is too simplistic (Crandall, 1980).

Maldonado (1987) questioned whether disengagement truly was truly universal and inevitable, and whether it really resulted in high morale.

Maddox (1966:182) argued that

a pattern of disengagement is more adequately viewed as a continued life-style of particular individuals than as a likely culmination of a process characteristic of all ageing individuals.

Crandall (1980) noted that there were many elderly people who did not disengage from society, and who did not appear to have suffered adverse consequences from continued engagement.

### **2.7.2 ACTIVITY THEORY**

Since the formulation of the activity theory of ageing by Havinghurst and Albrecht in 1953, the theory has been subject to intense scrutiny. Although subsequently challenged by the disengagement theory advanced by Cumming and Henry in 1961, it is now widely held that activity, particularly social activity, contributes to increased

life satisfaction among the aged (Beaver, 1983).

Decker (1980) referred to the activity theory as the dominant paradigm in the field of gerontology. He suggests that the aged are essentially the same as middle-aged and younger individuals. They have the same psychological and social needs. All individuals need to stay active, to be involved with people in social groups and organizations, and to interact with the environment. However, the aged must find substitutes for lost roles in work, family, and community in order to maintain a sense of personal identity and a positive self-concept. This view was also supported by Havighurst, Neugarten, and Tobin (1963:161):

Old people are the same as middle-aged people with essentially the same psychological and social needs... . The older person who ages optimally is the person who stays active and manages to resist the shrinkage of his social world.

The proponents of the activity theory of ageing argued that disengagement was not a voluntary or intrinsic process. Disengagement was imposed upon the individual either as a result of his biological deterioration and general health problems, or as a result of society withdrawing from the ageing individual by either discouraging participation or by failing to encourage participation. Reduced activity was a result of external circumstances, such as the loss of a spouse, or the death of friends, imposition of retirement or income loss (Havighurst, Neugarten, and Toblin, 1963). Furthermore, these activity theorists argued that socio-economic variables were more important for the understanding of disengagement.

Assessing the concepts and ideas of activity theorists, Lemon, Bengston and Peterson

(1972:519) concluded:

Activity provides various role supports necessary for reaffirming one's self concept... . Role supports are necessary for the maintenance of a positive self concept, which in turn is associated with high life satisfaction.

Criticisms levelled at the activity theory include that role activity may not determine higher morale, but rather that people with higher morale are better able to form friendships and stay active than those with a lower morale (Carndall, 1980). Another criticism is that activity theory creates an expectation that older people are merely copies of middle-aged people, and that no allowance is made for patterns of behaviour peculiar to the aged (Lowy, 1985).

Supporters of the activity theory argue that the best estimate of how active an older person is at any age is based on previously established patterns of social interaction and that only by understanding the older person's previous life style can one predict his degree of engagement or disengagement. Essentially, the activity theorists claim that individuals need to keep active if they wish to be happy in their old age, and that the person who remains active will enjoy higher morale and thus experience optimal ageing (Crandall, 1979; Maldonado, 1987).

### **2.7.3 OTHER THEORIES**

The quest for alternate conceptual frameworks has led to more theories on the aged being developed. A brief account of these theories will be given, not only to provide

a context for the present study, but also to present a clearer understanding of the aged and the ageing process.

### **(i) SOCIAL INTEGRATION THEORY**

The social integration theory of ageing was proposed by Rosow (1967) and expanded by Osgood and Sontz (1982). Rosow's basic contention was that the integration of the aged into society was seriously weakened in several respects by loss of income or loss of spouse and friend. The solution for reintegration of the aged into society therefore

lies in age-segregated communities in which the aged find a ready source of friends, in age peers, as well as meaningful leisure role activities and roles in various organizations (Rosow, 1967:35).

This is further emphasized when Rosow (1967:162) argued that "people are tied into their society essentially through their belief, the groups that they belong to and the positions they occupy or their social roles".

Durkheim (1980) found that social integration was necessary both for the maintenance of the social order and the happiness of the individual. Rose and Petterson (1965:64) concluded that this theory "provides a network of interrelationships and serves as a social and cultural milieu for the older individual". They further argued that not only can the potential range of social relationships be expanded, but also that favourable evaluation of aged-linked roles could be enhanced. This results in shared values

which helps to facilitate the ageing process (Rose and Peterson, 1965).

## **(ii) MODERNISATION THEORY**

The modernization theory was developed by Cowgill and Holmes (1972) and later revised by Cowgill (1974). This theory described the level of modernization and the role and status of the aged in society. The modernization theory encompasses level of technology, degree of urbanization, rate of social change, and the degree of westernization (Cowgill and Holmes, 1972). The basic proposition was that in modern industrialised societies change was inevitable and this resulted in the abandonment of older people economically, socially and culturally by their children and societies in general (Mantzaris, 1986).

Through their studies Cowgill and Holmes (1972) came to the conclusion that urbanization induced geographic mobility and tended to break up the extended family. As children move up the occupational and economic ladder and relocate, older family members were left behind in lower status positions, isolated from frequent social contact with children and grandchildren. Cowgill and Holmes (1972) pointed out that the status of the aged was inversely proportional to the rate of social change, residential mobility and the level of literacy.

Cowgill (1974) isolated four of the most significant and salient changes in modern society which, according to modernization theory, affected the conditions of older people: scientific technology, urbanisation, literacy and mass education, and health

technology. He concluded that it was these four important aspects of modernization that eventually lead to the lower status of the aged in society.

### **(iii) SUBCULTURE THEORY**

This theory, proposed by Rose (1965), suggests that elderly people share unique experiences with each other which constitute a specific subculture (Crandall, 1979). Social services designed to assist older people also tend to promote recognition of their common situation, thus leading to the development of a subculture (Hendricks and Hendricks, 1979b). The social stigma attached to being old, or the aged's own affinity for people of their own age provides sufficient grounds for a subculture (Rose, 1965; Maldonado, 1987). The elderly tend to interact with each other increasingly as they grow older, and with younger persons decreasingly, and hence develop a distinct subculture (Rose, 1965). From a standpoint of activity levels, Miller (1965) noted that the aged who engaged in activities governed by performance standards not suited to their capabilities, will in all likelihood readjust their interests to reflect their current status, joining with their elderly peers.

Proponents of subculture theory acknowledge that the elderly were not isolated from the general population, and that this minimised the development of an aged subculture (Rose, 1962; Crandall, 1980). The subculture theory recognised that the elderly population was not homogeneous, and hence there was not only one aged subculture. As a result of this, the theory also recognises that the aged subculture does not have

universal impact (Crandall, 1980).

#### **(iv) AGE STRATIFICATION MODEL**

The theory of age stratification was put forth by Reily (1971) and Foner (1975). Ageing was perceived in this model as an important determinant of behaviour for two reasons. The first was that ageing may limit a person's ability to perform certain roles. The second was that rights, roles, opportunities and privileges were allocated differentially on the basis of age (Crandall, 1980). This was emphasised by Reily (1976:189):

A person's activities, his attitudes toward life, his relationship to his family or to his work, his biological capacities and his physical fitness are all conditioned by his position in the age structure of the particular society in which he lives.

A perspective that was derived from the age stratification theory was that of minority grouping. A minority group can be defined as a group of people who were accorded differential and unequal treatment because of physical and cultural characteristics (Warnes, 1982). Baron (1961) argued that the aged were an emerging quasi-minority group and that they resembled many of the ethnic minority groups. They were subject to stereotyping, prejudice and discrimination. Palmore (1969) also argued that the aged exhibited four major minority-group characteristics:

- (i) others had a negative stereotype about the aged;
- (ii) the aged were segregated;

- (iii) the aged were discriminated against; and
- (iv) like other minorities they reacted in a similar way to prejudice and discrimination.

Javis (1972) stated that old people were a minority group because they are clearly visible as a distinct category in a single society.

## **2.8 AGEING IN DEVELOPED COUNTRIES**

A short period after World War II, new population trends began to appear in most developed countries. Firstly, the proportion of old people began to increase. Today most Western countries are characterised by an ageing population. This was evident from the fact that the chronologically older populations were growing at a faster rate than the younger population. Secondly, there was a high percentage of elderly people. It was this problem that was causing great concern in the developed countries. This phenomena was largely due to the medical profession and its successful efforts to combat disease. Improvements in nutrition and living standards also played a role in increasing life expectancy and decreasing mortality rates. Therefore, in the developed countries there would be an increasing number of elderly person who live longer, and healthier and are able to live independent lives in the community.

In most developed countries the general policy on the care of the aged is to assist the aged to live independently in their communities for as long as possible, thus

forestalling premature institutionalization. The local authorities in these countries were faced with the problem of providing the necessary services and facilities for the ever increasing non-institutionalized aged population. The changes in the demographic composition of the elderly will have a profound significance for providers of resources and facilities for the aged (Ford and Smith, 1995)

## **2.9 AGEING IN LESS DEVELOPED COUNTRIES**

In the less developed countries of the world there has also been an increase in the aged population in the last decade. Coale (1983) concludes that as the fertility rates were declining in most countries of the world this was resulting in an ever increasing aged population. Therefore the next few decades would see dramatic changes in the demographic ageing processes. This view was also supported by Kirk (1979:401) when he said that "we are now at an exciting time in demographic transition among the developing areas, and this will occur more rapidly than it did in the west."

Although the less developed countries were experiencing an increase in the number of elderly people, this passed unnoticed because birth rates in these countries were still high. At present a little more than half of the world's elderly population live in the less developed regions, and by the turn of the century this share might increase to 61 percent (Warnes, 1987; 1988). Warnes (1990:35-36) further concluded:

The fastest growth of the elderly and the greatest problems of service provision in the next few decades will therefore occur in the third world, particularly in these countries that since 1960s have experienced marked fertility decline, partly because it is these countries that are experiencing rapid social and economic change.

Thus, from the above population trends, it can be concluded that there will be an increasing number of aged people in all countries of the world, who will live longer, healthier and more independent lives.

## **2.10 CONCLUSION**

If we are to learn anything of the geographies of ageing and the aged, we should listen to the voice of the older people and attend to their concerns (Harper and Laws, 1995: 199).

Social gerontology like most other disciplines has the problem of integrating theoretical knowledge with practical application. Although there are a number of theories in social gerontology, not a single theory has an absolute universal application. However, the growth of explanatory models in the last decade has laid the groundwork for significant advances in the near future. Changes in longevity and life expectancy, as well as social, political and economic currents of the future will result in ideas and solutions regarding the aged problem. Thus, gerontologists must construct new models or revise older ones if their explanations are to be of any scientific or social consequence.

According to Warnes (1982) old age has become an important stage in the life-cycle. People are going into this phase of life healthier and thus living longer. Therefore, conditions that permit an active old age should be promoted. This might prevent the aged from accepting inactivity as an image of old age. Thus solutions to the problems of the elderly can only be brought about through an interdisciplinary approach. The geographer, planner and the gerontologist must work together with the view of finding

solutions to the different problems facing the aged. In so doing they will be able to improve the quality of life of the aged.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 INTRODUCTION**

The increase in the number of people over the age of sixty-five years, and the recognition of the enormous implications of this growth for the well-being of our society as a whole, has stimulated interest in the research of the aged in recent years (Lawton and Herzog, 1989). During the early phase in the development of gerontology methods used in research on younger age groups were often simply imported and used for the aged. However, experience soon taught researchers that studying older adults posed some special problems and that traditional methods had to be adjusted to take into account age related differences (Lawton and Herzog, 1989). In this regard the primary contribution of geography is to reveal the nature of the social world through an understanding of how the aged act and give meaning to their lives in a specific environment (Eyles, 1988a). In this chapter the methodology adopted in this study is explained.

#### **3.2 THE RESEARCH IMPERATIVE**

##### **3.2.1 Aim**

The aim of this study is to determine the spatial mobility patterns of the aged in

Chatsworth and to identify difficulties encountered when engaging in these activities.

### **3.2.2 Objectives**

The objectives of this study were to:

- (i) identify basic needs of the aged;
- (ii) ascertain the degree of support that the aged receive from their families;
- (iii) determine the various disabilities that have a profound effect on the mobility of the aged;
- (iv) determine the different modes of transport used by the aged;
- (v) assess the problems experienced by the aged when using public transport;
- (vi) identify the various leisure and recreational activities of the aged;
- (vii) evaluate access to amenities in terms of time, cost and distance by the elderly;
- (viii) identify problem(s) or difficulties experienced by the aged when interacting with their neighbourhood/environment;
- (ix) evaluate the satisfaction/dissatisfaction of aged residents towards their neighbourhood/environment; and
- (x) suggest recommendations which will help to improve the quality of life of the aged in Chatsworth.

### **3.2.3 Hypotheses**

The following hypotheses are advanced:

- (i) the most important need of the aged is money;
- (ii) the aged receive support from their families;
- (iii) the aged are restricted in their movements because of their disabilities;
- (iv) the bus/mini-bus is the chief mode of transport of the aged;
- (v) the aged are dissatisfied with the services provided by public transport;

- (vi) the majority of the aged do not engage in leisure and recreational activities;
- (vii) the aged have poor access to essential services and facilities; and
- (viii) the aged are dissatisfied with their general living conditions in Chatsworth.

### **3.3 STUDY AREA**

With the implementation of the Group Areas Act large scale public housing projects were developed for the Indian community. Chatsworth was one such project. Chatsworth lies approximately 26 km to the south of Durban (figure 3.1). The total area of Chatsworth is 3 978 hectares. It is bordered by Umlazi in the west, Yellow Wood Park in the east and Mobeni in the south and Shallcross in the north.

The topography has a considerable effect on the planning of the town, creating steep road verges and thereby affecting access to properties and road side parking, and placing restrictions on active recreational space. Initially the town was designed, to accommodate 22 000 families. Presently it has a population of about 300 000. Chatsworth is divided into eleven neighbourhood units or community areas (table 3.1) (figure 3.2).

Each community area has been planned to be self-sufficient with regard to civic, commercial, educational and recreational requirements. Each community has public buildings such as a library, clinic, community hall, shopping centres and worship sites. In addition to neighbourhood centres, there is a major town centre which for topographical reasons is located slightly to the west of the centre of Chatsworth. This serves as a regional attraction, adjacent to a central sports and recreational area and

Figure 3.1 Location of Chatsworth

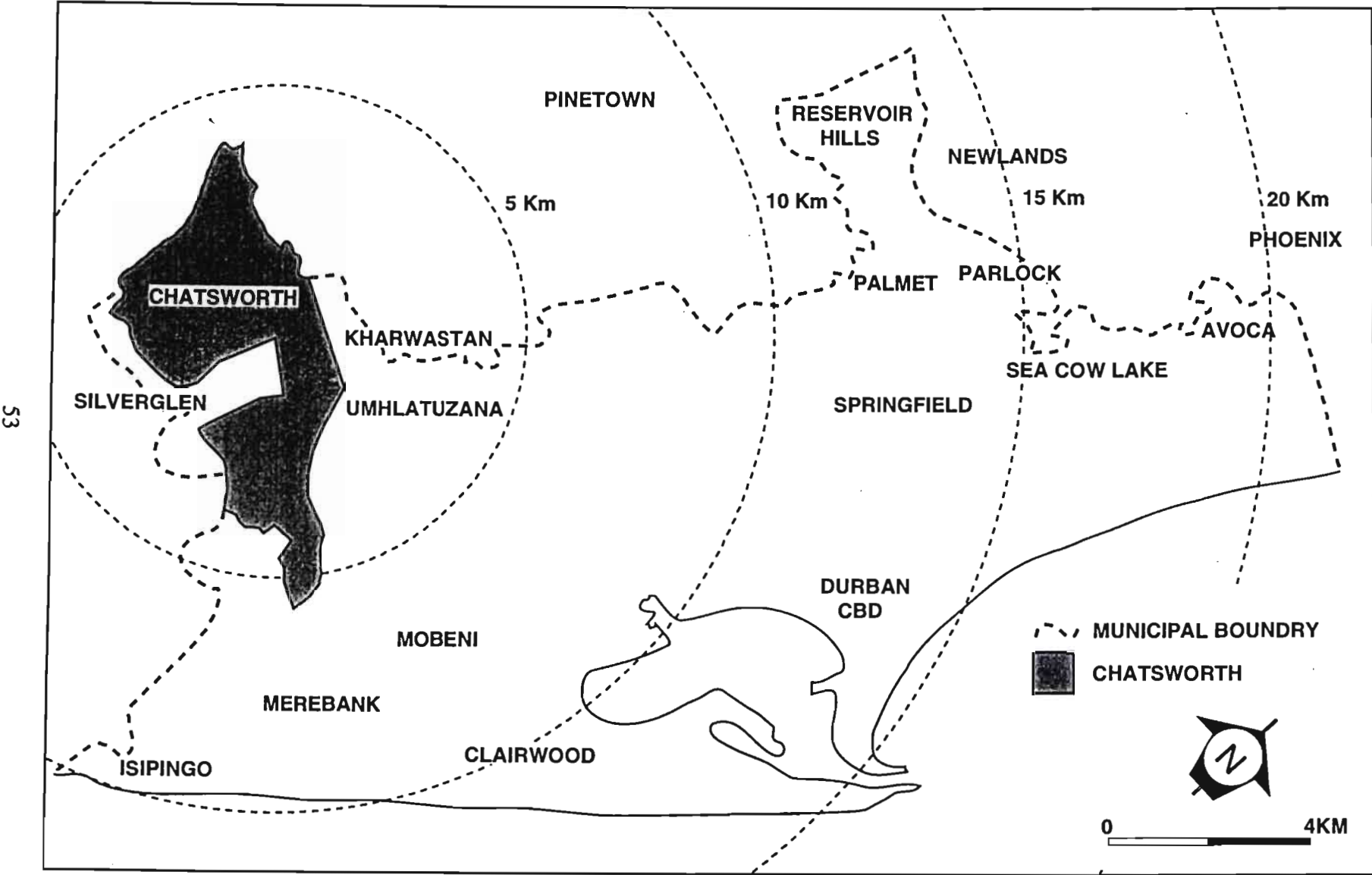
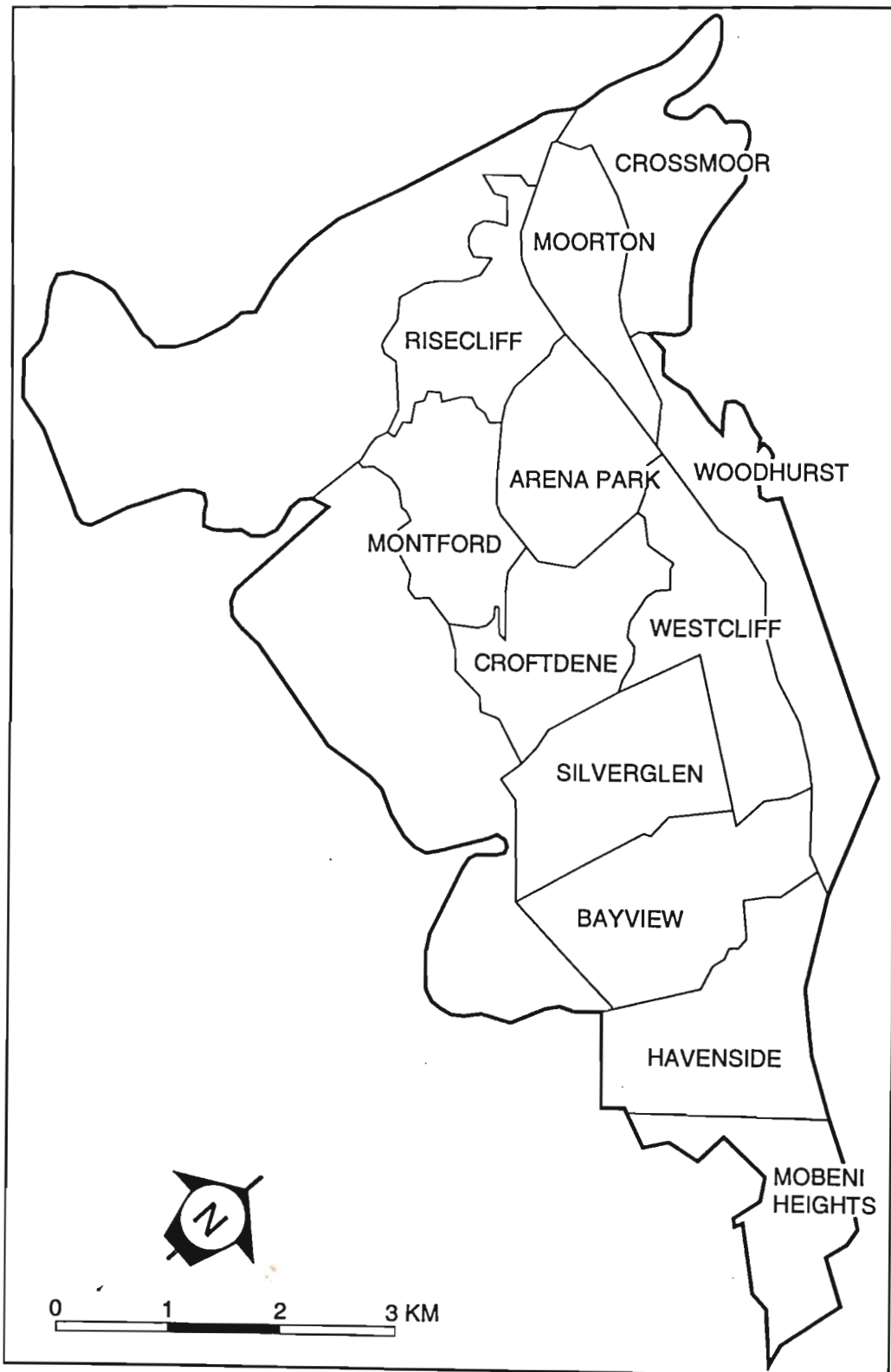


Figure 3.2 The Study Area

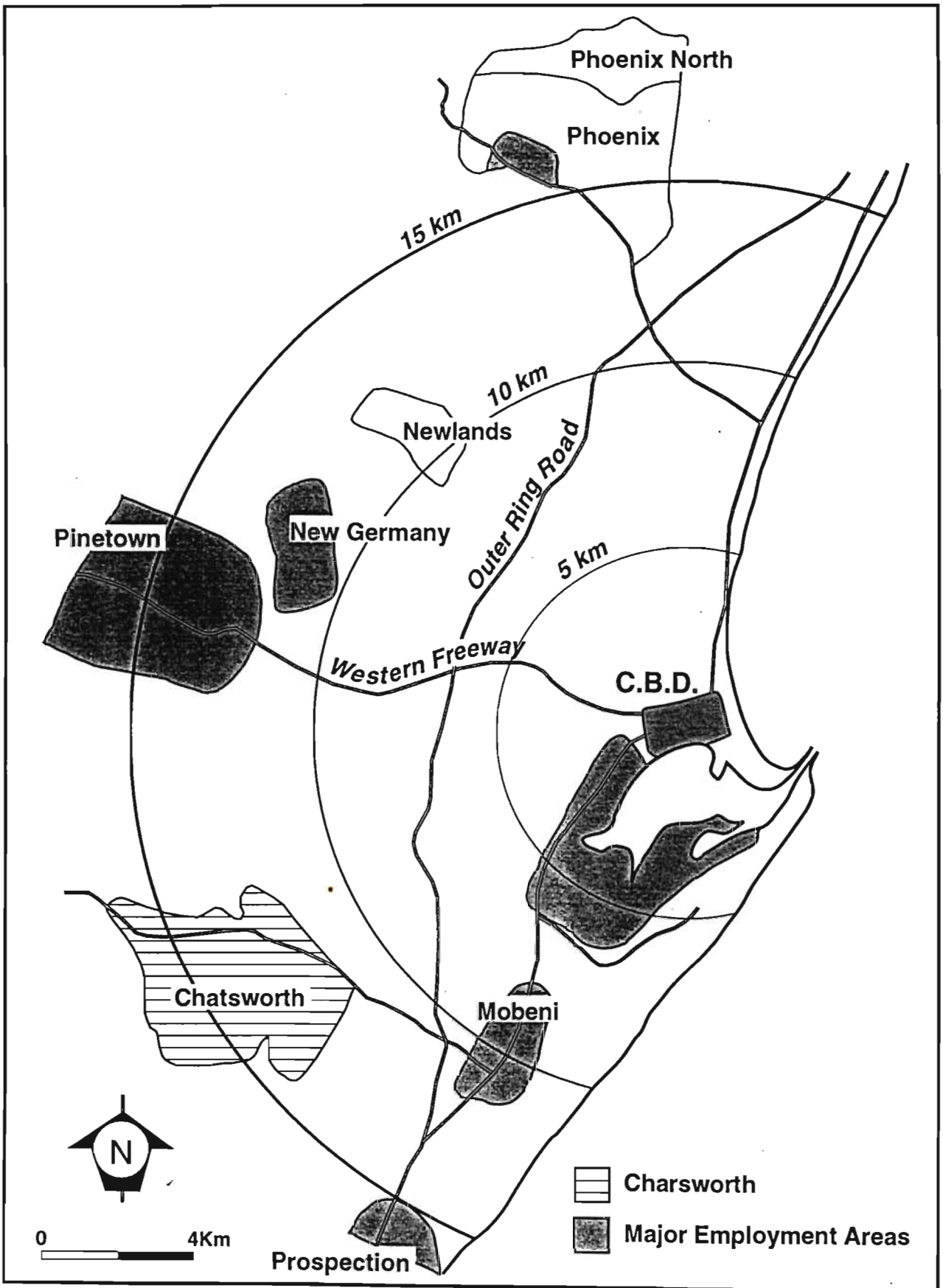


**Table 3.1. Community Areas of Chatsworth**

<b>Community Area Number</b>	<b>Community Area Name</b>
Unit 1	Havenside
Unit 2	Bayview
Unit 3	Westcliff
Unit 4	Mobeni Heights
Unit 5	Croftdene
Unit 6	Arena Park
Unit 7	Montford
Unit 8	Risecliff
Unit 9	Moorton
Unit 10	Woodhurst
Unit 11	Crossmoor

a major 750 bed hospital. The town was originally designed as a residential satellite to house the Indian people in the southern part of Durban. The residents of Chatsworth provide a reservoir of labour for the surrounding industries. The economically active people are employed mainly in Durban's city centre, the Jacobs-Mobeni area and Pinetown (figure 3.3). Today some light industrial sites have been introduced in Chatsworth to cater for local demand. The town is served by an arterial road, the Higginson Highway. This provides the only major access road for traffic moving directly into and out of Chatsworth and links the town to the industrial and commercial sector stretching from Mobeni to the city centre. The town is also served by an electrified rail service.

Figure 3.3 Regional Setting of Chatsworth



### 3.4 SAMPLING OF RARE POPULATIONS

The design of a efficient sample for surveying a rare population is one of the most challenging tasks confronting researchers. A rare population is taken to be a small subset of the total population. "Small" may be as large as one tenth or small as one hundredth, one thousandth or even less (Lawton and Herzog, 1989).

It is sometimes possible to identify strata with higher concentrations of the rare population. Thus, for instance, the rare population may be concentrated in certain geographical areas, clubs or service centres. In such situations it may be efficient to obtain a random sample from the strata identified (Bailey, 1987).

Since only about 25 percent of all household contain at least one person over the age of sixty years, this group is classified as a some-what rare population (Lawton and Herzog, 1989).

In the past gerontological research was neatly based on persons whose participation in the research was obtained in a non-scientific way. These studies were plagued by problems such as selection of respondents and inaccurate groupings. However, survey research methodology provides a unique and powerful set of tools for conducting research on ageing. The scope of possible topics to be covered, the ease of precise statistical methods for defining and sampling from known populations, and sets of well worked procedures for eliciting relevant information make it an ideal vehicle for studying a broad range of important aspects related to the aged (Lawton

and Herzog, 1989). This does not mean that other methods are less valuable. Keith (1986) recommends participant - observation as an important method of data collection when researching the aged. Lawton and Herzog (1989) suggest that survey research methodology is an encompassing, flexible and scientifically precise technology for research purposes in minority populations.

Recently, researchers have made use of various sampling techniques. Kish (1965) looked at survey sampling techniques and Sudman (1976) used random sampling. Cliff, et al. (1990) argued that where routine reporting was incomplete, or inaccurate, planners relied to a large extent on survey data. The negative aspects of household surveys are that it is labour intensive, comparatively expensive and data analysis can be time consuming (Oyoo, et al., 1991).

Bailey (1987) added a further limitation when he described household surveys as a rather artificial and restrictive instrument, limited to a relatively small number of previously chosen questions. Irrespective of these limitations, it is still a very effective method of collecting a significant amount of data over a relatively short period of time (Oyoo, et al., 1991). Furthermore Madge (1965:150) maintains that "the principle application of the interview in social science is its use for the purpose of making people talk about themselves".

The different methods in practice and reporting of human geographical research has provided a platform for methodological pluralism (Eyles, 1988b).

### 3.4.1 THE SAMPLE STRATEGY

A representative sample of aged residents in the Chatsworth was drawn using a stratified random sampling technique. According to Mendenhall, *et al.* (1971:53) "a stratified sample is obtained by separating the population elements into non-overlapping groups, called strata". Bailey (1987) says that, although the word "strata" implies rank order, the method of stratified sampling can be applied to any mutually exclusive (non-overlapping) groups, regardless of whether or not they are rank-ordered. Once the stratified sampling groups have been identified a random sample is drawn within each group. In this study the eleven community areas in their designated units comprised the stratified sample population (table 3.2). The population of each service centre ranged from 50 to 197, and totalled 815 in Chatsworth (table 3.2). One hundred respondents or a sample of 12.3 percent was chosen from all centres. In service centres with a population of less than 100, nine (9) elderly respondents were selected and ten (10) respondents from those centres with a population greater than 100. The aged were selected randomly from a membership register compiled by the eleven aged service centres and clubs in Chatsworth. A sample of 100 respondents was considered feasible and manageable in terms of time and costs in collecting the type of information that was required. Moreover, it was suitable for both quantitative and qualitative analyses.

The respondents were chosen on the criteria that they were mobile. "Mobile" was defined as being able to get around without assistance or with the assistance of an escort, walking cane, crutches but not confined to a wheelchair (Ferreira, 1986). Only

'mobile' persons were included in the sample. The reason for this was that severely handicapped or disabled persons generally have specific problems and needs (Ferreira, 1986) which fell outside the scope of this investigation.

**Table 3.2 Number of Respondents from Neighbourhood Units.**

<b>Unit Number</b>	<b>Area Name</b>	<b>Centre Population</b>	<b>Frequency</b>
1	Havenside	63	9
2	Bayview	98	9
3	Westcliff	60	9
4	Mobeni Heights	51	9
5	Croftdene	54	9
6	Arena Park	50	9
7	Montford	197	10
8	Risecliff	55	9
9	Moorton	74	9
10	Woodhurst	61	9
11	Crossmoor	52	9
	Total	815	100

### **3.5 DATA SOURCE**

The primary data for this study was collected through participant-observation and a questionnaire survey. Both quantitative and qualitative methods were used in this study. Brayman (1984) explains that the quantitative approach can be used simultaneously with the qualitative approach and their purposes will not clash. He

argued that, when used in conjunction, each method provides a great depth of perception that neither is able to provide by itself. Since life is socially constructed, the aged assign their own meanings to every day experiences. This cannot be studied only in terms of deterministic laws but rather through interpretation and understanding. Thus the qualitative research strategy was suitable for this study because it offers the policy maker a framework to make policy decisions that will have positive impact on the lives of the people affected or thought to be part of the problem (Lawton and Herzog, 1988).

### **3.5.1 Participant-observation**

Participant-observation refers to a variety of strategies in which the researcher studies a group in its natural setting by observing their activities and to a varying degree, participating in their activities. Keith (1986) stated that very little is known about the quality of life and feelings of the aged, and that many other research methods cannot be used before preliminary participant-observation discovers reasonable questions and answers. Handel (1991:244) explains this argument further:

Participant-observation is a method in which a researcher spends a great deal of time over a period of weeks, months or years observing to a greater or a lesser degree, joining in the activities of the group or organisation he or she is studying (Handel, 1991: 244).

The holistic and qualitative data this method can provide about the lives of the aged are urgently needed (Keith, 1986). Permission was obtained from the University of Durban-Westville's, Senior Citizen's Club in Westcliff and the Aryan Benevolent Home

Service Centre in Montford. The researcher visited these centres at least once a week, to conduct the survey for three months mainly during weekends. This made it possible for the researcher to engage in informal, conversational interviewing, thereby continually reviewing the data collected. The members of the service centres were therefore able to express their opinions and attitudes on the topic more freely. A definite advantage of using this type of data collection is that it offers the researcher the opportunity to perceive the situation from the "inside" rather than from the "outside" (Yin, 1987). The use of the researcher as a methodological tool has led to questions of objectivity and scientific validity since observation cannot be carried out in a value-free vacuum (Evans, 1988). Thus to validate this research a questionnaire was used to overcome subjectivity and bias.

### **3.5.2 Group discussion**

Before embarking on the actual collection of data, a series of group discussions were held with the aged at the Woodhurst and the Montford service centres in Chatsworth. The discussions served to reflect the views and opinions held by the aged. The ideas obtained through this method helped in the construction of the questionnaire.

### **3.5.3 Interviews**

Information and ideas were also obtained from interviews held with officials in charge of the various old aged clubs and service centres in Chatsworth. Mr Sitharam, chairperson of the Aryan Benevolent Home, was also interviewed. A list of service

centres in Chatsworth as well as contact persons was also obtained from the offices of Mr Sitharam.

### 3.6 QUESTIONNAIRE DESIGN AND FORMAT

A standardised questionnaire, a fundamental and basic investigative tool in social science research, with predetermined categories, was used to obtain the necessary data for the research. An interview schedule directs the line of questioning and answering. The design and format of the questionnaire was in accordance with the aim and objectives of this study. The type of questions included in the study were:

- (i) Closed-ended questions: These involve issues where respondents select one or more of specific categories provided by the researcher (Bailey, 1987).
- (ii) Open-ended questions: These questions were used for issues where all the possible answer categories were not known by the researcher. These questions further encouraged the respondents to state their opinions more fully.
- (iii) Scaled or ranked questions: With these questions, interviewers had to choose responses that were closest to their viewpoint.

The questionnaire was divided into the following aspects:

- (i) **Personal Data:** Variables in this section included sex, age, level of education, marital status and membership to service centres or old age clubs.
- (ii) **Socio-economic Characteristics:** In this section questions asked involved monthly income, source of income, family support and contribution to family budget.

- (iii) **Residential History:** Issues examined included place of residence, period of stay, previous place of residence and type of dwelling.
- (iv) **Family Structure:** In this section questions were asked about present family structure and the type of structure the aged preferred.
- (v) **Health and Mobility:** Issues examined focused on health status, level of mobility and disabilities that affected mobility.
- (vi) **Transportation:** Respondents were asked about the facilities used, the mode of transport used, frequency of visits, efficiency of public transport and problems encountered.
- (vii) **Environmental Characteristics:** Problems or difficulties experienced in getting around Chatsworth were asked in this section.
- (viii) **Leisure and Recreational Activities:** In this section questions were asked on the type of leisure or recreational activities that the aged engaged in as well as factors preventing participation in any of these activities.
- (ix) **Access to Amenities:** Respondents were asked questions on access to amenities in respect of time, cost and distance.
- (x) **Needs of the Aged:** In this section respondents were asked to rate basic needs such as food, housing, income, health and clothing.
- (xi) **Activity and Non-Activity:** Respondents were questioned about their participation in service centres, cultural, social, sporting and household activities.
- (xii) **Attitude to Quality of Life:** Finally, the aged were asked to rate the neighbourhood as a place in which to live, rate the quality of services and to rate the quality of services/facilities in Chatsworth; explain why they like/dislike Chatsworth and what they would change in Chatsworth to enhance the quality of life of the aged in the area.

### **3.7 INTERVIEW TECHNIQUES AND PROBLEMS ENCOUNTERED**

The interviews were conducted by the researcher with the assistance of two trained field workers during the day at the various service centres or at the homes of the interviewees. In cases where the interviewees were unable to read or understand the questions, the field workers assisted in explaining the questions simply and without bias. Although the confidential nature of the study was emphasised, a few respondents were reluctant to divulge their exact income or their savings.

It was impressed upon the aged who were interviewed that their honesty was important to promote positive recommendations to the relevant authorities so that the quality of life of all the aged in Chatsworth would be enhanced.

Although there were no major problems, the interviewers found that the questionnaires took a long time to complete because many of the aged interviewed discussed aspects that did not fall within the scope of the study.

### **3.8 CONCLUSION**

Overall, all respondents were most hospitable and the chairpersons and social workers at the various service centres were most accommodating. We were also given opportunities to mix freely with the aged at all service centres. The response to the questionnaires were very good and there was a 100 percent return. Those who could not be interviewed at the service centre provided us with their home address and a

convenient time to interview them. The questions took an average of 75 minutes to complete. In the next chapter the research findings will be analysed.

## **CHAPTER FOUR**

### **THE AGED IN CHATSWORTH**

#### **4.1 INTRODUCTION**

In South Africa there has been very little research carried out in the field of gerontology as a sub-discipline in Geography. Although, gerontology has been widely researched in other fields of Social Science, this aspect has not received the attention it deserves in the field of Geography. This study is, therefore, intended to make a contribution to this field, and will highlight ways of improving the quality of life of the aged. The research findings discussed below are organised to provide an in depth analysis about the spatial mobility patterns of the aged in Chatsworth. Both quantitative and qualitative data was gathered. Tables do not always add up to 100 percent because of multiple responses and the calculations are rounded off to the nearest percent.

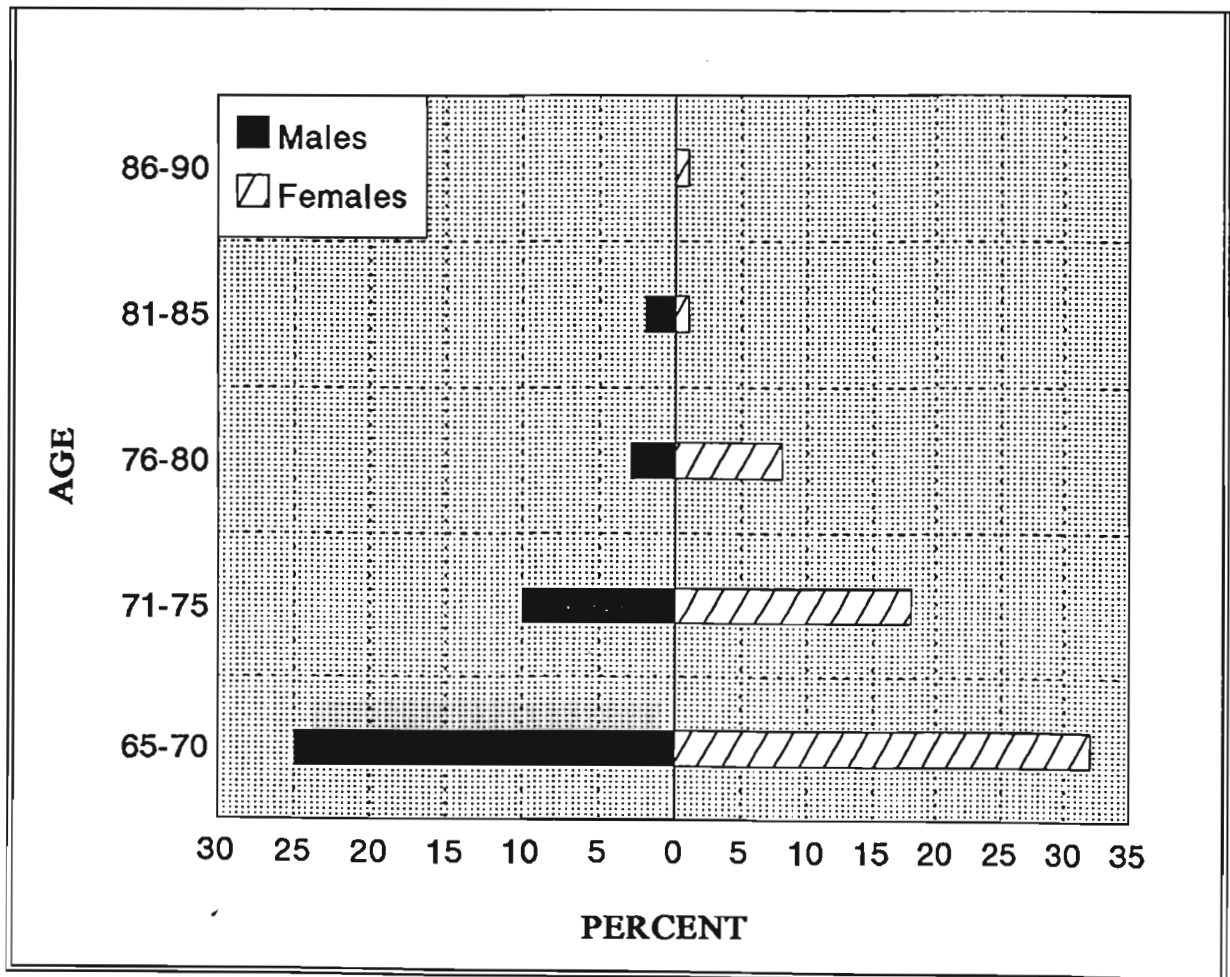
#### **4.2 SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF THE AGED IN CHATSWORTH**

An analysis of demographic and socio-economic data is an important aspect of any empirical research because it provides pertinent background information about the people being studied (Butler-Adam and Venter, 1984). Socio-economic and demographic characteristics are taken into consideration because they influence environmental satisfaction and mobility patterns directly or indirectly.

#### 4.2.1 Age-Sex Distribution of Sample

An attempt was made to determine the age-sex distribution of the aged in the Chatsworth area. The total sample comprised of 100 aged people attending the various service centres in the Chatsworth area. Sixty percent of the sample comprised of females and forty percent were males. More females therefore attended the service centres than males. Over 50 percent of the sample comprised those in the 65-69 age group. Proportions decreased with increasing age (figure 4.1).

Figure 4.1 Age-Sex Distribution of Sample Population



#### 4.2.2 Marital Status and Education

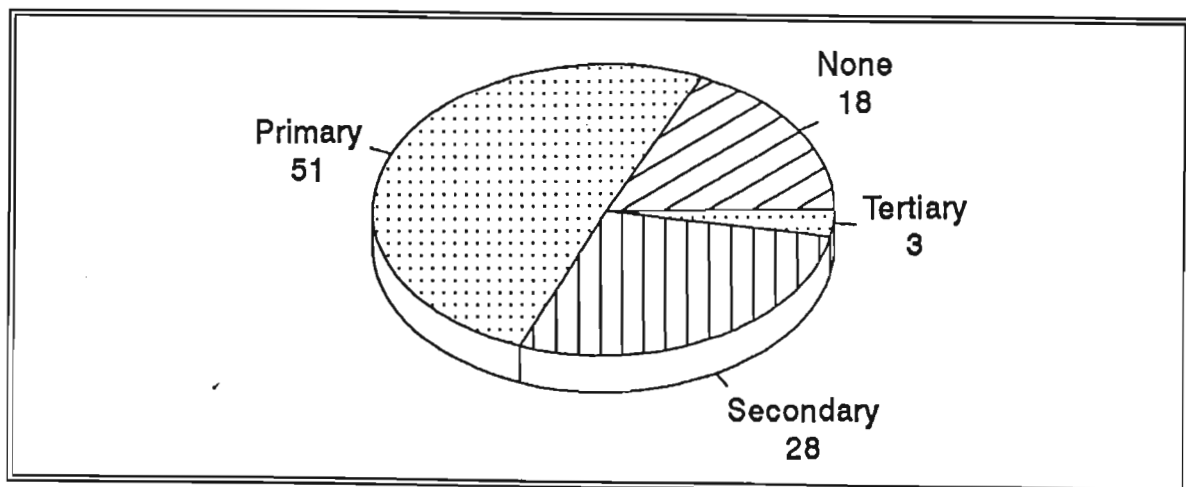
Almost equal proportions of the aged who were married (48 percent) and widowed (47 percent) (table 4.1). Literacy levels were high, and 82 percent had some form of formal education. The majority (51 percent) had primary education while 28 percent had secondary education. A small proportion (18 percent) had no formal education (figure 4.2).

**Table 4.1 Marital Status**

Marital Status	Percent
Single	04
Married	48
Divorced	01
Widowed	47
Total	100

n=100

**Figure 4.2 Level of Education**



### 4.2.3 Income

Most respondents received an income of between R200 and R400 per month (table 4.2). The chief source of this income was state or company pensions (97 percent) (table 4.3).

**Table 4.2 Monthly Income**

Monthly Income	Percentage
R201- R400	66
R401- R600	15
R601- R800	11
R801 - R1000	04
> R1000	04
TOTAL	100

n=100

**Table 4.3 Income Source**

Source	Percentage
State pension	79
Company pension	18 97%
Shares	00
Retirement annuity	06
Allowance (family)	05
Rental from dwelling	01

n=100

#### 4.2.4 Family Structure

It can be inferred from table 4.4 that three different family types were prevalent among respondents. The majority (61 percent) of the interviewees lived in a joint family structure. For the purpose of this study the term 'joint family' refers to a family unit that consists of three generations. This conjugal unit consists of husband, wife and unmarried children, together with the parents of the husband or wife (Jithoo, 1987).

Minor proportions (25 and 14 percent) lived in extended and nuclear families, respectively. The nuclear family is a conjugal unit consisting of only two generations, husband wife and unmarried children (Jithoo, 1987). Murdock (1961:73) states that while "the extended family consists of two or more nuclear families affiliated through an extension of parent-child relation". Most respondents (68 percent) preferred to live in a joint type family. A significant minority preferred to live within an extended family system (table 4.4).

The reasons given for living in the present family structure are evident in table 4.5. Over sixty percent of the respondents "wanted others to be around them" and did not prefer to live alone. Half of the respondents desired to help family members financially and practically. Other respondents (56 percent) lived in their present family structure out of choice.

**Table 4.4 Present and Preferred Family Structure**

<b>Present Family Structure</b>	<b>Percent</b>
Joint family	61
Extended family	25
Nuclear family	14
Total	100
<b>Preferred Family Structure</b>	<b>Percent</b>
Joint family	68
Extended family	32
Total	100

n=100

**Table 4.5 Reasons for Living in the Present Family Structure**

<b>Reasons</b>	<b>Percent</b>
You need others around to assist you	63
Do not like to live alone	60
To help family practically/financially	50
Because you want to	56

n=100

**4.3 RESIDENTIAL HISTORY**

The passing of the Group Areas Act, No. 41 of 1950, began a course of territorial and racial segregation of the people of South Africa. The Indian township of Chatsworth was the result of the Group Areas Act. This Act forced many Indian families to leave

their homes and to settle in Chatsworth and in so doing "dislocated a way of life that had existed for many decades" (Subramony, 1992:16).

Respondents previously lived in the following areas: Clairwood (33 percent), Mayville (21 percent), Cato Manor (18 percent) and Durban North (9 percent) (table 4.6).

**Table 4.6 Previous Place of Residence**

<b>Previous place of Residence</b>	<b>Percent</b>
Clairwood	33
Mayville	21
Cato Manor	18
Durban North	09
Pietermaritzburg	06
Sea View	04
Bellair	03
Jacobs	03
Greyville	03
Total	100

#### **4.3.1 Period of Stay in Chatsworth**

Most of the interviewees have been residing in Chatsworth for over 16 years (table 4.7). The majority of the respondents owned their houses (63 percent) (figure 4.3).

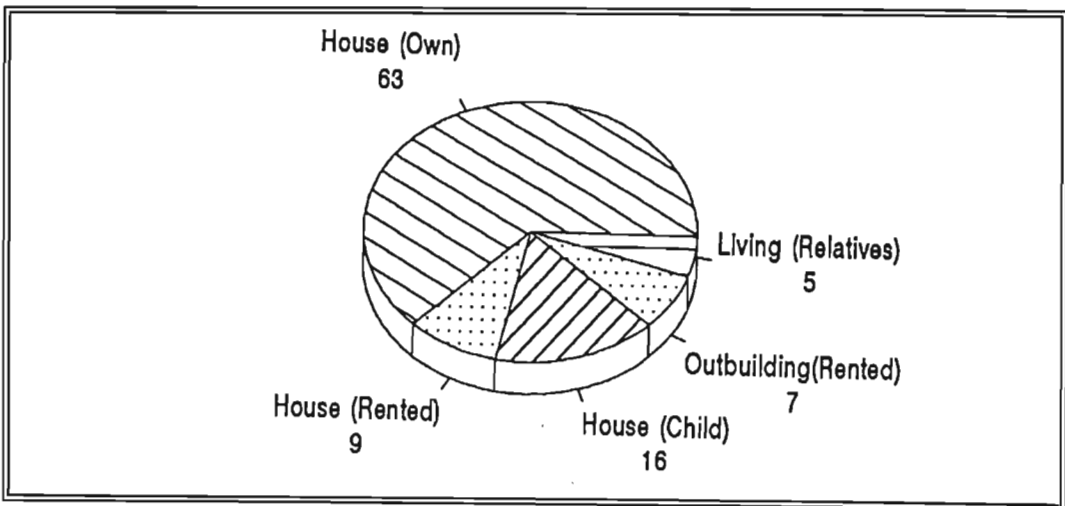
Multiple responses were received with regards to reasons for living in the present dwelling. Two major reasons were cited for living in the present dwelling. These were

affordability (59 percent), the forced removals due to the Group Areas Act (48 percent), and a minor proportion (29 percent) preferred to live with children or relatives (table 4.8).

**Table 4.7 Period of Stay**

Years	Percent
11 - 13 years	04
14 - 16 years	01
> 16 years	95
Total	100

**Figure 4.3 Tenure**



**4.3.2 Dissatisfaction With Present Accommodation**

Chatsworth was intended to be an inexpensive housing project. There was to be the maximum utilization of space. The houses were constructed quickly with the cheapest

building material available and on mass production lines. Decisions regarding the provision of amenities were taken by the authorities with little or no consultation with the people.

It is evident from table 4.9 that 82 percent expressed some dissatisfaction with their present accommodation. A major problem was the structure of the dwelling. Cottages were attached and 52 percent of the respondents stated that they had no privacy because of the close proximity to neighbours. Privacy was also influenced by the closeness to the roads. Another source of dissatisfaction for 43 percent of the aged was the steepness and narrowness of the steps inside and outside the home (plate 4.1/ 4.2)(table 4.9). Another source of dissatisfaction was the inferior quality of dwellings. Dwellings were made of blocks and had no ceilings. This affected the aged during the cold winter months.

**Table 4.8 Reasons for Living in Present Dwelling.**

<b>Reasons</b>	<b>Percent</b>
Affordability of dwelling	59
Group Areas	48
Living with children or relatives	29
Social ties in area	08

n=100

**Table 4.9 Reasons for Dissatisfaction with the Present Dwelling**

<b>Reasons</b>	<b>Percent</b>
Attached cottages (no privacy)	59
Inferior quality building	55
Close proximity of house to the road houses lots of disturbances	52
Steps are too narrow and steep	43

n=82

#### **4.4 NEEDS OF THE AGED**

##### **4.4.1 Needs**

According to Maslow (1954) all human beings have both lower needs (physiological and security needs) and the higher needs (esteem and self-actualization needs). Beyond the basic needs, social integration and the need for self-esteem (recognition by others) gain prominence. These needs of the aged must be fulfilled in order to enhance their quality of life.

The major trend in the rating of needs was that clothing was of least importance to the aged (96 percent). This was followed by food, with 47 percent considering it unimportant. For about two thirds of the respondents money was very significant (60 percent). Fifty-four percent and 66 percent, respectively, considered housing and health as important (table 4.10). A small proportion (24 percent) were of the opinion that health was of minor importance.

**Plate 4.1 Steep Steps Outside Houses**



**Plate 4.2 Steep, Narrow Steps Leading into Buildings**



**Table 4.10 Rating of Needs**

<b>Needs</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Food	10	10	32	47	01
Housing	22	32	33	13	00
Money	27	33	23	14	03
Health	41	25	10	24	00
Clothing	00	00	02	02	96

n=100

It can be inferred from table 4.11 that 87 percent of the aged felt that their quality of life could be improved by society placing more emphasis on intrinsic values. Most of the respondents (74 percent) were of the opinion that they should be treated with greater love and understanding. Moreover, they felt that they should be part of society and not be discarded and forgotten (37 percent). This group also felt that they were not respected, and that they were taken for granted and were often perceived as a burden to society. Although the aged visited places with the service centres, a minority (10 percent) wanted to visit and tour more places of interest either with the family or with friends (table 4.11).

**Table 4.11 Satisfaction of Needs**

<b>Other Needs to be Satisfied</b>	<b>Percent</b>
To be shown greater love and affection	74
To be part of society and not discarded	37
To be respected and not taken for granted	37
To visit and tour places of interest	10

n=87

#### 4.5. LIVING PREFERENCES

The policy of the government is that the aged should remain in the community for as long as possible and the establishment of old age homes should be discouraged (Snyman, 1984).

The majority of the respondents (82 percent) preferred to live with their families, and 18 percent desired to be alone (table 4.12). Reasons given by those who preferred to live with their families were as follows:

- (i) companionship;
- (ii) security; and
- (iii) strong family ties.

Those who desired to live independently cited the following reasons.

- (i) away from family problems;
- (ii) the joy of a quiet and peaceful environment; and
- (iii) no obligation to others.

It is significant to note that none of the respondents preferred to live in an old age institution. Old age institutions to respondents meant being isolated from the rest of society because they were a burden that had to be shouldered by someone outside their family. Many also felt that they would lose contact with their loved ones, and feared being forgotten by their families once institutionalized. The institutionalization of the aged would also have a profound psychological effect on them. They would be

forced to adapt to a new style of life in a very strange and different environment, an environment that would threaten their last few years of existence.

**Table 4.12: Institution Preferred to Live in**

Preferred Institution	Percent
With your family	82
On your own	18
In an institution (old age home)	00
Total	100

n=100

#### 4.6 SUPPORT FROM FAMILIES

Fifty nine percent of the respondents stated that their families were able to support them and the rest (41 percent) did not receive any assistance from their family members. In terms of financial support from their families, 44 percent, did not require this form of family support. The main reason for not wanting this kind of support was that their children had their own families to support (84 percent) (table 4.13).

**Table 4.13: Reasons for not wanting Financial Support from Families**

Reasons	Percent
Son/daughter have their own families to support	84
Own source of income	54
Son/daughter unemployed/did not earn well	38

n=44

Fifty-six percent of those who said they needed financial support also tendered

Fifty-six percent of those who said they needed financial support also tendered reasons (table 4.14). The most important reason for wanting financial assistance was that it was the "child's turn to support parent". According to the aged they saw it as their right to receive financial support from their children because they invested in the education of their children. Another reason was the low income received by respondents.

**Table 4.14 Reasons for wanting Financial Support from Families**

Reasons	Percent
Child's turn to support parent	77
Low income received by respondents	43

n=56

#### 4.6.1 Financial Contribution to Family Budget

Eighty-two percent of the respondents made a financial contribution to the family budget (table 4.15). This was mostly done on a monthly basis (60 percent). Twenty-two percent contributed financially sometimes, and 18 percent not at all (table 4.15).

**Table 4.15 Contribution to Family Budget**

Contributions	Percent
Monthly	60
Sometimes	22
Not at all	18

n=100

The majority (62 percent) of the aged contributed to the family budget so as to purchase things that they liked, for example, special types of food (table 4.16).

**Table 4.16 Reasons for contributing to Family Budget**

<b>Responses</b>	<b>Percent</b>
Have things that I want	62
Agreed that everyone should contribute	18
Living alone with son/daughter	14
Nobody else is working	06
Total	100

n=100

#### **4.6.2 Monthly Expenditure**

Over 70 percent of respondents spent less than R50 a month on transport, clothing, medical expenses, leisure and recreation. With regard to food and accommodation, the amounts spent varied. Fifty-four percent spent R100-R174, and almost equal proportions spent less than R100 and more than R175 on food. Fifty-three percent spent R75 to R124, and almost equal proportions spent less than R74 and between R125 and R149 on accommodation (table 4.17).

**Table 4.17 Average Monthly Expenditure**

Amount	Food	Trans.	Cloth.	Medical expense	Leisure and Rec.	Acc.
< R50	07	99	88	72	79	07
R50-R74	11	06	12	18	13	16
R75-R99	04	01	00	08	05	16
R100- R124	19	01	00	01	03	37
R125-R149	27	00	00	00	00	08
R150-R174	08	00	00	00	00	13
R175-R199	00	00	00	00	00	00

n=100

### 4.6.3 Family Support

Although most Indian families are willing to take care of their aged, the decline of the extended family system and the high cost of living will mean that greater numbers of aged will look to the state for support (Nair, 1989). The majority of the aged received social support (90 percent), material support (82 percent) and practical support (78 percent) from their families. However, only 39 percent received financial support in excess of R50 per month from their families (table 4.18). The majority of the respondents said that their quality of life would be adversely affected without the various types of support (food, shelter, clothing) provided by their families (84 percent).

Multiple reasons were given by the aged for wanting family support. The majority (81 percent) of the respondents needed the love and attention of their families. Almost

equal proportions of the aged felt that they would not be able to maintain the same quality of life because their family provided them with security and happiness, and that their incomes were too low for them to be able to live independently (table 4.19). When respondents had problems, for example, with their health or finance, the majority of them turned to their families (83 percent), and others (17 percent) looked to their friends for assistance (table 4.20).

**Table 4.18 Family Support**

<b>Support</b>	<b>Percent</b>
Social support (visit, companionship, etc.)	90
Material support (food, clothing, etc.)	82
Practical support (shopping, transport, etc.)	78
Financial support (R50 plus a month)	39

n=100

**Table 4.19 Importance of Family Support to Quality of Life**

<b>Reasons</b>	<b>Percent</b>
Needed love and attention of children	81
Would not be happy without family	42
Income received too little	41
Living with children provides an opportunity to visit family and friends with them.	20

n=100

#### 4.6.4 Dependency

It is significant that over 90 percent of the aged were never dependent on anyone for their personal hygiene. The aged sometimes relied on others especially with regard to transport (69 percent) and shopping (50 percent). At least 40 percent were frequently engaged in cooking and general housework (table 4.21)

**Table 4.20 Assistance from Family/Friends**

Assistance obtained from	Percent
Family	83
Friends	17
Total	100

n=100

**Table 4.21 Dependency on Other People**

Activity	Never	Sometimes	Often	Very Often
Shopping	18	50	14	18
Cooking	28	25	17	30
General house keeping	23	35	26	16
Personal hygiene	91	09	00	00
Transport	16	69	12	03

n=100

## **4.7. HEALTH**

### **4.7.1 Health Status**

Various researchers have found that self-assessment of health is a good indicator of the health status of the individual (Taylor, 1981; The Australian Longitudinal Study of Ageing, 1990; Ferreira, et al., 1992). A reasonable assessment of a person's health can be an important indicator of the quality of life of the person. Due to the high cost of medical treatment many of the aged could not afford private treatment, even from doctors in their immediate vicinity. This forced them to obtain medical treatment from the R K Khan Hospital, which is the only provincial hospital in Chatsworth. Here they experience numerous difficulties: waiting in long queues from as early as 04h00; delays due to a shortage of doctors; uncomfortable seats; and unsympathetic treatment from the clerks and nurses.

When respondents were questioned about their present health status, 47 percent perceived it to be average. Almost equivalent proportions viewed their health to be good and poor, respectively. Very few rated their health as very good (7 percent) and very poor (3 percent) (figure 4.4).

### **4.7.2 Ailments Suffered by Respondents**

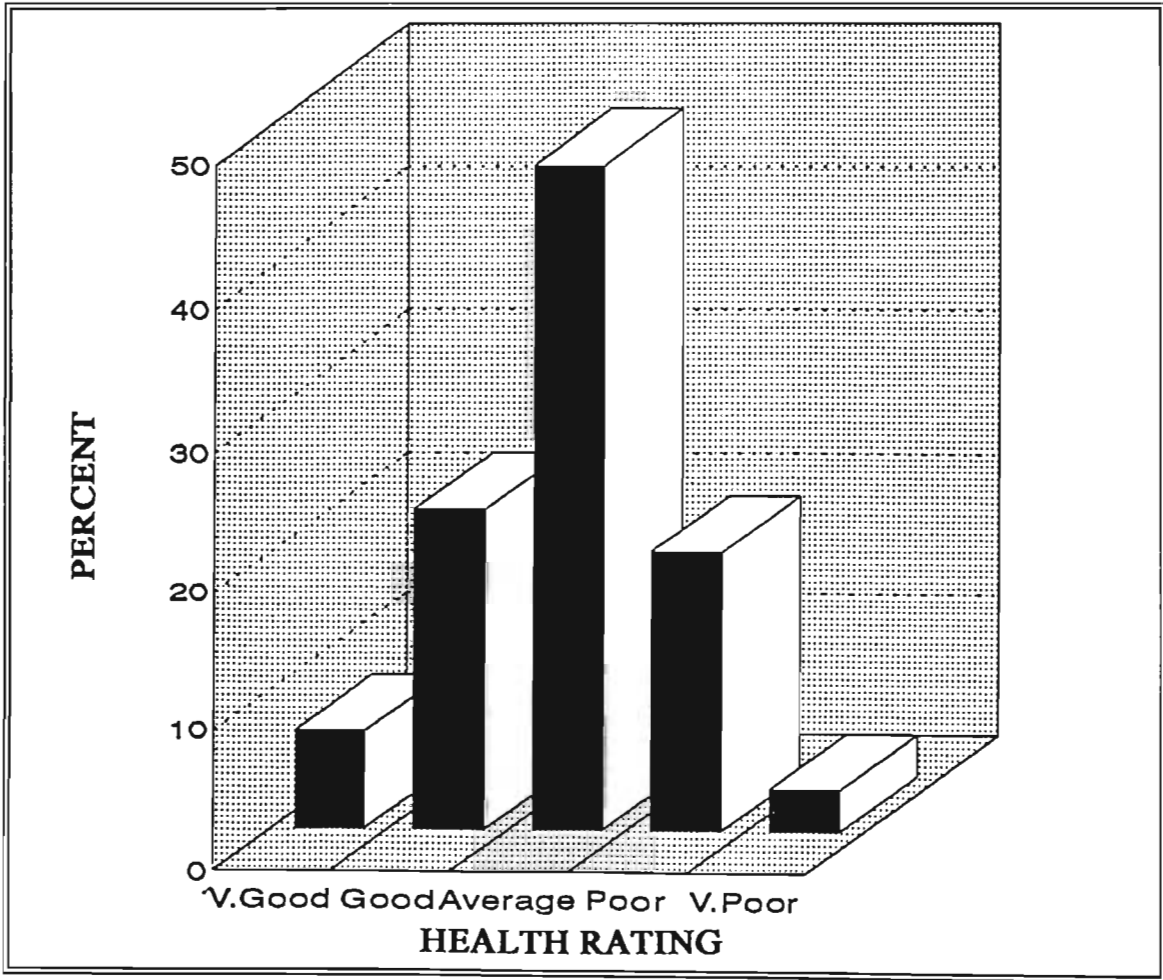
Over 77 percent of the respondents had poor eyesight and they tired easily from walking and standing for long periods. Sixty-six percent had arthritis and rheumatism. General weakness and bad knees affected half of the respondents. Other illnesses

suffered by respondents were breathlessness (43 percent), hearing (27 percent), heart problems (18 percent), and bladder problems (16 percent) (table 4.22).

#### 4.8 MOBILITY

Mobility is a critical factor in determining the quality of life of the aged. In order to meet their daily essential needs the aged have to be mobile. Those who have a high degree of mobility are able to live a more independent life.

Figure 4.4 Health Ratings



#### 4.8.1 Movement in the Neighbourhood

Although most respondents had some type of ailment, the majority of them (82 percent) could move around freely and independently. A few of the respondents (16 percent) moved around with some difficulty. The rest (2 percent) moved around with the assistance of a walking stick or frame (table 4.23).

**Table 4.22 Disabilities**

<b>Disabilities</b>	<b>Percent</b>
Poor eyesight	77
Tires easily from walking/standing	77
Arthritis, rheumatism	66
Sore knees	51
General weakness	50
Breathlessness	43
Poor hearing	27
Heart problems	18
Bladder problems	16

n=100

**Table 4.23 Self Perceived Level of Mobility**

<b>Level of Mobility</b>	<b>Percentage</b>
Gets around freely and independently	82
Gets around but with difficulty	16
Gets around only with the aid of a walking stick or walking frame	02
Total	100

n=100

### 4.8.2 Movement in House

Over 70 percent of the aged did not have freedom of movement in the home. This was not due to personal factors in the household but due to the structure and encumbrances in the household. Fifty-six percent of the interviewees had difficulty climbing stairs. Furthermore, rugs and mats in the household restricted the freedom of movement. Some of the aged (35 percent) had accidents by slipping and falling on loose rugs and matting on floors (table 4.24).

**Table 4.24 Reasons for Lack of Freedom of Movement in the House**

<b>Reasons for Lack of Freedom of Movement</b>	<b>Percentage</b>
Difficulty climbing steps	56
Too many rugs/mats on the floor	35
Limited place to move in the house because of the furniture and small rooms	29

n=100

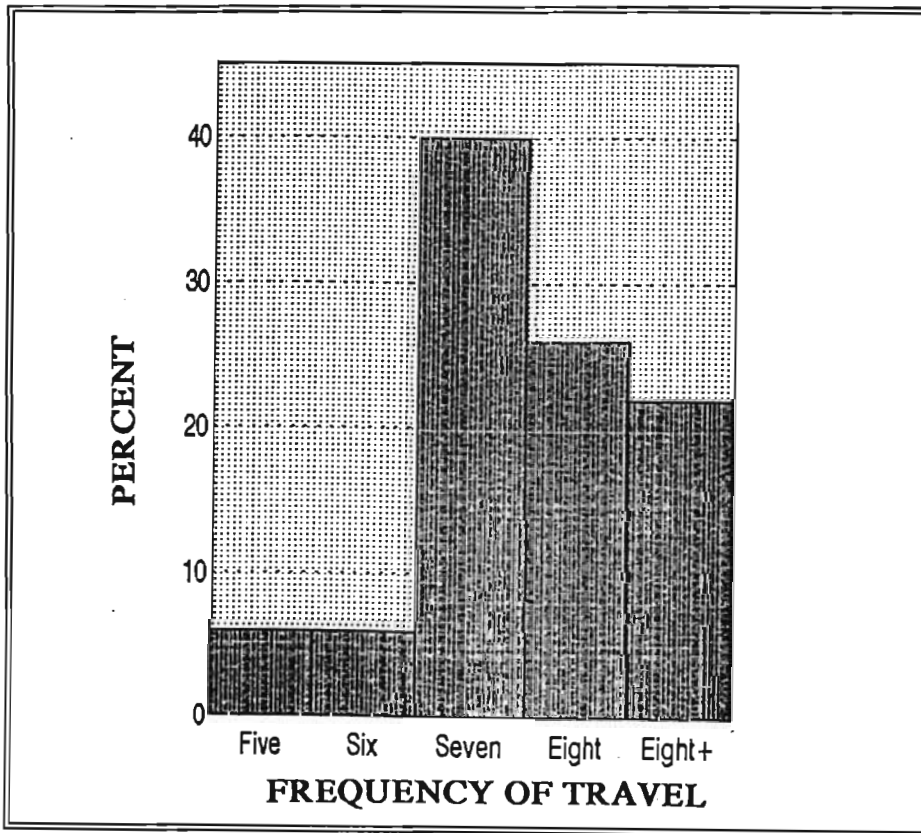
## 4.9 TRANSPORT

The aged, in order to satisfy their physical, social and psychological needs outside their homes, require efficient public transport. Essential activities such as shopping, paying accounts, meeting friends, seeking medical care and participating in leisure and recreational activities are influenced by the availability and accessibility of transport.

#### 4.9.1 Frequency of Travel by any Mode of Transport

The mobility patterns of the aged was clearly evident by the number of times that they travelled to and from the various facilities and service centres in the last month before the survey was undertaken. Seven to eight journeys were undertaken by 66 percent of the respondents. More than eight journeys were made by 22 percent of the aged (figure 4.5).

Figure 4.5 Frequency of Travel



#### 4.9.2 Different Modes of Transport Used by the Aged.

Three-quarters of the respondents had never learnt to drive a car and were forced to

rely on other modes of transport to get to places not easily accessible by walking. Also, the majority could not afford a car. Although most of the respondents walked to their destinations which involved short distances (95 percent), family cars also provided a means of transport for over 60 percent of the respondents. Over 96 percent used the bus/mini-bus (table 4.25), and this was also the most common mode of transport used by the respondents (table 4.26).

**Table 4.25 Different Modes of Transport**

<b>Mode of Transport</b>	<b>Percent</b>
Bus/mini-bus	96
Walking	95
Car (family)	60
Car(own)	05
Train	05
Taxi	03

n=100

**Table 4.26 Most Common Mode of Transport**

<b>Mode of Transport</b>	<b>Percent</b>
Bus/mini-bus	87
Car (family)	10
Car(own)	03
Taxi	00
Train	00
Walking	00

n=100

### **4.9.3 Mode of Transport to Facilities**

The majority of the respondents used the bus to the following services and facilities: food shops, post office, town, banks, hospital and the beach. About 83 percent of the respondents walked to the service centres. About half of the respondents walked to their places of worship (51 percent) and when visiting their friends and relatives (54 percent). If there was an emergency, 44 percent of the respondents were transported by the family car for medical treatment (table 4.27).

### **4.9.4 Time Spent Waiting for Public Transport**

The average waiting time was 29 minutes and a large proportion (53 percent) waited for about 20-29 minutes for transport. Thirty-seven percent spent over half an hour waiting for public transport (table 4.28). Public transport in Chatsworth has been privatised. Most of the buses wait for passengers. Moreover, there is no fixed timetable and this makes bus transport in Chatsworth irregular.

### **4.9.5 Problems Experienced with Public Transport**

The main difficulty experienced by public transport was loud music (98 percent) , overcrowding (89 percent), wasting time (73 percent) and dangerous driving (60 percent). About half the respondents found boarding or alighting from public transport difficult because of the height of the steps (plate 4.3/ 4.4), as well as walking to and from the bus stop (table 4.29).

**Table 4.27 Mode of Transport to Facilities (Percent)**

Facility	Mode of Transport					
	N/A	Car	Bus	Taxi	Train	Walk
Food shops	09	24	48	04	00	15
Other shops	05	07	48	00	00	40
Banks/building societies	25	12	52	06	00	05
Pension office	18	07	64	06	00	05
Hospital	02	10	73	02	00	13
Doctor	22	44	25	04	00	05
Library	84	02	06	00	00	08
Place of worship	12	29	08	00	00	51
Centre of town	11	16	73	00	00	00
Visit friends/relatives	01	30	15	00	00	54
Beach	07	05	88	00	00	00
Cinema	60	05	35	00	00	00
Parks	11	05	84	00	00	00
Sporting venues	78	06	09	02	02	03
Service centres/clubs	00	06	09	02	00	83

n=100

**Table 4.28 Average Waiting Time for Public Transport**

Time (Mins)	Percent
10-19	10
20-29	53
30-39	22
40-49	15

n=100

$\bar{X}=29$

**Plate 4.3 High Steps at the Bus Entrance**



**Plate 4.4 High Steps Leading into Mini-Bus**



**Table 4.29 Problems Experienced with Public Transport**

<b>Problems</b>	<b>Percent</b>
Walking to and from the bus stop	50
Boarding and alighting from public transport	41
Waiting for public transport	73
Maintaining balance in a moving bus/taxi	44
Crowded /overloaded bus/taxi	89
Loud music in bus/taxi	98
Dangerous driving	69
Entering buses/taxis/trains	50

n=100

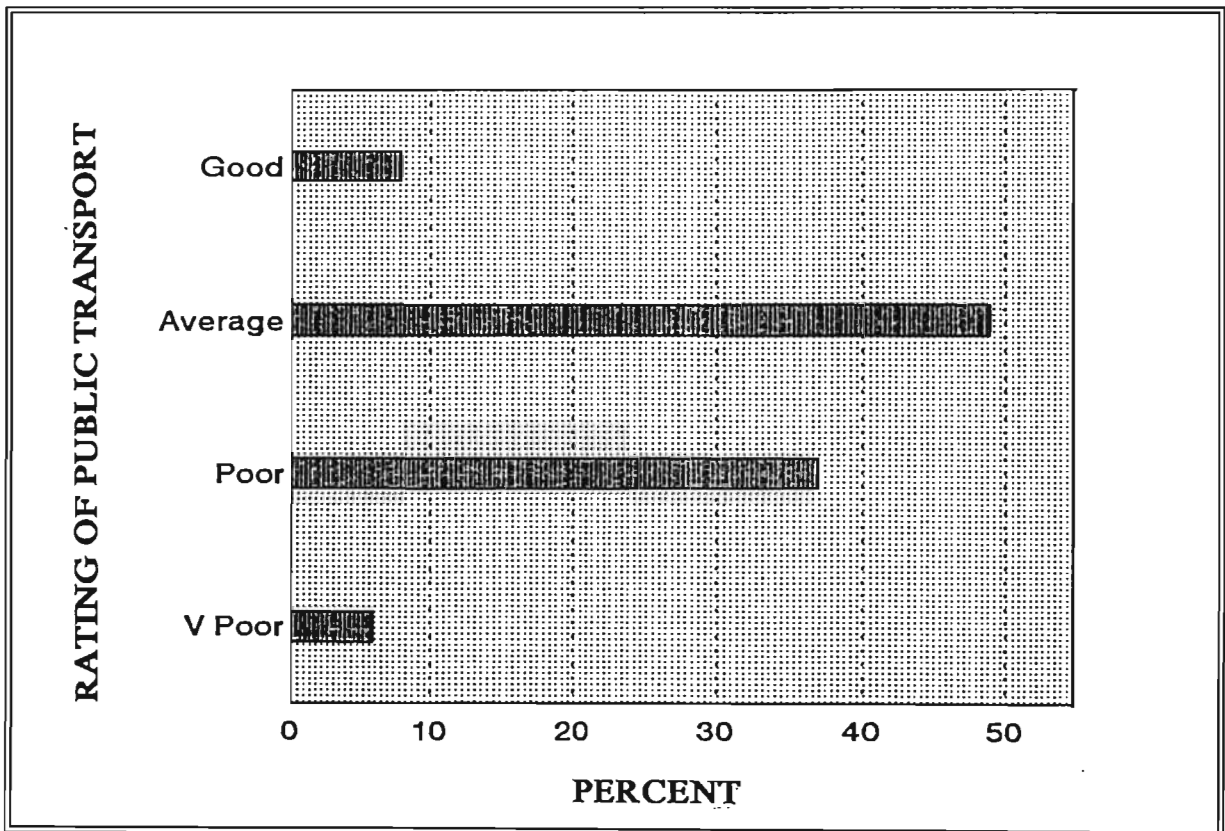
#### **4.9.6 Efficiency of Public Transport**

Respondents were also asked to rate the efficiency of public transport. It seems that public transport in Chatsworth was inefficient, as average and poor ratings were given by 86 percent of the aged (figure 4.6).

#### **4.10 LEISURE AND RECREATION**

It is important for the aged to interact with their outside world for both mental and physical health. It is through engaging in leisure and recreational activities that the aged can enhance their quality of life by breaking away from their daily routine. Most of the aged (95 percent) lived an active life and all of them hoped that they would continue in the same vein. The reason cited by the respondents was to keep fit (97 Percent)

**Figure 4.6 Ratings of Public Transport**



#### **4.10.1 Household Activities**

Three household activities were conducted by over 60 percent of the respondents. These were cooking (62 percent), housekeeping (67 percent) and gardening (79 percent). Washing and ironing of clothes was done by a minority of members, with proportions of 40 percent and 35 percent, respectively (table 4.30).

#### **4.10.2 Leisure and Recreational Activities**

Respondents were sometimes engaged in active and passive recreational activities.

Active leisure activities included visiting the beach (84 percent), visiting the park (85 percent), engaging in hobbies such as knitting, woodwork and sewing (67 percent) (table 4.31). A minority took part in sporting activities, for example, darts, fishing and jogging. Passive activity included watching television (88 percent) and reading the newspaper. Eighty percent desired to engage in certain activities such as woodwork, sewing, bowling, golf, tennis, swimming, and fishing (table 4.32).

**Table 4.30 Household Activities**

<b>Activity</b>	<b>Percent</b>
Gardening	79
General housekeeping	67
Cooking	62
Washing	40
Ironing	25

n=100

**Table 4.31 Type of Leisure and Recreational Activities**

<b>Activity</b>	<b>Percent</b>
Visit the beach	84
Visit the park	85
Watching television	98
Sports	08
Hobbies (eg. handwork, sewing, knitting, etc.)	60

n=100

**Table 4.32 Desired Activities**

<b>Activity</b>	<b>Percent</b>
Hobbies (sewing, woodwork,etc.)	38
Bowling	15
Golf	13
Tennis	13
Swimming	10
Fishing	06
Gym	06

n=80

Some reasons preventing respondents from participating in certain activities were lack of facilities (65 percent), lack of finance (48 percent), poor health (18 percent) and transport difficulties (12 percent) (table 4.33). Lack of skills also hindered a minority from engaging in these recreational activities.

**Table 4.33 Reasons for not Engaging in Activities**

<b>Reasons</b>	<b>Percent</b>
Lack of Facilities	65
Lack of Finance	48
Lack of Equipment and material	34
Poor Health	18
Transport difficulties	12

n=80

## **4.11 ACCESS TO AMENITIES**

Access to basic services and facilities are essential for the aged to live a meaningful and independent life. The location of amenities must be easily accessible to the aged so that it can be utilized by them.

### **4.11.1 Time Taken to Travel to Amenities**

Over half the respondents took about 10-19 minutes to go to places of worship and service centres. A significant proportion (40 to 48 percent) travelled to hospitals, shops, the pension office and banks in 20-29 minutes. A smaller proportion of the aged took more than 30 minutes to reach all amenities. The average travel times to all amenities ranged from 21-36 minutes (table 4.34). It is significant that travel time to parks took a longer time because the majority of the aged went on outings organised by the various centres to areas outside Chatsworth.

### **4.11.2 Public Transport Costs**

The highest cost paid for transportation was for visiting the parks (R9-R11). The reason for this high cost was outings undertaken with service centres which entailed long distances. The average cost for amenities ranged from R2,80 to R3,80. A large proportion (60-70 percent) paid R3 to R5 to go to hospitals, shops, the pension office and banks. The majority of the respondents paid a minimal amount of less than R2,00 to visit places of worship (65 percent) and service centres (87 percent) (table 4.35).

**Table 4.34 Travelling Time to Amenities**

Amenity	Time in Minutes						$\bar{X}$
	10-19	20-29	30-39	40-49	50-59	60-69	
Hospital	20	43	27	10	00	00	27.2
Shops	20	42	20	18	00	00	28.1
Place of Worship	53	24	12	11	00	00	22.6
Pension Office	24	40	26	10	00	00	26.7
Library	06	07	03	00	00	00	N/A
Parks	02	11	22	19	15	31	36.8
Sporting venues	10	07	03	00	00	00	N/A
Banks/building societies	22	48	20	10	00	00	26.3
Service centres/ clubs	54	29	11	06	00	00	21.4

n=100

#### 4.11.3 Average Distance to Amenities

The average distance travelled to parks was 9,5 km. In comparison to other amenities that the aged visited, this was the longest distance travelled. As stated previously, this was because they travelled out of Chatsworth. With regards to average distances travelled to other amenities a moderate journey of 3,5 km to 5,5 km was covered (table 4.36).

**Table 4.35 Transport Costs to Amenities**

Amenities	Costs in Rands				
	R0-R2	R3-R5	R6-R8	R9-R11	$\bar{X}$
Hospital	30	60	10	00	3.6
Shops	20	71	09	00	3.8
Place of worship	65	30	05	00	2.8
Pension office	30	61	09	00	3.7
Library	10	09	00	00	N/A
Parks	08	33	13	46	7.0
Sporting venues	09	10	03	00	N/A
Banks/ building societies	30	64	06	00	3.5
Service centres/clubs	87	13	00	00	2.3

n=100

**Table 4.36 Distance to Amenities**

Amenities	Distance in Kilometres						$\bar{X}$
	0-2	3-5	6-8	9-11	12-14	15-17	
Hospital	03	41	34	22	00	00	5.5
Shops	22	39	31	08	00	00	4.5
Place of worship	34	46	17	03	00	00	3.8
Pension office	11	37	44	08	00	00	5.0
Parks	08	09	17	19	08	39	9.5
Banks/ building societies	09	38	41	12	00	00	5.0
Service centres/ clubs	34	60	06	00	00	00	3.5

n=100

#### **4.11.4 Frequency of Visits to Amenities and Service Facilities**

Monthly visits to services and facilities, for example, shops, banks, the pension office and hospitals were common amongst 57 to 86 percent of respondents. Over 80 percent of respondents seldom visited the beach or parks. Doctors were infrequently visited (67 percent) as most respondents went to the hospital where the treatment and medication was much cheaper. Other facilities that were never visited by the majority of respondents was the library (81 percent), sporting venues (78 percent) and the cinema (58 percent). The service centres were visited on a weekly basis by 90 percent of the respondents. Visits to places of worship and friends were also undertaken on a weekly basis by 66 percent and 55 percent of the interviewees, respectively (table 4.37).

### **4.12 SERVICE CENTRES AND OTHER ORGANISATIONS**

Service centres represent an important social and recreational outlet for the aged. The aged, when meeting at these centres, engage in various types of activities such as playing cards, organising visits to the park or beach, and socializing. At the centre the aged are able to meet people from outside their family circle. Service centres permit the aged to break away from the routine of staying at home.

#### **4.12.1 Membership of Service Centre**

With regard to membership of old aged service centres or clubs, 48 percent of the

aged were actively involved for three to six years, and a significant proportion joined in the last two years (table 4.38).

**Table 4.37 Frequency of Visits to Amenities**

Facilities	Frequency				
	Daily	Weekly	Monthly	Seldom	Not at all
Food shop	04	21	57	09	09
Other shops	33	21	10	30	06
Banks/building societies	00	00	68	08	24
Pension Office	00	00	70	15	15
Hospital	00	00	86	09	05
Doctor	00	00	05	67	28
Library	00	12	04	03	81
Place of worship	02	66	06	12	14
Centre of town	00	05	34	50	11
Visit friends/ relatives	06	55	17	21	01
Beach	00	02	06	83	09
Cinema	00	00	10	32	58
Parks	00	00	06	92	02
Sporting venues	00	07	02	13	78
Service centres/ clubs	03	90	07	00	00

n=100

#### 4.12.2 Service Centre/Club Support and Assistance

Most of the aged were members of these service centres or clubs because of the numerous activities that took place (table 4.39). Ninety percent saw these centres as a place to meet friends and an opportunity to visit places on organised trips (78 percent). These centres also provided an opportunity for members to play games (64 percent) and learn new skills eg. knitting (48 percent) and to discuss social (82 percent) and health problems (20 percent).

**Table 4.38 Membership at Service Centres/Clubs**

Years	Percent
0 - 2	37
3 - 5	48
6 - 8	08
9 - 10	07

n=100

#### 4.12.3 Suggested Improvements to Service Centre Structure

When respondents were asked to suggest improvements to the present structure of the service centres, over half of them were of the opinion that some changes should take place to cater for their needs. Forty-four percent said that it should remain the same.

The most important change was to build their own centre as they were using community halls at present (39 percent). Over 20 percent suggested that subscription fees were too high and should be decreased, and about 40 percent stated that trips

organised by the centres were too expensive, and should be subsidised. Others wanted the service centres to have their own transport, for example mini-buses, and better meals to be provided (4 percent) (table 4.40).

**Table 4.39 Service Centre's Support**

<b>Support</b>	<b>Percent</b>
Place to meet friends and socialize	90
Organised outings and tours	78
Place to engage in recreational activities e.g. games	64
Skills learnt e.g. knitting and sewing	48
Opportunity to meet social workers to discuss problems	42
Informative talks on health care and diet	39
Provided with meals	32
Receive love, care and understanding	30

n=100

**Table 4.40 Suggested changes at Service Centres**

<b>Suggested Improvements</b>	<b>Percent</b>
An old age centre should be built to take care of their special needs	64
Cost effective trips should be organised	43
Entrance into the service centres should be free	21
Transport should be provided by the service centres	11
Better meals should be provided	04

n=56

#### 4.12.4 Membership of Other Organisations

Besides being members of the service centres or clubs, 55 percent belonged to cultural organisations and 45 percent did not belong to any type of organisation (table 4.41). The majority of those who were members of cultural organisations, (85 percent) were ordinary members, and 15 percent occupied official positions.

**Table 4.41 Participation in Other Organisations**

<b>Organisations</b>	<b>Percent</b>
Cultural	55
Sporting	05
None	40

n=100

#### 4.13 NEIGHBOURHOOD DOMAIN

The neighbourhood domain is an important component in evaluating quality of life. Knox (1976) argued that although the focus is on the quality of streets and buildings, aspects such as the provision of services and facilities are also evaluated. Hesser (1981) contends that poor neighbourhood conditions elicit reduced satisfaction responses.

#### 4.13.1 Problems Experienced in Getting Around Chatsworth

More than 60 percent of the aged experienced some sort of difficulty or problem in getting around Chatsworth. Seventy-six percent had problems with climbing steps and 69 percent had difficulty in crossing streets. Sixty-two percent of the respondents had problems with walking on pavements because of obstructions caused by parked vehicles and the poor condition of pavements (plate 4.6). The City Police in Chatsworth are beginning to take a tough stand against vehicles parked on pavements. Buses parked on pavements would be towed away because fines imposed did not deter the drivers from blocking the path of pedestrians (Neighbour News, 16/11 95). Climbing up pavement curbs (plate 4.5) posed a problem to 61 percent of the respondents (table 4.42).

**Table 4.42 Problems Experienced with the Physical Structures**

<b>Problems</b>	<b>Percent</b>
Climbing steps into buildings	76
Crossing streets	68
Climbing up pavement curbs	68
Walking on pavements	62

n=100

**Plate 4.5 High Pavement Kerbs**



**Plate 4.6 Poor Pavement Conditions**



#### 4.13.2 Fears in Getting Around Chatsworth

Ninety-five percent of the respondents were afraid of getting around in Chatsworth. The main fear highlighted by the aged was that of being robbed by criminal elements (67 percent). Over 60 percent were afraid of being involved in accidents. High speed driving has returned to Chatsworth. "Motorists seem to have a blatant disregard for the safety of pedestrians" (Neighbour News, 05/12/1995:7). Forty-eight percent of the respondents were afraid of falling, and 8 percent feared crowded services and facilities (table 4.43).

**Table 4.43: Fears Cited in Getting Around Chatsworth**

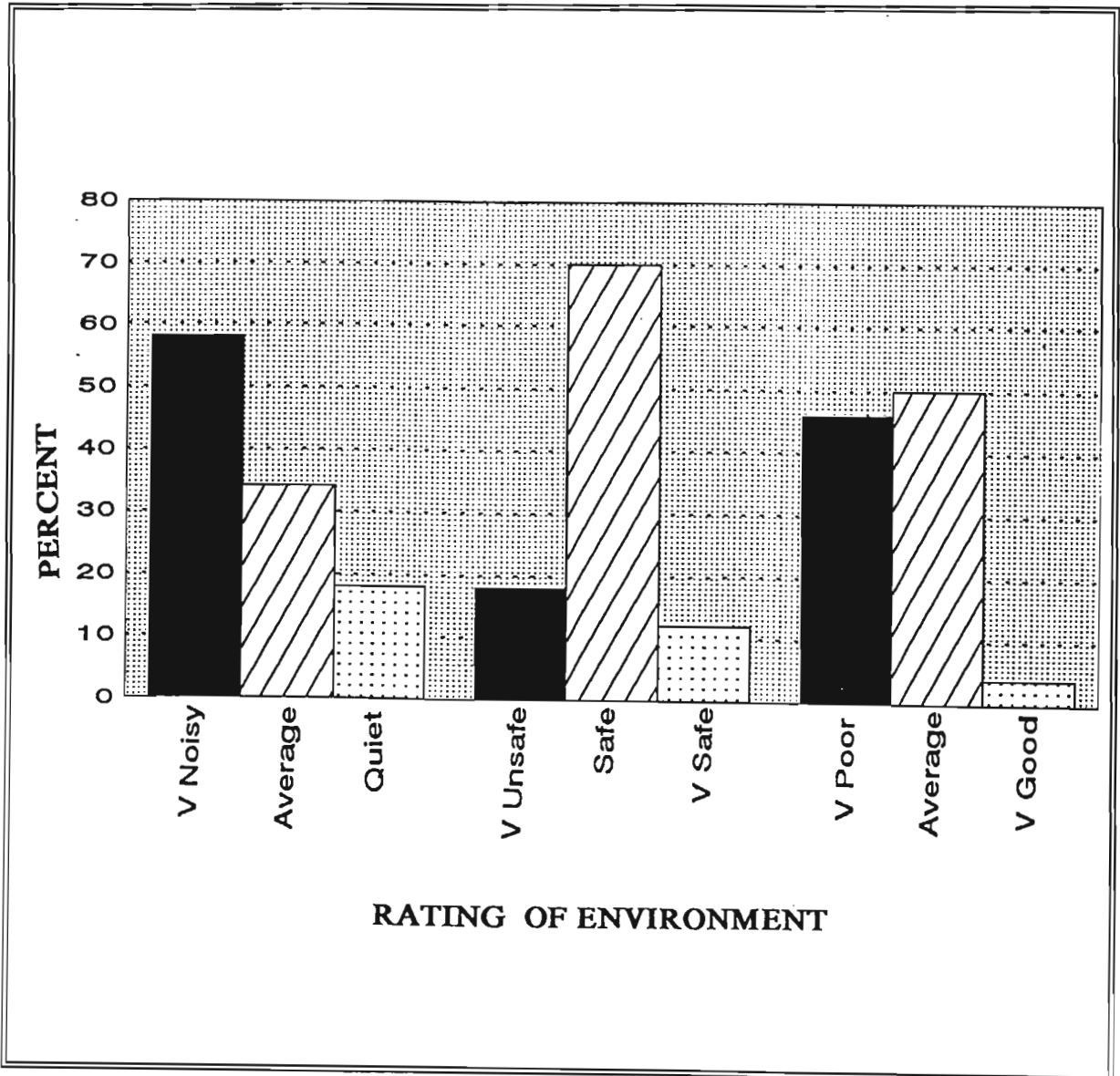
<b>Fears</b>	<b>Percent</b>
Robbed by thugs	67
Accidents	63
Falling	48
Crowds	08
None	05

n=100

Although the respondents had fears of been robbed, 72 percent had not been robbed or assaulted. The reason for their fear was based on heresay evidence from friends and relatives that numerous old people have increasingly become victims of robbery and assault in the last few years. Those who had been robbed and assaulted had money and valuables taken from them.

According to 82 percent of the respondents the area in which they lived was safe or very safe. However, they claimed that the area was very noisy. Half the respondents rated the buildings in which they lived as average in quality but a significant proportion rated it as very poor (figure 4.7).

**Figure 4.7 Perception of Residential Environment**



### 4.13.3 Quality of Services and Facilities

Most of the facilities in the area were of a low quality. This was evident from the fact that 50 to 70 percent rated the bus service, streets, pavements (plate 4.6), bus shelters (plate 4.7; plate 4.8), community halls and recreational facilities as low. A significant proportion (53 and 46 percent) respectively, rated parks and religious facilities as average. Fifty percent rated religious facilities as high. High and average ratings were also received for shopping facilities (52 and 32 percent), and for street lighting (45 percent and 31 percent) (table 4.44).

**Table 4.44 Rating of Services and Facilities**

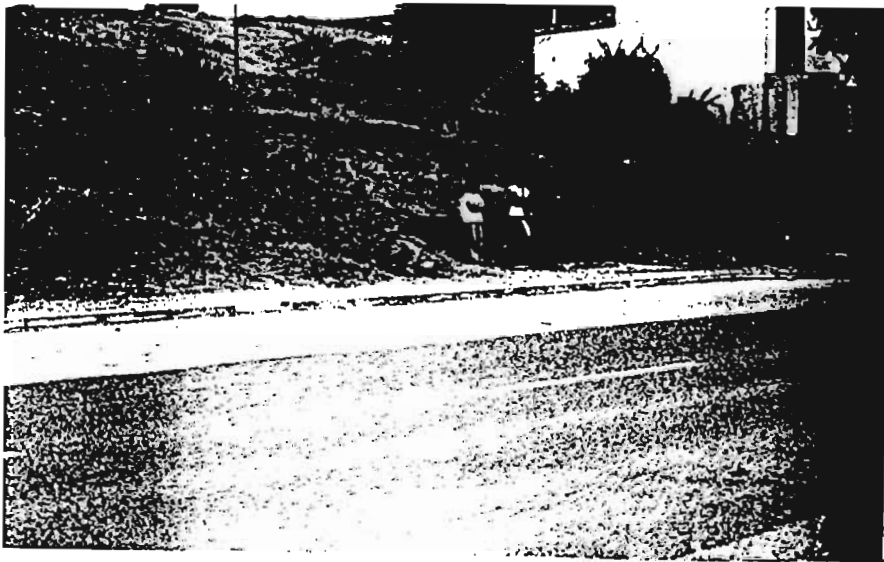
<b>Services/ Facilities</b>	<b>Very High</b>	<b>High</b>	<b>Average</b>	<b>Low</b>
<b>Services</b>				
Bus	05	13	32	50
<b>Facilities</b>				
Streets	03	16	30	51
Pavements	03	12	17	68
Bus shelters	02	05	23	70
Street lighting	04	55	21	20
Parks	04	20	52	24
Community halls	10	17	20	53
Recreational	05	11	15	68
Medical	13	13	21	53
Religious	04	50	46	00
Shopping	15	52	32	01

n=100

**Plate 4.7 Lack of Bus Shelters**



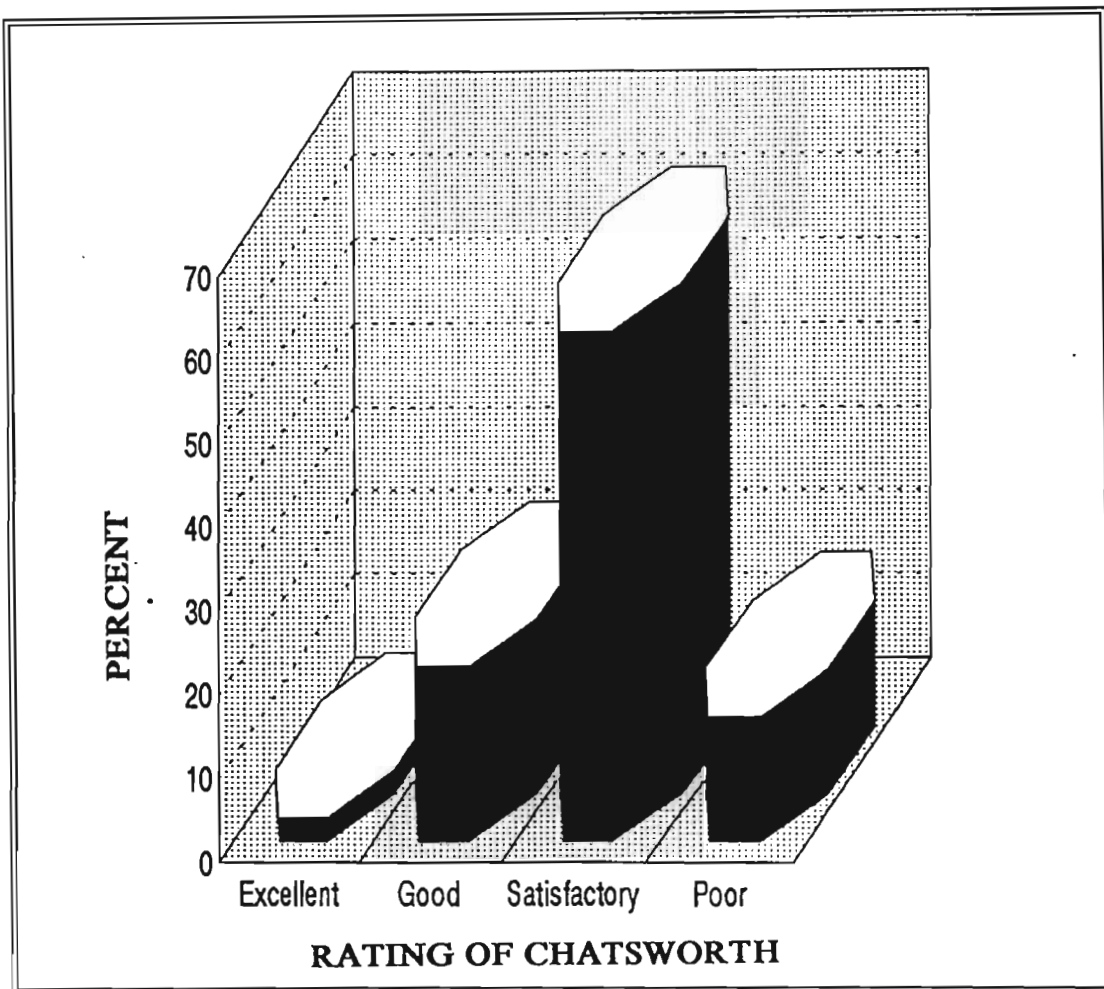
**Plate 4.8 No Bus Shelter at Bus Stop**



#### 4.13.4 Ratings of Chatsworth

Despite the negative aspects of the dwellings and the environment, 61 percent of the aged were satisfied with living in Chatsworth. Some rated Chatsworth as good (21 percent) and excellent (3 percent) (figure 4.8).

Figure 4.8 Ratings of Chatsworth as a Place in which to Live



Reasons for rating Chatsworth as a desirable place to live focused mainly on social aspects. The area was also considered safe and stable to live in by 80 percent of the respondents. Sixty-five percent stated that they had friends and relatives in the area and 46 percent knew the neighbourhood well. About 40 percent said that everything

was convenient in Chatsworth, whilst 20 percent owned their own house (table 4.45). Those who were dissatisfied (15 percent) with living in Chatsworth cited the following reasons: informal settlers, over crowded conditions, noise in the area and poor services (table 4.46).

**Table 4.45 Reasons for Desirability of Chatsworth**

<b>Reasons</b>	<b>Percent</b>
Safe and stable area	80
Most of my friends and relatives stay in the area	65
I know the area well	46
Everything is convenient	40
I have my own house	20

n=85

**Table 4.46 Negative features of Chatsworth**

<b>Reasons</b>	<b>Percent</b>
Poor Services	67
Over crowded conditions	47
Informal settlements	33
Noise	33

n=15

#### **4.13.6 Improvements to Chatsworth to Enhance the Quality of Life**

To enhance the quality of life the aged suggested various changes. The most significant was transport. Ninety-five percent of the aged suggested that the bus

service should be regular and more efficient. More bus shelters should be built and concessions should be given to the aged. Several respondents suggested that:

- (i) the steps leading into the buses should be lowered to allow for easy entry;
- (ii) hand railings are necessary for easy access into the bus; and
- (iii) the bus driver should wait until people are seated before driving off.

Other facilities such as police services and security at pension offices should be improved (77 percent). Money was also a problem for 42 percent of the aged, and they suggested that the state pension should be increased drastically. Respondents (33 percent) also complained about the inefficient service at clinics and hospitals. They suggested that the aged should be given preference or some procedure should be implemented to increase efficiency at these facilities. Other changes suggested by respondents were that they should be given more opportunities in involvement in community affairs (16 percent), the aesthetic appearance of the township should be enhanced by planting trees and establishing gardens along road sides (10 percent), and informal dwellers who were an eye sore, should be removed (14 percent) (table 4.47).

#### **4.14 LIFE IN GENERAL**

Finally, respondents were asked about their satisfaction with life in general. In spite of the difficulties experienced by the aged, 80 percent of them were very satisfied and only a minority were dissatisfied with life in general (19 percent) (table 4.48).

**Table 4.47 Suggestions to Improve the Quality of Life in Chatsworth**

<b>Improvements</b>	<b>Percent</b>
Transport	95
Services and facilities	77
State pensions	42
Health services at clinics and hospitals	33
Involvement in community	16
Plant trees and lawns on road sides	10
Remove squatters	04

n=100

**Table 4.48 Ratings of Satisfaction with Life in General**

<b>Ratings</b>	<b>Percent</b>
Satisfied	80
Dissatisfied	18
Very dissatisfied	01
Neither satisfied nor dissatisfied	01

n=100

#### **4.15 SUMMARY AND CONCLUSION**

Although most of the respondents had some type of ailment, it did not deter them from engaging in different types of activities and moving around freely and independently. The majority of the aged (96 percent) walked to nearby venues. However, 96 percent of the respondents made use of the bus/mini-bus as a means of transport to venues that were some distance away. The use of public transport posed many problems to

the aged such as loud music and crowded or over-loaded buses. The majority of the aged received social support, material and practical support from their families. However, few received financial support. As a result, many of the respondents wanted a substantial increase in their state pensions to enhance their quality of life.

Many problems were also experienced by the aged in getting around Chatsworth. These included climbing stairs and pavement kerbs, and crossing streets. In addition to these problems, many of the aged had other social and personal fears in getting around Chatsworth, such as motor vehicle accidents, falling and being robbed by thugs.

The mobility patterns of the aged were also influenced by the leisure and recreational activities in which they engaged. These activities involved visits to the beach and parks, watching television and engaging in hobbies. However, apart from these activities many desired to engage in sport such as bowling, golf, tennis, and swimming. Unfortunately, due to the lack of sporting facilities, especially for the aged, they cannot participate in these codes of sport. There is also no organised sports association that caters for their needs. Many of the aged expressed the need to live an active life so as to keep fit and to be independent. As a result many of the aged engaged in household activities such as gardening, general housekeeping, cooking and ironing. The service centres provided a place to meet friends, to go on organised outings, engage in recreational activities and to learn new skills and hobbies.

Many of the aged felt that their present dwellings were restrictive and did not allow

them to move about freely because of the narrow stairs, small rooms, and rugs/mats placed around the house. Moreover, the houses were of a poor quality and were too close to the road. This resulted in many of the aged being dissatisfied with their present accommodation. On an emotional level, many of the aged felt that they needed to be shown greater love and affection, and to be given the respect that they deserved.

The underlying feeling of the majority of the respondents that emerged from the survey was that in order to enhance their mobility and quality of life the transport service in the area should be improved, and their state pensions should be increased. It must be acknowledged that although the aged in Chatsworth experienced many difficulties they were satisfied with their life in general.

## CHAPTER FIVE

### EVALUATION

#### 5.1 INTRODUCTION

Ageing has a direct influence on the mobility patterns of the individual. Firstly, health and personal capabilities show a decline with age. The mobility of the aged is further hampered by disabilities due to ill-health such as arthritis, rheumatism and cardiac conditions. In addition, retirement from work results in a reduction of income. These are important factors that have a direct impact on the mobility patterns of the aged.

The aim of this study was to determine the spatial mobility patterns of the aged in Chatsworth. It is based on the rationale that mobility is a good measure of assessing the quality of life of the elderly. The purpose of this chapter is to provide a synthesis of the study, and thereby draw meaningful conclusions. In this respect, hypotheses based on conceptual underpinnings, will be tested for their validity. The following hypotheses were presented in this study:

- (i) The most important need of the aged is money;
- (ii) The aged receive support from their families;
- (iii) The aged are restricted in their movement because of their disabilities;
- (iv) The bus/mini-bus is the chief mode of transport for the aged;
- (v) The aged are dissatisfied with the public transport in Chatsworth;

- (vi) The aged have poor access to essential services and facilities;
- (vii) The majority of the aged are not actively engaged in leisure or recreational activities; and
- (viii) The aged are dissatisfied with their living conditions in the Chatsworth area.

## 5.2 HYPOTHESIS ONE - NEEDS

The needs of the aged are the same as that of the younger generation. Except for the inevitable changes in biology and health, older people are the same as middle-aged people, with essentially the same psychological and social needs (Havinghurst, 1968).

Maslow (1954) argued that once the basic needs of man such as food (survival) and shelter (security) are satisfied, higher needs take command and focuses attention towards attaining new goals such as social and esteem needs (Maslow, 1954). Brody (1974) and Stagner (1970) elaborated further on Maslow's theory by suggesting that the level of satisfaction of these needs have a significant effect on the quality of life of the individual. Gross (1972) regards such an approach as dangerous, since need satisfaction cannot be accurately observed and measured. Despite of this criticism, a number of researchers (Allardt, 1973; Atkinson, 1970 and Eyles, 1988b) have used levels of need satisfaction as an indicator of the quality of life.

The trend in the rating of the needs of the aged showed that 96 percent saw clothing

as being of least importance. Food was seen by 60 percent as unimportant. Therefore, it can be concluded that these basic needs of the aged are being successfully satisfied. Sixty five percent rate money as significant. Money was seen by the aged as a means of satisfying other basic needs like paying the rent for their homes (shelter) and purchasing food. Health and housing was considered as unimportant by forty seven percent and 46 percent respectively.

In Chatsworth 64 percent of the respondents were of the opinion that they should be treated with greater love and understanding (social needs), while 37 percent felt that the need to be recognized and respected by society as a whole (esteem need) was important. This was similar to the theory postulated by Maslow (1954), that once the basic needs are satisfied then the individual looks towards satisfying higher needs. Therefore, the hypothesis that the most important need of the aged is money, is partially accepted.

### **5.3 HYPOTHESIS TWO - FAMILY SUPPORT**

Traditionally, the aged formed an integral part of the family structure of the Indian community. Droskie (1975) pointed out that through the supportive structure of the "Kutum", or extended family structure problems of isolation and segregation did not exist among the Indian aged. Anderson, et al. (1983) argued that the individual and social integration of the elderly into the Indian family was felt to be obligatory. These

ideas were reinforced by Steyn (1986) when he concluded that

the Indian population of South Africa has succeeded in retaining a large part of the extended family structure (kutum) that is traditional in Hindu and Moslem societies; and the aged are for most part well accommodated within this social framework (Steyn, 1986:5).

Over 90 percent of the aged interviewed did not require support from their families for their personal hygiene. While 69 percent of the aged interviewed depended on family members to assist in providing transport for them, 50 percent required assistance in carrying out their task of shopping.

The majority of the aged received social support (90 percent), material support (82 percent) and practical support (78 percent) from their families. This finding concurs with Nair (1989), who found that the majority of Indian families were willing to accept the responsibility of caring and supporting the aged in their home environment.

However, only 39 percent of the respondents received financial support in excess of R50 per month from their families. This was due to the following reasons:

- (i) the high cost of living did not allow the families to have surplus money;
- (ii) families had to cater for their own needs;
- (iii) families received inadequate income; and
- (iv) there was a high unemployment rate within the families.

The hypothesis that the aged receive support from their families is therefore accepted.

#### 5.4 HYPOTHESIS THREE - HEALTH DOMAIN

Maintaining mobility is frequently identified as an important factor for the elderly who wish to live independently. Many of the aged suffer from some form of physical disability which has a negative influence on their mobility patterns. They have difficulty in maintaining the same level of mobility as the younger population group (Ferreira and Mostert, 1986). Carp (1976) argued that old age is frequently accompanied by a decline in sensory acuity, strength and agility, leading to impaired perception, slower reactions and difficulty in moving from one place to another. Although ageing is not synonymous with illness and debility, it is important to recognise signs of the ageing process, such as impaired mobility, vision and hearing.

Seventy-seven percent of the respondents rated their health as being average and above average, while 23 percent rated their health as being poor or very poor. Seventy seven percent of the respondents had problems with their eye-sight and tired very easily from waiting and standing for long periods. Similar findings were made by Ferreira and Mostert (1986) when they argued that many of the aged had impaired mobility, vision and hearing. With the advent of old age there is a decline in sensory activity, strength and agility which in turn leads to impaired perception and slower reactions (Carp, 1976; Hunt, 1977).

Sixty-six percent of the respondents had arthritis and rheumatism. This concurs with Skeleton (1982) that the aged often have health problems associated with the heart, loss of strength and stamina, rheumatism and arthritis. Greenberg (1982) found that

the aged were unable to walk long distances or carry heavy loads.

However, 82 percent of the respondents stated that they could get around freely and independently. Moreover, eighty-eight percent of the respondents averaged seven or more journeys per month, indicating that the aged in Chatsworth were highly mobile.

The hypothesis that the aged are restricted in their movements because of their disabilities is therefore rejected.

## **5.5 HYPOTHESIS FOUR AND FIVE - TRANSPORT**

With respect to transport two hypotheses have been formulated:

### **(i) Chief mode of Transport**

The availability of adequate, cost effective transportation can increase the degree of mobility among the aged and thereby expand their range of social interaction, engagement and activity (Ferreira and Mostert, 1986). This promotes a sense of independence, thus preventing social isolation of the aged. In this way the aged feel that they still have some control over their environment, and reduces the notion of what Lawton (1970:17) refers to as "environmental docility".

Different modes of transport were used by the aged in Chatsworth. Almost equal proportions made use of the bus/mini-bus (96 percent) and walking (95 percent). The

family car provided a means of transport for 60 percent of the respondents.

The bus was used as a chief mode of transport, thus enabling the aged to reach services that were beyond their walking range. These services included the collection of their pensions, shopping and withdrawing of money from different banking institutions. Although the bus/mini-bus remains potentially the most appropriate means of public transportation for the aged, many experience problems in using the system, such as boarding and alighting from the bus/mini-bus (Steyn, 1986).

Walking was the most common mode of transport over short distances. This mode of transport involved activities such as visiting friends who were living in close proximity to them, attending service centres, religious institutions and local shops. According to Carp (1971a) and Hunt (1977) the aged have difficulty in walking fast and far. The problems relating to mobility of the aged are greatly aggravated by journeys that entail the climbing of steps, the crossing of busy roads or coping with narrow or uneven pavements. Further, for walking to be an effective mode of transport requires that facilities be nearby, and adequate pathways, safe for the pedestrian to cross intersecting roads, be provided (Skeleton, 1982).

The car was used to go shopping, to attend family functions and visiting the hospital or doctor in an emergency. Bell and Olsen (1974) found that many of the aged found it distasteful to rely on their friends and families for transportation as they did not want to pose a burden to others.

In this study, the majority (87 percent) stated that the bus/mini-bus was their most common mode of transport to the various services and facilities. In the light of the above, the hypothesis that the bus/mini-bus is the chief mode of transport to the various services and facilities is accepted.

## **(ii) Public Transport**

The significance of travel lies in the importance of the activity. Even if it is only routine activity, it may be vital for the quality of life of the aged and the need to maintain their independence and self-respect.

Skeleton (1982) gives three requirements that have to be met for an adequate bus service. First, there must actually be a bus service at suitable times with adequate reliability between, or near, the locations where people are and those they want to visit. Second, the fare must be reasonable given a person's income. Third, a person must be able to walk to and from the bus stop, to sustain the necessary wait, often while standing and without shelter from weather, to get on and off the bus, and to have the capacity to stand and move around inside the vehicle even while it was moving.

In respect to the first requirement, although there is a bus/mini-bus service, many of the aged had to wait long periods for transport. The average waiting time was 29 minutes. This can be attributed to the fact that the public transport in Chatsworth has been privatised. There is no fixed timetable and many bus drivers wait long periods

for passengers.

The second requirement concerning the fare was also not fulfilled. There were no concessions granted to the aged by the private transport system in Chatsworth. The aged viewed this as a major problem because reduced rates (equal to approximately 19 percent of the normal fare), is given by municipal buses in the Durban Metropolitan Area. This rate was valid all weekend, but limited to the hours 08h00 to 16h30 on a week day. Travel after 17h30 was also at the reduced rate (Steyn, 1986). Unfortunately, Municipal buses do not service the Chatsworth area.

The third requirement relates mainly to bus design. Half the respondents had problems associated with boarding and alighting from buses/mini-buses due to the high steps, narrow entrances and the absence of railings being installed at the entrance. Complaints were also made about the lack of adequate bus shelters. Other problems that were experienced by the aged were loud music in vehicles; crowded/over-loaded vehicles; waiting for public transport; dangerous driving; walking to and from the bus stop; and the insensitive attitude of bus drivers.

This concurs with the finding of Ferreira and Mostert (1986) who found that obstacles or environmental barriers to the mobility of the aged were related to the bus/mini-bus, the service it provides and the pedestrian environment. Furthermore, they found that the most important barriers relating to the buses were the height of the steps, a dire lack of bus shelters and infrequent bus services. The cost and frequency of the service may also influence the usage of the bus/mini-bus (Clark and Smith, 1978;

Moseley, et al., 1976).

These difficulties which the elderly experience with public transport tend to limit their choice of activities and impacts negatively on mobility.

Ninety-two percent of the respondents rated public transport as average, poor or very poor. Thus, it can be concluded that the public transport system in Chatsworth is inefficient. Therefore, the hypothesis that the aged are dissatisfied with public transport in Chatsworth is accepted.

## **5.6 HYPOTHESIS SIX - ACCESS TO SERVICES AND FACILITIES**

In order to assess the degree of accessibility, Hagerstrand (1973a:11) developed a method of analysis called "space-time" geography which attempted to define what activities particular individuals or groups can reach, bearing in mind distances involved, mobility and the amount of free time available. These factors also play an important role in respect to accessibility to services and facilities (Age Concern, 1977). For the purposes of this study access to these services and facilities will be evaluated in terms of distance, time and cost.

### **(i) Distance**

The greater the spatial separation between the aged and the services and facilities, the greater the difficulties experienced by them in reaching and making use of these

amenities. The average distance travelled to hospitals, shops, pension offices, places of worship, banks and service centres was between 3,5 km to 5,5 km. The average distance travelled to parks was 9,5 km.

This study concurs with the findings of Roberts (1974) and Sherman and Britten (1973) who concluded that older people are less able to make longer costly journeys to distant supermarkets, and are often frightened and confused by the bustle in larger shops.

According to Schuurman (1985), to overcome distance, efficient transport must be available and one must be able to pay for it. Many of the aged in Chatsworth have found the public transport inefficient, overcrowded and irregular. With respect to cost, no concessions were granted to the aged.

Except for consumer goods and luxury items, the elderly want the same access to choice of goods and retailers as the rest of the population (Bruce, 1974). Older people tend to make greater use of smaller local shops, particularly for regular purchases such as food (Greenberg, 1982). However, this study has revealed that the aged in Chatsworth make use of both the local shops (walking) as well as the larger shopping centres (bus/mini-bus).

## **(ii) Time**

Hagerstrand (1970:14) maintains that human behaviour is limited by "capability

constraints" which are both spatial and temporal. These are responsible for coordinating a variety of activities around the home. Hence, inaccessibility in terms of distance, mobility, time and money will directly influence the decision to travel.

Robson (1982) argues that the lack of time should not affect old people, as free time is a major feature of old age. He explains that

after the children have left home or no longer need looking after, many of the constraints that structured people's days disappear: working, preparing for work, travelling to and from work, meeting children from school, preparing other peoples meals...(Robson, 1982: 272).

This is not totally true with respect to the aged in Chatsworth. Many of the respondents who are still living within a nuclear or extended family system, still perform household chores which include cooking and ironing and taking care of their grandchildren. Other aspects that limit access to amenities involve waiting for public transport, time taken to reach a destination, and the distance to the bus stop.

### **(iii) Costs**

One of the greatest fears that people have of old age is that of losing economic independence. The aged are caught between rising living costs (inflation) and the dwindling value of money. It is this scenario that causes great concern to many of the aged in Chatsworth.

Income tends to diminish with age. The income of those above the age of 85 tend to

be much lower than those who recently retired (Age Concern, 1977; Hunt, 1977). This significantly affects spending patterns of elderly people, who spend two-thirds of their income on basic necessities. This study found that 81 percent of the respondents received an income between R201 - R600 per month, and the main source of this income was state or company pensions. The average travelling cost to most amenities ranged between R2,80 and R3,80.

Although the average travelling cost does not seem high, but when looked at in terms of the income of the aged and the high cost of living, this can become an important constraint on their already tight budget.

In conclusion, distance, time and cost limit access to services and facilities for the aged. Hence, the hypothesis, that the aged have poor access to services and facilities is accepted.

## **5.7 HYPOTHESIS SEVEN - RECREATION AND LEISURE**

Leisure and recreational activities are important for the elderly, but with ageing there is a marked decline in travelling for these purposes as well as participation in these activities themselves (Hopkin, Robson and Town, 1978).

The most consistent findings show that there is a positive relationship between life satisfaction and levels of social activity and interaction amongst the aged (Tobin and Neugarten, 1961; Maddox, 1965; 1966; Pihlblad and McNamara, 1965; Palmore,

1968). Leisure and recreational participation may be particularly beneficial to the elderly because social involvement is considered a key factor to successful ageing (Atchley, 1976). Regular leisure and recreational participation has shown to lead to psychological benefits among the elderly (Iso-Ahola, 1980; Tinsley, et al., 1987).

Retirement does not normally mean that people lose their previous interests, but the degree to which they can still be actively involved depends on health, transport and income (Greenberg, 1982). Due to the shrinkage of the elderly's income and disabilities associated with ageing, involvement in physically active or costly pursuits tends to decrease. These are, in turn, replaced by more passive pleasures of reading, watching television and sleeping (Age Concern, 1977). According to Hendricks and Hendricks (1977) the common outside leisure pursuit that the aged make are trips to parks, beaches and the countryside.

The majority of the aged in Chatsworth engaged in certain active activities such as visiting the beach (84 percent) and the park (85 percent). Sixty percent of the respondents were actively involved in hobbies such as handwork, sewing and knitting. A minority of the aged participated in card games, darts, fishing, gardening, cooking and jogging. The most important passive activity of the aged was watching television. These findings are similar to that of the active theory as formulated by Havinghurst and Albrecht (1953).

However, the aged in Chatsworth faced numerous difficulties:

- (i) Lack of facilities (the municipality in charge of Chatsworth tends to provide for active sports which are of limited use to older people).

- (ii) Financial difficulties (low income was eroded by the high cost of living and there is very little or no money to engage in recreational or leisure activities).
- (iii) Lack of equipment and material (to pursue their hobbies such as woodwork require large sums of money for the purchase of machinery and material).
- (iv) Poor health (many of the aged had disabilities which prevented them from engaging in certain activities).
- (v) Transport difficulties (the ability of the elderly to live a full life is restricted because of transport problems).

It is evident that although the aged do experience a number of difficulties in Chatsworth, they engaged in both passive and active recreational and leisure pursuits. Therefore, the hypothesis that the majority of the aged do not engage in leisure and recreational activities is rejected.

## **5.8 HYPOTHESIS EIGHT - NEIGHBOURHOOD**

The neighbourhood is a spatial unit with specific social, historical and physical characteristics (Keller, 1968), an area within which residents feel safe or unsafe (Suttles, 1972). Neighbourhood satisfaction refers to the degree of 'fit' or congruence between one's neighbourhood aspirations (or ideal neighbourhood concept) and one's actual residential circumstances (Campbell, et al., 1976; Morris and Winter, 1978; Knox and McLaren, 1978; Loo, 1986).

In Chatsworth many respondents cited the following difficulties experienced in their neighbourhood:

- (i) Crossing streets (speeding cars and the inability to walk fast).

- (ii) Walking on pavements (uneven pavements, cars and buses parked on pavements).
- (iii) Climbing steps in buildings and pavements kerbs (problem related to negotiating the height of the steps).

Many of the aged expressed their dissatisfaction with their present accommodation: no privacy; closeness to the road; narrow and steep steps; and inferior buildings. Many of the respondents (56 percent) found their movement restricted because they had difficulty climbing up and down steps. The floor space of houses were small and this restricted the respondents movements because of the furniture, loose rugs and other household peripherals. In fact, about one third of the respondents had accidents by slipping and falling in the house. The following fears were also cited by many respondents: fear of accidents; fear of falling; and fear of being robbed by thugs.

The following services had a low rating:

- (i) Bus service (inefficient transport service).
- (ii) Pavements (crowded or uneven).
- (iii) Community halls (lack of these structures to cater for the needs of the aged).
- (iv) Recreation (very little recreational facilities for the aged).
- (v) Medical (only one hospital that serves the needs of the entire Chatsworth population - long queues and time consuming).

This concurs with the findings of Ward (1979) who argued that a number of obstacles influence mobility, including: crime and fear for personal safety; flights of steps; speed of traffic-light changes; and the height of the pavements above the street-level makes

stepping on and off an effort. Ferreira and Mostert (1986) contended that perceptual barriers also played a role in inhibiting the mobility of the aged. They argued that anxiety, apprehension and fear of crowds, traffic accidents, physical attacks and embarrassment acted as constraints to mobility.

Despite the negative aspects highlighted by the respondents, 85 percent were satisfied with Chatsworth as a place in which to live. The reasons why they felt that Chatsworth was a desirable place included:

- (i) Safe and stable area (in relation to other parts of KwaZulu Natal).
- (ii) Social contacts (friends and families).
- (iii) Area was well known by respondents (many of the respondents lived in the area for more than 16 years).
- (iv) Home ownership (many of the respondents owned their houses).

Hence, the hypothesis that the aged are dissatisfied with the living conditions in Chatsworth is rejected.

## **5.9 THEORETICAL REFLECTIONS**

There are various theories that underlie the ageing process. Some of these theories are the disengagement model, activity model, social integration, modernization, age stratification model and the subculture model which are discussed in detail in Chapter Two.

From the research findings it is evident that the majority of the aged are involved in both passive and active recreational activities. Many of the aged are still involved in carrying out household chores as well as doing their own shopping. Furthermore, 88 percent of the aged made six or more journeys per month, indicating quite strongly that they are highly mobile. However, a minority of the aged were not very mobile and their participation in leisure and recreation was limited. This was the result of their declining health.

In the context of the two main theories of ageing, the 'disengagement model' and the 'activity model' neither can be used with 100 percent certainty as a predictive tool, with respect to the aged in Chatsworth. However, judging by the research findings it is apparent that the majority of the aged in Chatsworth best fit within the 'activity model' paradigm.

## **5.10 CONCLUSION**

Evaluation of data proves conclusively that in Chatsworth:

- (i) The majority of the respondents regarded food and clothing as unimportant, resulting in the belief that these needs have been satisfied. Money had a significant rating. However, the majority (64 percent) of the respondents sought the higher needs of love and understanding (social needs) and recognition (esteem needs).
- (ii) Most of the aged received social, material and practical support from their families.
- (iii) Although the majority of the respondents rated their health as average and above average, they had many disabilities that were common with the ageing process. Their disabilities included poor eyesight, tiring easily from walking or

standing, arthritis, rheumatism, sore knees, general weakness, breathlessness, poor hearing, heart and bladder problems. Although the aged were faced with many difficulties, this did not restrict their mobility.

- (iv) Different modes of transport were used by respondents. However, the bus/mini-bus was the chief mode of transport.
- (v) Many transport problems were experienced by the aged. These were boarding and alighting from the bus, height of the steps, few bus shelters, loud music, crowded/overloaded vehicles, dangerous driving, waiting for public transport, and the attitude of bus drivers.
- (vi) The aged had access to various services and facilities in Chatsworth. However, they had to travel long distances and there was a lack of efficient transport. Since the most needed services of the aged was beyond walking distance, public transport had to be used. They paid normal fares as no concession were granted.
- (vii) Most of the respondents engaged in both passive and active leisure and recreational pursuits. Passive activities included watching television, relaxing at the beach and resting in the parks. Active activities included household chores, gardening, fishing, jogging, knitting, woodwork and sewing. In respect to leisure and recreational activities many of the aged faced the following problems: lack of facilities, financial difficulties and lack of equipment and material.
- (viii) The Chatsworth neighbourhood has both positive and negative features. The positive features were a safe and stable environment, closeness to friends/families, and familiarity with the area. The negative features were reckless drivers, uneven pavements, height of steps, lack of leisure and recreational facilities, fear of thugs and inefficient transport.

In the next chapter tentative recommendations are provided in the light of the above evaluation.

## CHAPTER SIX

### RECOMMENDATIONS AND CONCLUSION

#### 6.1 INTRODUCTION

The current debate in post-apartheid South Africa is concerned with ways of finding a more equitable distribution of wealth and services, and in so doing correct the imbalances of the past (Daily News, 7/8/95). This chapter will look at the aged and recent state policy, provide suggestions and recommendations in redesigning the neighbourhood and providing the necessary services and facilities to improve the mobility of the aged in Chatsworth and look at other areas of research that will improve the quality of life of the aged.

#### 6.2 THE AGED AND RECENT STATE POLICY

The aged will be faced with another crisis in their twilight years when government subsidies for old age homes were reduced. This was in line with the government's policy of spreading its welfare funds to disadvantaged areas as well as to other social services. The new policy has thrown old age homes into turmoil as they battle to find solutions to adjust to the financial crisis (Daily News, 7/11/95).

Presently the view of the government was to keep the aged in the community for as long as possible. For this concept to be effective it was envisaged that a greater

number of community centres would be established to cater for the needs of the aged while they continued to live with their families. Therefore, the aged will have to look to their families or to the charity of the community for help (Daily News, 07/09/95).

### **6.2.1 Future Policies**

The government has moved away from the notion of 'care of the aged' to 'age management', which is viewed as a holistic and positive approach to the question of ageing. Age management recognises ageing as a natural phase of life without denying the special needs of older people. The basic principle underlying age management was to enable the aged to live an active, healthy, meaningful and independent life for as long as possible with the family as a support system (Ministry of Social Welfare and Population Development: Discussion Document, 05/06/1995).

The government's national strategy on the aged was highlighted in the Ministry of Social Welfare and Population Development discussion document (1995) and included the following aspects:

- (i) Each individual should as far as possible provide for his/her retirement and old age. However, the government has the responsibility to provide for the needs of the aged.
- (ii) Homes for the aged should be provided for only the frail who are in need of 24 hour nursing.
- (iii) Appropriate, adaptable and affordable houses are required for the aged and their families.
- (iv) Accessible and affordable health care is to be provided to ensure that the aged remain in the community for as long as possible.

- (v) An age-integrated society should be fostered.
- (vi) Social services to the aged will be community-based and home-care should be encouraged.
- (vii) All forms of racial discrimination in government-funded services will have to take the aged's diverse values and traditions into consideration when planning services.
- (viii) Due to the high incidence of age discrimination and abuse special attention must be given to the protection of the rights of the aged.

In the light of the above government policy the aged are to be kept in the community with the family playing a greater role in their care. The government was committed to developing affordable, accessible and effective services for the aged in South Africa as well as protecting their safety and dignity.

## **6.3 RECOMMENDATIONS**

### **6.3.1 Transport and the Elderly**

#### **(i) Bus Design**

The height of the bus steps is seen as a major barrier to bus travel by the majority of the aged. In order to allow for easy access into buses the maximum legal height of steps into buses must be lowered. Another alternative would be "kneeling buses" as used in Yorkshire, where the suspension over the front nearside wheel can be lowered at stops, to reduce the step height (Skeleton, 1982). Buses should be fitted with a retractable step system for facilitating entry and exit. Handgrips should be installed on both sides of the entrance to allow for easy entry into buses. The entrance into

buses, aisles and seat spacing should be widened. These improvements will enable the aged to board and alight the buses with greater ease and confidence.

The importance of these small improvements to buses is that they will allow older people, and those who are becoming less mobile, to continue to use this mode of transport (Ferreira and Mostert, 1986).

## **(ii) Operational Practices**

Buses/mini-buses should stop close to the kerb. Bus drivers should wait until the elderly are seated before driving off. This will reduce the incidence of injuries due to falls in buses. This would require a change in the attitude of bus drivers and the priorities of the operation of public transport, which operate on a principle of minimizing dead time in bus schedules (Skeleton, 1982). Loud booming music should be banned on all buses/mini-buses transporting the aged.

## **(iii) Bus Services and Bus Routes**

The aged should be seen as an integral part of society and special services have to be provided for them. One service which can make the life of the aged more comfortable and safer is the provision of a regular bus/mini-bus service. This should operate according to a fixed time schedule, preferably between 09h00 and 14h00 when there is light traffic and the buses/mini-buses are not crowded. In this way the aged would be able to visit the hospital, beach, park and even the pension office and

bank, knowing that they are safe and comfortable.

Movement amongst the aged is presently quite restricted due to the discomfort that they are exposed to in reaching public transport which is, in most cases, the bus/mini-bus. In order to alleviate the problems experienced by the aged, more bus shelters would have to be erected so that the aged would not be forced to walk long distances. The quality of these bus shelters must also be improved with provision being made for proper seats and good shelter to protect them from the elements (such as wind, sun and rain).

A special bus service should also be arranged for the aged to enable them to carry out their shopping and marketing. Large supermarkets, such as Checkers which is situated in the Chatsworth Centre, for example, should have goods at a reduced rate on a week day to enable the aged to buy their necessities, and also to shop at ease without being jostled in a crowd. The private sector also has a significant role to play in easing the burdens of the aged and thus providing them with a meaningful life. This could be done by subsidizing group tours to places of interest for the aged.

#### **(iv) Concessionary Bus Fares**

Even where an adequate or good bus service exists, potential passengers must be able to afford the fare which is a well recognised deterrent to travel by public transport (Skeleton, 1982; Webster, 1977). Given the low income of the elderly in Chatsworth, it can be expected that fares could be a significant deterrent to travel. In a survey

conducted by Age Concern (1973) it was found that the bus fare increases were the greatest problem to elderly people in urban areas. The provision of concessionary fares on buses led to an increase in the mobility of the elderly (Warnes, 1982). However, in Chatsworth such a system does not exist. The elderly are forced to pay the full fare, and are thus forced to be less mobile. When concessions were asked by the aged by displaying their pension cards many of them are embarrassed by the curtness of the drivers. Some of the aged are seen as being a burden on the bus and are advised to wait for the next bus. There can be no doubt that there is a dire need for all concerned, namely, the association for the aged, local authorities and transport operators to reach an agreement about concessionary fares that would suit the aged.

Public transport operators must also be made aware that they would also benefit from concessionary fares. They provide a predictable and easily collected source of revenue, and generate extra travel during the off-peak daytime periods, when most services have spare capacity (Skeleton, 1982).

An important requirement in providing an accessible transport service for the elderly is the co-ordination of resources from both private and public sectors to be utilized in the delivery of an integrated transport system. Existing resources should be used most efficiently to reduce fares and promote efficiency. Techniques such as co-ordination of social agency transportation and user subsidies can help to provide a better service to the aged at a lower cost than that of introducing a new transportation service. These ventures should involve the private sector and grow into a major community service (Ferreira and Mostert, 1986).

## **(v) Pavements and Traffic Control**

Most of the elderly people get about on foot to some extent. For walking to be an effective mode of transport, there is a need for proximate facilities, the provision of adequate obstacle free pathways, and safe crossings at intersecting roads.

Increasing age reduces agility, strength, hearing, vision, judgement of speed, reaction times and adapting to changes in road layout. In this regard the following suggestions are made:

- (i) Speed restriction signs or speed humps should be installed in the vicinity of the Chatsworth Centre.
- (ii) Robots should be installed at busy intersections.
- (iii) The traffic lights at the R K Khans hospital should be adjusted to allow more time for pedestrians to cross the road.
- (iv) Cars and buses should be prevented from parking on the pavements and heavy fines should be imposed if this regulation was violated.
- (v) Proper tarred pavements should be constructed on both sides of all the bus routes.
- (vi) The height of pavement kerbs should be lowered or angled to prevent falling.
- (vii) Hand rails should be compulsory at entrances to buildings where there are many steps. An alternative would be to have sloped ramps instead of steps.

### **6.3.2 Creating a Better Environment**

#### **(i) Crime**

The aged, because of their reduced strength, are seen as easy targets for thugs and

muggers. Ward (1979) found that older people, especially those who are less mobile or frail, were vulnerable to various types of victimization such as purse snatching and mugging. In this regard there should be more plain clothed police deployed in the vicinity of the Chatsworth Centre where many of the services that are used by the aged are found. Ferreira and Mostert (1986) found that most muggings were related to places where money transactions take place (banks, pension offices and shops). A strong police patrol unit should be present especially in areas frequented by the aged. This would definitely make the aged feel more secure knowing that police were patrolling in their vicinity.

## **(ii) Medical**

Elderly people are the heaviest users of medical facilities, but it is often very difficult for them to get to a hospital or clinic (Greenberg, 1982). It has been observed that the most frequent visitors also take the longest time to reach medical facilities (Hopkin, Robson and Town, 1978a). There should be a regular bus service to the hospital which should be accessible to the aged. The elderly should be given preferential treatment and not have to wait in long queues. More doctors should be employed to speed up the process of treatment of elderly patients.

Greater emphasis should be placed on community care in Chatsworth. Day care centres should provide basic medical care. The main objective should be to try and keep the aged in their home environment and community as long as possible. In Chatsworth most service centres meet once a week. There is a need to increase the

frequency of meetings at centres to twice or thrice a week.

### **(iii) Housing**

The physical design of houses and buildings are based upon normal human performance abilities. This results in the aged being regarded as misfits in their homes and their environment. This has serious consequences as the aged are most vulnerable to the impact of their built environment (Steinfeld, 1981).

Hanson (1977) has estimated that the elderly spend 80 - 90 percent of their time in their homes. Housing provides a means of satisfying a number of fundamental needs of the aged: independence, safety, comfort, a wholesome self-concept, a sense of place, relatedness, environmental mastery, psychological stimulation and privacy (Montgomery, 1972).

With the onset of old age, many of the aged experience problems in getting around in their own homes. Sometimes their world revolves around one room because of the fear of accidents. These accidents can be prevented by remodeling their homes so that it can become safer for them. Due to the lack of finances, in most cases, the remodeling of their premises is virtually impossible.

The banks/building society's can play a positive role by providing the householder where aged people reside with loans at reduced interest rates. The householder would then be in a position to redesign part of their home to create an appropriate

residential environment for the aged person. Some of the suggested modifications would be the erection of grab-bars which greatly assist the aged in maintaining balance. These can be erected in shower cubicles, where many accidents occur, as well as along stairways, and toilets.

Due to the types of homes that have been provided in the Chatsworth area (sub-economic council homes), many of the aged have difficulty in reaching basic amenities such as the toilet because they are built at the lower level of the double-storeyed homes. This problem can be alleviated by the construction of toilets at the upper level of the house where the bedrooms are located.

#### **(iv) Services and Facilities**

There is a need for recreational facilities for the aged, for example, specially designed centres where they can spend a few hours being gainfully occupied with tasks that appeal to them. Some of the activities that the aged enjoy are knitting, sewing, handicraft and woodwork. The aged can find greater satisfaction in their activities when it is shared with their peers.

Despite the fact that Chatsworth is home to many aged people, it is disconcerting to note that they have not been catered for in the establishment of parks that are easily accessible to them. Parks provide the aged with an opportunity to relax. However, Chatsworth has a very limited number of parks. Although Chatsworth does possess a nature reserve, this is not safe or easily accessible to the aged. Parks should,

therefore, be established on selected open spaces that are convenient and accessible to the aged. These type of recreational activities for the aged will promote their physical and social development, while the parks will enhance the aesthetic appeal of Chatsworth.

Women were traditionally regarded as care givers to the aged. However, today many of the women are seeking employment to supplement household incomes because of the high cost of living. The balance between the needs of work, family, and caring of the aged is a daunting task. Therefore, there is a need for better financed and coordinated community care facilities, day care programmes and home visiting support services. Another suggestion would be to establish age-care facilities which are attached to the workplace similar to that of child-care (Steyn, 1986)

### **6.3.3 Tax Rebates**

The government should also make a positive contribution to enrich the lives of the aged. A role that the government can play, for example, would be by offering financial assistance in the form of tax rebates, grants or subsidies to householders that are taking care of the elderly. Savings generated through reduced taxes can then be channelled into creating better living conditions for the aged. This may be seen as an incentive for the children to keep their aged parents with them, thus delaying institutionalization. Psychologically, this would have a positive impact on the aged and their quality of life would be enhanced due to their feelings of security and belonging.

## **6.4 SOME RESEARCH DIRECTIONS**

Research on the aged in South Africa tended to be fragmented, and mainly conducted among the more advantaged white sector of the population (Ferreira, et al., 1992). Therefore, valuable knowledge can be generated by looking at comparative studies between the different race groups on aspects such as "Health Care of the aged". The accessibility to health care facilities and its impact needs to be evaluated among all population groups.

Other research areas which could have an impact on the quality of life of the aged include an investigation of social services for the elderly such as day care centres, home-help services and mobile clinics, not in isolation, but holistically. Leisure and recreation is another area that requires attention in terms of needs, provision of amenities and accessibility. Another area of investigation is the role and involvement of the family as a support system in caring for the aged. This would be valuable to families, policy makers as well as the aged.

## **6.5 CONCLUSION**

Awareness of the concerns of the aged and responding to their needs can enhance the potential of the elderly to continue active and independent lives in the community. Assistance with mobility will not only increase the range of opportunities for the elderly, but in the long term, reduce the amount of public expenditure on institutional care for the elderly. It is necessary for the aged to gain access to the various social services

and facilities to become integrated into the community (Ferreira and Mostert, 1986).

This study examined the mobility patterns of the aged with regards to problems, access to services and facilities and the neighbourhood environment. It is evident from this study that the aged in Chatsworth experienced mobility problems that limited their access to essential services and facilities because of inefficient transport, low income, lack of facilities and disabilities associated with the ageing process. These problems not only have physical effects, but also psychological and social repercussions on the aged.

The aged are continuously facing falling incomes and decreasing physical abilities. However, they still need to be mobile to reach shops, essential services and social or recreational activities. Mobility is essential for the aged so that they may live an independent, meaningful and fulfilling life.

The elderly are fundamentally the same as the rest of the population, but provisions for them tends to emphasize their differences and difficulties brought about by advanced age. Planning can help to break down barriers that hinder the mobility of the aged, and in so doing give the elderly improved opportunities to enjoy the same quality of life as the rest of the community.

Today planners must be aware that future generations of elderly people will have higher expectations. They will be better educated and prepared for their retirement years. Many of the services and facilities provided now must be upgraded to prevent

similar problems in the future.

## REFERENCES:

- Abram, M. 1978. Beyond Three Score and Ten: A First Report on a Survey of the Elderly. England: Mitcham.
- Age Concern. 1973. Age Concern on Transport. Mitcham: Age Concern.
- Age Concern. 1977. Profiles of the Elderly: Who are they? Surrey: Age Concern.
- Aitken, S. C. et al. 1989. Environment Perception and Behavioural Geography. In G. Willmott and G. Gaile (eds.), Geography in America. Ohio: Merrill Publishing Co., pp. 218-238.
- Aitken, S. C. 1991. Person-Environment Theories in Contemporary Perceptual and Behavioural Geography 1: Personality, Attitudinal and Spatial Choice Theories. Progress in Human Geography, 15:179-193.
- Allardt, E. 1973. About Dimensions of Welfare. An Exploratory Analysis of a Comparative Scandinavian Survey. Helsinki: Research Group for Comparative Sociology, University of Helsinki.
- Anderson, W. W. et al. 1983. Accommodation Needs and Preferences Among Indian Old-Age Pensioners in Durban. Durban: Department of Social Work, Research Report No. 6, University of Durban - Westville.
- Annalisa, M. 1995. Experiences. Singapore: World Housing Congress in the 'Pacific' Century. 25-29 September.
- Ashford, N. and Holloway, F. M. 1972. Transportation Patterns of Older People in Six Urban Centres. The Gerontologist, 12, 43-47.
- Atchley, R. C. 1976. The Sociology of Retirement. Cambridge.
- Atkinson, A. B. 1970. On the Measure of Inequality. Journal of Economic Theory, 2:244-263.
- Bailey, K.D. 1987. Method of Social Research. Massachusetts: Bergin and Gravelly Publishers.
- Baron, M. 1961. The Aging American. New York: Crowell.
- Beaver, M. L. 1983. Human Service Practice with the Elderly. New Jersey: Prentice-Hall.
- Bebbington, A. C. and Davies, B. 1982. Patterns of Social Service Provision for the Elderly. In A. M. Wames (ed.), Geographical Perspectives on the Elderly. London:

John Wiley and Sons, pp. 355-374.

Bell, W. G., and Olsen, W. T. 1974. An Overview of Public Transportation and the Elderly: New Directions for Social Policy. The Gerontologist, 8:20-23.

Birren, J. E. 1964. The Psychology of Aging. New Jersey: Prentice-Hall.

Bohland, J. R. and Davis, L. 1978. Sources of Residential Satisfaction Amongst the Elderly: and Age Comparative Study. Oklahoma: Unpublished Paper, Department of Geography, University of Oklahoma, Norman.

Bohland, J. R. and Frech, P. 1982. Spatial aspects of Primary Health Care for the Elderly. In A. M. Warnes (ed.), Geographical Perspectives on the Elderly. London: John Wiley and Sons, pp. 339-354.

Bond, J. 1993. Living arrangements of Elderly people. In J. Bond, P. Coleman, and S. Peace (eds.), Aging in Society. London: Sage, pp. 200-225.

Bradburn, N.M. and Caplovitz, D. 1965. Reports on Happiness: a Pilot Study of Behaviour Related to Mental Health. Chicago: Aldine.

Brayman, A. 1984. The Debate About Quantitative and Qualitative Research: A Question of Method or Epistemology?. British Journal of Sociology, 35:75-92.

Brocklehurst, J. C. 1982. Practical Care of Geriatric Patients in Report. Johannesburg: Southern African Conference on the Care of the Aged. 13-16 September, RAU.

Brody, S. J. 1974. A Social Work Guide for Long-Term Care Facilities. Washington D. C.: DHEW Publications.

Bruce, A. 1974. Facilities Required Near Home. Built Environment, 3:290-291.

Burgess, E. 1960. Aging in Western Societies. Chicago: University of Chicago Press.

Butler-Adam, J. F. and Venter, W.M. 1984. Indian Housing Study in Durban and Pietermaritzburg, Volumes One and Two. Metropolitan Durban: Natal Town and Planning Commission.

Bytheway, W. R. 1982. Living under an Umbrella: Problems of identity in Sheltered Housing. In A. M. Wames (ed.), Geographical Perspectives on the Elderly. London: John Wiley and Sons, pp. 223-228.

Campbell, A. et al. 1976. The Quality of American Life: Perceptions, Evaluations and Satisfaction. New York: Russell Sage Foundation.

Carp, F. M. 1971a. Walking as a Means of Transportation for Retired People. The Gerontologist, 11:104-111.

- Carp, F.M. 1971b. On Becoming an Ex-Driver: Prospects and Retrospect. The Gerontologist, 11:101-103.
- Carp, F. M. 1976. Urban Lifestyle and Lifestyle Factors. In M. P. Lawton, R. J. Newcomer and T. O. Byrets (eds.), Community Planning for an Ageing Society. Pennsylvania: Dowden, Hutchinson and Ross, pp. 19-40.
- Carp, F. M. 1977. Living Environments of Older People. In R. H. Binstock and E. Shanes (eds.), Handbook of Aging and the Social Sciences. New York: Van Nostrand, pp. 244 -271.
- Chantilli, E. J. and Schmelzer, J. L. 1971. Transportation and Aging: Selected Issues. Washington: U. S. Government Printing Office.
- Chapman, P. 1979. Unmet Needs and the Delivery of Care. London: The Social Administration Research Trust.
- Chetty, R. 1980. The Changing Family: A Study of the Indian Family in South Africa. South African Journal of Sociology, 11(2):22-27.
- Chinkanda, E. N. 1989. Care of the Aged - Attitudes of Urban Blacks. In M. Ferreira, et al. (eds.), Ageing in South Africa: Social Research Papers. Pretoria: Human Science Research Council, pp. 143-157.
- Clark, D. and Smith, M. 1978. The Decline of Rural Services. London: Standing Committee of Rural Community Council.
- Cliff, J. et al. 1990. Using Surveys in Mozambique for Evaluation Diarrhoea Diseases Control. Health Policy and Planning, 5:219-225.
- Coale, A. J. 1983. Recent Trends in Fertility in Less Developed Countries. Sciences, 221:828-832.
- Cowgill, D. O. 1974. The Aging of Populations and Societies. Annals of the American Academy of Political and Social Sciences, 415:1-18.
- Cowgill, D. O. and Holmes, L. D. (eds.) 1972. Aging and Modernization. New York: Meredith.
- Crandall, R. D. 1979. Social Interaction, Affect and Leisure. Journal of Leisure Research, 11(4):165-181.
- Crandall, R. D. 1980. Gerontology - A Behavioural Science Approach. Reading: Addison-Wesley.
- Cumming, E. and Henry, W. E. 1961a. Growing Old: The Process of Disengagement. New York: Basic Books.

Cumming, E. and Henry, W. E. 1961b. The Process of Disengagement. A View in Depth of Social Psychological Process in Ageing. New York: Basics Books.

Cumming, E. et al. 1960. Disengagement - a Tentative Theory of Aging. Sociometry, 23:23-24.

Curtis, S. 1989. The Geography of Public Welfare Provision. London: Routledge.

Damley, F. 1975. Adjustment to Retirement: Integrity or Despair?. The Family Coordinator, 24: 217-226.

Decker, J. 1980. Social Gerontology: An Introduction to the Dynamics of Aging. Boston: Little, Brown and Co.

Dressel, P. 1986. Symposium. Civil rights, Affirmative Action, and the Aged of the Future: Will Life Chances be Different for Blacks, Hispanics and Women? An Overview of the Issue. The Gerontologist, 26(2):128-131.

Driedger, L. and Chappell, N. 1987. Aging and Ethnicity: Toward an Interface. Canada: Butterworth.

Droskie, Z. 1975. The Importance of Providing Services for the Aged. Durban: Paper read at Conference on Indian Aged, 16-17 May.

Durkheim, E. 1980. Suicide. Translated by J. A. Spaulding. Illinois: The Free Press.

Evans, M. 1988. Participant Observation, the Researcher as Research Tool. In J. Eyles and D. M. Smith (eds.), Qualitative Methods in Human Geography. Cambridge, UK: Polity Press, pp. 197-218.

Eyles, J. 1974. Social Theory and Social Geography. Progress in Planning, 2:244-263.

Eyles, J. 1988a. Interpreting the Geographical world: Qualitative Approaches in Geographical Research. In J. Eyles and D. M. Smith, (eds.), Qualitative Methods in Human Geography. Cambridge: U.K. Polity Press, pp. 1-17.

Eyles, J. 1988b. Research in Human Geography. New York: Basil Blackwell.

Falocchio, J. C. and Cantilli, E. J. 1974. Transportation and the Disadvantaged. Massachusetts: Lexington.

Ferreira, M. 1986. Attitudes of South Africans Regarding Provision for Old Age. Pretoria: Human Sciences Research Council.

Ferreira, M. 1989. The Ageing of the South African Population. Senior News, 22:1-3.

- Ferreira, M. and Mostert, W. P. 1986. Mobility of the Aged in Durban : the Effects of Environmental Barriers. Pretoria: Human Science Research Council.
- Ferreira, M. et al. 1989. Aging in South Africa Social Research Papers. Pretoria: Human Sciences Research Council.
- Ferreira, M. et al. 1992. Multidimensional Survey of Elderly South Africans, 1990-91: Key Findings. Cape Town: HSRC/UCT Centre for Gerontology.
- Fine, M. 1975. Interrelations Among Mobility, Health and Attitudinal Variable in an Urban Elderly Population. Human Relations, 28 July:451-473.
- Foner, A. 1975. Age in Society: Structure and Change. American Behavioural Scientist, 19:144-165.
- Ford, R. G. and Smith, G. C. 1995. Spatial and Structural Change in Institutional Care for the Elderly in South East England, 1987-90. Environment and Planning A, 27:225-248.
- Fry, L. and Keith, J. (eds.). 1986. New Methods for Old Age Research. Massachusetts: Bergin and Gravey Publishers, Inc.
- Galster, G. and Hesser, G.N. 1982. The Social Neighbourhood: An Unspecified factor in Homeowner Maintenance. Urban Affairs Quarterly, 18(2):235-254.
- Gilbert E. W. 1939. The Growth of Inland and Seaside Health Resorts in England. Scottish Geographical Magazine, 55:21-27.
- Gillespie, C. W. I. and Louw, J. 1993. Life Satisfaction in Old Age and Activity Theory: Should the Debate be Re-opened?. South African Journal of Gerontology, 2:25-30.
- Golant, S. M. 1972. The Residential Location and Spatial Behaviour of the Elderly. Chicago: Research Paper no. 143, Department of Geography, University of Chicago.
- Golant, S. M. 1976. Intra urban Transport Needs and Problems of the Elderly. In M. P. Lawton, R. J. Newcomer and T. O. Byerts, (eds.), Community Planning for an Aging Society, Pennsylvania: Hutchingson and Ross, pp. 102-112.
- Golant, S. M. ed. 1979. Location and Environment of Elderly Population. Washington D. C.: Winston.
- Golant, S. M. 1980. Locational Environmental Perspectives on Old-age Segregated Residential Areas in the United States. In D. T. Herbert and R. J. Johnston (eds.), Geography and the Urban Environment: Progress, Research and Application. London: Wiley, pp. 257-294.
- Golant, S. M. 1992. Housing America's Elderly: Many Possibilities/ Few Choices. Beverly Hills, CA: Sage.

- Goudy, W. J. 1977. Evaluations of Local Attributes and Community Satisfaction in Small towns. Rural Sociology, 42:371-382.
- Greenberg, L. 1982. The Implications of an Ageing Population for Land-use Planning. In Warnes, A. M. (ed.), Geographical Perspectives on the Elderly. London: John Wiley and Sons, pp. 401-425.
- Gross, G.H. 1972. Urban Health Disorders: Spatial Analysis and the Economics of Health Facility Locations. International Journal of Health Sciences, 22:64-83.
- Hadley, R., Webb, A. and Farrell, C. 1975. Across the Generations - Old People and Young Volunteers. London: National Institute, Social Services Library, George Allen and Unwin Ltd.
- Hagerstrand, T. 1970. What About People in Regional Science?. Papers of the Regional Science Association, 24:7-21.
- Hagerstrand, T. 1973a. Transport in the 1980 - 1990 Decade: the Impact of Transport on the Quality of Life. Athens: Paper Presented at the Fifth International Symposium on the Theory and Practice of Transport Economics.
- Hagerstrand, T. 1973b. The Domain of Human Geography. In R. J. Chorley (ed.), New Directions in Geography. London: Methuen. 13-21.
- Handel, G. 1991. Case Study in Family Research. In J. R. Feagin, A. M. Orum and G. Sjoberg (eds.), A Case for Further Study. U.S.A.: The University of North Carolina Press, pp. 244-268
- Hanson, P. 1977. The Activity Patterns of Elderly Households. Geografiska Annaler. 59:107-124.
- Harper, S. 1992. New Geographies: Implication for Studies of Ageing. Working Paper.
- Harper, S. and Laws, G. 1995. Rethinking the Geography of Ageing. Progress in Human Geography, 19(2):199-221.
- Harvey, D. 1973. Social Justice and the City. London: Edward Arnold.
- Havinghurst, R. T. 1954. Flexibility and the Social Roles of the Retired. American Journal of Sociology, 59:309-311.
- Havinghurst, R. J. 1968. Personality and the Patterns of Ageing. Gerontologist, 8:20-23.
- Havinghurst, R. J. and Albercht, R. 1953. Older People, New York: Longmans Green.

- Havinghurst, R. J., Neugarten, B. L. and Tobin, S. S. 1963. Disengagement and Patterns of Aging. In B. L. Neugarten (ed.), Middle Age and Aging: A Reader in Social Psychology. Chicago: University of Chicago Press, pp. 161-172.
- Hendricks, C. and Hendricks, J. 1976. Concepts of time and Temporal Construction Among the Aged, with Implications for Research. In J. Gumbrium (ed.), Time, Roles and Self in Old Age, New York: Human Sciences, pp. 101-112.
- Hendricks, J. and Hendricks, C. D. 1977. Aging in Mass Society: Myths and Realities. Cambridge: Winthrop.
- Hendricks, J. and Hendricks, C.D. 1979a. Dimensions of Ageing. Massachusetts: Winthrop Publishers.
- Hendricks, J. and Hendricks, C. D. 1979b. Theories of Social Gerontology. Massachusetts: Winthrop Publishers.
- Hillman, M., Henderson, I. and Whally, A. eds. 1976. Transport Realities and Planning Policy. London: Political and Economic Planning Commission.
- Hofmeyr, B.E. and Mostert, W.P. 1989. Demographic Ageing of the South African Population. Past (1945 - 1985) and Expected (1985 - 2035) trends. Pretoria: Human Science Research Council.
- Holdsworth, D. and Laws, G. 1994. Landscapes of Old Age in Coastal British Columbia. Canadian Geographer , 38:162-169.
- Hopkin, J. M., Robson, P. and Town, S. W. 1978a. The Mobility of Old People. Crowthorne: Report 850, Transport and Road Research Laboratory.
- Hopkin, K. M., Robson, P. and Town, S. W. 1978b. Transport and the Elderly: Requirements, Problems and Possible Solutions. Crowthorne: Transport and Road Research Laboratory Supplementary Report SR 419.
- House, J. S. and Kahn, R. L. 1985. Measures and Concepts of Social Support. In S. Cohen and S. L. Syme (eds.), Social Support and Health. Orlando: Academic Press, pp. 87-92.
- Hunt, A. 1978. The Elderly at Home. London :Office of Population Censuses and Surveys, Social Service Division, Her Majesty's Stationery Office.
- Huttman, E. D. 1977. Housing and Social Service for the Elderly. New York: Praeger.
- Ingram, D. R. 1977. The Concept of Accessibility: A Search for an Operational Form. Regional Studies, 5:101-107.
- Iso-Ahola, S.E. 1980. Social Psychological Perspectives on Leisure and Recreation. Springfield: Charles C. Thomas.

- Javis, G. K. 1972. Canadian Old People as a Deviant Minority. In C. L. Boydell, C. E. Grindstaff and P. C. Whitehead (eds.), Deviant Behaviour and Societal Reaction. Toronto: Holt, Rinehart and Winston, pp. 605-627.
- Jithoo, S. 1975. Fission of the Hindu Joint-Family in Durban. Journal of the University of Durban- Westville, 2:3.
- Jithoo, S. 1987. The Dynamics of Indian family Firms in Durban. Proceeding of a Conference: Aspects of Family Life in the South African Indian Community. Occasional Paper No. 20. Durban: Department of Social Work, University of Durban-Westville.
- Johnston, R. J. 1980. Geography and Geographers - Anglo American Human Geography since 1945. London: Edward Arnold.
- Kahana, E. 1975. A Congruence Model of Person-Environment Interaction. In P. G. Windley, T. O. Byerts and F. G. Ernest (eds.), Theory Development in Environment and Ageing, Washington D. C.: Gerontological Society, pp. 122-142.
- Keith, J. 1986. Participant Observation. In C.L. Fry and J. Keith (eds.), New Methods for Old Age Research. Massachusetts: Bergin and Gravey Publishers, pp. 149-168.
- Keller, S. 1968. The Urban Neighbourhood: A sociological Perspective. New York: Random House.
- Kelly, J. R. et al. 1986. Later life leisure: How they Play in Peorie. The Gerontologist, 26:531-537.
- Kenyon, G., Schroots, J. and Birren, J. eds. 1991. Aging and Metaphor in Science and the Humanities. New York: Springer.
- Kimmel, D. C. 1974. Adulthood and Ageing: An Interdisciplinary, Developmental View. New York: John Wiley.
- Kirk, D. 1979. World Population and Birth Rates: Agreements and Disagreement. Population and Development Review, 5:479-494.
- Kish, L. 1965. Survey Sampling. New York: Wiley.
- Knox, P.L. 1976. Social Well-being and North Sea Oil: An Application of Subjective Social Indicators. Regional Studies, 10:423-432.
- Knox, P.L. and Maclaran, A. 1978. Values and Perceptions in Descriptive Approaches to Urban Social Geography. In D.T. Herbert and R.J. Johnston (eds.), Geography and the Urban Environment. Chichester: John Wiley and Sons, pp. 197-248.

- Laws, G. 1993. The Land of Old Age: Society's Changing Attitudes to Built Environments for Elderly People. Annals of the Association of American Geographers, 83:672-693.
- Laws, G. 1994. Contested Meanings, the Built Environment and Ageing in Place. Environment and Planning A, 26:1787-1802.
- Lawton, M. P. 1970. Planning Environments for Older People. Journal of the American Institute of Planners, 36:124-129.
- Lawton, M. P. and Kleban. M. H. 1971. The Aged Resident in the Inner City. The Gerontologist, 2:277-283.
- Lawton, M. P. 1975. Planning and Managing Housing for the Elderly. New York: Wiley.
- Lawton, M. P. 1980. Environment and Ageing. Monterey: Brooks Cole.
- Lawton, M.P and Herzog, A.R. 1989. Special Research Methods for Gerontology. New York: Baywood Publishing Company.
- Lawton, M. P., Newcomer, R. J. and Byerts, T. O. 1976. Community Planning for an Aging Society. Pennsylvania: Hutchinsonson and Ross.
- Lemon, B. W., Bengston, V. L. and Peterson, J. A. 1972. Exploration of the Activity Theory of Ageing: Activity Types and Life Satisfaction Among In-Movers to a Retirement Community. Journal of Gerontology, 27:511-523.
- Lipman, A. and Ehrlich, I. F. 1994. Psychological Theoretical Aspects of Aging: Explanatory Models. In B. Robert and J. R. Enright (ed.), Perspectives in Social Gerontology, Massachusetts: Needham Heights, pp. 212-255.
- Loo, C. 1986. Neighbourhood Satisfaction and Safety. A Study in a Low Income Ethnic Area. Environment and Behaviour, 18(1): 109-131.
- Losier, G. F. et al. 1993. A Motivational Model of Leisure Participation in the Elderly. The Journal of Psychology, 127(2): 153-170.
- Lowy, L. 1985. Social Work with the Ageing Population. New York: Longman Publishers.
- Maddox, G. L. 1965. Fact and Artifact: Evidence Hearing on Disengagement Theory. Human Development, 8:117-130.
- Maddox, G.L. 1966. Persistence of Life Style Among the Elderly. Vienna: Proceedings of the 7th International Congress of Gerontology, Viennese Medical Academy.

- Maddox, G. L. 1986. Persistence of Life-style among the Elderly: a Longitudinal Study of Patterns of Social Activity in Relation to Life Satisfaction. In B. L. Neugarten (ed.), Middle Age and Aging: A Reader in Social Psychology. Chicago: University of Chicago Press, pp. 81-83.
- Madge, J. 1965. The Tools of Social Science. London: Longman.
- Maldonado, D. 1987. Aged. In A. Minahan (ed.), Encyclopedia of Social Work. Maryland: National Association of Social Workers. pp. 133-148.
- Mancini, J. A. 1980. Strengthening the Family Life of Elder Adults: Myth - Conceptions and Investigative Needs. In N. Stinnet (ed.), Family Strengths, Lincoln: University of Nebraska Press, pp. 153-179.
- Mancini, J. A. and Orthner, D. K. 1982. Leisure Time, Activities, Preferences and Competence: Implications for the Morale of Older adults. Journal of Applied Gerontology, 1:95-103.
- Mangum, W. P. 1982. Housing for the Elderly in the United States. In A. M. Warnes (ed.), Geographical Perspectives on the Elderly. London: John Wiley and Sons, pp. 191-223.
- Mantzaris, E. A. 1986. Methodological Problems of Research into the Ageing Process Among Indians Residents in Old-Age Homes in Durban. South African Journal of Sociology, 17(2):43-48.
- Mantzaris, E. A. 1988. Religion as a Factor Affecting the Attitudes of South African Indian Towards Family Solidarity and Older Persons. Journal of Sociology, 19(3):111-116.
- Markides, K. S. and Martin, W. H. 1979. A Casual Model of Life Satisfaction Among Elderly. Journal of Gerontology, 34:86-93.
- Maslow, A. H. 1954. Motivation and Personality. New York: Harper
- McGuire, F. A. 1984. A Factor Analytic Study of Leisure Constraints in Advanced Adulthood. Leisure Sciences, 6:313-326.
- Mendenhall, W. et al. 1971. Elementary Survey Sampling. Wadsworth: Belmont, C.A.
- Meyer, J. 1981. Elderly Activity Patterns and Demand for Transportation in a Small City Setting. Socio-economic Planning Science, 15:9-17.
- Meyer, J. 1990. Research on Services for the Elderly. Urban Geography, 11:394-401.
- Millar, L. 1987. The Traditional Care of the Indian Aged in South Africa. Welfare Focus, 17(1):12-18.

- Miller, S. J. 1965. The Social Dilemma of the Aging Leisure Participant. In A. M. Rose and W. A. Peterson (eds.), Older People and their Social World. Philadelphia: F. A. Davis Company, pp. 77-92.
- Ministry of Social Welfare and Population Development: Discussion Document, 05/06/95.
- Minkler, M. and Estes, C. L. eds. 1991. Critical Perspectives on Aging: The Political and Moral Economy of Growing Old. New York: Baywood Publishing Company.
- Moller, V. and Ferreira, M. 1992. Successful Ageing in South Africa: Opportunity Structures and Subjective Well-Being. Southern African Journal of Gerontology, 1:5-8.
- Montgomery, J. E. 1972. The Housing Patterns of Older Families. The Family Coordinator, 21:37-46.
- Moodley, D. (1992). The Role of the Aged in the Preservation and Perpetuation of Religio-Cultural Values in Hindu Family Life. Durban: M.A. Dissertation, University of Durban-Westville.
- Moos, R. H. and Lenke, S. 1980. Assessing the Physical and Architectural Features of Sheltered Care Settings. Journal of Gerontology, 35:571-583.
- Morril, R. L. and Wohlenburg, E. H. 1971. The Geography of Poverty in the United States. New York: Mc Graw-Hill.
- Morris, E. W. and Winter, M. 1978. Housing, Family and Society. New York: John Wiley and Sons.
- Moseley, M.J. et al. 1977. Rural Transport and Accessibility. Norwich: Centre of East Anglian Studies, University of East Anglia.
- Murdock, G.P. 1961. The Universality of the Nuclear Family. In C. Bell and S. D. Vogel (eds.), A Modern Introduction to the Family. Illinois: The Free Press, pp. 32-49.
- Nair, K. 1987. Attitudes of Indians Towards Caring for the Aged in the Home Environment. Durban: M.A. Dissertation, University of Durban-Westville.
- Nair, K. 1989. Attitudes of Indians Towards Caring for the Aged in the Home Environment. In M. Ferreira, L. S. Gillis and V. Moller (eds.), Ageing in South Africa Social: Research Papers. Pretoria: Human Science Research Council, pp. 178-186.
- Neugarten, B. L., Havinghurst, R. J. and Tobin, S. S. 1961. The Measurement of Life Satisfaction. Journal of Gerontology, 16:134-143.
- Oosthuizen, G. C. and Hofmeyr, J. H. 1979. A Socio-Religious Survey of Chatsworth. Durban: University of Durban-Westville, Institute for Social and Economic Research, No 7.

Osgood, N. J. (ed.). 1982. Life after Work: Retirement, Leisure, Recreation and the Elderly. New York: Praeger.

Osgood, N. J. and Sontz, H. L. 1989. The Science and Practice of Gerontology. New York: Greenwood Press.

Oudellet, P. 1986. The Leisure Participation and Enjoyment Patterns of French and English Speaking Citizen's Clubs in New Brunswick, Canada. Canadian Journal on Aging, 5(4):257-267.

Oyoo, A.O. et al. 1991. Rapid Feedback from Household Surveys in P.H.C. Planning: An Example from Kenya. Health Policy and Planning, 6:360-383.

Padayachee, G. N. 1989. A Community-Based Study of the Aged in Lenasia, Johannesburg. In M. Ferreira et al. (eds.), Ageing in South Africa: Social Research Papers. Pretoria: Human Science Research Council, pp. 128-142.

Paillat, P. ed. 1979. Migrations de Restraints. Gerontologie et Societe, 8:213.

Palmore, E. B. 1975. Sociological Aspects of Aging. In E. W. Busse and E. Pleiffer (eds.), Behaviour and Adaptation in Later Life. Boston: Little Brown, pp. 33-69.

Palmore, E. B. 1968. The Effects of Ageing on Activities and Attitudes. Gerontologist, 8:259-263.

Peace, S.M. 1977. The Elderly in an Urban environment. PhD Dissertation. University of Wales.

Pihblad, C. T. and McNamara, R. L. 1965. Social Adjustment of Elderly People in Three Small Towns. In A. M. Rose and W. A. Peterson (eds.), Older People and their Social World. Philadelphia: F.A. Davis, pp. 211-232.

Prinsloo, R., et al. 1989. A Comparison of the Functional Status of Two Elderly Population Groups (White and Coloured) in the South - Western Cape. In Ferreira, M. , et al. (eds.), Ageing in South Africa Social: Research Papers. Pretoria: Human Science Research Council, pp. 97-112.

Ragheb, M. G. 1980. Interrelationships Among Leisure Participation, Leisure Satisfaction and Leisure Attitudes. Journal of Leisure Research, 12(2):138-149.

Riley, M. W. 1971. Social Gerontology and the Aged Stratification of Society. Gerontologist, 11:79-87.

Riley, M. W. 1976. Age Strata in Social Systems. In R. Binstock and E. Shanas (eds.), Handbook of Aging and the Social Sciences. New York: Van Nostrand Reinhold.

- Riley, M. and Foner, A. 1968. Ageing and Society Volume 1: An Inventory of Research Findings. New York: Russell Sage.
- Roberts, E. 1974. The Retired as Consumers. Surrey: Age Concern.
- Robson, P. 1978. Profiles of the Elderly: Their Mobility and Transport. Mitcham: Age Concern.
- Robson, P. 1982. Patterns of activity and mobility among the elderly. In A. M. Warnes (ed.), Geographical Perspective on the elderly. London: John Wiley and Sons, pp. 265-280.
- Rose, A. M. 1962. The Subculture of the Ageing. A Topic for Sociological Research. The Gerontologist, 2:123-127.
- Rose, A. M. and Peterson, W. eds. 1965. Older People and their Social Worlds. The Subculture of the Aged. Philadelphia: F.A. Daves
- Rosow, I. 1967. Social Integration of the Aged. New York: Free Press. Rowles, G. D. 1978. Prisoners of Space: Exploring the Geographical Experience of Older People. Colorado: Westview Press.
- Rowles, G. D. 1986. The Geography of Ageing and the Aged: Toward an Integrated Perspective. Progress in Human Geography, 10:511-539.
- Schooler, K. K. 1969. The Relationship between Social Interaction and Morale of the Elderly as a Function of Environmental Characteristics. The Gerontologist, 9:25-29.
- Schooler, K. K. 1970. Effect of Environment on Morale. The Gerontologist, 10:194-197.
- Schuurman, F. J. 1985. The Access to Space for Urban Low Income Groups: The Case of Public Transport. Liverpool: Liverpool University Press.
- Shannon, G. W. and Denver, G. E. A. 1972. Health Care Delivery: Spatial Perspectives. New York: Mc Graw-Hill.
- Sherman, E. M. and Britten, M. 1973. Contemporary Food Gatherers. Gerontologist, 13:358-364.
- Short, J.R. 1984. An introduction to Urban Geography. London: Routledge and Kegan Paul.
- Skeleton, N. 1982. Transport Policies and the Elderly. In Warnes A. M. (ed.), Geographical Perspectives on the Elderly. London: John Wiley and Sons, pp. 303-322.

- Smith, D. M. 1973. The Geography of Social Well Being in the United States. New York: Mc Graw-Hill.
- Snyman, I. 1984. Accommodation for the Aged. Occasional Paper No. 14. Pretoria: Human Science Research Council.
- Stagner, R. 1970. Perceptions, Aspirations Frustrations and Satisfaction: An Approach to Urban Indicators. Ekistics, 30:197-199.
- Steyn, J. L. 1986. Housing and the Aged: A Profile of the Elderly White Community in Durban. Durban: Research Section, Town Planning Branch, City Engineers Department, City of Durban, October.
- Striner, F. W. 1978. The Transportation Needs of the Elderly in a Large Urban Environment. The Gerontologist, 18:207-211.
- Subramony, K. 1993. A History of Chatsworth: Impact of the Group Areas Act on the Indian Community of Durban (1958 - 1975). Pretoria: M.A. Dissertation, University of South Africa.
- Sudman, S. 1976. Sample Surveys. Annual Review of Sociology, 2:107-120.
- Suttles, G.D. 1972. The Social Construction of Communities. Chicago: University of Chicago Press.
- Taaffe, E. J. 1974. The Spatial View in Context. Annals of the Association of American Geographers, 64:1-16.
- Taylor, R.C. 1981. Self-Reports and Self-Estimates of Health. In J. Kinnaird, J. Brotherson and J. Williamson. (eds.), The Provision of care for the elderly. Edinburgh: Churchill Livingstone, pp. 200-210.
- Teague, M. 1980. Aging and Leisure: A Social Psychological Perspective. In S. Iso-Ahola (ed.), Social Psychological Perspectives on Leisure and Recreation. Illinois: Springfield, pp. 125-142.
- The Australian Longitudinal Study of Ageing: Key Findings of Multi-Dimensional Pilot Study 1990. Adelaide, SA: Centre for Ageing Studies.
- Tibbits, C. ed. 1960. Handbook of Social Gerontology: Societal Aspects of Ageing. Chicago: University of Chicago Press.
- Tinsley, H.E. et al. 1987. The Relationships of Age, Gender, Health and Economic Status to the Psychological benefits: Older Persons Report from Participation in Leisure Activities. Leisure Sciences, 9:53-65.
- Toblin, S. S. and Neugarten, B. L. 1961. Life Satisfaction and Social Interaction in the Ageing. Journal of Gerontology, 16:344-346.

- Townsend, P. 1957. The Family Life of Old People. London: Routledge and Kegan Paul.
- Tsui, A. O. and Bogue, D. J. 1978. Declining World Fertility: Trends, Causes, Implications. Population Bulletin, 33:56-63.
- Tunstall, J. 1966. Old and Alone. London: Routledge and Kegan Paul.
- Wachs, M. 1979. Transport for Elderly: Changing Lifestyles, Changing Needs. Berkeley, California: University of California Press.
- Ward, R. A. 1979. The Aging Experience. An Introduction to Social Gerontology. New York: Lippincott.
- Warnes, A. M. 1981. Towards a Geographical Contribution to Gerontology. Progress in Human Geography, 5:317-341.
- Warnes, A. M. eds. 1982. Geographical Perspectives on the Elderly. New York: John Wiley and Sons.
- Warnes, A.M. 1984. Cities and Elderly People: Recent Population and Distributional trends. Urban Studies, 31(4):799-816.
- Warnes, A. 1987. The Ageing of Britain's Population: Geographical Dimensions. Espaces, Populations, Societies, 2:317-327.
- Warnes, A. M. 1985. Geographical Locations and Social Relationships in Developing and Developed Nations. In Pacione, M. (ed.), Social Geography: Progress and Prospects, London: Croom Helm, pp. 252-294.
- Warnes, A. M. 1988. The Demography of Ageing. In A. T. Davenport (ed.), Anaesthesia and the Aged Patient, Oxford: Blackwells Scientific Publications, pp. 9-26.
- Warnes, A. M. 1990. Geographical Questions in Gerontology: Needed Directions for Research. Progress in Human Geography, 14:24-56.
- Watkins, J. 1990. Appalachian Elderly Migration Patterns and Implications. Research on Aging, 12:409-429.
- Webster, F. V. 1977, Urban Passenger Transport. Some Trends and Prospects. Crowthorne: Laboratory Report 771, Transport and Road Research Laboratory.
- William, O. P.-1971. Metropolitan Political Analysis. New York: The Free Press.
- Wiseman, R. F. 1978. Spatial Aspects of Ageing. Resource Paper 78-4. Washington D. C.: Association of American Geographers.

Yin, R.K. 1989. Case study Research Design and Methods: Applied Social Research Method Series, vol.5. Chicago: Sage Publications.

APPENDIX 1



University of  
Durban~Westville

PRIVATE BAG X54001 DURBAN  
4000 SOUTH AFRICA  
TELEGRAMS: 'UDWEST'  
TELEX: 6-23228 SA  
FAX: (031)820-2383  
☎ (031)820-9111

DEPARTMENT OF GEOGRAPHY

20 June 1994

Schedule No.:.....  
Researcher: P Chanderjith  
Telephone Number:418904

CONFIDENTIAL

A STUDY OF SPATIAL MOBILITY PATTERNS OF THE AGED IN  
CHATSWORTH.

Introduction

Good morning/afternoon/evening. My name is..... and I  
am from the Department of Geography, University of Durban-Westville. At present I am  
conducting a survey in this area in order to get a better understanding of the spatial mobility  
patterns of the aged. Please feel free to be completely honest and to say exactly what you  
feel, as the information which you give us will be completely confidential. I am interviewing  
many people in this area and I would greatly appreciate your help.

P Chanderjith  
(Masters student)

Student No.: 7608532

Dr B Maharaj  
(Supervisor)  
SENIOR LECTURER

## 1. PERSONAL

1.1 Service centre or old age club:

--

1.2 Sex:

Male	Female

1.3 Age category:

60-64	65-69	70-74	75-79	80+

1.4 Marital status:

Single	Married	Divorced	Widowed

1.5 Education Level:

None	Primary	Secondary	Tertiary

## 2. RESIDENTIAL

### 2.1 Area where respondents live:

Havenside (Unit 1)	
Bayview (Unit 2)	
Westcliff (Unit 3)	
Mobeni Heights (Unit 4)	
Croftdene (Unit 5)	
Arena Park (Unit 6)	
Montford (Unit 7)	
Risecliff (Unit 8)	
Moorton (Unit 9)	
Woodhurst (Unit 10)	
Crossmoor (Unit 11)	

### 2.2 Number of years that respondent has lived in Chatsworth:

< 2 years	
2 - 4 years	
5 - 7 years	
8 - 10 years	
11 - 13 years	
14 - 16 years	
> 16 years	

### 2.3 Previous place of residence prior to moving to Chatsworth:

--

2.4 Type of dwelling in which respondent lives:

House (own)	
House (rented)	
House belonging to child	
Outbuilding (rented)	
Living with relatives	
Other (specify)	

2.5 Please indicate the major reason for living in your present dwelling.

---

2.6 How long have you lived in this accommodation?

< 2 years	
2 - 4 years	
5 - 7 years	
8 - 10 years	
11 - 13 years	
14 - 16 years	
> 16 years	

2.7 If you have moved within the last 5 years, please indicate why?

---

**3. FAMILY STRUCTURE**

3.1 Do you live within a joint family or nuclear family structure?

Joint family	Nuclear family	Alone (with wife)

3.2 If you live with your family it is:

REASON	YES	NO
Because you want to		
To help family practically/financially		
You need others around to assist you		
Do not like to live alone		
Other (specify)		

3.3.1 What family structure would you prefer?

Joint family	Nuclear family

3.3.2 Reason(s):

---

---

3.4.1 Would you prefer to live?

With your family	
On your own	
In an institution (old age home)	

3.4.2 Why?

---

---

#### 4. HEALTH AND MOBILITY

##### 4.1 Self-rated health status of respondent:

Very good	
Good	
Average	
Poor	
Very Poor	

##### 4.2 Self-perceived level of mobility of respondents:

Gets around freely and independently	
Gets around but with difficulty	
Gets around only with the aid of a walking stick or walking frame	
Get around only with assistance from others	

##### 4.3 Are you affected by any of the following?

DISABILITIES	YES	NO
Poor eyesight		
Poor hearing		
Tires easily from walking		
Tires easily from standing		
Heart problems		
Arthritis, rheumatism		
Breathlessness		
Bad knee		
Bladder problems		
General weakness		
Other (specify)		

## 5. TRANSPORTATION

5.1 Different modes of transport used:

MODE	YES	NO
Car (own)		
Car (family)		
Bus		
Taxi		
Train		
Walking		
Other (specify)		

5.2 Most common mode of transport:

Car (own)	
Car (family)	
Bus	
Taxi	
Train	
Walking	
Other (specify)	

5.3 Mode of transport and frequency of use:

FACILITY	MODE OF TRANSPORT						FREQUENCY				
	N/A	C A R	B U S	T A X I	T R A I N	W A L K	D A I L Y	W E E K L Y	M O N T H L Y	S E L D O M	NOT A T A L L
Food shop											
Other shops											
Banks/building societies											
Post office											
Hospital											
Doctor											
Library											
Place of worship											
Centre of town											
Visit friends/relatives											
Beach											
Cinema											
Parks											
Sporting venues											
Service centres/clubs											

5.4 Number of times (\*) during the past month that you travelled by any mode of transport:

Did not travel	
Once	
Twice	
Three	
Four	
Five	
Five +	

\* A return journey is counted as one.

5.5 How do you rate the efficiency of public transport in Chatsworth?

Very good	
Good	
Average	
Poor	
Very poor	
Cannot say	

5.6 Do you experience any difficulty when using public transport?

PROBLEMS	YES	NO
Walking to and from the bus stop		
Boarding or alighting from public transport		
Waiting for public transport		
Maintaining balance in a moving bus/taxi		
Crowded/overloaded bus/taxi		
Loud music in bus/taxi		
Dangerous driving		
Entering buses/taxis/trains		
Other (specify)		

5.7 Do you drive a car?

Never learned to drive a car	
Yes, still drives	
No, no longer drives	

## 6. SOCIO-ECONOMIC IMPLICATIONS OF THE AGED

6.1 What is your nett monthly income?

< R200	R201-R400	R401-R600	R601-R800	R801-R1000	>R1000

6.2 What is the source of your income?

SOURCE	YES	NO
State pension		
Company pension		
Shares		
Retirement annuity		
Allowance (family)		
Rental from dwelling		
Other (specify)		

6.3.1 Is your family able to care for you?

Yes	No

6.3.2 Do you think they should support you financially?

Yes	No

6.3.3 Why? \_\_\_\_\_

---

6.4.1 If NO, in 6.3.2, do you contribute financially to the family budget?

Yes	No

6.4.2 How often?

Monthly	Sometimes	Not at all

6.4.3 Why? \_\_\_\_\_

6.5 Please indicate (if applicable) the average monthly amount you spend on:

AMOUNT	F O O D	T R A N S P O R T	C L O T H I N G	MEDICAL EXPENSES	LEISURE AND RECREATION (ENTERTAINMENT )	A C C O M M O D A T I O N
< R50						
R50-R74						
R75-R99						
R100-R124						
R125-R149						
R150-R174						
R175-R199						
>R200						

6.6.1 Does your family regularly (at least once a month) give you:

SUPPORT	YES	NO
Financial support (R50 plus a month)		
Material support (food, clothing, etc.)		
Practical support (shopping, transport, etc.)		
Social support (visit, companionship, etc.)		

6.6.2 If the answer is YES, to any options in question (6.6.1), could you manage the same quality of life without this support?

Yes	No

6.6.3 Give reason(s): \_\_\_\_\_

\_\_\_\_\_

6.7 If you have a problem (eg. health, finance, etc.) who would you turn to for assistance?

\_\_\_\_\_

**7. ENVIRONMENTAL CHARACTERISTICS**

7.1 What problem(s) or difficulties do you experience in getting around Chatsworth?

PROBLEMS	YES	NO
Crossing streets		
Walking on pavements		
Climbing steps into building		
Climbing up pavement curbs		
Other (specify)		

7.2 What fears do you have in getting around Chatsworth?

\_\_\_\_\_

\_\_\_\_\_

7.3.1 Have you been robbed or assaulted in Chatsworth, since turning 60 years?

Yes	No

7.3.2 If YES elaborate: \_\_\_\_\_

-

## 8. LEISURE AND RECREATIONAL ACTIVITIES

8.1 In what type of leisure/recreational activities do you engage?

ACTIVITY	YES	NO
Visit the beach		
Visit the park		
Watching television		
Sports		
Hobbies		
Other (specify)		

8.2.1 Is there any leisure/recreational activities that you would like to engage in but are unable to do so?

Yes	No

8.2.2 If YES, state the activity:

--

8.3 What is preventing you from participating in these activities?

---



---

**9. ACCESS TO AMENITIES**

**9.1 Time**

9.1.1 How long does it take you to travel to and from the following amenities?

AMENITY	TIME (Mins.)					
	<20	20-29	30-39	40-49	50-59	>60
Hospital						
Shops						
Place of Worship						
Post office						
Library						
Parks						
Sporting venues						
Banks/building societies						
Service centres/clubs						
Other (specify)						

9.1.2 What is the average time spent waiting for public transport?

TIME (Mins.)						
<10	10-19	20-29	30-39	40-49	50-59	>60

9.2 Costs

9.2.1 What is the cost of transport to and from these places?

AMENITY	COST IN RANDS					
	< R2	R2-R4	R5-R7	R8-R10	R11-R13	R14 +
Hospital						
Shops						
Place of worship						
Post office						
Library						
Parks						
Sporting venues						
Banks/building societies						
Service centres/clubs						
Other (specify)						

### 9.3 Distance

9.3.1 What is the average distance to these amenities (include return trip)?

AMENITY	DISTANCE IN KILOMETRES					
	< 2	2-4	5-7	8-10	10-12	> 13
Hospital						
Shops						
Place of worship						
Post office						
Library						
Parks						
Sporting venues						
Banks/building societies						
Service centres/clubs						
Others (specify)						

### 10. NEEDS OF THE AGED

10.1 Rate the following basic needs in order of importance to you:

(use a scale 1 to 5)

Food	1	2	3	4	5
Housing (shelter)	1	2	3	4	5
Money (income)	1	2	3	4	5
Health	1	2	3	4	5
Clothing	1	2	3	4	5

10.2.1 Is there any other need that you would like to satisfy in order to improve your quality of life?

Yes	No

10.2.2 Elaborate:

---

---

## 11. ACTIVITY AND NON ACTIVITY

11.1 How would you describe your present life?

Active	Inactive

11.2.1 As an aged person what type of life would like to lead?

Active	Inactive

11.2.2 Why?

---

---

11.3 How long have you been a member of your old age service centre/club?

YEARS	
< 1	
1 - 2	
3 - 4	
5 - 6	
7 - 8	
9 - 10	
> 10	

11.4 With what kind of support /assistance does your service centre/club provide you?

---

---

11.5.1 Are there any disadvantages of belonging to an old age service centre/club?

Yes	No

11.5.2 If YES, give reasons:

---

---

11.6.1 Besides your old age service centre/club do you belong to any one of the following organisations?

ORGANISATIONS	YES	NO
Cultural		
Social		
Sporting		
None		
Other (specify)		

11.6.2 If you belong to an organisation, what is your role in that organisation?

---

11.7 Which of the following household activities do you conduct by your self?

ACTIVITY	YES	NO
Cooking		
Washing		
Ironing		
General house keeping		
Gardening		
Other (specify)		

11.8 Are you dependant on other people for:

ACTIVITY	Never	Sometimes	Often	Very often
Shopping				
Cooking				
General house work				
Personal hygiene				
Transport				
Other (specify)				

11.9 Do you go on tours/trips organised by old age organisations?

Yes	No

## 12. ATTITUDES TOWARDS QUALITY OF LIFE

12.1.1 Are you able to move about freely in your house?

Yes	No

12.1.2 If NO, elaborate:

---

12.2.1 Are you experiencing any problems or dissatisfaction with your present accommodation?

Yes	No

12.2.2 Give reasons:

---



---

12.3 Select the appropriate category that best describes the area (unit) in which you live?

CATEGORY	RATING		
Noise	very noisy	average	quite
Safety	very unsafe	safe	very safe
Quality of buildings	very poor	average	very good

12.4 From an aged point of view how would you rate the quality of services and facilities in Chatsworth?

SERVICES/FACILITIES	NOT AVAILABLE	VERY HIGH	HIGH	AVERAGE	LOW
Services					
Bus					
Facilities					
Streets					
Pavements					
Street lighting					
Parks					
Community hall					
Recreational					
Medical					
Shopping					
Religious					
Other (specify)					

12.5 How would you rate Chatsworth as a place for the aged to live?

Excellent	Good	Satisfactory	Poor

12.6.1 Are you satisfied living in Chatsworth?

Yes	No

12.6.2 Give reasons: \_\_\_\_\_

—

\_\_\_\_\_

\_\_\_\_\_

12.7 What more do you feel could be done to enhance the quality of life of the aged in Chatsworth?

\_\_\_\_\_

\_\_\_\_\_

12.8 Taking all things together, how satisfied are you with your life in general?

Very satisfied	
Satisfied	
Dissatisfied	
Very dissatisfied	
Neither satisfied nor dissatisfied	