AN ASSESSMENT OF LEISURE ACTIVITIES AND THE FITNESS AND WELL-BEING OF OLDER PEOPLE IN LIVERPOOL .

by

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ABSTRACT

Current demographic changes are characterised by an increased number and proportion of older people. This is typified in Liverpool's population. The Government's White Paper objective of 'adding years to life and life to years' encapsulates the challenge faced by health professions, politicians and academics in responding to such demographic realities. One factor that has been suggested as having the potential to enhance life quality in particular, is the use of leisure time. This area was explored in the current study.

The main aim of the study was to examine the relationship between leisure and ageing. Specifically the study aimed to document the leisure behaviour of older people, to investigate the factors which are associated with, or are a consequence of, leisure participation and to critically discuss the implications of this study for leisure interventions and models of ageing.

To achieve these aims a series of quantitative studies was undertaken to examine the leisure behaviour of a sample of older people including the relationship between this behaviour and fitness and well-being. Subjects were from three different age groups, from differing residential settings and included both sexes. Attitudes towards leisure and health, service use and provision and the activity adoption process were also investigated in this sample. In addition, the attitudes of people within the immediate socio-context of older people were assessed. These studies were followed by a qualitative investigation into issues emerging from the quantitative findings.

One of the main findings of this study was that the nature of activity undertaken by the sample of older people was home based, non physically active and social. This raises many questions since active pursuits and pursuits outside of the home were found to be associated with well-being. Leisure behaviour differed variably by age, sex and residence type.

A major constraint to leisure participation was found to be poor health status. This was particularly salient to older subjects and those living in residential accommodation. The relevance of other forms of constraints differed by age and residence type.

Multiple regression analysis revealed rating of physical activity and rating of personal control to be major variables in explaining the variance observed in leisure behaviour.

Some of the important factors implicated in relation to leisure in later life were: personal control, health status, physical ability, receptiveness and the socio-cultural environment. The study questioned the use of chronological age as a measure of the ageing process and also discussed the definition of leisure in relation to later life.

The study suggested that interventions should be considered to promote activities aimed at the widening of leisure repertoire in addition to encouraging frequency of participation in certain types of activity. Interventions should ensure that the older population is not categorised as one homogenous group and should create supportive environments to encourage their use. The empowering principles of health promotion are also implicated from the work. Interventions should also contribute to creating positive attitudes towards activity in later life.

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I would like to dedicate this piece of work to the memory of my Nan - whose cotton socks, God has surely blessed.

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All the world's a stage,
And all the men and women merely players:
They have their exits and their entrances;
And one man in his time plays many parts,
His acts being seven ages. At first the infant,
Mewling and puking in the nurse's arms.
Then the whining school-boy, with his satchel
And shining morning face, creeping like snail
Unwillingly to school. And then the lover,
Sighing like furnace, with a woeful ballad
Made to his mistress' eyebrow. Then a soldier,
Full of strange oaths, and bearded like the pard,
Jealous in honour, sudden and quick in quarrel,
Seeking the bubble reputation
Even in the cannon's mouth. And then the justice,
In fair round belly with good capon lined,
With eyes severe and beard of formal cut,
Full of wise saws and modern instances;
And so he plays his part. **The sixth age shifts**
Into the lean and slipper'd pantaloon,
With spectacles on nose and pouch on side,
His youthful hose, well saved, a world too wide
For his shrunk shank; and his big manly voice,
Turning again toward childish treble, pipes
And whistles in his sound. Last scene of all,
That ends this strange eventful history,
Is second childishness and mere oblivion,
Sans teeth, sans eyes, sans taste, sans everything.

William Shakespeare
As You Like It
(Act II, Scene vii)

CHAPTER ONE

INTRODUCTION

1. INTRODUCTION

1.1 The Older Population

1.1.1 Demographic Ageing

1.1.1.1 National Population Trends

Demographic changes in the British population have resulted in an increased number and proportion of people over the statutory retirement ages. In total, nine million people are over these ages (Victor, 1991). The proportion of the population over retirement age has increased from 6% to 17% during this century (McKeever and Perry, 1990). These figures are indicative of what has been termed 'a revolution in ageing' and has been in progress in Britain (and other developed nations) for most of this century (Warnes, 1991). This refers to a substantial fall in the number of younger people and an increasing proportion of older people in a relatively stable total population size. As time progresses, the percentage of older people in the population is set to continue rising (McKeever and Perry, 1990). National changes in the age structure of a population are in the main influenced by fertility and mortality, although other factors, such as war and migration, are significant variables in this process (Warnes, 1991). As knowledge of the factors that affect fertility and mortality is far from complete (especially in relation to late age mortality) caution should be adopted when forecasting the number of people at specific ages, particularly for dates more than a decade ahead (Warnes, 1991). The Office of Population Censuses and Surveys (OPCS) who produce national and local projections of the population stressed that projections are not forecasts of future populations but show levels which would result if the assumptions about births, deaths and migration were to be realised (Hayes, 1989). Taking this into account Warnes (1991) predicted that although the early decades of the twenty first century will see a further increase in the numbers of older people as the high post-war birth cohorts reach old age, thereafter there is likely to be a period of stability. In particular, demographers have predicted that there will be increasing numbers of people over the age of 75. This

proportion of the older population will increase at a greater rate than the rise in the total proportion of older people. The number of those living to a greater age ('very elderly') is also expected to increase in the future. In relation to this, Warnes (1991) cautioned that those living to a great age are far from representative of the total older population and care should be taken not to stereotype older people by this minority.

It is important to consider that the older population has a widely reported difference in the number of males and females. In Western culture life expectation for women is 78 years and for men is 73 years of age. This sex differential tends to widen with increasing age, for example, the ratio of women to men in the 70-84 age group is 2:1 and in the 85 plus age group it is 4:1. Thus the 'very elderly' group are predominantly women.

1.1.1.2 The City of Liverpool - Population Trends

The City of Liverpool has approximately 90,000 residents over retirement age according to the City Planning Officer (CPO) and the OPCS (Source: The City of Liverpool, Community Care Plan, 1993). This represents 19% of Liverpool's total population (Liverpool City Council, 1993) and compares to a national percentage of 17%. The figures for 1991 indicated that 12% of the total number of residents in Liverpool were aged between 60/65 and 74, 5.6% were 75 to 84 years old and 1.4% were over the age of 85.

In Liverpool the national trends have been accentuated by selective migration of the younger age groups. Between 1961 and 1981 the major cities lost population dramatically. For most major cities this loss slowed considerably between 1981 and 1987. However, in Liverpool, the numerical and percentage decline was estimated to be three times that for other cities, such as Manchester. Future population projections for Liverpool differ according to source (Hayes, 1989). OPCS projections assume the continuation of selective migration while alternative statistics, from the City Planning Officer, assume that the range of policy responses to past decline will produce a slowing down in the rate of migration. These assumptions have different implications for the overall population total. However, they both agree on marked differences in the

age trends of future populations. Both projections for the period until 2001 reflect a marginal decline in the school population; a dramatic decline in the 16-24 year olds; and a large increase in the oldest age groups over 75 years of age.

Hayes (1989) stated that OPCS analysis of the composition of the older population in Liverpool indicated that in the period until 2001:

- The number of 60/65-74 year olds will fall by 14% between 1987 and 2001. This is in part due to the effect on births of the First World War.
- The numbers aged 75-84 will remain unchanged between the period of 1987 and 2001. In the context of a 19% decline in the total population this age group will form an increased proportion of the population.
- The most significant trend will be the continued increase in the numbers over 85 years of age. The rise is forecast to be 44% between 1987 and 2001. There are projected to be over 10,000 in this age group by 2001, compared with 5,600 in 1981.

Hayes (1989) commented that the CPO's high population projections for those over retirement age are only slightly above those of OPCS.

Table 1 depicts the number of older males and females in the Liverpool population, as shown by the 1991 census.

TABLE 1: The Number of Older People in Liverpool

AGE BAND	MALES	FEMALES
60 - 64	11,733	12,907
65 - 69	10,314	12,802
70 - 74	7,661	10,821
75 - 79	5,523	9,738
80 - 84	3,079	6,835
85 - 89	1,075	3,653
90 and over	285	1,408

Thus in the total population of Liverpool the ratio of women to men differs only slightly from the expected ratio of 2:1 for the 70-84 age group and 4:1 for the 85+ group. (In Liverpool the ratio for the 70-84 age group is 1.7:1 and 3.7:1 for the older group.) McKeever and Perry (1990) stressed that contrary to popular stereotypes, the majority of older people live healthy and independent lives. Indeed, the authors quoted that only 4% of people over retirement age live in institutional accommodation. In Liverpool 3.67% of older people live in institutional accommodation[1]. Of those living in residential accommodation, 56.2% live in Local Authority run accommodation and 43.8% in privately run. A differential is evident in the number of males and females (Males: 28% and Females: 72%) and in the different age groups (60-74: 21.8%: 75-84: 40.7% and 85+: 37.5%) living in residential accommodation. In addition to residential accommodation there has also been a growth in Sheltered Housing, which the local authority provide in addition to provision by private housing associations. Sheltered Housing are sets of accommodation, usually flats, which are served by a warden, who is either resident or can be contacted in an emergency (Barnes, 1987).

Of the total number of households in Liverpool, 63,802 include one or more persons of pensionable age. Of these, 47% of households are people over retirement age living alone, 22% are households with two or more older people, whilst 31% are households in which one or more older people live with others under retirement age. Although figures are not available for the Liverpool population, McKeever and Perry (1990) documented that for the population as a whole 95% of older people are not housebound.

1.1.1.3 The Wards of Liverpool - Population Trends

Liverpool is divided into 33 electoral wards. The ward is a unit upon which census (and other) data is collected and is thus a useful unit of analysis. However, analysis based on the ward as a unit can be problematic as wards can be socially diverse areas (Liverpool City Council, 1993).

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[1] This includes people living in the following accommodation types; Local Authority Homes, Housing Association Homes, Nursing Homes and other Residential Homes

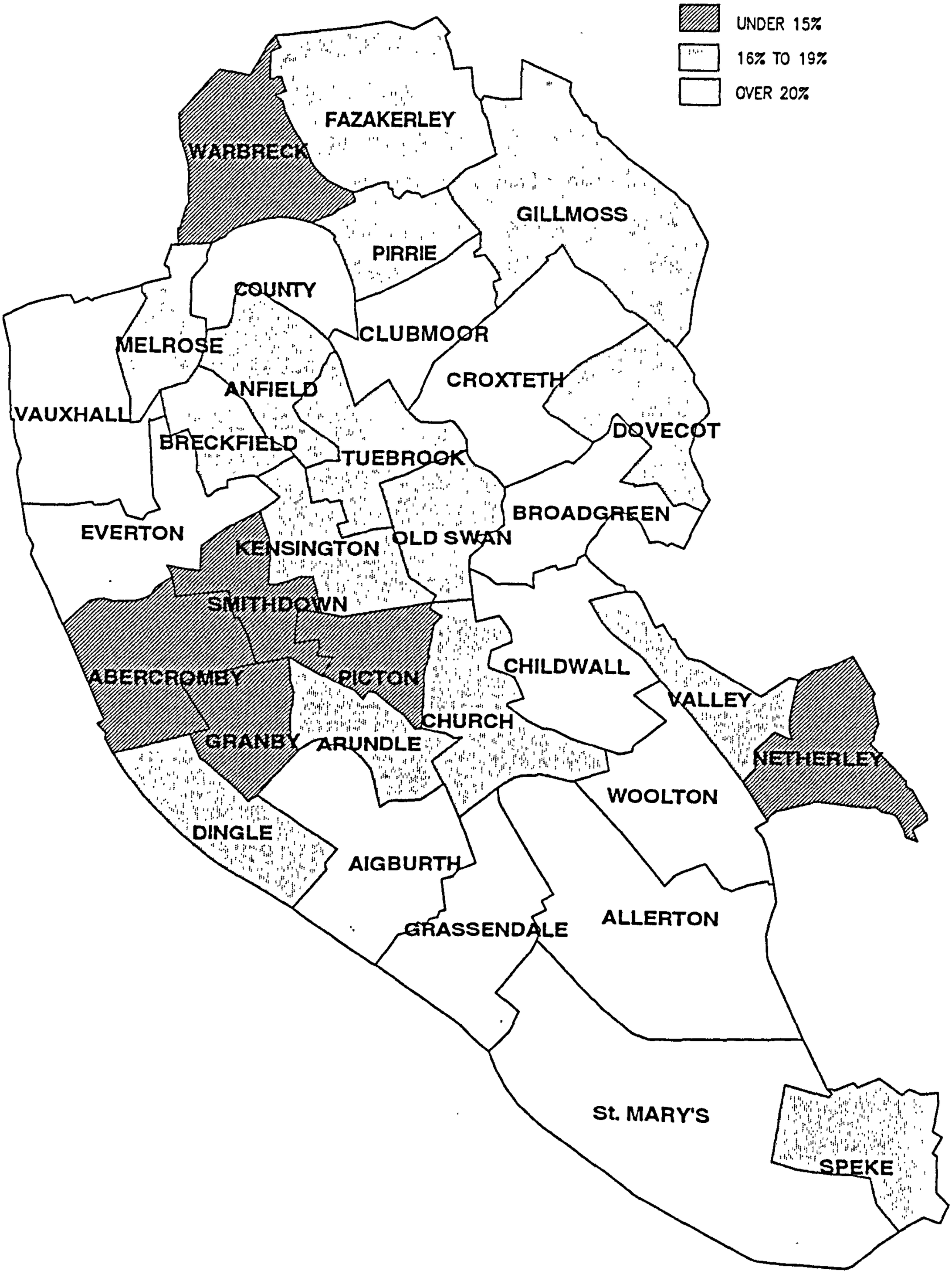

Figure 1: **A Map of the Percentage Range of Older Residents by Ward**

Source: Key Statistics: Liverpool Wards

The wards of Liverpool are diverse when analysing the age structure of their individual populations. Figure 1 shows the percentage range of older residents in each ward. Generally, wards with high proportions of children have low proportions of older people and vice versa. Aigburth is the most extreme example with the lowest proportion of children (15%) and the highest proportion of older people (25%). Whereas other wards such as Netherley have only 13% older people and 24.1% under 16's. As a result of the large number of residential and nursing home accommodation in the area, Aigburth has the highest proportion of people over 85 years.

1.1.2 Policy Implications

The demography presented has fuelled much discussion by researchers and policy makers. Warnes (1991) wrote that the contribution of demography is both detailed and constructive. Despite this, Warnes (1991) reported that this has not prevented:

> *" ..... irrational, ideologically expedient and even alarmist interpretations of the trends" (Warnes, 1991 p.187)*

Victor (1991) argued that this is reflected in social policy research where much concern has focused upon 'old age' as a social problem. Much of the concern has centred around the economic implications that such demographic changes have for our society. It has promoted fashionable concerns that the economic interests of different age groups are antagonistic (Warnes, 1991). Such comments have however yielded a critical response. For example, Binney and Estes (1988) proposed that the 'intergenerational war' within American society is constructed and used to maintain conflict between generations to divert attention from the deficit of state policy to strive towards a life-course entitlement to health and well-being. Furthermore, the authors suggested that the demographic social 'problem' created by increasing numbers of older people is emphasised to deflect away the broader issue of economic equality between generations. Walker and Phillipson (1986) warned against interpreting demographic projections as social realities. The authors argued that 'old age' is a socially constructed concept which is influenced by social and economic factors. Thus to rely solely on demographic studies to understand the meaning and experience of old age to produce appropriate policy

responses appears inadequate. Detailed social analysis of the ageing process would yield a more informed response to the realities of 'old age'.

It has been argued that the analysis of demographic trends should be applied to local populations (Warnes, 1991). Thus the potential exists for localities and for population groups to have detailed and focused analysis based upon current trends. Demographic information will also influence policy planning and delivery of certain services. The use of such demographic information is evident within policy planning as reflected by the following statements by the Planning Officer of Liverpool City Council:

> " ..... *There are a number of significant policy and programme implications arising from projected age group changes. In general, the ageing of the population will increase the need for services and resources for the elderly relative to younger age groups. This will include not only services for the most vulnerable elderly over 75 but for recreation and leisure facilities amongst the older as against the younger working age population"* *(Hayes, 1989 p.8)*

> " ..... *The growth of the very elderly above retirement age has obvious implications for health, housing, and social services. This is particularly the case when taken with the growth in one person households, the majority of which will be elderly"* *(Hayes, 1989 p.26)*

> " ..... *The balance between age groups will affect the relative demand for services ..... Within individual services such as sport and recreation the large fall in the 16-34 age group and the growth in older groups will shift the demand for different types of activity."* *(Hayes, 1989 p.26)*

McMurdo et al (1992) reported on two opposing predictions concerning the consequences of such age structure changes in the population: Firstly, optimists believe that the onset of disability will be delayed, thus reducing the amount of disability in the older population. The second view holds that the increasing older population will "... herald unprecedented numbers of frail and disabled elderly people surviving, only to endure a prolonged period of disability" (McMurdo et al, 1992 p.171).

On a societal level, it is apparent that an increasing older population has implications for health service provision, social service provision, employment policies and many other aspects of current public responsibilities. In reality demographic ageing has been accompanied by the spread of formal retirement, state pensions and medical and social services targeted at the older population (Warnes, 1991). The challenge faced by health professionals, politicians and academics in responding to the demographic realities is encapsulated in the British Government's White Paper objective of "...adding years to life and life to years". With medical and social progress resulting in the majority of the population now attaining half the potential life span of human beings (Sixsmith, 1992) it is argued that the focus is one of quality of life rather than quantity of life. Quality of life as seen in terms of the physical, psychological and social well-being of the individual. This has been echoed by McMurdo et al (1992) and Sixsmith (1992). McMurdo (1992) proposed that consideration should be given to ways in which we can prevent or postpone morbidity in the older population. Sixsmith (1992) argued that important questions need to be addressed regarding the longevity of life; Is old age something to look forward to? Do we live longer only to endure more years of chronic illness? Do we have more years of enforced leisure only to find that we can't afford the things that we used to do or what is commonly expected by the rest of society? These questions address issues concerning the quality of life of older people and have major policy implications and practice implications for sectors of public life, such as health, education and social service provision.

Given the pronounced ageing population in Liverpool the 'Community Care Plan for 1992 to 1995' has been produced in response to the 'National Health Service and Community Care Act' (1990). This plan sets out the organisation and deliverance of care and support services for people in Liverpool. One of the target areas was the city's 'older population'. In addition to food, warmth, accommodation, safety and help with daily living, leisure and recreational opportunities were identified as a particular need for this age group. The plan set the challenge of "*promoting healthy and safe lifestyles for older people*" (p.50).

Despite the potential for research to contribute to a discussion of the implications which demographic changes hold for local policies, sociological and other investigations have rarely focused upon older people (Victor, 1991), in particular in a locality context in an attempt to inform the debate of local issues.

1.1.3 The 'Older Population': The Problem of Definition

Often the older members of society are referred to collectively as 'the elderly' but for research and policy purposes the parameters of this term needs to be defined. Defining the term older population has proven problematic. Obviously 'the elderly' are the oldest people living in a society but the maximum life span is approximately 100-110 years (Case and Waterhouse, 1994) and defining the point at which one actually becomes 'elderly' is debatable (Barnes, 1987). MacNeil and Teague (1987) suggested that the definition of 'old' can vary according to the definer's perspective. The authors provided an interesting account of the various forms of reference which, when adopted, change how we define individuals as 'old'. MacNeil and Teague (1987) presented these frames of reference as models through which different criteria are adopted when defining individuals. These models include:

- Chronological Model - by which calendar years are used as a measure of age. As indicated by the demography presented previously in this section, this is the most commonly used parameter to define 'older people'.
- Biological Model - by which physical changes to the individual are used as a measure of age.
- Behavioural Model - by which stereotypical behaviours, such as inactivity, are used as a measure of age.
- Socio-cultural Model - by which socially and culturally determined roles, which are associated with 'old age', are used as a measure of age.
- Personal Model - by which the personal view of the individual on how they relate to the ageing process is used as a measure of age.

As MacNeil and Teague (1987) argued, the model individuals choose to adopt is subject to change and interpretation. Thus one definition may include an individual who under another frame of reference is excluded. This clearly indicates the problematic nature of producing an operational definition of the term 'older population'. This is particularly difficult when the definition needs to reflect a particular community, as with gerontological studies focusing upon the individuals and their reactions and relationships within particular environments.

1.1.4 Summary of Section 1.1

Demographic analysis has indicated that the age structure of the population is changing to include an increased number and proportion of older people. This is characterised by a particular increase in the number of people over 75 years of age and a sex differential whereby, in general, women live longer than men. This picture of population structure reflects the locality based statistics for the Liverpool area; where the proportion of older people is 2% greater than the national average. In addition further analysis of Liverpool indicated diversity in age structure by ward.

The needs of older populations have certainly been a part of the focus of policy makers. Indeed one of the aims set by policy on a national level was to add years to life as well as life to years. In Liverpool, in particular, demographic information has informed policy responses. However, it has been argued that a social analysis would further the understanding of the meaning and experience of old age.

To understand and study the ageing process, the changes associated with the frames of reference, mentioned in Section 1.1.3, need to be examined. The following section will initially examine the ageing process from three different perspectives and explore the implications these perspectives have for the context in which ageing research should take place. The discussion intends to highlight issues which are relevant to the current study and does not attempt to be a comprehensive account. It specifically aims to draw attention to factors which are relevant to examining age associated changes in fitness and well-being.

1.2 The Ageing Process

1.2.1 A Biological Approach

In biological terms 'old age' can be defined as that stage of a person's life span when degeneration of different parts of the body occurs. There appears to be no adequate definition of biological age. As a result of differences in the quantity and quality of any remaining function, there tends to be large variation in these functions as people age. Barnes (1987) suggested that considering the amount of individual differences observed in human ageing (Shock et al, 1984) assessing functional status seems to be a more rational basis for categorising a person's age than chronological age alone. Therefore, functional age is an abstract concept that appears applicable, even if it is not easy to define or measure.

1.2.1.1 Physiological and Functional Changes Associated with Ageing

Age changes occur in most systems in the body (Case and Waterhouse, 1994). It is these physical changes that are most commonly associated with the ageing process. As most changes are concerned with the concept of loss and degeneration the ageing process is often conceived in negative terms (MacNeil and Teague, 1987).

- The cardiovascular and respiratory systems

The cardiovascular system becomes less efficient with age. The heart muscle becomes stiffer, resulting in a reduced maximum heart rate and stroke volume. As a result, maximum increase in cardiac output is restricted and the heart has to work harder to expel the same volume of blood. Blood pressure rises with age and it takes significantly longer for the blood pressure to return to its normal state following exertion or stress (Barnes, 1987). Lung capacity also reduces, and the combined decline in cardiac output and oxygen output results in a decline in maximal aerobic power. While none of these interfere with function at rest, the ability to increase oxygen delivery to tissues is markedly decreased. Deterioration of both pulmonary and cardiovascular mechanisms

means pathological conditions are frequent in older people (MacNeil and Teague, 1987). However, MacNeil and Teague report on the growing body of evidence that link smoking, lack of exercise, a high intake of fat and obesity to cardiovascular disease i.e. functional changes are not inevitable at any particular chronological age.

- The musculoskeletal system

The musculoskeletal system enhances functioning through facilitating movement and protecting and supporting the body. It undergoes degenerative changes with age which make the body weaker and less flexible (MacNeil and Teague, 1987). Although muscle structure does not seem to vary with age the total mass declines and this accounts for the fall in lean body mass which is characteristic of ageing (Case and Waterhouse, 1994). The changes in muscle mass results in a reduction in muscle strength (Stead, 1993). Peak muscle strength occurs between the ages of 20 and 30 and declines progressively thereafter. Therefore functionally these changes add up to a decreased strength and endurance. It has been suggested that the cause of the reduction in muscle mass is partly due to 'hypokinesia' or disuse (O'Brian, 1991) and partly due to loss of motorneurones supplying the muscle (Case and Waterhouse, 1994). Thus the reduction in muscle strength is not uniform as it is related to disuse. The implication of this being that it can be delayed by 'use'. However, Barnes (1987) reported that there is often a decrease in the strength of grip.

Bone mass and density also decrease with age, and the reduction in bone mineral density makes bones increasingly susceptible to fracture. In addition, the connective tissue between the bones weakens and becomes less compliant, making joints stiffer and less flexible (Stead, 1993). Indeed arthritis is a common feature of ageing (MacNeil and Teague, 1987). From a functional standpoint, arthritis can impair the older person's total movement, strength and flexibility. It affects the shoulders, knees, hips and joints of the fingers with the latter effecting the persons ability to grasp, manipulate and control objects. Immobility may also have a role in this process since bone is normally being constantly remodelled in response to the stress to which it is exposed (Case and Waterhouse, 1994). Osteoporosis, the result of excessive bone loss, is accelerated in

women at the menopause because of oestrogen depletion at this time. Also, Barnes (1987) reported that intervertebral discs become thin causing shortening of the trunk and an overall height reduction of an average two inches.

- The nervous system

Brain weight may decrease with age by 6-7 per cent between 20 and 80 years of age (Case and Waterhouse, 1994). Depletion of neurotransmitters generally occurs with age. Some also report a reduction in conduction velocity along the axons which causes response and reaction time to be slower (Barnes, 1987). However, this is disputed by others (MacNeil and Teague, 1987). The latter argued that although there are several changes associated with ageing, the neurones do not appear to be greatly altered in their ability to function normally. They believed that the major change in the nervous system is the degeneration of cells. It is generally agreed that some of this loss will result from a decreased blood flow to the brain. Case and Waterhouse (1994) reported that it is commonly cited that brain cells are lost at a rate of approximately 10,000 per day from age 20 onwards. However they believe that there is no strong evidence for this and report that as neurones are lost the dendrites of the remainder become longer and form more connections, thus compensating to some extent.

In addition, it has been reported that older individuals display a lesser amount and pace of locomotion and manipulation (Leith, 1982). Although this has been attributed to processors in the central nervous system, it is possible that psychological factors contribute to this process as well. An example of this is reported by Leith (1982) who suggested that older people may tend to adopt risk avoidance strategies such as perceptual checking if they feel vulnerable to misreading signals. Leith (1982) suggested that this may account for part of the 'slowing down' observed in older individuals. Researchers have also speculated upon the cause of this phenomenon. Is it the ageing process or conditions associated with ageing, such as lack of exercise, poor physical tonus, neglect or disuse? (Leith, 1982).

Long-term memory is well preserved but short-term memory can be impaired (Case and Waterhouse, 1994). Case and Waterhouse (1994) suggested that this may be linked to a decreased ability to learn new skills in old age. Although others (e.g. MacNeil and Teague, 1987) have suggested that there is sufficient evidence to dispel this concept as a myth. Some authors (e.g. Case and Waterhouse, 1994) suggest that complex functions such as conceptual skills and reasoning ability begin to decline very early but verbal skills are relatively well preserved. In general most research has suggested that the overall intellectual processes usually remain intact as we age (MacNeil and Teague, 1987).

Despite a lack of consensus on the physiological changes within the nervous system a major behavioural consequence observed is a slower reaction time with age. Botwinck (1982) reported that the reaction time of older people is found to be slower than the reaction time of younger people and that it is observed generally across the senses. As MacNeil and Teague (1987) highlighted this is relevant to reacting to such events such as a dog running in front of a car or tripping up on a kerb. The important point is whether the slowing down has a significant effect on the individual's life. Considering this Botwinck concluded that it diminishes the capacity to perform the necessary tasks of life effectively while Kalish (1982) stated that it had a minimal effect and need not have a destructive influence on well-being.

♦ Morbidity and Ageing

Sidell (1995) reports on work which suggests medical technology has contributed towards increased longevity however high levels of symptomatic diseases such as arthritis are still endured, especially in females. The prevalence of both acute and chronic health problems increases with age (Sidell, 1995). The table below indicates the levels of long standing illness subjects reported in the 1987 Health and Lifestyles Survey.

TABLE 2: Percentage Levels of Long Standing Illness by Age

	WOMEN		MEN	
% REPORTING	65-74	75+	65-74	75+
Arthritis	17.5	20.0	8.0	7.0
Heart Disease	9.5	12.0	12.0	11.0
High Blood Pressure	8.5	10.5	7.5	7.0
Orthopaedic Condition	3.5	4.0	2.5	5.0
Back Trouble	4.0	4.0	3.0	1.5
Sight	3.0	4.0	4.0	3.5
Stroke	2.5	3.5	4.0	4.0
Bronchitis	3.0	3.0	5.0	7.0
Diabetes	3.0	2.0	0.5	3.0
Gastric/Intestinal	2.0	2.0	2.0	1.0
Depression	2.0	1.5	0.2	-
Thyroid	1.5	1.5	0.2	-
Respiratory Disease	1.5	2.0	2.5	3.5
Deafness	1.0	2.5	2.5	3.5
Cancer	1.5	1.5	1.0	1.0
Hernia	1.5	1.5	1.0	2.5
Stomach Ulcer	1.5	1.0	2.5	2.0
Anaemia	1.0	1.5	1.5	1.5
Genito-urinal	0.5	2.0	1.0	3.0

Source: Sidell (1995)

- Fitness and Ageing

Some of the changes discussed previously in this section have obvious implications for the levels of fitness of the older population. The recent national fitness survey has published data indicating fitness levels for people up to the age of 74. They found for example that 30% of men and 56% of women, aged 65-74, had quadriceps strength below that required to stand up from a chair unaided. Furthermore, concerning the same

age group, 45% of men and 79% of women were not fit enough to sustain continuous normal paced walking (Grimley-Evans, 1992).

1.2.2 A Psychological Approach

The psychological approach concentrates on the behaviour and the associated age related changes in such concepts as intelligence, personality and emotions (Harris, 1990).

1.2.2.1 Psychological Changes Associated with Ageing

- Cognitive Capabilities

Leith (1982) reported on the popular myth that ageing is associated with a decrease in mental abilities. This is often illustrated in cross-sectional studies of ageing. However, the study of intelligence and ageing has promoted much debate in the psychological literature. Longitudinal techniques negate any changes in intellectual abilities with age thus questions have arisen as to the validity of methods used in cross-sectional research. In addition, Birren (1968) reported on the fact that mental functioning is closely related to health status and as Leith (1982) commented when health status is controlled for, no decline in mental functioning is observed. The general consensus is that intelligence remains relatively constant provided that the individual continues to lead a stimulating life (Barnes, 1987). In addition, it has been suggested that factors such as attitude and educational differences can influence the rate of decline in such mental abilities (Moran, 1979).

MacNeil and Teague (1987) reported that many studies have examined the ability to learn with age and in general have found young subjects to outperform older subjects. MacNeil and Teague (1987) believed that a major factor determining this finding is a decline in sensory functioning. They reported that physical health has been shown to have an effect on learning and that the ability to learn in older people can improve under certain conditions e.g. with various tasks, settings and techniques and the authors

suggested that physical changes are therefore an inadequate explanation. Eisdorfor (1969) believed that older people may be influenced by the fact that they are more cautious and less willing to take risks. MacNeil and Teague (1987) also cited motivation as a possible influential factor in this result.

It is important to stress that organic brain damage and acute cognitive deterioration within the ageing process is, as MacNeil and Teague (1987) described, *"the exception, not the rule"* (p. 110). The chances of experiencing it increases with age, but only a small percentage of older people are so affected. Most view dementing conditions as a sign of disease, not a normal part of the ageing process (MacNeil and Teague, 1987).

In summary there are individual differences in cognitive ageing, the effects on some are greater than on others.

- Emotional Capabilities

Leith (1982) commented that facing the prospect of becoming older is a challenge to an individuals "personal integrity and emotional stability" (p.18). Old age can often be accompanied by many stressful events (Leith, 1982), including death of family members or friends, retirement and changes in living circumstances which require substantial coping strategies and readjustments. Mooney (1980) suggested that adaptation to such events can depend upon the quantity and quality of private resources (e.g. health) and public provisions (e.g. support services) available. Similarly, Schwartz (1977) believed that adaptation is dependent upon incentive, opportunity and circumstance whilst Havighurst (1968) stated that an individual's personality is the best predictor of adjustment in the later years.

Many writers (e.g. Bowling et. al., 1992; Katona, 1991) have commented that depression is the most common functional disorder in the later years. Copeland et al. (1987) found symptoms of clinical depression to exist in 22% of the older population. As Leith (1982) documented, depression can manifest in symptoms such as a sense of uselessness, a loss of self-esteem, apathy and pessimism about the present or future.

♦ Personality Changes

Most writers (Leith, 1982) agree that personality does not change as individuals grow older. The later years can be seen as another life stage that is potentially a time for growth and development (Barnes, 1987). However, Barnes recognised that

> *"All elderly people retain the capacity for change but perhaps not the enthusiasm for it. After a lifetime of experience ..... they may elect to stay with the things they know, trust and feel secure with" (p.126)*

This has implications for leisure behaviour in terms of the activities people feel comfortable partaking in which may be confined to familiar activities previously performed. Personality type has been the focus of investigation as to the importance of it's role in 'successful ageing' with Neugarten (1968) describing it as a major factor in determining whether individuals age 'successfully' or not.

1.2.3 A Sociological Approach

The sociological approach to the ageing process is focused upon the interaction between older people and society. It is principally concerned with the effect each can have upon the other (Harris, 1990).

1.2.3.1 Socio-cultural Changes Associated with Ageing

Within the sociological approach attention has been given to changing social roles, changing social support networks, changing life events and the consequences these have for an older persons quality of life.

♦ Socialisation and the Ageing Process

Socialisation is essentially the process through which individuals learn their culture; they learn the necessary skills, values and roles to be members of a society (Harris,

1990). This is seen as continuous process throughout the life-course. Harris (1990) reported on the work of Inkeles (1969) who described the socialisation process of old age as adjustments to physical change. This process included acquiring new skills, changing behaviour patterns, relinquishing current roles and accompanied status, and taking on new roles, especially those associated with leisure. Inkeles (1969) postulated that it is the individual's peer group who acts as the 'main agent' in encouraging this process.

The uptake of roles is influenced by our social environment and our social position (MacNeil and Teague, 1987). Changes with both these social factors are associated with age. It follows that changes will occur in the status of a person as roles and status are closely linked. In terms of status, roles have been defined as the pattern of socially acceptable and expected behaviours. What then are the roles that society considers to be socially acceptable or expected of older people? Most texts (e.g. MacNeil and Teague, 1987) have acknowledged the lack of expectations in terms of social behaviour that is imposed upon older people. Burgess (1950: see MacNeil and Teague, 1987) used the term 'roleless role' to describe the position of older people in American society. The role changes that do occur with age are largely due to shrinkage and ambiguity. In reference to the former, it is suggested that the quantity of social contacts decrease with age and roles are lost with such occurrences as retirement, widowhood and decreasing physical mobility (MacNeil and Teague, 1987). This is hampered by role ambiguity whereby the roles that older people do have are based on stereotypical assumptions of older people and are not associated with a high value. Thus role status tends to decline with age.

The ageing process has also been discussed in terms of it's effect on the amount and quality of social support older individuals receive (Bosse et. al., 1993). Bosse et al (1993) highlighted the contradictory statements of researchers in this area. Some (e.g. Atchley, 1976) have reported on the decline in social support with the loss of family, work colleagues and friends whilst others (e.g. Chappell et. al., 1985) have reported on an increasing social support network as new roles associated with retirement are acquired.

♦ Cultural Values and Norms

MacNeil and Teague (1987) stated that to understand ageing it is necessary to examine the views older people hold of themselves. The self concept of a person is widely believed to be an important determinant of behaviour (Wright, 1960). As it is learnt, it is thus susceptible to environmental influences, such as a society that is youth and work orientated (MacNeil and Teague, 1987). Society's attitudes towards ageing are dominated by myths, stereotypes and ignorance which often prevent a realistic view of ageing (Snodgrass, 1986). This can be detrimental to the formation of an older person's self concept.

A person's self concept can be defined as 'the individual as known by the individual' (Pennington, 1980). It comprises three components; a person's self identity, esteem and presentation. The prevalence of negative stereotyping can have profound influences upon a person's self concept and thus their behaviour.

Miller (1982) stated that *"an individual's behaviour can be understood only as a part of the system, a system which includes the behaviours of others and the expectations that those others hold about how the individual is going to behave"*

It follows that to understand behaviour in older people it is necessary to understand the influence of this 'system'. It should therefore be recognised that the behaviour of others towards older people is often mediated by their beliefs in certain stereotypes. These beliefs create certain expectations concerned with the content of the stereotype of how older people will behave.

Evidence from Snyder et al. (1984) demonstrated that people, within social interaction, will selectively search for, and collect information that is consistent with their expectations. This may cause strong pressures for target people to incorporate the perceiver's view into his or her own self concept and hence 'act out the part'. Thus it would appear that certain aspects of an older person's behaviour could be attributed to the stereotypes society holds of older people.

To examine this in more detail the following discussion will draw upon the social psychological research in this area. Miller (1982) believed that stereotyping is in all of us, as a reflection of our culture, our language, and our manner of thinking. The term stereotype is in essence a cognitive structural concept, referring to a set of expectations held by the perceiver regarding members of a social group (Hamilton, 1979). Thus group membership is the stimulus cue on which a number of inferences about the person are based. These inferences are the basis for the creation of a number of hypotheses which a perceiver holds while interacting with a target.

In a series of investigations Snyder and Swann (1978) found that subjects systematically planned to test hypotheses by adopting confirmatory strategies to search for evidence which would confirm their beliefs. Within social interaction this strategy is characteristically defined as the ".... preferential soliciting of behavioural evidence whose presence would tend to confirm the hypothesis under scrutiny" (Snyder and Swann, 1978 p.278). Thus the expectations held may lead the perceiver to focus attention on a particular aspect of behaviour, thereby making that aspect more salient; or they may lead the perceiver to interpret certain behaviours in a biased manner. This process creates a self fulfilling prophecy, giving subjective evidence confirming the existence of the original hypothesis i.e. the stereotype. This maintains the perceiver's belief in it. Snyder and Swann (1978) believed that *"... the structure and process of human thought fosters and promotes the ready and willing adoption of confirmatory strategies for hypothesis testing"* (p.1210).

Therefore it is easier for an individual to think of the target behaving in accordance with the hypothesised nature than it is to consider the target violating this nature. Research from other areas seems to lend support for this proposition (See Snyder, 1981).

Furthermore, research on stereotyping has found that the presence of stereotypes can channel social interaction in ways that cause the stereotyped individual to behaviourally confirm the perceiver's stereotype. (Snyder, 1984). Many investigations have been designed to chart the process by which an individual's social beliefs can and do initiate

cognitive, behavioural and interpersonal activities to influence the reality of these beliefs (e.g. Skrypnek and Snyder, 1982).

The following quote by Snyder (1984) encapsulated the process

> *"... the things that individuals believe in exert powerful influences on the ways that they and other people live their lives. Beliefs and impressions do not exist in a vacuum ... The events of our lives are very much a reflection of our beliefs about ourselves and other people in our social worlds. It is in this sense that beliefs do create reality."*

A psychological model of the self concept, outlined by Miller and Turnball (1986), predicted that not only will the stereotyped individual behave in a manner congruent with the perceiver's stereotype, but will also, on the basis of their behaviour, believe that he or she is actually that type of person. It is evident from this that the existence of the stereotype has been influential upon the behaviour of the stereotyped person and thus their self presentation. It has also affected the beliefs the person holds of themselves i.e. their self identity. If the initial stereotype was negative then the change in identity and presentation could thus be detrimental to the person's self esteem. Thus the process of interaction, when mediated by stereotypical beliefs, can affect all three components of a person's self concept. Montague (1977) summed up this process as one of playing a role which is imposed by the self as well as others indicating an element of "I am this age so I have to behave this way" (p.79).

Further research is needed to explore these issues in more depth but to dismiss the effects of stereotypes as trivial would seem fraught with potential dangers. The social psychological research outlined above has not examined the specific effects of old age stereotypes. The research uses other social groups to generalise about the use of stereotypes. However, some recent research has focused upon old age stereotypes in particular (e.g. Gekoski & Knox, 1990; Milligan et al., 1989). Although further research is required, two interesting aspects have been noted. Firstly, although the prevalence of negative stereotypes of older people were shown to exist (e.g. Milligan et al., 1985) these studies have also found that poor health can be a large determinant of

negative images (Milligan et al., 1989; Gekoski & Knox. 1990). The latter two investigations reported that the perception of both young and old profiled persons in poor health are more negative than young and old profiled persons in good health. Gekoski and Knox (1990) suggested that at least some of the behaviour that appears to be ageist may be more accurately seen as 'healthist'. In addition, it has been suggested (Milligan et al., 1985) that physical health status is a major determinant of self image in older people. Milligan et al. (1985) referred to a number of studies which report a correlation between health and the acceptance or rejection of the stereotypes of old age. Thus the self identity of an older person in poor health is likely to be more congruent with the stereotypical perception of older people than the self identity of an older person in good health.

It appears therefore that poor health status is a more powerful determinant of negative self concepts compared to other aspects of ageing, such as chronological age. Other theories have been proposed in an attempt to explain the influence of societal attitudes and their effect upon the self concepts of older people, and hence their behaviour. MacNeil and Teague (1987) stated that it is possible for perceptions of the self to remain stable over time despite the changes associated with ageing. Two reasons are suggested for this: firstly, self perceptions are created early on in life and are thus a pervasive force against incongruent environmental information at a later stage in life; secondly, an increased inner orientation in later age causes the self concept to be influenced less by external forces and more by inner perceptions developed over a lifetime. This is inconsistent with the stereotype research outlined above, which does not account for such influences as pervasive early life perceptions of the self.

The second interesting aspect emerging from recent American research on stereotyping is the indication of a change in the stereotypical beliefs held. A study by Harris et al. (1988) concluded that the stereotypes held of older people are no longer as negative. Furthermore, Milligan et al. (1989) found that the younger participants rated older profiles in a more positive way compared to younger profiles. It is suggested that these differences may reflect a growing trend towards viewing the elderly in a more positive manner. However, as Milligan stated, it could be possible that younger people become

more ageist in their attitudes as they become older. Further longitudinal research is required to assess this. Also as this research is American it may not reflect British culture although work in other countries has reported similar findings. An example of this is the cross cultural study carried out by Foldesi (1989) in five cities. This indicated that the age structure of a population is related to opinions concerning older people. When a population is on average younger, more liberal and accepting attitudes are held concerning the social roles of the elderly. However, there is no doubt that, in general, Western societies hold pessimistic attitudes towards the ageing process. This is evident in the vocabulary commonly used to describe older people, such as infirm, confused and old timer, and in the signals portrayed in many aspects of life which aim to glorify youth (MacNeil and Teague, 1987). An obvious example of the latter is within the cosmetic industry in the advertising promotions of 'anti-ageing' products. However attitudes are often complex and contradictory in that individuals often strive to live longer lives but afford little status to greater chronological years.

1.2.3.2 Social Theories of Ageing Process

Consideration of the ageing process has led to the notion, specifically in the American literature, of 'successful ageing' or how the individual can negotiate the changes that are associated with later life (Sixsmith, 1992). The outcome of 'successful ageing' is primarily seen as the well-being of the individual. Well-being is used as a general concept to refer to life satisfaction and emotional health (Sixsmith, 1992). The latter is concerned with such concepts as self esteem and happiness.

There is no one theory of ageing that adequately explains the complex process involved (Howe, 1988). Each theory emphasises a variable, or a set of variables, which may be relevant to explaining the ageing process and thus provide a framework in which research can be structured (Kart, 1994). Below is a brief summary of the theories of ageing which are particularly relevant to this current study.

The **Life Cycle Developmental Approach** views life as a changing and growing process with times of stability and times of transition (Osgood, 1982). Social

psychologists concerned with this approach have focused upon the changing roles associated with different stages of the life-span. Role involvement has been studied in terms of work, family, community and leisure (Osgood, 1982). Clausen (1972) identified the components that underlie an individual's performance of life course roles: personal resources, such as health; sources of support and guidance that help orientate the individual; opportunities available or obstacles encountered and individual effort.

Role Theory is concerned with the consequences of role changes associated with the ageing process (Kart, 1994). These changes are primarily associated with loss, such as the loss of the work role. This is substituted by the retirement role and the associated roles of later life. Closely linked to this is the **Continuity Theory.** This advances the maintenance or substitution of roles, activities, habits and associations in later life. The identity of a person is believed to be based upon a number of roles. The uptake of the leisure role is proposed to give continuity to the identity. Some researchers (e.g. Tinsley et al., 1987) have found support for this theory by analysing the psychological benefits gained from leisure as a substitution for those once obtained from work. However, others (e.g. Glamser and Hayslip, 1985) found leisure to be an inadequate substitute for the work role.

Activity Theory is closely associated with Continuity theory. It proposed that maintenance of physical, mental and social activity is required for adequate life satisfaction (Havighurst, 1961). Activity is a resource for coping with change (Kelly, 1986). Kart (1994) reported on the possible withdrawal of the social world from older people. Activity theory proposed that 'successful ageing' is based on resisting this withdrawal and remaining active. This forms the basis for most of the leisure research in this area (Howe, 1988) i.e. activity being shown as beneficial to well-being (see Section 1.3.1).

In contrast to activity theory, is **Disengagement Theory** (Cumming and Henry, 1961). This described 'successful ageing' as the mutual moving apart of the ageing individual and the society in which they live. This is seen as beneficial to both parties.

Socio-environmental Theory directs itself at understanding the effects of the immediate social and physical environment on the activity patterns of older people (Kart, 1994). The theory proposed that two factors are important in determining interaction: physical proximity and age homogeneity. The theory recognised that different social contexts will generate different sets of activity norms for older people (Kart, 1994). Incongruence between environmental expectations and activity resources will lead to low morale and diminished life satisfaction.

Attribution Theory, proposed by MacNeil and Teague (1987) correlates 'successful ageing' to personal causation and control of behaviour. It is based upon dispositional and environmental attribution of behaviours. A person will feel in control if they can attribute their behaviours to dispositional qualities i.e. those qualities inherent in themselves. The theory proposed that older people are conditioned to becoming increasingly helpless and dependent and hence accepts environmental attribution's to explain behaviour. The person, therefore, has lost his/her sense of control over their life and this results in negative self perceptions. Thus a person needs feelings of adequacy and competence to control their life events. The proposal is purely theoretical and has little empirical evidence to substantiate it.

Age Stratification is based upon the assumption that society is divided into age stratas. Members of each strata differ in the social roles they are expected to take up and in the rights and status given them by society. This approach to analysing the ageing process has focused upon such questions as (Kart, 1994) how an individual's location within the age structure of a society influences his or her behaviour and attitudes. Chronological age and cohorts are used as the basis for analysis.

The **Political Economy** is a recent approach to exploring the ageing process (Phillipson, 1991). This approach is concerned with 'old age' as a socially constructed state. It is not concerned with the biological or psychological changes associated with ageing but with explaining the social and economic factors that can condition many of the experiences facing older individuals (Kart, 1994). One aim of this approach is to

explore the contribution that social policy makes to the *"dependent status of older people"* (Phillipson, 1991 p. 405)

1.2.4 A Multifaceted Approach

To understand the ageing process, Shock et al (1984) emphasised the need to consider

> *"the interacting influences of biological processes, personality and behavioural factors, social and environmental forces, and the idiosyncratic health behaviours and stresses of the individual" (p.207)*

This is evident from the discussion previously in this section. Thus ageing appears to be multifaceted consisting of social and psychological as well as biological processes (Ory et. al., 1992). It seems that a greater understanding of the individual and the ageing process will be obtained only through an enquiry which takes an holistic approach; one which includes, and goes beyond, the medical model to study the individual and the context in which that individual lives. The ageing process is an adaptation to gradual changes in physical and mental health as well as social circumstances. It follows from this viewpoint that potential modifications to the ageing process are possible within the social and behavioural realms as well as a biomedical approach (Ory et. al., 1992).

Social Policy in Britain has made positive steps toward the older members of the population with its commitment to eradicate health inequalities between groups of people (Victor, 1991). This is part of the World Health Organisation's (WHO) "Health for ALL by the Year 2000". The last several decades have seen an increasing interest in measuring health outcomes apart from mortality. Siu et al. (1993) stressed that within ageing research a greater focus should be placed on function and quality of life and increasingly researchers are focusing upon the measurement of quality of life (Mobily, 1993). Bury and Holme (1993), drew on the work of George and Bearon (1980: see Bury and Holme, 1993), to define this concept as twofold: It involves measurement of certain objective conditions, particularly, general health and functional status and socio-economic status. This represents the assets a person has to cope with life changes

(Bury and Holme, 1993). In addition it is necessary to look at a range of subjective evaluations which indicate the well-being of the individual. This involves measurement of life satisfaction and self esteem and their related concepts (Bury and Holme, 1993). This twofold definition includes 'the conditions of life and the experience of life' (Bury and Holme, 1993 p.233).

MacNeil and Teague (1987) argued that there are some aspects of the ageing process that can be modified. For example they state that studies have demonstrated maintenance and/or improvement of certain physical abilities such as flexibility and speed. In addition there is similar evidence for the maintenance of certain psychological abilities. As Schwartz (1977) wrote

> *"Because there has been so much emphasis in discussions of ageing on the losses and deficits that go along with old age, many of us have come to take it for granted that old people cannot function very well because of the burden of their years. In sharp contrast to this, we are finding out more and more that a lot of things we used to think were the result of simply getting old are not. They result from intrusions from the outside, or accidents (such as disease); from too much stress; from bad environments; from poor diets; from too little exercise and the like." (p. 17)*

This reflects the proposition that there is potential to postpone certain factors through lifestyle and modify the impact of ageing (MacNeil and Teague, 1987). The recent report from the Carnegie Enquiry into the Third Age (1993) concluded that the ageing process was influenced by individual lifestyle factors. The report recommended that older individuals should be striving towards a healthy, active lifestyle. In addition they recommended that health and social services primary target should be the maintenance of positive health, including mental well-being. Furthermore Central Government should view the monitoring of healthy life expectancy in the over 50's as a measure of success in health and other services. Fries and Carpo (1981) postulated that the necessary conditions to postpone the ageing process are based upon physical, social and psychological exercise of specific functions. Considerable attention has been given to the use of leisure time as a potential to improvement in both life expectancy and quality.

The Carnegie Report (1993) stressed the importance of 'good quality leisure' for maintaining physical and psychological well-being in later life.

1.2.5 Summary of Section 1.2

Various approaches have been taken to explore the ageing process. This has involved examining the physical, psychological and social changes associated with old age. However, it is evident that there is diversity in the experience of these changes within the older population (Sidell, 1995). For example the available evidence concerning older people indicates that age, cohort, social class and gender differences are evident in the experience of health (Victor, 1991).

To further explore the ageing process, an approach which is multifaceted in nature would allow exploration of the influence of these changes on the lives of older people. This approach may focus upon function and quality of life indicators to explore 'the conditions of life and the experience of life'.

Recent research and policy has focused upon the idea of promoting positive health through improving the 'conditions of life and experience of life' for older people. One factor considered important to this concept is leisure. The following section will explore this is more detail.

1.3 Leisure Activities and Ageing: Towards the Maintenance of Positive Health?

According to the definition of Quality of Life, as stated by Bury and Holme (1993), for leisure participation to lead to an improvement in the quality of life it must have a positive effect upon either general health or functional status ('the condition of life') and/or the well-being of the individual ('the experience of life'). The implications previous research has for the relationship between leisure involvement and the quality of life concept is discussed below.

1.3.1 Leisure Activity and 'the Condition of Life'

1.3.1.1 Leisure Activity and Fitness, Function and General Health

Physical fitness can be seen as consisting of three facets -stamina, strength and flexibility (Grimley-Evans 1992). Age associated decline in these facets used to be accepted as inevitable (Bassey, 1982) and the loss in fitness attributed to the 'ageing process'. However, as previously discussed in Section 1.2, they are also dependant on other lifestyle and illness factors. One of the factors contributing to the decline is a sedentary lifestyle (Bassey, 1982). A growing body of evidence implicates the importance of physical activity in maintaining function in older people (Edwards et al., 1992). McMurdo (1992) stated that this has the potential to maintain function in activities of daily living and prolong active life expectancy. Bassey (1982) stated;

"The quality of life in old age depends very much upon continuing to make the most of remaining potential in the face of age-dependent loss and disease. The benefits of exercise are therefore arguably greater in old age than at any other time of life" (p110).

It is postulated that a training effect will occur if the activity is of an appropriate intensity, duration, frequency and nature. In fact McMurdo believed that as a person ages and functional ability declines the importance of the training effect becomes greater. The Carnegie Report on 'Abilities and Well-being in the Third Age' (Grimley-Evans, 1992) discussed what is meant by 'appropriate' in this context. They suggest that for the activity to be 'appropriate' issues of safety, effectiveness, enjoyment and cost need to be considered. Effectiveness is a complex issue as most of the guidelines that exist are based on young, healthy adults. However, the Carnegie Report does suggest that activity should include exercises which promote strength, stamina, skill and suppleness. Considering a 'healthy person in the third age' they suggest, for stamina and strength, two or three weekly sessions of brisk walking, swimming or similar activity, sustained for a period of 20-30 minutes. The report also suggests simple stretching exercises for the shoulders, hips, knees and ankles. Guidelines for the frail or unfit are rather more vague indicating a regime which gradually builds up fitness. McMurdo (1992) suggested that there is no ideal prescription of exercise for older people but it will vary

between individuals. Furthermore she concluded that if exercise *"is presented as a means of postponing dependancy, keeping fit - and having fun more old people will have the chance to add life to their years"* (p.167) In a randomised control trial of exercise in older people McMurdo et al (1992) demonstrated the acceptability and effectiveness of an aerobic class for older people and the effectiveness of a health education class for this age group. Between group comparison showed the exercise group to perform significantly better than the health education group on spine flexion, perceived health status, life satisfaction and maximal physical exertion. The exercise group also showed improvement in knee flexibility, leg and back strength, pulse rate, blood pressure and self ratings of mood. However, as the authors noted, participants in the study were volunteers and thus caution should be taken if generalising the result to the older population at large.

In addition to the enhancement of 'normal health' with benefits to the cardio-respiratory system and the musculo-skeletal system (Stead, 1993) other texts stress the beneficial effects of exercise for chronic health conditions such as osteoporosis (McMurdo, 1992) and cardiovascular risk, hypertension, and obesity (Phelps, 1987).

1.3.2 Leisure Activity and 'the Experience of Life'

1.3.2.1 Leisure Activity and General Well-being

The evidence of the association between leisure and well-being is complex and often contradictory messages are conveyed. Stead (1993) argued that the evidence is inconclusive concerning the proposition that exercise has a beneficial effect on well-being. This concurs with the conclusions from other studies, examining 'customary physical activity' and its association with well-being in later life, in that the relationship is found to be weak and indirect (Morgan et al., 1991). However as Stead pointed out self reports from people taking part in exercise are often positive; with antedotes such as 'feeling better'. In fact studies have found exercise to associate with elevated mood, locus of control, self esteem and improved cognitive functioning. It has also been discussed in terms of stress reduction and improved sleep patterns. McMurdo (1992)

reported on studies which have indicated that exercise can alleviate mild to moderate depression, improve the quality of sleep, improve self esteem and life satisfaction. McMurdo wrote that for older people *"the psychological effects of exercise should not be underestimated"* (1992, p.166). Social life and social contacts have been postulated to improve the quality of life and stimulate physical and mental activity, such that participation in social activities will improve the general standard of health (Davies, 1990), help reduce loneliness (Mellor and Edelmann,1988) and influence quality of life (Bury and Holme, 1993). However studies using 'objective measures of psychological well-being' often produce inconclusive findings.

In a paper by Coleman et al. (1993) self esteem is cited as important to understanding old age, especially in relation to coping with events associated with later life, such as bereavement and institutionalisation. From their own longitudinal work based in Southampton although they found that self esteem appeared stable over a 10-13 year period, shifts were evident in the sources of self esteem - away from family and work and towards leisure pursuits and activities. In fact resilience in self esteem was related to activity levels;

> *"The number of hobbies and interests, the number of different types of journey outside of the home, and the perception of oneself as an active person were all significantly related to maintained self esteem ten years later"* (p.188)

This factor lead the authors to give their support to those who argue for greater promotion of leisure for older people. In addition the authors also identified a negative attitude to becoming dependent to be predictive of a decline in self esteem.

The American researcher Kelly (1987) postulated that leisure is an important element in life satisfaction and social integration. Life satisfaction was found to be strongly associated with level of leisure activity when measures of income, age, sex, marital status and occupation as well as health and housing problems were subject to prior control. In addition the measure of social integration (measure of frequency of interaction with family and friends) was also strongly related to leisure participation.

The types of leisure that differentiated the studies age categories in life satisfaction were: for 40-64 year olds travel and cultural activities, for 65-74 year olds social and travel activities and for those aged 75+ family and homebased activities. These findings are consistent with the shift for those over 65 to social integration as the most important factor in life satisfaction and the availability of family for those 75 and above.

The book 'Social Psychology of Leisure and Recreation' (Iso-Ahola, 1980) explored the consequences of 'institutionalisation' upon the well-being of older people. The book argued that when people enter into institutions they are deprived of social contacts and personal responsibility, and thus personal control, and this results in a decline in physical and psychological well-being. The situation older people find themselves in is adapted to by the individual changing their expectations of what they strive to do. The book calls this process 'overadaptation' and states that people *"... by their capacity of overadapting they come to accept even the most dehumanising forms of leisure as appropriate and sufficient to 'satisfy' their need for novelty and variety."* (p.173). Furthermore, this is seen as a relevant issue to other groups of older people, such as those with a low socio-economic status. The concept of personal control is discussed by others (Heckhausen and Schulz, 1995) in terms of the changes observed in primary and secondary control over the life span.

1.3.2.2 Leisure Activity and Socialisation

A discussion of leisure activity and socialisation has implications for the continuity and activity theories of ageing. Evidently many roles are lost with increasing age. Therefore to provide continuity to personal identity a substitution of roles would appear necessary. Many researchers (e.g. Howe, 1988) have considered the substitution of the leisure role. Contrasting findings have been reported. Support has been given as psychological benefits can be seen to be gained from an involvement in leisure activity. Tinsley et al. (1987) believed this could adequately substitute the benefits once gained from previous roles. However, Glamser and Hayslip (1985) reported on the inadequacy of the leisure role for this purpose.

An example of this is the loss of the work role. A major lifestyle change is associated with the loss of the work role. It can lead to many losses in terms of achievement, self esteem and social interaction. This results in problems such as loneliness, boredom and untapped energy (McKeever and Perry, 1990). Many (e.g. Leith, 1982) have described the beneficial effects participation in leisure activities can have in overcoming these problems. However, to some people, participation in leisure activities can lead to feelings of guilt. The prevailing work ethic can result in attitudes which devalue non work activities. Feelings of guilt arise when too much time is spent on enjoyment (Rapoport and Rapoport, 1975). Such social influences as the loss of roles, prejudice and lowered status can be instrumental in decreasing the opportunities for control in older persons (Kurtz and Propst, 1991). Control is defined as the power to make decisions to obtain desired outcomes. Increased perceived control has been found to have a positive impact on well-being. In examining the substitution of leisure to fulfil roles once obtained by work, Kurtz and Propst found leisure control to correlate positively with life satisfaction.

Evans and Haworth (1991) examined the psychological well-being of unemployed young adults compared to a matched group of employed young adults. The authors specifically examined five categories of experience needed for psychologocal well-being postulated by Jahoda; time structure, social contact, collective effort or purpose, social identity or status and regular activity. Evans and Haworth quote a paper by Jahoda et al (1980) which states that *"... .modern men and women have deep seated needs for structuring their time use and perspective, for enlarging their social horizon, for participating in collective enterprises where they can feel useful, for knowing they have a recognised place in society, and for being active ..."* - needs which are met through being employed. In fact Evans and Haworth found that a level of activity and having a main pursuit is associated with greater well-being whilst being unemployed. However, the level of well-being and access to the categories of experience was limited compared to that of the employed group. They also found that motivation was an important issue in gaining access to the categories of experience and well-being. These are obviously issues which can be related to the experience of older retired people.

In 1986 Kelly commented on the obscurity surrounding the reasons why leisure activity is an important element of adaptation in the later years. He proposed three possible explanations: firstly, that leisure is effectively a time filler around retirement when other significant roles are diminishing; secondly, leisure provides a means of "effectual action" (p.531) responding to diminishing roles; thirdly, leisure provides a context to develop and express social relationships.

1.3.2.3 Leisure Activity and Cultural Values and Norms

Leisure activity as an entity does not escape the influence of myths and stereotypes. The research outlined in Section 1.2.3 suggests the powerful influence that the existence of stereotypes can have on behaviour. It is therefore important to acknowledge the potential effect of stereotypical beliefs and myths when considering leisure behaviour. Research has indicated that generalised stereotypes can affect self concept and hence behaviour. By examining these stereotypes it is evident that most are associated with different aspects of activity. It is therefore not surprising that most of the research in this area has used the activity theory as a focus. What are these stereotyped beliefs and how valid are they?

Unfortunately many negative images are associated with ageing - loneliness, inactivity, declining mental and physical health, increasing dependency and inability to learn new skills. Leith (1982) addressed the validity of the stereotypes held of older people. For example, he discussed the myth that older people should be encouraged to slow down. However, research has indicated that healthy individuals with a variety of personal interests are best able to cope with the stresses accompanying old age. For this reason older persons must be encouraged to become more physically active. Physical activity can help to attain and/or maintain acceptable levels of fitness. As discussed in Section 1.2.2, mental functioning in later years is closely related to health status. When the latter is taken into account, no gradual decline with age in mental ability is reported (Birren, 1968). Mooney (1980) believed there to be good evidence that given optimal condition such as health, social involvement's, environmental stimulation, incentives and feedback certain functions will continue to improve into the later years.

It is clear that activity theory has important implications for quality of life in later years. However, the theory does not explain many of the factors associated with the promotion of life satisfaction for older people. It has therefore been criticised as an oversimplification (MacNeil and Teague, 1987). Howe (1988) stated that "... *with respect to the gerontological literature, little suggests that the frequency of activity alone causes a person to be happy. The importance of the quality of leisure involvement is often discussed" (p. 452).* A study by Ragheb and Griffith (1980: see Howe, 1988) found increases in life satisfaction when satisfied with leisure as compared to participation alone, thus emphasising the importance of leisure quality rather than quantity.

1.4 Leisure Behaviour and Ageing

1.4.1 Leisure Participation and Ageing

Research of leisure in later life consistently reveals a negative correlation between age and leisure participation (Mobily, 1984; Singleton, 1985; Kelly, 1986; Tokarski, 1991). This may appear surprising when it is considered that, in terms of time availability, leisure potentially could be a significant inclusion within the life of older persons (Verhoven, 1977). It has been said that 'leisure is the third age' (Midwinter, 1992). This is based on the premise that the third age is free of previous roles and consists of leisure time. Midwinter (1992) suggested that leisure time is the closest common denominator to defining older people as they represent a heterogeneous group in terms of health and wealth.

Examining leisure behaviour reveals that the amount of time spent on leisure decreases with age as does the scope of activities that older individuals partake in i.e. leisure repertoire narrows with age (McGuire et al., 1987). Across the life-span, in general, an individual's leisure repertoire will increase steadily from birth to mid-life, after which it begins to decline. Developmental analysis of leisure also indicates the types of activities people pursue at different stages of the life-span. It is predicted that soon after

infancy the desire for novel play and recreation experiences become stronger than the need to participate in familiar forms of leisure. The desire for novelty continues until it reaches a peak early in childhood or adolescence remaining at this level for a number of years before declining in late adulthood. At the same time the need for familiar experiences has considerably less strength across the life-span and increases just before retirement when there is a greater need for familiarity over novelty. It is suggested that the need for novelty does not disappear in the later years but it appears within a much smaller leisure repertoire, substituting totally new experiences with variance within activities that the individual has become comfortable with and most enjoys.

Singleton (1985) commented that, in general, the types of activities older people take part in are sedentary and homebased and most previous research concludes that older people participate in 'passive' activities (Singleton, 1985). Leisure activities that are frequently reported by older people include: watching television, gardening, visiting and reading (Kart, 1994) working around the yard and pleasure driving (Verhoven, 1977). Kelly (1986) reported that the most uncommon activities associated with later life are sport, exercise, resource based outdoor recreation and community organisation activities. Alternatively little reduction was observed for family, social and homebased activity for older persons. Kelly indicated that the negative correlation between leisure and age only holds for certain types of activity.

The above findings are of an American or Canadian origin. Recently in Britain the Carnegie Report (1993) on the Third Age examined the leisure behaviour of the British population between the ages of 50 and 74. Similar findings were presented. The most common activities in the over 60 population were found to be; television, gardening, visiting, reading and (for women) dressmaking. In particular activities that involved physical exertion declined after this age (with the exception of gardening). The report stated that 'third agers' do not use their increased leisure time to take part in the more healthy and active pursuits. In fact 50% of men and 62% of women, aged 60-69, did not partake in any physical activity in the past twelve months, except walking.

The work of Singleton (1985) indicated that older people have a core set of activities, which are homebased. This is consistent with the findings of Rapoport and Rapoport (1975) who also suggested that the majority of these activities are centred around the family. This correlates with the findings of Kelly (1983) who found that the activities listed above (Carnegie Report) are typical of those that represent the core of adult leisure around which other activities are chosen. Abrams (1996) suggested that the use of time in later life is dominated by television, housekeeping and self care activities.

Long (1986) in a study looking at the effect of retirement on the use of leisure time found that after retirement few new activities were taken up and several of the activities more frequently cited after retirement included interaction with another. Long (1986) argued that continuity is an important element of adjustment after retirement. In this study Long found a general continuity in activities and interests pursued before and after retirement.

> *"Changes initiated by respondents tended to be in the timing and duration of activities and sometimes in the roles and meanings that they held, rather than in the activities themselves" (p.3).*

Furthermore, McAvoy (1979) reported a similar finding; 92% of older subjects began participating in their most frequently occurring activities before the age of 50. Kelly (1986) and Tokarski (1991) support this view.

Describing leisure behaviour Kelly (1986) stated that continuity is demonstrated in the 'core' of accessible and relatively informal leisure. Other activities may be maintained if they have a little, or no, physical component and especially if they involve social interaction with a 'significant other'. Kelly found that for older subjects leisure behaviour shifts somewhat towards social engagement and away from strenuous physical activity. Kelly (1986) suggested that within the continuity are patterns of change. For example, health and physical ability rather than age itself seem to be related to a reduction in certain kinds of activity. This is evident when comparing the 'young old' to the 'old old'; for the latter leisure is predominantly more homebased (Kelly, 1986).

To explain leisure behaviour Kelly (1986) detailed the Core and Balance Model. This represents the core leisure that persists throughout the life course (accessible activities, usually in or near the residence, integral part of ongoing daily life). In addition a balanced set of engagements that are more likely to shift through the life-course as roles, self definitions, aims and opportunities change.

1.4.2 Meaning of Leisure in Later Life

Long (1986) commented that retirement could be seen as 'pure leisure' if we accept the definition that leisure is associated with activities that are free from work obligations. As Long highlighted this is not reflected in reality as older people only report low levels of leisure participation. Rapoport and Rapoport (1975) commented on the complex and variable meanings of leisure in later life in contrast to the roles which influence younger age groups, such as family, work and community life, which may define leisure for this age group. Whereas *".... in the case of the elderly there is the withdrawal of many of these structures and the consequent possibility of new, optional patterns - all of which is in a sense leisure. This is why the popular conception of old age is that it is an age of leisure"* (p. 313).

However, the question remains 'what do older people consider to be leisure and what meaning is placed on leisure in their lives?'. The 1993 Carnegie Enquiry reported that older people tended to regard retirement to be associated with inactivity. Kelly (1986) believed that leisure should be seen as an integral part of life throughout the life cycle. Kelly (1986) emphasised that social processes provide individuals with identities and this takes place through all life domains including leisure. Indeed for some individuals leisure identities may be central to 'who we are and who we are trying to become'. American research (e.g. McAvoy, 1979) has investigated older people's leisure needs and found that these involved - socialising, self fulfilment, closeness to nature, physical exercise and learning. Others (e.g. Argyle, 1989; Kelly, 1983) have categorised leisure needs in terms of autonomy, relaxation, family activity, health, competition, leadership, stimulation, escape from routine, creativity, altruism and self actualisation. In a study

by Beard and Ragheb (1980) six facets of leisure satisfaction were identified; psychological, educational, social, relaxation, physiological and aesthetic. These variables denote categories of benefits that leisure participation was associated with. Kelly (1986) studied the leisure activities of a particular community, Peoria Illinois, and the meaning of leisure to subjects in his sample. He concluded that the older persons in Peoria were similar to adults in other communities where *"leisure is neither the peripheral and residual life domain nor the life transforming elixir that some assume"*. It is a factor characterised by the Core and Balance model (see Section 1.4.1) and can be used as a resource for dealing with life.

Other researchers postulate that new meanings need to be given to leisure whereby persons can use leisure to contribute to society (Verhoven, 1977). Midwinter (1992) recognised that within a time of non work the concept of leisure changes. This is reflected in a relationship between leisure and its contribution to an individual's self identity and concept. Midwinter (1992) wrote of the challenge to prove that an individual's identity is not solely work dominated and that people can have a meaningful and fulfilling retirement.

1.4.3 Leisure: The Problem of Definition

The definition of leisure is often a neglected area. Due to the complex nature of the leisure concept, it's definition has proven problematic. Several approaches have been taken by theorists to define the leisure concept (Roberts, 1978; Parker, 1971; Clark and Critcher, 1990). Examples of definitions include lists of activities and specific orientations, such as, the residual time based approach. Kelly (1983) believed such definitions inadequate. Different people have different perceptions of what is, and is not, leisure at different times in their lives. It appears important that perceptions of leisure are examined especially when considering leisure beyond retirement.

From the discussion on self concept and role changes there appears to be a need to recognise that leisure activities in later life take on a new perspective and a new meaning. Some support for this proposition comes from the work of Long (1986) who

found that although leisure activities may be pursued before and after retirement, the meanings of these activities to the individual may change. Haywood et al (1990) believed that a change in the meaning of leisure activities is necessary for people faced with otherwise unstructured time to help maintain a sense of purposeful activity. This requires a broad view of what the leisure concept constitutes (Bernard, 1990). Furthermore Kelly (1986) stressed that the view of leisure as organised activity within the community does not reflect the leisure realities of later life. Thus the definition of leisure needs to encompass more than organised activity to portray a realistic picture of leisure in later life.

Kelly (1983) believed that a definition should revolve around motivations, rather than outcomes. Thus the definition should focus on what people are seeking in their lives and how leisure provides opportunities for becoming something more or different, in addition to reinforcing satisfying self concepts. It must be recognised that leisure activities are not just time fillers. They can be an avenue for personal expression and growth (Kelly, 1986). Factors relevant to determining leisure are the immediate context in which people live and age related expected roles (Kelly, 1986). Interestingly Kelly (1986) defined leisure behaviour as a 'response to resources' (p.536). The behaviour is determined largely by what is available to the individual in terms of such factors as family situation, community, occupation, education, geography and culture as well as certain personal conditions, such as health status.

Verhoven (1977) commented that the definition of leisure activity by older people is important when considering how the individual will respond to it. This appears to be an important focus to incorporate into research and policy and is analogous to the concept proposed by Kaplan (1975). This approach emphasised the subjective nature of leisure, such that, any experience may be labelled leisure if perceived so by the person involved in it.

1.5 Factors Affecting Participation in Later Life

Understanding of the relationship between leisure participation and ageing requires recognition that although people choose their own leisure activities, their choice is limited by a series of constraints (Abrams, 1996). In addition Haywood (1990) postulated that there are fundamental social divisions in Britain which give rise not just to diversity in leisure activity but to inequality of opportunity which constrains leisure choice. McGuire (1986) recognised that constraints can act in two ways; they can limit leisure activity or they can prohibit participation totally.

The constraints that have been identified or suggested as influential upon older people's leisure are discussed below grouped into individual factors, environmental factors and socio-cultural factors although these categories are not distinct from each other. Constraints can be interconnected and variable (Bernard, 1990).

1.5.1 Individual Constraints

Mobily et al. (1984) cited age as a major determinant of leisure behaviour. In a study which examined the explanatory power of a number of variables associated with leisure repertoire, age was the most powerful factor. In addition Mobily et al. (1984) examined education, marital status, life satisfaction, exercise attitude, leisure attitude and self perceived health as independent variables to examine whether leisure repertoire varied according to them. Following age, the second most important factor was self perceived health. Leisure attitude, life satisfaction and sex explained independently approximately 1% of score. Attitude to exercise (part of), marital status and education were significant but only marginal in explaining variance in leisure repertoire. Mobily et al. (1984) concluded that the latter constraints were so weak that it is difficult to argue that they were remarkable influences on leisure repertoire.

Mobily et al's study concluded that sex differences were minimally related to leisure repertoire. Females were found to have larger repertoires (7.41 ± 2.34) than males

(7.04 ± 2.35). Mobily et al. stated that there is evidence that this differential decreases in the later years of life, particularly concerning homebased activities.

Mobily et al. (1984) suggested that researchers should take a closer look at self perceived health as a variable determining leisure repertoire. Mobily et al's. study emphasised some of the factors which are associated with leisure behaviour. However the authors suggested that further research is required to provide a more detailed analysis of this area. Many other studies have examined these type of constraints. Another American study by McGuire et al (1986) found that respondents aged 61-75 were primarily limited by lack of time and health reasons. Respondents over the age of 75 were primarily limited from leisure involvement by health. Time became a decreasingly salient factor across the life-span whereas health became increasingly common as a constraint. The authors expressed surprise at the finding that transportation and income were not important constraining factors to older people. In fact they found that these two factors, together with safety and lack of information, did not change in importance across the life-span. An interesting finding revolved around the lack of a companion to partake in leisure activities with. This showed a U shaped curve across life-span, being a more influential constraint upon the young and the old. However, although the older subjects felt this constrained their behaviour it did not prohibit them from participation.

The study also found that constraints older subjects reported differed from younger age groups constraints. In fact they observed a gradual decrease in the percentage number of individuals experiencing constraints across the life span. The authors offer two explanations for this; either people disengage and are therefore unaffected by constraints or they have the necessary coping skills to avoid constraints.

Some studies, such as McAvoy (1979), have suggested that the major barrier older people report is lack of physical ability. Similarly they report other constraints such as a lack of companionship and a lack of time. However unlike McGuire et al.'s (1986) study they also reported lack of transportation and finances as significant barriers to later life leisure participation.

Kart (1994) reported that older people tend to retain leisure patterns from earlier in life. He commented that the 'core' activities are consistent across the life-span and are thus well practised. Kart (1994) postulated that *"one reason why people have difficulty occupying leisure roles is simply that the lack the practice"* (p.326). This is implicated by Bernard (1990) who stated that older people are influenced by what they believe possible and available to them. Bernard uses the example of the use of leisure centres which are often alien places to older people and hence they are unlikely to use them.

In a study by Rubenstein (1987) outdoor recreation participation was examined in two European Countries: Luxembourg and France. Participation levels were higher than expected for activities such as country walks, travel and picnicking. However participants were more likely to be healthier, younger, male, married, better educated and owner occupants. In Thionville, France, outdoor recreation participation was associated with high social class although in Luxembourg good health was the factor most closely associated with level of participation. The authors suggested that the two countries face different obstacles to outdoor recreation: in the relatively wealthy society of Luxembourg, health became the main determinant. Whereas in Thionville the authors reported a high degree of social isolation among the working class older population who appeared to face different challenges.

Bley (1972) found that new members of a 'Community Group' who became 'erratic' users had lower morale and life satisfaction scores as opposed to new members who became regular users. However the direction of causation is unclear; is it that people who use the community group increase their life satisfaction and morale or are people who have a higher life satisfaction and morale more likely to go to the community group?

Abrams (1990) commented on the effects of isolation upon leisure behaviour. Abrams work has suggested that the contact level between older people and others is extremely low and a large proportion of older peoples' time is spent in isolation. This not only has

obvious connotations for opportunities for leisure but also is associated with mortality rates.

Finally, the recent Carnegie Report (1993) identified lessening mobility, fear of travel, lack of skills and confidence, lack of money and information as the major barriers to leisure participation for older people in Britain. Interestingly, the report does not specify health as a factor influencing participation. Considering the amount of long term illness reported in this age group and the associated morbidity statistics this appears surprising.

1.5.2 Environmental Constraints

Included under this heading is economic constraints. Income can be an essential element in determining leisure patterns. Abrams (1990) referring to the Governments 1986 'Family Expenditure Survey' stated that for households where the head was 65 years or more, the gross income was below half that obtained by households headed by a 50-64 year old. Reduced expenditure was evident on those goods and services associated with leisure activity. This has implications for the importance of, for example, reduced admission fees and free travel as a facilitator to participation (Bernard, 1990). Abrams (1990) also found that financial constraints vary for different sectors of the older population, in particular he noted that affluent households were associated mostly with the younger age group i.e. those households were the head was 65-69 years old and thus their expenditure patterns were similar to those who were working age. Clearly the process of targeting specific groups of older people, such as those on low income levels, is an area for debate. Sixsmith (1992) commented on the 1991 Liverpool Quality of Life Survey, which replicated the Breadline Britain survey in which people were asked if they could afford certain items which were regarded as necessities. Examples of these items included heating for living areas, beds for everyone and a hobby or leisure activity. Nationally the Breadline Britain survey showed that the prevalence of poverty was 21% and extreme poverty was 7%. In Liverpool the figures were 40% and 15% respectively. Sixsmith (1992) reported that it had been suggested that the number of older people who live in poverty may have been

underestimated in Liverpool. As Abrams (1996) has argued such high levels of poverty has implication for involvement in leisure.

Another form of environmental constraint is the physical surroundings. The condition of the physical environment and its safety level are important features affecting participation (Leslie, 1991; Abrams, 1996). This can influence activities such as walking, jogging and shopping. McAvoy (1979) found that leisure needs differed according to residential area. Access to facilities can also be a fundamental determinant. Car ownership can greatly improve access to leisure opportunities. However those in receipt of a pension are twice as likely not to have access to a car compared to others (Bernard, 1990) which may clearly influence leisure behaviour. This has implications for the location of facilities in relation to public transport routes. Another factor to consider is the facilities themselves, or lack of them! In a study by McGuire et al. (1986) 60% of older respondents felt constrained from partaking in more leisure activity than undertaken at present. One common reason cited for this was the lack of facilities available. Of the facilities available, their condition and the type of activities they provide can be crucial (Bernard, 1990). Implications are evident for the promotion of activities.

1.5.3 Socio-cultural Constraints

A much higher percentage of older men and women in the higher social classes are active (Verhoven, 1977). People's leisure activity is related to their attitudes, perceptions and values which both facilitate and constrain leisure choice. Bley (1972) suggested that the incorporation of leisure values is a key to 'successful' ageing. A major factor for consideration is the prevailing social attitude to the concept of leisure activity and older people. Bernard (1990) highlighted how society, in general, tends to view older people as less likely to participate in activities, as isolated, as mentally slower and as less able to learn new things. This is confounded by a youth orientated culture which can further diminish the views older people hold of themselves (McKeever and Perry, 1990). Bernard (1990) believed that such negative attitudes affect our definition of what "*....is or is not acceptable or appropriate leisure behaviour*

amongst older people" (p.15). As discussed in Section 1.2.3 fixed ideas can be internalised. This was indicated by Hobman (1978) who believed that stereotypes, concerning older people, influence their behaviour, rather than describe it. In addition the position is confounded in that present cohorts of older people may be less accepting of the concept of leisure due to the prevailing work ethic (Verhoven, 1977) which was once fundamental in their lives (Bernard, 1990).

In conclusion, Haywood (1990) argued that it is important to a study of leisure and ageing to examine which, among the extensive possibilities, are the most important constraints and which constraints are marginal. This will provide a greater understanding of leisure behaviour.

1.5.4 Models of Leisure Participation and Ageing

Abrams (1996) commented that the majority of the population has not yet found how, through their leisure activities, to re-engage during the later years of life; except for those with a large amount of income and with some experience of further or higher education.

In an attempt to address this issue some research has been aimed at deducing the activity participation process. Why do individuals partake in leisure pursuits and what determines their choices? One approach has been to focus on the individual's behaviour and his/ her environment (Kelly, 1983). This includes multidisciplinary approaches of a psychological and sociological nature. However, Brandenburg et al. (1982) believed that although these studies have been important in creating a knowledge base they do not directly impart practice guidelines. The Australian work of Brandenburg et. al. (1982) produced, from a series of developmental studies, a conceptual model of how people adopt recreation activities. This process is depicted in Figure 2. The model begins with preoccupations and interests. In order for this to develop into activity adoption, certain conditions need to exist. These are termed opportunity, knowledge, favourable social milieu and receptiveness.

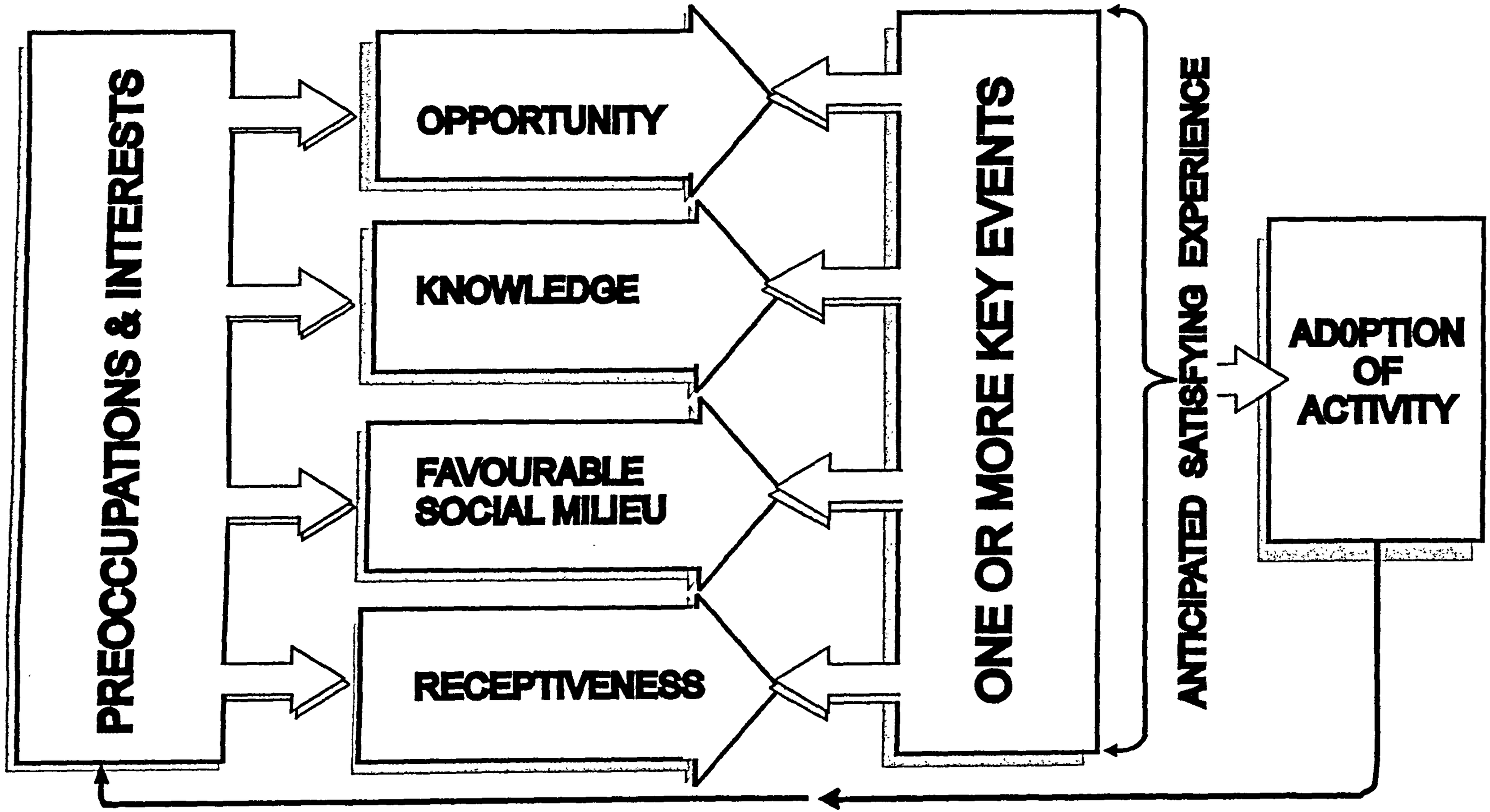

Figure 2: Brandenburg (1982) Model of Activity Adoption

Opportunity refers to favourable socio-environmental conditions and/or the absence of constraints. Prior experience of the activity constitutes the knowledge condition. Social milieu refers to the immediate reference group who must be accepting of the activity adoption and finally, receptiveness, refers to the individuals willingness to take up the activity. If these conditions are present then the experience of a key event (for example, being personally invited to partake) will lead to activity adoption if the individual believes that the adoption will prove a satisfying experience. The adoption may then lead in a cyclical fashion to changes in the individual's preoccupations and interests.

This model was further analysed by examining the process in terms of older individuals who partook in a senior adult fitness program in America (Howe, 1988). In general this work supported the activity adoption process as proposed by the model. However, activity specific knowledge was unsupported. The work also suggested that the conditions of opportunity and social milieu should be expanded to include a wider range of variables.

Another model of leisure participation proposed by Ragheb and Tate (1993) is based on leisure attitude, motivation and satisfaction. This model was designed to account for the cognitive and affective components of attitude towards leisure; obligations and commitments limiting participation in leisure activities; motivation to participate in leisure activities; the extent of participation in leisure activities and satisfaction derived from participation in leisure activities.

1.6 Summary

Society is currently within the context of an ageing population. An older population which is characterised by a greater number of women and an increasing number and proportion of people over the age of 75. Demographic findings, such as these, have important implications for policy directions. They can influence policy planning and service provision. However, to facilitate a more informed discussion on the policy options best equipped to respond to demographic ageing, social analysis of the experience of old age is required. In particular, research is required which aims to

assess the leisure needs of a particular community in order to inform local policy decisions of the implications of demographic change. This type of research can provide insight into the needs, experiences and opinions of older people living within a particular social context which can then inform the policy decision making process.

As discussed, to gain a fuller understanding of the ageing process requires a move towards a holistic view of the biological, psychological and social needs, and influences, upon individuals. This extends to studying the individual in such a way which attempts to take account of the context in which they live. A major concern of the consequences of 'demographic ageing' is the health of older populations. In particular, as health care advances in recent years have increased longevity, current interest is being focused upon the quality these added years hold for an individual. The quality of life concept is defined to include objective conditions (such as general health, functional status and socio-economic status) and subjective evaluations (such as life satisfaction and self esteem).

One factor that has been considered as having the potential to improve the quality of older years is leisure participation. It has been proposed that leisure can have a significant impact, and be influenced by, all three facets of the ageing process; biological, psychological and social. However, despite the potential benefits of leisure participation it appears that only low levels of leisure involvement are observed in older population groups. The understanding of this paradox is unclear. This is hampered by the

"... paucity of detailed empirical research which addresses the issue of leisure and old age." (Bernard, 1990 p.14).

Long (1980) commented that to a great extent the understanding of ageing and leisure is from work with a USA base. This has stimulated British research but there is still the need for work which allows the move from theorising to a systematic empirical approach. Bernard (1990) suggested that the current knowledge base has been derived from other disciplines, such as the work within social gerontology. As Bernard wrote

the British situation is one in which .... *"... leisure scholars have paid scant attention to older people, and gerontologists for their part have yet to address the role of leisure ...."* (Bernard, 1990 p.14). In addition information on leisure and ageing can be derived from certain large scale surveys (Bernard, 1990). However these tend to treat older people as one homogenous group.

Within this context there appears to be a need for a research approach aimed specifically at leisure and ageing which takes a multi-disciplinary perspective and recognises that older people are not a homogenous population and that ageing can be a differential experience according to many social variables. The central premise to this approach is that the experience of ageing and leisure cannot be understood without reference to the context in which people live (Neugarten, 1982). Rapoport and Rapoport (1975) stated that research should integrate housing, health care and leisure provision to enable examination of the different responses which may be needed for people who live in different social contexts and degrees of affluence. The Rapoports believed it was necessary to base research on the social and personal phenomenology of ageing. This required examining the experience of becoming older, exploring how older people perceived this process and the people who relate to them. Equally, research should focus on the knowledge of those who are associated with older people (Rapoport and Rapoport, 1975). In summary the Rapoports believed that research should move from studies on old age and its problems to studies of older people. This can be best achieved through qualitative techniques which will supplement and explain the picture painted by demographic and quantitative studies of the ageing process.

This approach can be applied to extend the knowledge concerning leisure and ageing. It has been utilised by the present study to examine leisure and ageing in a localised community based sample. The demographic information available for Liverpool was the basis for the formulation of a quantitative social study of leisure and ageing within the Liverpool community. This analysis aimed to document the leisure behaviour of older people in Liverpool and provide insight into the relationship between this behaviour and the fitness and well-being of older people. Thus through demographic and quantitative analysis a description is provided of leisure and ageing within the

defined community. Some writers in this field (e.g. Brandenburg et al., 1982) have expressed concern that the creation of a knowledge base of information is not sufficient on its own to have direct implications for policy and practice guidelines. Thus the knowledge base of the present study was used to generate qualitative studies of significant issues as qualitative techniques allow exploration of issues established from quantitative enquiry. This provided not only a documentation of the leisure behaviour and fitness and well-being of older people but lead to a greater understanding of the issues surrounding leisure in later life.

This study has policy and practice implications in terms of addressing the following questions:

- What is the actual leisure behaviour of older people in Liverpool?
- What do we know about the relationship between leisure participation and quality of life?
- What are older peoples' attitudes to involvement in leisure activities?
- What types of activities do older people want to partake in?
- What do older people feel about current leisure provision?
- What factors affect older peoples' participation in activities?
- How does the actual activity adoption process work?
- What are the implications for intervention strategies?

In addition the study focused upon the attitudes towards leisure and ageing in the socio-cultural environment as is had been suggested from the literature that to understand behaviour it is important to examine the context in which that behaviour is taking place. This wealth of information has the potential to inform the assessment of needs and provision in terms of leisure services. Therefore it seemed imperative for the study to consider the implications it held for policy and provision in addition to discussing the theoretical implications it had for the academic study of leisure and ageing. The basis of this study was recognition that the ageing process is multifaceted; including changes which are physical, psychological and social in nature. Thus a defining characteristic of the study was its approach which was not purely based in one discipline but attempted to address issues relating to leisure and ageing across disciplines.

CHAPTER TWO

STATEMENT OF THE PROBLEM

2. STATEMENT OF THE PROBLEM

The present study arose from the dearth of detailed empirical work in the field of leisure and ageing and a complete absence of local information in Liverpool. It hoped to augment the current knowledge base of information within this field which has mainly been of North American origin. In addition, as described in Chapter One, it attempted in design to have a multi-disciplinary perspective and a multiple methodological approach in order to maximise the value of the research.

2.1 Aims

The primary aim was to examine the relationship between the leisure behaviour of older people in Liverpool and established indicators of quality of life, namely specific fitness parameters, functional capabilities and measures of well-being.

Specifically this thesis aimed:-

(i) to document the leisure behaviour of older people in Liverpool.

(ii) to investigate factors which were associated with, or a consequence of, leisure behaviour.

(iii) to critically discuss strategies of leisure promotion and to consider the theoretical and policy implications.

The achievement of these aims will extend the knowledge concerning leisure activity and ageing, with particular relevance to Liverpool's ageing population. This will assist in assessing needs and provision in terms of leisure services and support and will have implications for future policy decisions concerning Liverpool's older population.

2.2 Objectives

To fulfil the study aims the following objectives were set:

1. To compile an interview schedule for recording leisure activities and various sociological and psychological variables.

2. To administer the interview schedule to a wide cross-section of older people from different accommodation types.

3. To measure certain functional capabilities of the sample.

4. To examine the cross-sectional findings in relation to in-depth qualitative interviews.

5. To assess attitudes towards ageing and leisure activity held by individuals closely involved with older people.

6. To critically discuss the feasibility of possible intervention strategies suggested by the quantitative and qualitative analysis.

7. To consider the implications the study had for theoretical models of activity and ageing and for local policy.

CHAPTER THREE

REVIEW OF METHODOLOGIES

3. REVIEW OF METHODOLOGIES

The following section reviews the methodologies employed in the current study. The tables below summarise the components of the study and the methodological approaches adopted.

TABLE 3: Summary of Methodologies with a Sample of Older People

METHOD	MEASURES	TYPE OF APPROACH
Structured Questionnaire	Leisure behaviour Process of activity adoption Barriers and enhancers to leisure Knowledge of leisure services Attitudes to leisure and health Well-being Social Support	Quantitative
Physical and Functional Measurements /Structured Questionnaire	Subjective functional ability Anthropometric measures Strength Flexibility Reaction Time Actual Functional Ability	Quantitative
Focus Groups	Leisure and Ageing Process of activity adoption Barriers and enhancers to leisure Attitudes towards leisure services Attitudes towards leisure and health	Qualitative

TABLE 4: Summary of Methodologies with a Sample of Individuals within Socio-cultural Environment

METHOD	MEASURES	TYPE OF APPROACH
Questionnaire	Socio-cultural attitudes towards ageing	Quantitative
In-depth Interviews	Attitudes towards personal ageing, older people and activity and ageing	Qualitative

3.1 Assessment of Leisure Behaviour

Various issues concerning the definition of leisure were important to the study. It had been implicated from the literature (e.g. Midwinter, 1992) that leisure may take on a new meaning in later life and thus it seemed appropriate to examine how older people themselves define leisure in their lives. In an attempt to avoid preconceptions concerning this definition the approach of the study was to allow subjects to define leisure subjectively.

Accurate assessment of leisure behaviour is a complex issue. From the literature three measures of participation were identified (Section 1.4):

- Leisure Repertoire
- Frequency of Activity Participation
- Types of Activity Participation

The main two methodological approaches to collecting information on leisure behaviour are through structured questionnaire and diary methods. The former asks respondents to recall behaviour over a specified time period whilst the diary approach requires the respondent to record current information on behaviour. In choosing the most suitable approach for the present study three considerations were taken into account. The first was the importance to fulfil one of the major aims of the study; to provide a 'picture' of leisure behaviour in the older population and thus it was necessary to consider the time span over which to 'paint this picture'. The second was to consider how to optimise the number of subjects and thus collect information on a wide range of people with various levels and types of interests. The third consideration was the degree of co-operation

which would be required by subjects to take part in the study. All these criteria were important in determining the methods to be adopted.

For the present study, in order to obtain a 'picture' of leisure behaviour which examined older people from various backgrounds and differing situations, it had to be subject intensive. For example, to examine leisure behaviour by type of residence would necessitate involving a large enough sample from each residence. To examine further variables such as age and sex would differentiate the sample further, thus requiring enough subjects within each sub-sample i.e. one sub-sample may be 60-70 year old males from residential accommodation. Since leisure behaviour was to be collected as part of a wider database of information on well-being, attitudes and demographic information, in addition to respondents being asked to take part in a physical appraisal, it was felt that the amount of co-operation involved would not lend itself to a diary type methodology with a large number of older people. A diary type methodology requires a greater degree of a subject's time and commitment compared to a questionnaire approach to recall of behaviour. It was also felt that a diary approach would fail to recruit the large sample required.

A second concern to using the diary approach was the limited time span over which it would collect information. If the study only had information over a one or two week period this would not allow examination of issues regarding leisure repertoire and thus would be limited in 'painting a complete picture' of leisure behaviour. The aim was to collect information on the activities undertaken on a day to day basis, a weekly basis, a monthly basis and so on to include activities undertaken infrequently. This would document complete leisure involvement and not just explore activities of a regular nature. These arguments informed the decision of the present study into adopting a questionnaire approach to recall leisure behaviour. However this approach is not without its complexities. One of these is the choice of reference period over which to ask subjects to recall their behaviour. In discussing this the Technical Report of the Allied Dunbar National Fitness Survey (Fentum et al.,1994) - which used a questionnaire approach to collecting information of physical activity involvement -

stated that two factors should be taken into account when deliberating reference period; (a) that inaccuracies in recall will be minimised over shorter time periods and (b) that a longer time span would provide a more accurate picture of an individual's activity. To account for such factors the present study collected information over two time periods; the previous four weeks to interview and the previous year. The Allied Dunbar NFS and the General Household Survey (GHS Foster et al., 1995) also used these two time periods, which enabled a comparison source for the current study.

The four week period is one of the more frequently used measures of current activity. For the present study it was felt important to collect information on the 12 month period to get an indication of occasional participation in one-off or infrequent activities. This would be missed by detailed analysis of one short time period. This may also indicate seasonal variation in leisure behaviour.

Developmental work for the Allied Dunbar Study NFS (which focused on people over the age of 16 years) examined stability and accuracy in recall of leisure behaviour. They concluded that stability was evident in behaviour when subjects were asked to recall over two different four week periods. They also found reliability in recall when subjects were asked about the previous year at two different times. Subjects in general were found to report the same information. The NFS study concluded that this is therefore a reliable method of recall.

3.2 Assessment of Factors Associated with Leisure Behaviour

3.2.1 Demographic Variables

Various demographic and personal characteristics had been identified through the literature as being associated with differences in leisure behaviour. Thus information was collected within the quantitative interviews on the following variables:

- Sex
- Age
- Residence Type
- Marital Status and Family
- Ethnicity
- Educational Level/ Qualifications
- Main Employment / Number of Years Retired from Employment

3.2.2 Barriers and Enhancers

A review of the literature had identified many individual, environmental and socio cultural constraints (see: Section 1.5) associated with leisure behaviour. To examine the relevance of these to older people in Liverpool questions were included, within the quantitative and qualitative interviews, to explore;

- Perceived barriers to participation

- Knowledge and opinions of services in the context of knowledge about other age specific services

- Attitudes towards leisure activity and health in the context of other risk behaviours. This followed a similar format to the Allied Dunbar NFS however it had a wider focus.

- Factors associated with adopting a leisure activity. This used the Brandenburg model (1982) as its focus and used the same methodological approach as Howe (1988).

- Social support as measured by The Index of Social Support (James et al., 1987).

Both qualitative and quantitative information was collected on these issues as it was felt important to establish not only the existence of various barriers and enhancers to behaviour but also the meaning and influence they had on the lives of older people.

This is an important source of information when considering leisure promotion. Quantitative methodology can establish the existence, and to some extent the importance, of various constraints and through qualitative methodology the significance of these concepts can be explored to a provide a greater understanding.

Demographic variables and barriers/ enhancers have been presented in two sections. However the two are not mutually exclusive. For example certain factors, such as family size and proximity to family may be associated with social support.

3.3 Assessment of Well-being

Due to the complexity and amount of information being collected the questions included in the questionnaire study on well-being were designed to be indicators of well-being rather than detailed assessments. As argued in Section 1.3.2 of this thesis it was felt that to provide an indication of Quality of Life certain well-being measures should be included. These are listed below:

- **Subjective Health Status**

This measure is a common inclusion in many large scale, health related surveys (Health and Lifestyle Survey, - Cox et al., 1987 and The Allied Dunbar NFS). The same format was used in the present study as an indicator of the individual's own perception of their health. It involved asking subjects to rate their health as excellent, good, fair or not so good for a person of their age. In addition subjects rate their health in comparison to others of their own age as 'more healthy', 'less healthy' or 'about average'. Research has suggested that this measure is an accurate indicator of actual health status (Blaxter, 1985; Hocker and Siegler, 1993).

- **Malaise**

This measure is taken from the 1987 Health and Lifestyle Survey and is described as a measure of 'self perceived psycho-social well-being' (p.152). The measure broadly

examines the experience of certain symptoms such as having difficulty sleeping, always feeling tired, having trouble with nerves, worrying over every little thing and feeling depressed. The higher the score the more frequently these symptoms are being experienced.

- **Life Satisfaction**

The measurement of life satisfaction is often based upon a measurement scale developed by Neugarten et al (1961). This current study adopted a measure proposed by James et al (1986) which assessed the validity of the Neugarten Life Satisfaction Index -Well-being scale and modified it accordingly to include those factors which showed acceptable reliability.

- **Self Esteem and Personal Control**

The measures of self esteem and personal control were taken from the work of Krause, Jay and Liang (1991) with older people.

3.4 Assessment of General Health and Functional Status

This component of the study sought to place particular emphasis on activities of daily living to correlate with the quality of life objective measure of functional status. Thus a test procedure was needed which was functionally relevant to the problems facing this age group. From investigations into tests used for physical assessment of older people (e.g. Shephard, 1987; Dugdill, 1991) a battery of tests was chosen. Hence all tests have previously been used on an older population.

3.4.1 Functional Relevance of The Tests Used

- **Grip Strength Test -** Handgrip reflects the ability to hold on to something such as a stair rail. It primarily involves forearm muscles which are responsible for flexion of the fingers. It is not necessarily representative of overall body strength (Tornvall, 1963)

but it has been shown to be a good indicator of other physiological conditions such as rheumatism, which causes weakening of the grip (Fernando and Robertson, 1982). Differences in grip strength are usually found between dominant and non-dominant hands (Harries, 1987). In the present study grip strength was measured using a Takei Kiki Kogyo (Tokyo, Japan) grip dynamometer.

- **Lateral Bending Test** - This parameter is a measurement of the degree of lateral bending in the thoracic and lumber spine. It was chosen as an indication of functional flexibility of the spine. It reflects the ability to move about and pick up objects.

- **Shoulder Abduction Test** - This movement is used to reach above the head and behind the neck - as, for example, when combing hair. Shoulder abduction range was measured as the maximal number of degrees of arc through which the arm moves upwards, in 45 degrees of horizontal flexion, from hanging vertically by the side. The elbow is extended during the manoeuvre. Both movement of the upper arm on the shoulder (gleno-humeral abduction) and the shoulder blade on the collar bone (scapulo-thoracic abduction) contribute.

- **Reaction Time Test** - This measures the time taken for a person to respond as quickly as possible to the appearance of a target stimulus. The measure is included within the battery to provide an indication of mean reaction speed. It was measured by means of a portable computer. This reflects the ability to respond to environmental cues such as safety crossing the road or reacting to domestic emergencies.

- **Functional Ability Demonstrations** - Four tests of functional ability were performed. These included touching the toes with the opposite hand (with knees and hips flexed), putting a plug in a socket and putting a key in a lock (when placed at a standard height) and rising from a stool 42 cm in height (with arms folded and arms free). This follows the National Fitness Survey (NFS) methods of physical appraisal of older people. This test procedure is believed to be functionally relevant to the problems facing older people.

Further to the tests of functional ability the anthropometric measures of height, weight, demi span and skinfold thickness were included in the battery as was a measure of blood pressure. These were also included within the NFS battery of tests for older people. The measures of height and weight allowed calculation of Body Mass Index. This method of estimating body fat is widely used (NFS Technical Report, 1994). In addition another measure of body composition was taken; the skinfold thickness. This again follows the NFS procedures.

In accordance with other health surveys (e.g. Health and Lifestyles Survey, 1987), it was felt important to collect data on the subjects' subjective opinions of physical and functional status as well as information concerning lifestyle behaviours which could affect health. This was collected by a short physical appraisal questionnaire. This followed a similar format to the procedure of the NFS.

3.5 Assessment of Socio Cultural Attitudes

An aim of the study was to explore the attitudes held towards ageing by those in close contact with older people. Various research projects have assessed the attitudes of society towards ageing and have used a diversity of assessments to do this. In the main these have consisted of attitude scales whereby subjects are asked to respond to attitudinal statements. The various methodologies indicate differing opinions in peoples' attitudes towards ageing. It is generally assumed that qualitative approaches would provide more in-depth information on the attitudes that people hold, however, to collect attitudinal information on a larger number of people quantitative methodology would be required. Both methodologies were employed in the current study.

3.6 Sampling

For the quantitative analysis of older peoples' leisure behaviour a probability sampling approach allowed generalisable data to be obtained. Due to concerns that older people should not be treated as one homogenous population a stratified random sample approach was adopted (as defined by Fink,1995). The strata upon which information

was collected were accommodation type, sex and age group. These sub-groups were chosen to reflect propositions in differences in leisure behaviour from the literature reviewed.

For the qualitative analysis sampling was based on selection criteria either from the quantified behaviour of individuals or the subjective opinions of subjects who felt their position was relevant to the study.

3.7 Summary of Methodologies

This thesis describes a process whereby a variety of separate studies were carried out to describe and examine the leisure behaviour of older people. Quantitative techniques provide a cross-sectional study of leisure behaviour, well-being and related concepts. In an attempt to understand further some of the issues highlighted from this database of information qualitative methodologies were employed to explore the issues under question. This process is described as one model of integrating quantitative and qualitative methodologies (Steckler et al., 1992).

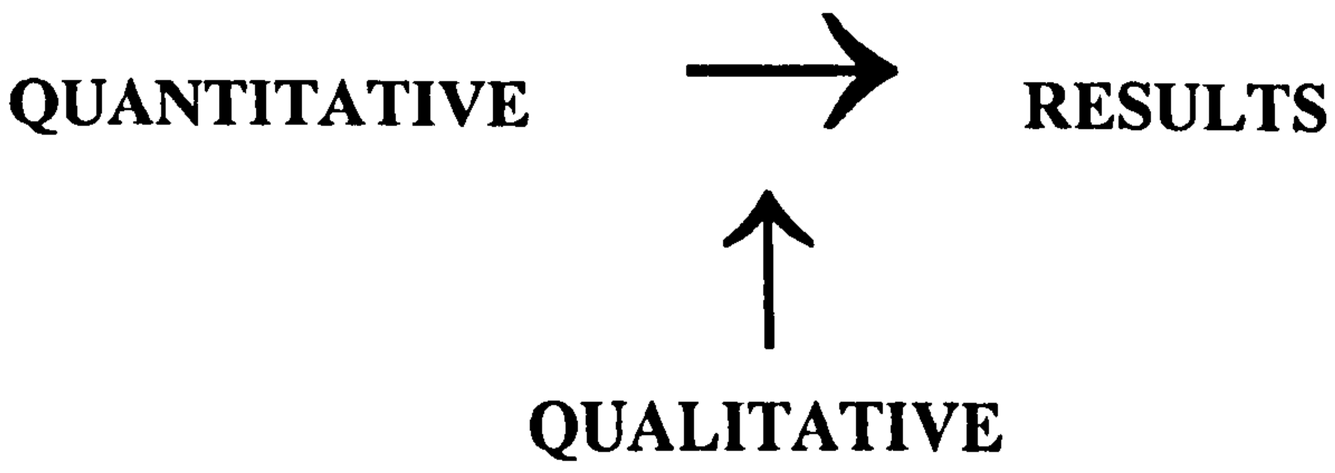

Figure 3: Model of Integrating Methodologies

Source: Steckler et al., 1992

Few studies on leisure and ageing have linked methodologies in this way to cover a wide range of variables.

CHAPTER FOUR

QUANTITATIVE STUDIES OF LEISURE AND AGEING

4. QUANTITATIVE STUDIES OF LEISURE AND AGEING

4.1 Cross-Sectional Analysis of the Leisure Behaviour of Older People and the Association Between Leisure Behaviour and Well-being and Socio-cultural Factors

4.1.1 Introduction

Table 5 shows the part of the study discussed in this section. There is a dearth of empirical work investigating the leisure behaviour of older people. Previous research has primarily focused upon the relationship between a small number of variables and leisure behaviour. No previous study has attempted to look at such a wide range of factors and the inter-relation between these factors. Thus for the present study it was necessary to construct an interview schedule which would cover the relevant factors which may lead to a greater understanding of the leisure behaviour of older people.

TABLE 5: Study Focus of Section 4.1

METHOD	MEASURES	Pages
Structured Questionnaire	Leisure behaviour	78-172
	Process of activity adoption	173-174
	Barriers and enhancers to leisure	175-181
	Attitudes to leisure and health	181-182
	Knowledge of leisure services	182-191
	Well-being and Social Support	192-208

From a review of the literature certain data collection problems became apparent. Firstly, there is a lack of information on methods of collecting data for this age group. Researchers in this area have used a wide variety of techniques and measurements to achieve their objectives. Thus, there are only a small number of standardised tools for

data collection. In addition to this a large proportion of work in this area is of American origin and hence the tools and methods had not been previously applied in this country. It was necessary, therefore, to draw on a wide variety of studies of ageing and health to compile the interview schedule. Secondly, the lack of British empirical work and the abundance of North American research in this area meant that the findings concerning leisure time for an older British population were scarce. In particular no previous extensive data collection had taken place for the older population of Liverpool. This necessitated the creation of a new interview schedule which could collect a large database of information, to guide the subsequent phases of the project.

4.1.1.1 Construction of an interview schedule

An extensive review of the literature was carried out and contact was made with other researchers who have previously worked in this area to identify variables and areas relevant to this study. In addition the various methods for collecting data were reviewed. This involved the study of previous leisure and health related research literature including the review of tests designed to assess various psychological variables, such as life satisfaction and self esteem. An interview schedule was devised based upon the review findings. The schedule was designed to collect the following information:-

- Certain demographic variables such as sex, age, marital status, education, (previous) occupation and type of residence.
- Information on the subject's leisure behaviour over the previous twelve months - with detailed questioning on the subject's leisure repertoire over the previous four weeks.
- The activity adoption process.
- Satisfaction with leisure repertoire and the subject's perception of barriers which may inhibit participation.
- Attitudes towards leisure and health.
- Knowledge of services within the community and use of these services.
- Measures of personal control, life satisfaction, social support, self esteem, and malaise.

For the pilot study the interview schedule was administered to 15 men and 20 women over the age of 60. Factors that were assessed during the pilot study included: the acceptability of the questionnaire to subjects; the length, content and format of the questionnaire and the final data produced from administering the questionnaire.

Following the pilot study, the interview schedule was amended in the following ways:-

- **The length of the questionnaire -** Interviewing time to complete administration of the questionnaire was between two and four hours. The length of the schedule, and the subsequent time involved for administration, was mentioned by 90% of the sample. The interviewer also noted problems with interviewee concentration and interest when staying with subjects for this length of time. This was detrimental to the data collection at the final stages of the interview. Therefore, the existing format was shortened.

- **The content of the questionnaire -** Partly for reasons already mentioned the stress and anxiety measures was omitted due to length of measures which took on average 30 minutes to complete. In addition, some subjects reported feeling uncomfortable at answering certain questions within the stress measure. The content of the questionnaire was also changed to include certain issues/themes that were proposed by subjects which were not specifically addressed within the original questionnaire. An example of the latter was the inclusion of a question on the availability of transport.

- **The format of the questionnaire -** It became evident from the pilot study that certain topics naturally followed others and that certain questions were best answered once a rapport had been established with the subject. It was possible from the pilot work to highlight those topics which subjects felt most comfortable with. The ordering of topics was explored between interviews to help determine the optimal point to introduce those questions that subjects felt most uncomfortable with. An example of the latter was the timing of the question dealing with the death of a spouse.

- **The wording of the questionnaire -** At the early stages of the pilot study it became apparent that subjects were confused by the wording of certain questions. It was also

necessary to change the format of some closed questions to an open style. The open questions provided more information on the subjects' perceptions concerning the topic the question addressed.

The final interview schedule is shown in Appendix 1.

4.1.2 Methods

4.1.2.1 Sampling

The sample was designed in order to reflect certain concepts which have been highlighted as lacking in other research projects to date. It was apparent from the literature that older people should not be treated as one homogenous group (Long and Wimbush, 1980). The leisure behaviour and influences upon a 60 year old may be very different from those of a 90 year old. Thus it was necessary to group the sample into age bands. In addition there is a well documented distinction between male and female leisure behaviour (Bernard, 1990). Approximately equal numbers of males and females in the sample would enable identification of differences in their leisure behaviour.

In addition it was essential for the sampling design to allow examination of differences in leisure behaviour between those living in residential accommodation and those living in their own homes. To explore this further, the sample was divided into subjects living within residential accommodation (to include residential homes and sheltered accommodation) and subjects living in their own home within the community (non-residential accommodation). This distinction is particularly relevant in the light of the recent Government White Paper which placed emphasis upon elderly people being encouraged to remain in their own homes and away from residential care.

Within the community the availability and type of services provided is likely to have a strong influence upon behaviour. Hence for the present research project it was necessary to obtain a random sample of people from all sectors of the community in order to examine the effect of differences in service provision.

The use of electoral registers was adopted to obtain a sample of those living in their own homes. In Liverpool there are seven constituencies which are divided into wards. There are five or six wards in each parliamentary constituency. A list of streets and residents is available for every area within each ward. Four streets were randomly selected (by use of random number tables) from each area. Every address was contacted with an introductory letter (Appendix 2) to the project. This letter explained the reasons for the project and the procedures involved and highlighted that Age Concern, Liverpool was supportive of the work. It stated that the researcher would call the following day to ask if anyone in the household was willing to participate in the project. The volunteers either took part in the interview immediately or an appointment was made for a mutually convenient time. In total 1561 households were given 2+ visits in an attempt to make contact. Of these, contact was made with 1273 households (81.5%). The table below indicates the response at each household:

TABLE 6: Interview Response Rate

Away for duration	20
House empty	25
No one in household over age group	833
Interviews	304
Refusals	91

Thus the response rate to the survey was 77%.

To obtain the sample of those living within residential accommodation, a comprehensive list of all the residential homes and sheltered accommodation within the Liverpool area (as defined by the County Council Boundary) was compiled. This was completed using several different sources of information, namely - local telephone directories, library information and 'Age Concern, Liverpool' publications. The accommodation was divided into postcode areas. Accommodation was randomly selected (by the use of random number tables) from each area and managers contacted. Attention was given to contact

residents in state owned accommodation as well as privately run accommodation. Each site was accessed initially through the manager/warden and where appropriate through higher management or resident bodies. Once access had been gained, the researcher approached those within the accommodation to explain the project and procedures involved. An appointment with volunteers was made for the interview to take place in a private part of the accommodation.

Due to the nature of the introduction process it was impossible to indicate an accurate response rate of people approached in residential accommodation. In addition this was hampered by the unavoidable task of negotiating access to individuals with residential home staff.

The total sample comprised of 140 male and 164 female subjects over the age of 60. These subjects were representative of different types of residential settings and divided into three age bands. A minimum of 20 males and 20 females were sought from each age band. This was achieved for all but one category of subjects; 60-70 year old males in residential accommodation. The following table denotes how the sample was divided:-

TABLE 7: Sample Design of Cross-Sectional Studies

HOUSEHOLDS					
MALE			FEMALE		
60-70	71-80	81+	60-70	71-80	81+
41	22	20	38	21	20

RESIDENTIAL					
MALE			FEMALE		
60-70	71-80	81+	60-70	71-80	81+
16	21	20	20	29	36

4.1.2.2 Fieldwork

The fieldwork began in April 1993 and was completed in January 1994. Wherever possible the interviews took place with only the interviewee and the researcher present. Each subject was provided with a verbal description of the main aims of the project, the procedures involved and confidentiality aspects. The subject provided written consent and the interview schedule was administered.

4.1.2.3 Measures of Participation

- **Leisure Repertoire:** Two measures of leisure repertoire were possible from the study questions: (a) four week leisure repertoire and (b) 12 month leisure repertoire. Each measure was calculated from the number of activities each subject reported over the time period.

In addition the repertoire of types of activities were calculated representing the number of each type of activity in subjects' repertoires. The types of activity repertoires and a description of how they were coded is given below:

1. Home Based Activity Repertoire
2. Out of Home Activity Repertoire
3. Social Activity Repertoire
4. Isolated Activity Repertoire
5. Active Activity Repertoire
6. Sedentary Activity Repertoire

The first four categories of activity were coded from information asked of the subjects. Thus home based and out of home participation was determined by asking subjects 'Where did you partake in this activity?' and social and isolated activities was coded from asking subjects 'Did anyone else partake in this activity with you?'. Sedentary and active activities were categorised in accordance with the activities classified under Physical Activity Ratios (PAR). Activities included within ratios above 2.8

were classified as active. Conversely activities included within PAR's under 2.8 were grouped as sedentary (Department of Health, 1991). The sedentary category included all those activities which did not involve a physical or energetic component. Examples included sitting relaxing, watching television, chatting and jigsaws. Active being defined as all those activities which are characterised by energetic or physical action. It includes all activities with a physical component. Examples include tennis, walking, exercises, shopping and gardening.

- **Frequency of Participation**: The study asked questions concerning the number of times each activity reported was participated in over the four week period. Thus it was possible to calculate total frequency of participation in all leisure activities plus frequency of participation in different types of leisure activities (using the coding described above under leisure repertoire).

Results were subjected to analysis of variance for the number and type of activities reported. Pearson Chi square were calculated to investigate relationships between variables. A difference or an association was deemed to be present if the probability of it being due to chance was estimated at less than 5% ($p<0.05$). All analysis was performed using the Statistical Package for the Social Sciences (SPSS).

4.1.3 Results

Description of the sample:

98.4% of the sample reported their ethnicity as white. 35.9% of sample were married, 12.5% were single, 4.3% were separated and 47.4% were widowed. Of those separated or widowed 74.1% had been for over 5 years. 20.7% of sample had no children while 75.9% of sample had between 1 and 3 children. This ranged upwards to one subject who had 9 children.

99.3% of sample had had a full time education. This was completed at 14 years or younger for 78.7% of the sample. 87.9% of the sample reported having no

qualifications. Of those that had qualifications these included matriculation (0.3%), school leaving certificate (2.4%), professional qualification (1.7%), typing/shorthand (1.7%), bookkeeping (0.7%), degree (1.0%), apprenticeship (2.0%), teaching (1.7%), diploma (0.3%), and 'O' levels (0.3%).

Only 3.6% of subjects were still in employment. 44.2% of those not employed at time of survey had finished working over 20 years ago, 27.1% between 10 and 19 years ago and 15.1% between 5 and 9 years ago. The remainder of the sample had retired within the previous two years to the survey.

36% of subjects who lived in their own homes lived alone. Of those living in the community and not living alone, 76% lived with their spouse, 16.5% with their family and 7.4% with their spouse and family. The percentage of subjects from each ward was on average 3% of the sample. A slightly greater response was found in three wards which had a high proportion of residential homes or sheltered housing. These were the wards of Allerton, Grassendale and Warbreck.

95.1% of the sample had lived in Liverpool for over 20 years. 72% having been born in Liverpool. When asked "Do you feel part of the community?" 69.6% responded yes. 57 of 211 qualified this by saying that they liked the city and the people, 53 of 211 said they felt part of the community because they had been born and bred in Liverpool, 43 of 211 felt attached to Liverpool and 34 of 211 felt settled here. 7 of 211 said it was because their family was in Liverpool.

Of those who did not feel part of the community - 65 of 93 felt that things had changed since they retired and that others were unfriendly, 22 of 93 said they preferred to keep to themselves and 6 of 93 had just moved into Liverpool.

In summary the majority of the sample were white, not living with a spouse and had between 1 and 3 children. Of those living in the community 36% lived alone. Although most of the subjects had had a full time education a large majority had no educational

qualifications. In addition most of the sample had been born in Liverpool and reported feeling part of the community.

4.1.3.1 Cross-sectional analysis of the leisure behaviour of older people

Age, sex and type of residence were used as the main independent variables with which to examine the leisure behaviour of the sample.

4.1.3.1.1 Leisure Repertoire

Leisure Repertoire is defined as the range of leisure activities an individual involves themselves in (Mobily et al., 1984). The results presented within this section aim to examine the extent and content of the samples' leisure repertoires, which by definition does not take account of frequency of participation.

The following section examines the total number of activities reported (over the two time periods) by age, sex and residence. The content of leisure repertoire is also assessed in terms of the number of home based, out of home, sedentary , active, social and isolated activities within subjects' repertoires and how involvement in each type of activity differs according to age, sex and residence.

- **Leisure Repertoire: Total Repertoire of Activities**

To give an indication of the quantity of activities included in subjects' leisure repertoires, the number of reported activities over the 12 month period was assessed. Analysis of the number of activities (reportedly undertaken in the year prior to the interview) of the total sample revealed a significant difference between the three age groups ($F_{2,301}$= 5.93 $p<0.01$). The mean values found for each age group is shown in Table 8. These figures indicate that the older age groups are involved in a lesser number of leisure activities than the younger group. A multiple test analysis (Tukey) showed that the difference was significant at the 5% level between the youngest and

oldest group and between the youngest group and subjects aged between 71 and 80 years of age.

TABLE 8: Mean (SD) Number of Reported Activities (12 Month Period) by Age of the Total Sample

AGE GROUPS		
60-70 **N=115**	**71-80** **N=93**	**81+** **N=96**
8.03 ±2.81	7.16 ±2.73	6.83 ±2.31

$F_{2,301}$= 5.93 p<0.01

Total sample analysis revealed no significant difference in the number of twelve month reported activities between males and females (Table 9).

TABLE 9: Mean (SD) Number of Reported Activities (12 Month Period) by Sex of the Total Sample

SEX	
MALE **N=140**	**FEMALE** **N=164**
7.60 ±2.68	7.21 ±2.68

$F_{1,302}$=1.63 p>0.05

A significant difference was revealed for the whole sample between the total number of activities reported in the last year and the subjects' type of residence ($F_{1.202}$=27.44 p<0.0001); subjects living in their own homes (household sample) reporting a greater number of activities compared to subjects from residential accommodation. The mean number of activities reported is shown in the table below:

TABLE 10: Mean (SD) Number of Reported Activities (12 Month Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL N=142	**HOUSEHOLDS N=162**
6.56 ±2.68	8.11 ±2.44

$F_{1,302}=27.44$ $p<0.0001$

Interestingly, analysis of the total samples' reported activities over the previous 4 weeks to interview revealed no age or accommodation differences but did reveal a significant difference in the total number of activities reported by males and females. This is shown in the tables below:

TABLE 11: Mean (SD) Number of Reported Activities (4 Week Period) by Age of the Total Sample

AGE GROUPS		
60-70 N=115	**71-80 N=93**	**81+ N=96**
4.84 ±2.04	4.79 ±1.86	4.87 ±1.81

$F_{2,301}= 0.042$ $p>0.05$

TABLE 12: Mean (SD) Number of Reported Activities (4 Week Period) by Sex of the Total Sample

SEX	
MALE N=140	**FEMALE** N=164
5.11 ±1.84	4.59 ±1.94

$F_{1,302}=5.88$ $p<0.05$

TABLE 13: Mean (SD) Number of Reported Activities (4 Week Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL N=142	**HOUSEHOLDS** N=162
4.71 ±2.06	4.93 ±1.77

$F_{1,302}=1.01$ $p>0.05$

Therefore in summary, significantly greater numbers of activities were reported by subjects in the younger age groups and in the household sample over the twelve month period and by males in the four week period. The latter finding of difference between males and females in the size of total leisure repertoire in contrary to the findings of Mobily et al. (1984) who found females to report more activity participation.

Leisure repertoire size was also examined for the female sample, the male sample, the sample of subjects from households and the sample from residential accommodation.

ANALYSIS OF TOTAL REPERTOIRE BY GENDER

Analysis of the female sample found no significant difference between the size of the leisure repertoires reported by females of the different age groups either over the 12 month period ($F_{2,161}$=1.47 p>0.05) or the 4 week period ($F_{2,161}$=0.17 p>0.05). This is shown in tables 14 and 15. However a significant difference was evident when the female sample was analysed by residence over the 12 month period ($F_{1,162}$=9.97 p<0.01); females living in their own homes reporting a greater number of activities (Table 16). This did not hold for the 4 week analysis ($F_{1,162}$=0.25 p>0.05) as shown in table 17.

TABLE 14: Mean (SD) Number of Reported Activities (12 Month Period) by Age of the Female Sample

AGE GROUPS		
60-70 N=58	**71-80 N=50**	**81+ N=56**
7.65 ±2.95	7.14 ±2.52	6.80 ±2.46

$F_{2,161}$=1.47 p>0.05

TABLE 15: Mean (SD) Number of Reported Activities (4 Week Period) by Age of the Female Sample:

AGE GROUPS		
60-70 N=58	**71-80 N=50**	**81+ N=56**
4.47 ±1.98	4.64 ±1.95	4.66 ±1.94

$F_{2,161}$=0.17 p>0.05

TABLE 16: Mean (SD) Number of Reported Activities (12 Month Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL N=85	**HOUSEHOLDS N=79**
6.59 ±2.45	7.87 ±2.76

$F_{1,162}=9.97$ $p<0.01$

TABLE 17: Mean (SD) Number of Reported Activities (4 Week Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL N=85	**HOUSEHOLDS N=79**
4.51 ±1.71	4.66 ±2.15

$F_{1,162}=0.25$ $p>0.05$

The male sample analysis revealed significant differences according to age group (Table 18) and residence (Table 19) over the 12 month period. Post hoc analysis found the age group difference to exist between the youngest and the oldest subjects. However, this difference was not evident for age ($F_{2,137}=0.25$ $p>0.05$) or residence ($F_{1,138}=3.04$ $p>0.05$) when analysis of the 4 week period was carried out (Tables 20-21).

TABLE 18: Mean (SD) Number of Reported Activities (12 Month Period) by Age of the Male Sample

AGE GROUPS		
60-70 N=57	**71-80 N=43**	**81+ N=40**
8.42 ±2.61	7.18 ±3.01	6.87 ±2.07

$F_{1, 138} = 4.92\ p<0.01$

TABLE 19: Mean (SD) Number of Reported Activities (12 Month Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL N=57	**HOUSEHOLDS N=83**
6.53 ±2.46	8.34 ±2.60

$F_{1,138}=17.25\ p<0.001$

TABLE 20: Mean (SD) Number of Reported Activities (4 Week Period) by Age of the Male Sample

AGE GROUPS		
60-70 N=57	**71-80 N=43**	**81+ N=40**
5.21 ±2.06	4.95 ±1.77	5.15 ±1.59

$F_{2,137}=0.25\ p>0.05$

TABLE 21: Mean (SD) Number of Reported Activities (4 Week Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL N=57	**HOUSEHOLDS N=83**
4.79 ±1.93	5.34 ±1.75

$F_{1.138}$=3.04 p>0.05

Therefore in summary the gender based analysis found the female sample to have no age differences in the amount of activities in their repertoire but did find (over twelve month period) that females who lived in their own homes reported a higher number of activities compared to females in residential accommodation. Whereas the male sample reported age and residence difference in quantity of activities reported over the 12 month period; the older age groups and men in residential accommodation reporting a lower number of leisure pursuits.

ANALYSIS OF TOTAL REPERTOIRE BY RESIDENCE TYPE

The results for those subjects who comprised the household sample presented a difference between the age groups for the 12 month period ($F_{2,159}$= 3.19 p<0.05); the older groups reporting fewer leisure involvements (Table 22). This was not found for the 4 week period ($F_{2,159}$= 0.45 p>0.05) as shown in table 23. Although a significant difference was found (over the twelve month period) between the age groups, a Tukey test found no two groups significantly differed from any other at the 5% level.

TABLE 22: Mean (SD) Number of Reported Activities (12 Month Period) by Age of the Household Sample

AGE GROUPS		
60-70 N=79	71-80 N=43	81+ N=40
8.63 ±2.90	7.79 ±2.55	7.43 ±2.17

$F_{2,159}$= 3.19 p<0.05

TABLE 23: Mean (SD) Number of Reported Activities (4 Week Period) by Age of the Household Sample:

AGE GROUPS		
60-70 N=79	71-80 N=43	81+ N=40
4.82 ±2.12	4.93 ±1.28	5.15 ±1.48

$F_{2,159}$= 0.45 p>0.05

In addition it was found that there was a significant difference between males and females over the 4 week period ($F_{1,160}$= 9.35 p<0.01); males who live in their own homes reporting a wider repertoire than females living in their own homes. The same pattern was found over the 12 month period however this was not significant ($F_{1,160}$= 1.21 p>0.05). The mean values for the age groups and the sexes is shown in tables 24 and 25 below:

TABLE 24: Mean (SD) Number of Reported Activities (4 Week Period) by Sex of the Household Sample

SEX	
MALE N=83	**FEMALE** N=79
5.34 ±1.75	4.51 ±1.71

$F_{1,160}=9.35$ $p<0.01$

TABLE 25: Mean (SD) Number of Reported Activities (12 Month Period) by Sex of the Household Sample

SEX	
MALE N=83	**FEMALE** N=79
8.34 ±2.60	7.87 ±2.76

$F_{1,160}= 1.21$ $p>0.05$

The residential sample analysis found no significant differences according to age or sex over either of the two time periods as shown in tables 26 to 29.

TABLE 26: Mean (SD) Number of Reported Activities (12 Month Period) by Age of the Residential Sample

AGE GROUPS		
60-70 N=36	71-80 N=50	81+ N=56
6.72 ±2.09	6.62 ±2.81	6.41 ±2.32

$F_{2,139}$= 0.20 p>0.05

TABLE 27: Mean (SD) Number of Reported Activities (4 Week Period) by Age of the Residential Sample

AGE GROUPS		
60-70 N=36	71-80 N=50	81+ N=56
4.86 ±1.90	4.66 ±2.26	4.66 ±2.00

$F_{2,139}$= 0.13 p>0.05

TABLE 28: Mean (SD) Number of Reported Activities (12 Month Period) by Sex of the Residential Sample

SEX	
MALE N=57	FEMALE N=85
6.53 ±2.44	6.59 ±2.45

$F_{1,140}$=0.22 p>0.05

TABLE 29 **Mean (SD) Number of Reported Activities (4 Week Period) by Sex of the Residential Sample**

SEX	
MALE	**FEMALE**
N=57	**N=85**
4.79	4.66
±1.93	±2.15

$F_{1,140} = 0.14$ $p>0.05$

In summary the household sub-sample found that the older age groups within it reported significantly narrower repertoires compared to the younger subjects and that a pattern of males reporting more activities to females was evident (although only significant over the four week period). Of those subjects who lived in residential accommodation there appeared no significant differences in the size of leisure repertoire according to age or sex.

Table 30 shows the average size of the leisure repertoires that were reported by each sub-sample over the previous 12 months.

TABLE 30: Mean (SD) Number of Reported Activities (12 Week Period) by Residence, Sex & Age of the Stratified Sample

	HOUSEHOLDS					
	MALE			FEMALE		
	60-70 N=41	71-80 N=22	81+ N=20	60-70 N=38	71-80 N=21	81+ N=20
TOTAL SAMPLE	9.00 ±2.65	8.00 ±2.61	7.35 ±2.15	8.24 ±3.13	7.57 ±2.52	7.50 ±2.23

	RESIDENTIAL					
	MALE			FEMALE		
	60-70 N=16	71-80 N=21	81+ N=20	60-70 N=20	71-80 N=29	81+ N=36
TOTAL SAMPLE	6.94 ±1.87	6.33 ±3.19	6.40 ±1.93	6.55 ±2.28	6.82 ±2.52	6.41 ±2.53
RESIDENTIAL HOMES	7.87 ±1.72	4.54 ±1.75	5.90 ±1.37	5.25 ±2.65	6.15 ±2.19	6.15 ±2.67
SHELTERED HOUSING	6.00 ±1.60	8.30 ±3.33	7.00 ±2.39	7.42 ±1.56	8.10 ±2.72	7.10 ±2.07

A comparison was made between the household sex groups and the residential sex groups (for the total sample). A significant difference was found between the number of activities reported by 60-70 year old males in the two types of residence ($F_{1,55}$=8.04 $p<0.01$). Those living in households reported significantly larger leisure repertoires. A similar finding was reported for 60-70 year old females between residential

accommodation and households ($F_{1,56}$=4.52 $p<0.05$). Similar comparisons between the other age groups found no significant differences.

In addition no such differences were evident for the leisure repertoire as identified over the 4 week period (Table 31).

TABLE 31: Mean (SD) Number of Reported Activities (4 Week Period) by Residence, Sex & Age of the Stratified Sample

	HOUSEHOLDS					
	MALE			FEMALE		
	60-70 N=41	71-80 N=22	81+ N=20	60-70 N=38	71-80 N=21	81+ N=20
TOTAL SAMPLE	5.31 ±2.10	5.27 ±1.20	5.45 ±1.50	4.29 ±2.03	4.57 ±1.29	4.85 ±1.42

	RESIDENTIAL					
	MALE			FEMALE		
	60-70 N=16	71-80 N=21	81+ N=20	60-70 N=20	71-80 N=29	81+ N=36
TOTAL SAMPLE	4.94 ±1.98	4.62 ±2.20	4.85 ±1.66	4.80 ±1.88	4.69 ±2.33	4.56 ±2.18
RESIDENTIAL HOMES	4.88 ±2.42	3.18 ±1.33	4.55 ±1.64	3.50 ±1.51	3.90 ±1.45	4.00 ±1.96
SHELTERED HOUSING	5.00 ±1.60	6.20 ±1.87	5.22 ±1.72	5.67 ±1.61	6.20 ±2.97	6.00 ±2.16

A SUMMARY OF THE KEY FINDINGS ON SIZE OF TOTAL REPERTOIRE

- Significant differences over the twelve month period were found in the number of activities in leisure repertoire between subjects of different age groups and types of residence.; narrower repertoires reported by older subjects and those in residential accommodation.

- Over the four week period a significant difference was found between males and females; males reporting wider repertoires.

- Both the male and female sample when analysed independently found that subjects in residential accommodation reported fewer activities. However, only the male sample found a difference in reporting associated with age, younger males reporting wider repertoires.

- Subjects who lived in their own homes had an age pattern and a gender pattern to leisure behaviour; older age groups (over twelve month period) and females (over four week period) reporting fewer activities. There was no apparent age or sex differences in the number of reported activities by those living in residential accommodation.

The analysis also examined the types of activities that the sample reported.

Figure 4 and Figure 5 depict the activities most frequently reported by subjects (regardless of frequency of participation) over the 12 month and 4 week periods. A complete list of the activities mentioned and the percentage each represents of the total number of reported activities can be found in Appendix 3.

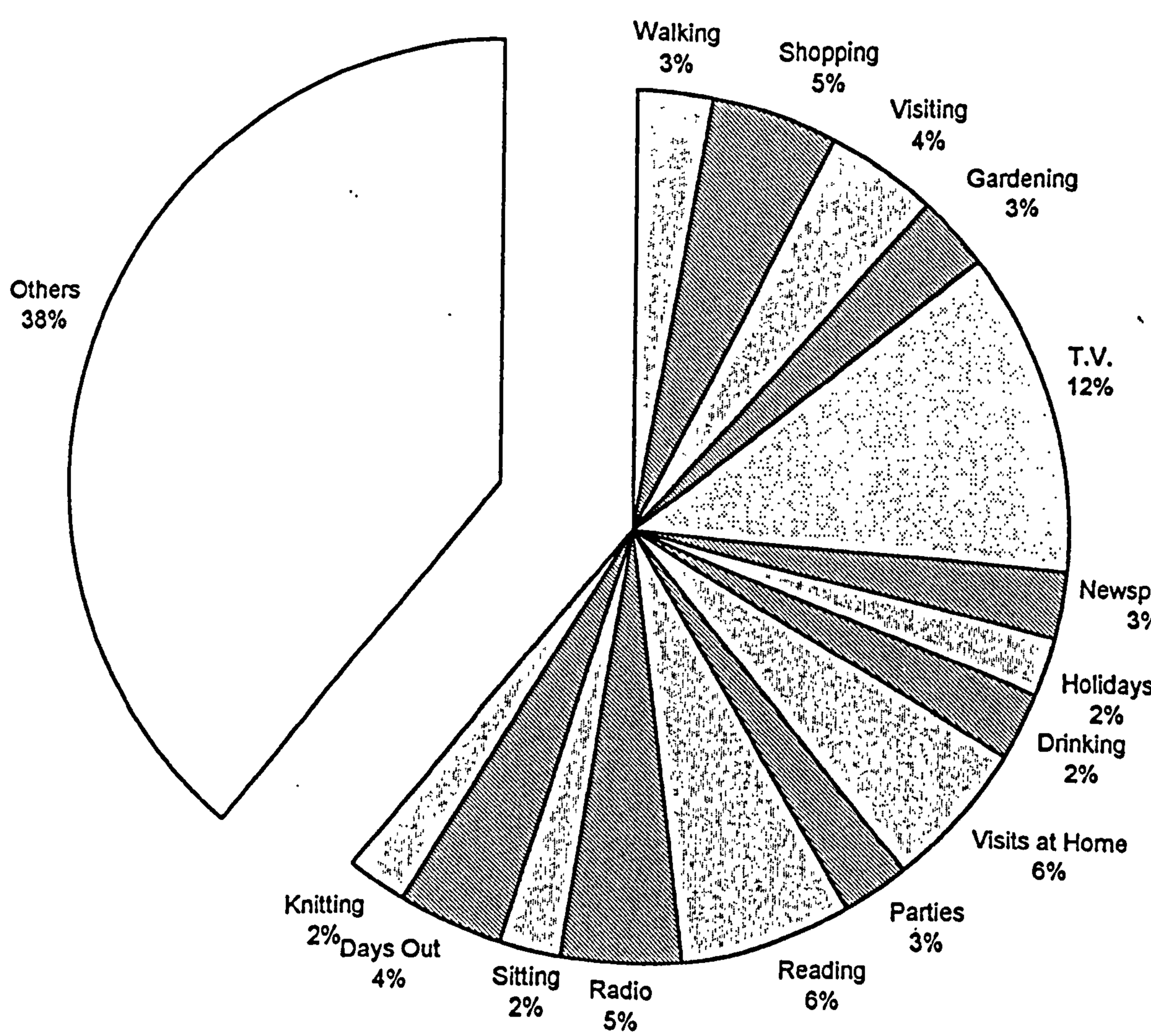

Figure 4: Range of Activities Reported over the Twelve Month Period

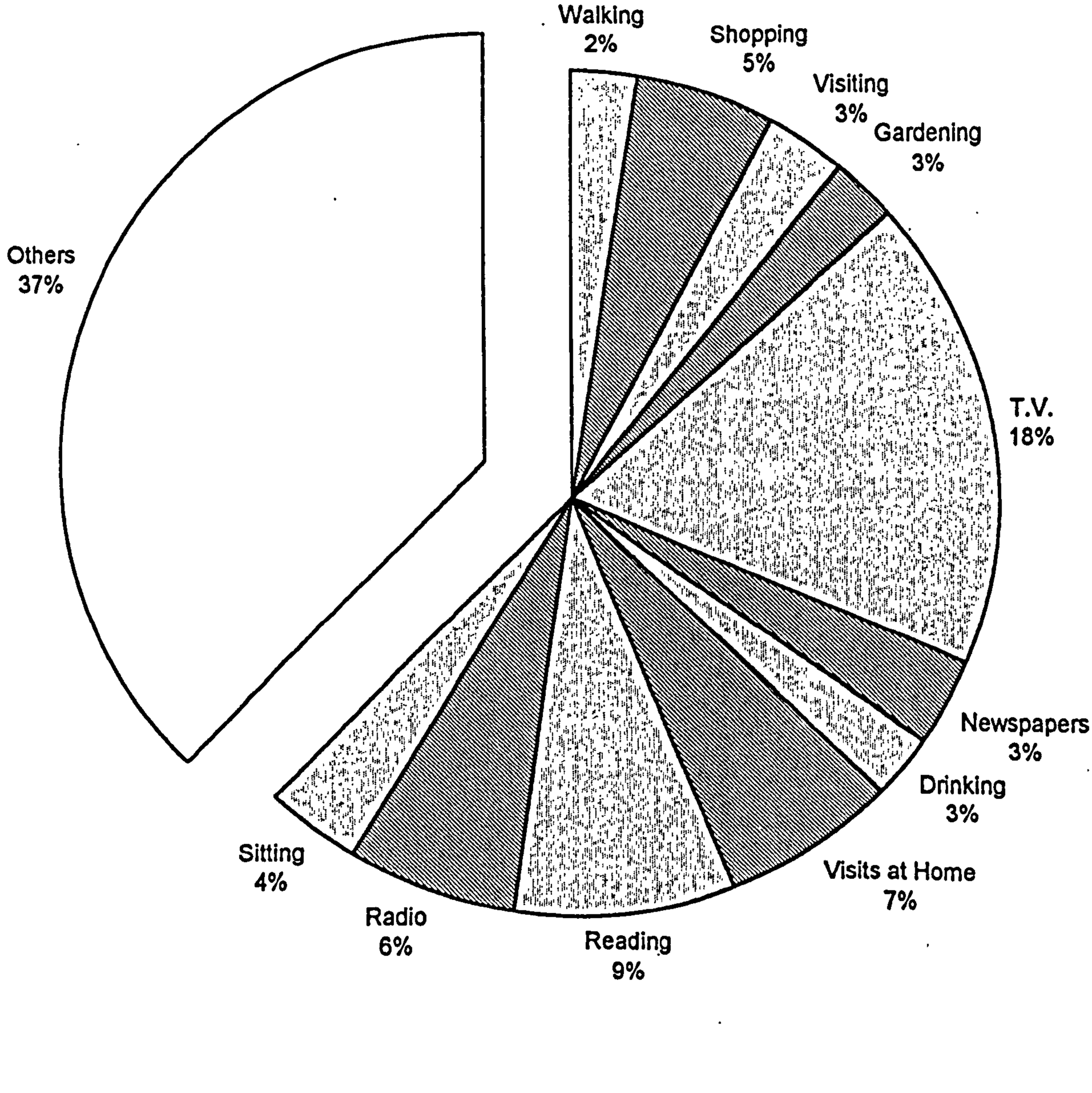

Figure 5: Range of Activities Reported over the Four Week Period

The following table shows the percentage of subjects who reported certain selected activities. Data from other sources is used as a means of comparison. All the data collected related to people over the age of 60 years. A diverse percentage of subjects reporting some types of activities (e.g. gardening) was found between studies. However in other instances the percentage of subjects who reported participating in an activity (e.g. Bowls) was similar.

TABLE 32: Four Week Participation Rates in Selected Activities

ACTIVITY	Percentage of subjects reporting participation	Percentage participation rate indicators from other data sources
Walking	11.5	32.5 (a) 82.5 (c)
Visiting Others/ Visits at Home	15.5	92.5 (b) 92.5 (a)
Gardening	12.2	48.5 (b) 47.5 (d) 60.0 (a)
Television Watching	85.9	98.0 (a) 97.5 (b)
Going to a Pub	11.8	18.5 (c) 29.5 (d)
Reading	40.8	58.5 (a) 58.5 (b) 57.0 (d)
Radio	30.3	79.5 (b) 84.5 (a)
Knitting	10.2	3.5 (a) 27.5 (b) 24.5 (d)
Visits to Library	2.6	29.0 (b)
Theatre	0.9	7.0 (b)
Cinema	0.7	1.0 (d)
Swimming	2.6	2.5 (c)
Dancing	2.6	4.5 (b)
Keep Fit/ Exercises	2.3	2.5 (c)
Bowls	4.0	4.0 (a)
Golf	1.3	2.5 (c)

(a) GHS, 1993 (4 week reference period) Foster et al., 1995

(b) GHS, 1987 - Source: Carnegie Report (Midwinter, 1992) (4 week reference period)

(c) Health & Lifestyles (1987) (2 week reference period) Cox, 1987

(d) Social Trends (1989) - Source: Carnegie Report (Midwinter, 1992) (4 week reference period)

Table 33 shows the percentage of subjects who reported participation in sport in the 4 week period compared to data presented by the Carnegie Enquiry (1992); the percentage reporting sport participation was similar between the two data sources.

TABLE 33: Percentage of Participation in Sport

	Outdoor Sport[1]	Indoor Sport[2]	Watching Sport[3]
Study	18.4	5.9	7.5
Carnegie Enquiry	17.0	5.0	4.0

[1] Study percentage includes: walking, fishing, bowls, ski-ing, golf, jogging,cycling,tennis + cricket.
[2] Study percentage includes: exercises, swimming, badminton, keep fit, gym, darts + snooker/ pool
[3] Study percentage includes: going to sporting events and watching sport on television

Leisure Repertoire: Home Based and Out of Home Activity Participation

63.7% of the reported activities participated in over the prior twelve months to the interview were home based activities and the rest took place outside of the home. These percentages were reflected in those obtained from the 4 week analysis where 33.2% of reported activities took place outside of the home.

The bar chart below shows the mean number of home based and out of the home activities over the two time periods:

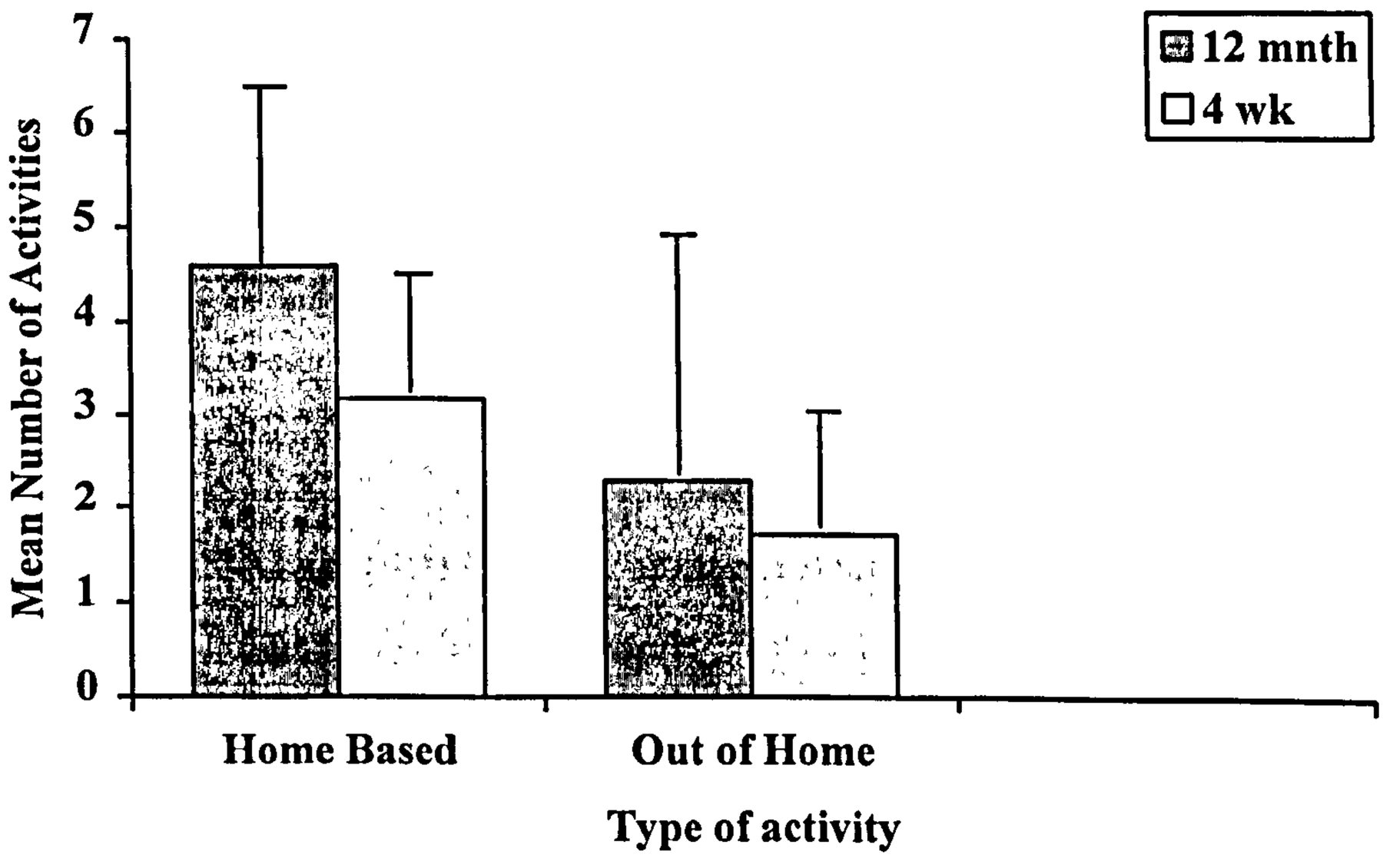

Figure 6 Mean (SD) Number of Home Based and Out of Home Activities Over Two Time Periods

ANALYSIS OF HOME BASED ACTIVITIES IN REPERTOIRE

Table 34 to Table 36 show that the mean number of home based activities reported did not differ according to age ($F_{2,301}$=1.48 p>0.05), sex ($F_{1,302}$=1.94 p>0.05) or accommodation ($F_{1,302}$=4.60 p>0.05) over the 12 month period. This was the same for the 4 week time period as shown in tables 37 and 39.

TABLE 34: Mean (SD) Number of Home Based Activities (12 Month Period) by Age of the Total Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=115	**N=93**	**N=96**
4.25	4.63	4.58
±1.75	±1.82	±1.73

$F_{2,301}$=1.48 p>0.05

TABLE 35: Mean (SD) Number of Home Based Activities (12 Month Period) by Sex of the Total Sample

SEX	
MALE	**FEMALE**
N=140	**N=164**
4.32	4.60
±1.56	±1.92

$F_{1,302}$=1.94 p>0.05

TABLE 36: Mean (SD) Number of Home Based Activities (12 Month Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL N=142	**HOUSEHOLDS N=162**
4.70 ±1.91	4.27 ±1.61

$F_{1,302}$=4.60 p>0.05

TABLE 37: Mean (SD) Number of Home Based Activities (4 Week Period) by Age of the Total Sample

AGE GROUPS		
60-70 N=115	**71-80 N=93**	**81+ N=96**
3.07 ±1.55	3.18 ±1.26	3.30 ±1.35

$F_{2,301}$= 0.72 p>0.05

TABLE 38: Mean (SD) Number of Home Based Activities (4 Week Period) by Sex of the Total Sample

SEX	
MALE N=140	**FEMALE N=164**
3.22 ±1.35	3.14 ±1.45

$F_{1,302}$=0.25 p>0.05

TABLE 39: Mean (SD) Number of Home Based Activities (4 Week Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL N=142	**HOUSEHOLDS N=162**
3.18 ±1.37	3.17 ±1.44

$F_{1,302}=0.00$ $p>0.05$

Thus there were no significant age, sex or residence differences in the total samples' amount of home based activities within the reported repertoires.

ANALYSIS OF HOME BASED ACTIVITIES IN REPERTOIRE BY GENDER

Analysis of the home based participation of males and females in the sample (shown in table 40 to 47) found no difference in behaviour by age or residence except in the case of the 12 month reported activity involvement in home based activities by residence of the females in the sample ($F_{1,162}=5.22$ $p<0.05$); females living in their own homes reporting significantly greater homes based participation compared to females who live in residential accommodation (table 46).

TABLE 40: Mean (SD) Number of Home Based Activities (12 Month Period) by Age of the Male Sample

AGE GROUPS		
60-70 N=57	**71-80 N=43**	**81+ N=40**
4.23 ±1.56	4.65 ±1.81	4.10 ±1.22

$F_{2,137}=1.47$ $p>0.05$

TABLE 41: Mean (SD) Number of Home Based Activities (4 Week Period) by Age of the Male Sample

AGE GROUPS		
60-70 N=57	71-80 N=43	81+ N=40
3.25 ±1.58	3.30 ±1.19	3.10 ±1.17

$F_{2,137}=0.25$ $p>0.05$

TABLE 42: Mean (SD) Number of Home Based Activities (12 Month Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL N=57	HOUSEHOLDS N=83
4.29 ±1.54	4.37 ±1.60

$F_{1,138}=0.87$ $p>0.05$

TABLE 43: Mean (SD) Number of Home Based Activities (4 Week Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL N=57	HOUSEHOLDS N=83
3.07 ±1.22	3.33 ±1.43

$F_{1,138}=1.21$ $p>0.05$

TABLE 44: Mean (SD) Number of Home Based Activities (12 Month Period) by Age of the Female Sample

AGE GROUPS		
60-70 N=58	71-80 N=50	81+ N=56
4.28 ±1.93	4.62 ±1.84	4.93 ±1.95

$F_{2,161}$= 1.67 p>0.05

TABLE 45: Mean (SD) Number of Home Based Activities (4 Week Period) by Age of the Female Sample

AGE GROUPS		
60-70 N=58	71-80 N=50	81+ N=56
2.90 ±1.52	3.08 ±1.32	3.45 ±1.46

$F_{2,161}$= 2.13 p>0.05

TABLE 46: Mean (SD) Number of Home Based Activities (12 Month Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL N=85	HOUSEHOLDS N=79
4.25 ±1.69	4.93 ±2.06

$F_{1,162}$=5.22 p<0.05

TABLE 47: Mean (SD) Number of Home Based Activities (4 Week Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL N=85	HOUSEHOLDS N=79
3.26 ±1.47	3.01 ±1.44

$F_{1,162}=1.18$ $p>0.05$

Thus for both males and females similar amounts of home based activities were included in their repertoires whatever their age group, sex or residence type. With the exception of females who lived in their own homes who reported a significantly higher amount of home based activities when compared to females living in residential accommodation.

ANALYSIS OF HOME BASED ACTIVITIES IN REPERTOIRE BY RESIDENCE TYPE

No age or sex differences were evident for the sub sample of subjects from residential accommodation in their home based leisure behaviour or for the households sub sample. This is shown in tables 48 to 55.

TABLE 48: Mean (SD) Number of Home Based Activities (12 Month Period) by Age of the Residential Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=36	**N=50**	**N=56**
4.75	4.76	4.63
±1.70	±2.03	±1.95

$F_{2,139}= 0.79$ $p>0.05$

TABLE 49: Mean (SD) Number of Home Based Activities (4 Week Period) by Age of the Residential Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=36	**N=50**	**N=56**
3.19	3.08	3.27
±1.24	±1.43	±1.42

$F_{2,139}= 0.25$ $p>0.05$

TABLE 50: Mean (SD) Number of Home Based Activities (12 Month Period) by Sex of the Residential Sample

SEX	
MALE N=57	**FEMALE N=85**
4.37 ±1.60	4.93 ±2.06

$F_{1,140}$=3.00 p>0.05

TABLE 51: Mean (SD) Number of Home Based Activities (4 Week Period) by Sex of the Residential Sample

SEX	
MALE N=57	**FEMALE N=85**
3.07 ±1.22	3.26 ±1.47

$F_{1,140}$=0.64 p>0.05

TABLE 52: Mean (SD) Number of Home Based Activities (12 Month Period) by Age of the Household Sample

AGE GROUPS		
60-70 N=79	**71-80 N=43**	**81+ N=40**
4.03 ±1.73	4.88 ±1.55	4.53 ±1.38

$F_{2,159}$= 1.83 p>0.05

TABLE 53: Mean (SD) Number of Home Based Activities (4 Week Period) by Age of the Household Sample

AGE GROUPS		
60-70 N=79	71-80 N=43	81+ N=40
3.01 ±1.68	3.30 ±1.04	3.35 ±1.27

$F_{2,159}$= 0.97 p>0.05

TABLE 54: Mean (SD) Number of Home Based Activities (12 Month Period) by Sex of the Household Sample

SEX	
MALE N=83	FEMALE N=79
4.29 ±1.54	4.25 ±1.69

$F_{1,160}$=0.02 p>0.05

TABLE 55: Mean (SD) Number of Home Based Activities (4 Week Period) by Sex of the Household Sample

SEX	
MALE N=83	FEMALE N=79
3.32 ±1.43	3.01 ±1.44

$F_{1,160}$=1.92 p>0.05

Thus no differences in the inclusion of home based activity involvement were evident when the residential and household samples were analysed independently.

ANALYSIS OF OUT OF HOME ACTIVITIES IN REPERTOIRE

The mean number of out of home activities (reported over the 12 month period) significantly differed between the age groups ($F_{2,301}$= 14.29 p<0.0001). Tukey analysis revealed that the youngest group was significantly different from the other two age groups as shown in table 56.

TABLE 56: Mean (SD) Number of Out of Home Activities (12 Month Period) by Age of the Total Sample

AGE GROUPS		
60-70 N=115	71-80 N=93	81+ N=96
3.82 ±2.68	2.53 ±2.04	2.27 ±1.92

$F_{2,301}$= 14.29 p<0.0001

Males and females ($F_{1,302}$=6.05 p<0.05) and the residence groups ($F_{1,302}$= 62.70 p<0.0001) also differed in the reported number of out of home activities; males and subjects living in their own homes reporting larger amounts of out of home activities. This is shown in tables 57 and 58.

TABLE 57: Mean (SD) Number of Out of Home Activities (12 Month Period) by Sex of the Total Sample

SEX	
MALE N=140	FEMALE N=164
3.29 ±2.42	2.63 ±2.29

$F_{1,302}$= 6.05 p<0.05

TABLE 58: Mean (SD) Number of Out of Home Reported Activities (12 Week Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL N=142	**HOUSEHOLDS N=162**
1.89 ±1.66	3.85 ±2.51

$F_{1,302}$=62.70 p<0.001

The four week analysis did not find the same differences for age and accommodation although the same trends were found (tables 59 and 60). However, the number of out of home activities did significantly differ by gender (table 61); males reporting greater out of home participation compared to females.

TABLE 59: Mean (SD) Number of Out of Home Activities (4 Week Period) by Age of the Total Sample

AGE GROUPS		
60-70 N=115	**71-80 N=93**	**81+ N=96**
1.76 ±1.24	1.60 ±1.29	1.55 ±1.41

$F_{2,301}$= 0.77 p>0.05

TABLE 60: Mean (SD) Number of Out of Home Activities (4 Week Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL	**HOUSEHOLDS**
N=142	**N=162**
1.53	1.75
±1.43	±1.17

$F_{1,302}=2.24$ $p>0.05$

TABLE 61: Mean (SD) Number of Out of Home Activities (4 Week Period) by Sex of the Total Sample

SEX	
MALE	**FEMALE**
N=140	**N=164**
1.89	1.45
±1.25	±1.33

$F_{1,302}=8.77$ $p<0.01$

Thus younger subjects, males and those living in their own homes reported significantly more activities which took place outside of the home over the 12 month period. The same trends were found over the 4 week period, but this was only significant for the difference in behaviour between males and females.

ANALYSIS OF OUT OF HOME ACTIVITIES IN REPERTOIRE BY GENDER

No significant differences were evident within the male and female samples for the number of out of home activities reported in terms of each samples' age and residence sub-groups for the four week analysis (tables 62 to 65). However the 12 month reports of out of home activities differed by age ($F_{2,137}$=7.34 $p<0.001$) and residence ($F_{1,138}$=23.91 $p<0.001$) for the male sample and significant differences were also evident between age groups ($F_{2,161}$= 7.08 $p<0.01$) and residence types ($F_{1,162}$=35.70 $p<0.001$) for the female sample; younger subjects and those living in their own homes reporting greater amounts of out of home activities. This is shown in tables 66 to 69.

TABLE 62: Mean (SD) Number of Out of Home Activities (4 Week Period) by Age of the Male Sample

AGE GROUPS		
60-70 N=57	71-80 N=43	81+ N=40
1.97 ±1.22	1.65 ±1.13	2.02 ±1.39

$F_{2,137}$=1.13 $p>0.05$

TABLE 63: Mean (SD) Number of Out of Home Activities (4 Week Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL N=57	HOUSEHOLDS N=83
1.72 ±1.37	2.00 ±1.14

$F_{1,138}$=1.72 $p>0.05$

TABLE 64: Mean (SD) Number of Out of Home Activities (4 Week Period) by Age of the Female Sample

AGE GROUPS		
60-70 N=58	71-80 N=50	81+ N=56
1.57 ±1.23	1.56 ±1.43	1.21 ±1.33

$F_{2,161}$= 1.29 p>0.05

TABLE 65: Mean (SD) Number of Out of Home Activities (4 Week Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL N=85	HOUSEHOLDS N=79
1.40 ±1.47	1.49 ±1.16

$F_{1,162}$=0.20 p>0.05

TABLE 66: Mean (SD) Number of Out of Home Activities (12 Month Period) by Age of the Male Sample

AGE GROUPS		
60-70 N=57	71-80 N=43	81+ N=40
4.19 ±2.61	2.58 ±2.11	2.78 ±2.07

$F_{2,137}$=7.34 p<0.001

TABLE 67: Mean (SD) Number of Out of Home Activities (12 Month Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL	**HOUSEHOLDS**
N=57	**N=83**
2.18	4.06
±1.71	±2.54

$F_{1,138}$=23.91 p<0.001

TABLE 68: Mean (SD) Number of Out of Home Activities (12 Month Period) by Age of the Female Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=58	**N=50**	**N=56**
3.45	2.48	1.91
±2.72	±2.00	±1.73

$F_{2,161}$= 7.08 p<0.01

TABLE 69: Mean (SD) Number of Out of Home Activities (12 Month Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL	**HOUSEHOLDS**
N=85	**N=79**
1.69	3.63
±1.61	±2.48

$F_{1,162}$=35.70 p<0.001

Thus the 12 month analysis found age and residence related differences in out of home activity behaviour for both males and females. This was not significantly reported by the 4 week data.

ANALYSIS OF OUT OF HOME ACTIVITIES IN REPERTOIRE BY RESIDENCE TYPE

Tables 70 to 73 show that there were no significant differences within the residential samples' out of home participation in terms of age or sex.

TABLE 70: Mean (SD) Number of Out of Home Activities (12 Month Period) by Age of the Residential Sample

AGE GROUPS		
60-70 N=36	71-80 N=50	81+ N=56
2.11 ±1.55	1.86 ±1.67	1.77 ±1.75

$F_{2,139}= 7.48$ $p>0.05$

TABLE 71: Mean (SD) Number of Out of Home Activities (4 Week Period) by Age of the Residential Sample

AGE GROUPS		
60-70 N=36	71-80 N=50	81+ N=56
1.67 ±1.41	1.58 ±1.49	1.39 ±1.42

$F_{2,139}= 0.44$ $p>0.05$

TABLE 72: Mean (SD) Number of Out of Home Activities (12 Month Period) by Sex of the Residential Sample

SEX	
MALE N=57	FEMALE N=85
2.18 ±1.69	1.71 ±1.61

$F_{1,140}=2.85$ $p>0.05$

TABLE 73: Mean (SD) Number of Out of Home Activities (4 Week Period) by Sex of the Residential Sample

SEX	
MALE N=57	FEMALE N=85
1.72 ±1.37	1.40 ±1.47

$F_{1,140}=1.69$ $p>0.05$

The household sample differed in terms of out of home activity reports for the age groups (over the 12 month period) and between males and females (4 week period); thus of people living in their own homes, younger subjects and males reported greater participation in out of home activities. Post hoc analysis found the age groups to differ between the youngest group and the oldest and the youngest group and those aged between 71 and 80. These significant differences are shown in tables 74 and 77.

TABLE 74: Mean (SD) Number of Out of Home Activities (12 Month Period) by Age of the Household Sample

AGE GROUPS		
60-70 N=79	71-80 N=43	81+ N=40
4.59 ±2.73	3.30 ±2.18	2.98 ±1.94

$F_{2,159}$= 7.48 p<0.001

TABLE 75: Mean (SD) Number of Out of Home Activities (4 Week Period) by Age of the Household Sample

AGE GROUPS		
60-70 N=79	71-80 N=43	81+ N=40
1.81 ±1.16	1.63 ±1.05	1.77 ±1.37

$F_{2,159}$= 0.34 p>0.05

TABLE 76: Mean (SD) Number of Out of Home Activities (12 Month Period) by Sex of the Household Sample

SEX	
MALE N=83	FEMALE N=79
4.06 ±2.53	3.63 ±2.48

$F_{1,160}$=1.17 p>0.05

TABLE 77: Mean (SD) Number of Out of Home Activities (4 Week Period) by Sex of the Household Sample

SEX	
MALE N=83	FEMALE N=79
2.0 ±1.15	1.49 ±1.16

$F_{1,160}=7.77$ $p<0.01$

Thus in examining the number of out of home activities within the repertoires of subjects in residential accommodation no significant differences were found between the different age groups or between males and females. However, younger subjects and males who lived in their own homes had greater numbers of out of home activities in their repertoires.

Table 78 shows the average number of out of home activities included within the samples' leisure repertoires. Numbers are indicated for each sub-sample over the previous 12 months.

TABLE 78 Mean (SD) Number of Out of Home Activities (12 Month Period) by Residence, Sex & Age of the Stratified Sample

	HOUSEHOLDS					
	MALE			FEMALE		
	60-70 N=41	71-80 N=22	81+ N=20	60-70 N=38	71-80 N=21	81+ N=20
TOTAL SAMPLE	4.24 ±2.83	3.49 ±2.04	2.70 ±1.89	4.93 ±2.63	3.18 ±2.34	3.25 ±1.99

	RESIDENTIAL					
	MALE			FEMALE		
	60-70 N=16	71-80 N=21	81+ N=20	60-70 N=20	71-80 N=29	81+ N=36
TOTAL SAMPLE	2.31 ±1.30	1.95 ±1.66	2.30 ±2.08	1.95 ±1.73	1.79 ±1.69	1.47 ±1.48
RESIDENTIAL HOMES	2.50 ±1.20	1.00 ±0.77	1.36 ±1.28	1.25 ±1.49	0.95 ±1.03	1.31 ±1.52
SHELTERED HOUSING	2.13 ±1.46	3.00 ±1.76	3.44 ±2.35	2.42 ±1.78	3.40 ±1.57	1.90 ±1.37

Interestingly, household males ($F_{2,80}$= 5.21 $p<0.01$) differed across the age categories whereas for household females ($F_{2,76}$= 2.73 $p>0.05$) and residential males ($F_{2,54}$= 0.28 $p>0.05$) and females ($F_{2,82}$= 0.64 $p>0.05$) no age difference in behaviour of this variable was evident.

When the residential sample was separated into subjects from residential homes and subjects from sheltered housing an age difference was found for males from residential homes ($F_{2,27}$= 4.53 $p<0.05$).

In addition a comparison was made between household and residential age groups for the male and female samples. Significant differences were evident between the following groups:

- 60-70 year old Household and Residential Males ($F_{1,55}$= 14.32 $p<0.001$)
- 60-70 year old Household and Residential Females ($F_{1,56}$= 10.85 $p<0.01$)
- 71-80 year old Household and Residential Females ($F_{1,48}$= 9.54 $p<0.01$)
- 81+ year old Household and Residential Females ($F_{1,54}$= 7.21 $p<0.01$)

In the comparison between the 71-80 year old household and residential males $p=0.06$ ($F_{1,41}$= 3.91 $p>0.05$) and there was no significant difference between the 81+ year old household and residential males ($F_{1,38}$= 7.21 $p<0.01$).

Table 79 below indicates the mean number of reported activities which took place out of the home in the four weeks prior to interview for each sub sample of subjects. No significant differences between groups were evident.

TABLE 79: Mean (SD) Number of Out of Home Activities (4 Week Period) by Residence, Sex & Age of the Stratified Sample

	HOUSEHOLDS					
	MALE			FEMALE		
	60-70 N=41	71-80 N=22	81+ N=20	60-70 N=38	71-80 N=21	81+ N=20
TOTAL SAMPLE	1.98 ±1.13	1.82 ±1.05	2.25 ±1.29	1.63 ±1.17	1.43 ±1.03	1.30 ±1.30

	RESIDENTIAL					
	MALE			FEMALE		
	60-70 N=16	71-80 N=21	81+ N=20	60-70 N=20	71-80 N=29	81+ N=36
TOTAL SAMPLE	1.94 ±1.48	1.48 ±1.21	1.80 ±1.47	1.45 ±1.36	1.66 ±1.67	1.17 ±1.36
RESIDENTIAL HOMES	2.13 ±1.64	0.82 ±0.87	1.36 ±1.36	0.88 ±0.99	0.84 ±0.96	0.77 ±0.99
SHELTERED HOUSING	1.75 ±1.39	2.20 ±1.14	2.33 ±1.50	1.83 ±1.47	3.20 ±1.69	2.20 ±1.68

A SUMMARY OF THE KEY FINDINGS ON THE NUMBER OF HOME BASED AND OUT OF HOME ACTIVITIES IN REPERTOIRE

- A greater number of the activities reported as part of leisure repertoire are home based compared to activities outside of the home.

- In general the age groups, sexes and residence types reported similar levels of involvement in home based activities.

- In comparison between age groups, sexes and residence types, differences were reported in out of home activity involvement. However this, in most instances, was only supported by 12 month data; younger subjects, males and those living in their own homes reporting a wider repertoire of out of home activities.

♦ **Leisure Behaviour: Sedentary and Active Activity Participation**

Analysis of the leisure behaviour of the sample over the 12 month period found that 83.8% of the activities participated in were sedentary in nature and only 16.2% were active. Similarly over the 4 week period the percentages were 84.5 and 15.5 respectively.

The bar chart below depicts the mean number of sedentary and the very low number of active activities over the two time periods.

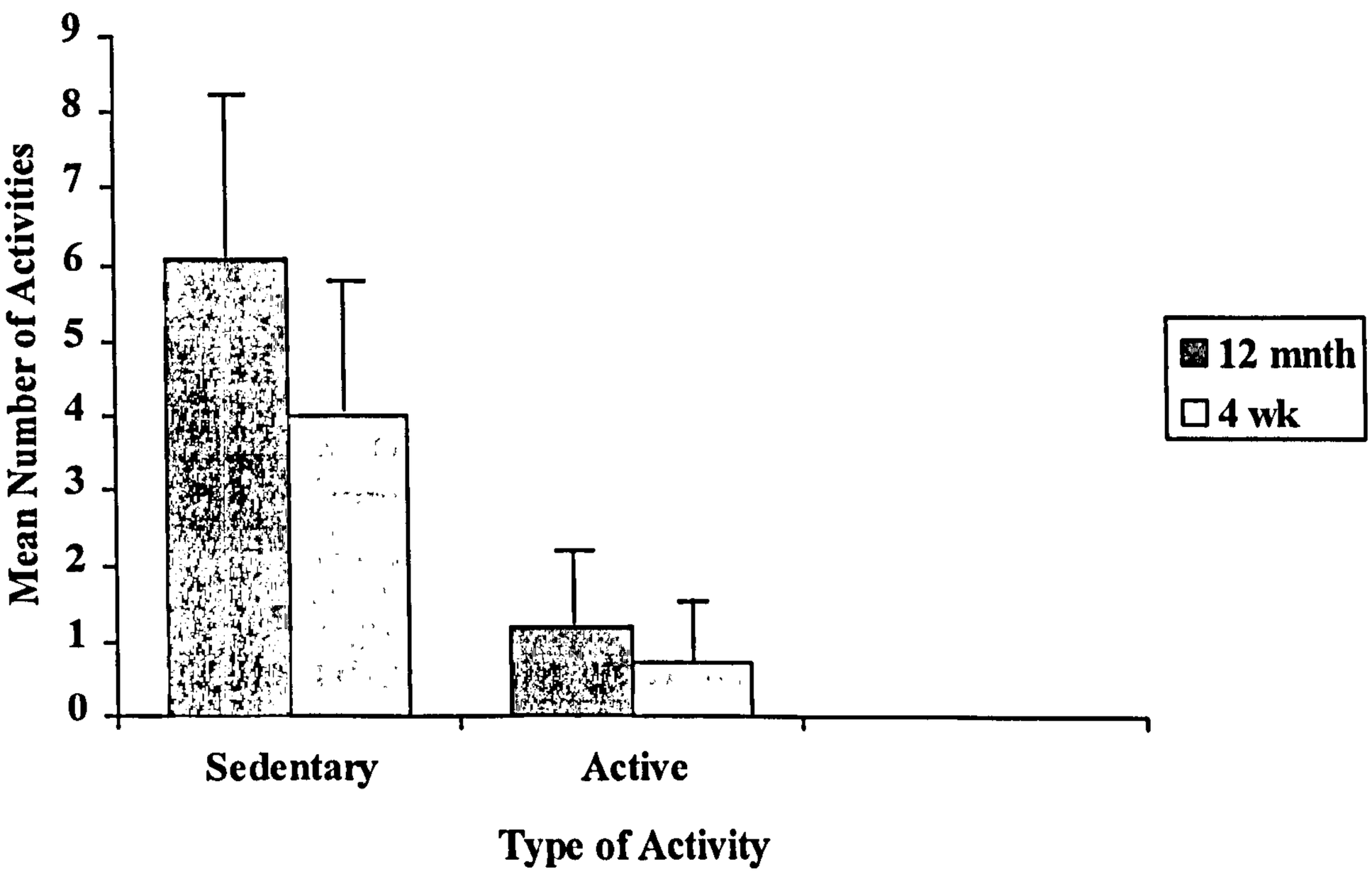

Figure 7: Mean (SD) Number of Sedentary and Active Activities over the Two Time Periods

ANALYSIS OF SEDENTARY ACTIVITIES IN REPERTOIRE

Tables 80 to 82 show the mean number of sedentary activities reported by the three age groups, males and females and the two residential groups. No significant differences were evident between the age groups ($F_{2,301}$=1.68 p>0.05) or sexes ($F_{1,302}$=0.16 p>0.05). However the household group reported a significantly greater number of sedentary activities as compared to the residential group ($F_{1,302}$=4.33 p<0.05).

TABLE 80: Mean (SD) Number of Sedentary Activities (12 Month Period) by Age of the Total Sample

AGE GROUPS		
60-70 N=115	71-80 N=93	81+ N=96
6.38 ±2.42	5.97 ±2.50	5.81 ±2.04

$F_{2,301}$=1.68 p>0.05

TABLE 81: Mean (SD) Number of Sedentary Activities (12 Month Period) by Sex of the Total Sample

SEX	
MALE N=140	FEMALE N=164
6.02 ±2.34	6.12 ±2.35

$F_{1,302}$=0.16 p>0.05

TABLE 82: Mean (SD) Number of Sedentary Activities (12 Month Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL N=142	**HOUSEHOLDS N=162**
5.78 ±2.26	6.34 ±2.38

$F_{1,302}$=4.33 p<0.05

The same pattern of results was reported over the 4 week period. This is shown in tables 83 to 85.

TABLE 83: Mean (SD) Number of Sedentary Activities (4 Week Period) by Age of the Total Sample

AGE GROUPS		
60-70 N=115	**71-80 N=93**	**81+ N=96**
3.84 ±1.86	4.05 ±1.60	4.20 ±1.65

$F_{2,301}$= 1.14 p>0.05

TABLE 84: Mean (SD) Number of Sedentary Activities (4 Week Period) by Sex of the Total Sample

SEX	
MALE N=140	**FEMALE N=164**
4.00 ±1.66	4.04 ±1.78

$F_{1,302}$=0.03 p>0.05

TABLE 85: Mean (SD) Number of Sedentary Activities (4 Week Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL N=142	**HOUSEHOLDS N=162**
4.24 ±1.83	3.83 ±1.60

$F_{1,302}$=4.39 p<0.05

Thus sedentary leisure behaviour only differed by residence type; subjects living in their own homes reporting greater sedentary participation.

ANALYSIS OF SEDENTARY ACTIVITIES IN REPERTOIRE BY GENDER

Analysis of the male sample showed no significant differences in the number of sedentary activities reported by age or sex over the two time periods. This is shown in the tables 86 to 89.

TABLE 86: Mean (SD) Number of Sedentary Activities (12 Month Period) by Age of the Male Sample

AGE GROUPS		
60-70 N=57	**71-80 N=43**	**81+ N=40**
6.50 ±2.28	5.90 ±2.82	5.45 ±1.66

$F_{2,137}$= 2.53 p>0.05

TABLE 87: Mean (SD) Number of Sedentary Activities (4 Week Period) by Age of the Male Sample

AGE GROUPS		
60-70 N=57	71-80 N=43	81+ N=40
3.93 ±1.88	4.05 ±1.56	4.05 ±1.47

$F_{2,137}$= 0.09 p>0.05

TABLE 88: Mean (SD) Number of Sedentary Activities (12 Month Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL N=57	HOUSEHOLDS N=83
5.68 ±2.38	6.25 ±2.29

$F_{1,138}$=2.01 p>0.05

TABLE 89: Mean (SD) Number of Sedentary Activities (4 Week Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL N=57	HOUSEHOLDS N=83
4.28 ±1.91	3.77 ±1.59

$F_{1,138}$=3.43 p>0.05

In addition no significant differences in sedentary participation were found for the female sample between age groups or residence (tables 90 to 93).

TABLE 90: Mean (SD) Number of Sedentary Activities (12 Month Period) by Age of the Female Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=58	**N=50**	**N=56**
6.25	6.04	6.07
±2.57	±2.21	±2.26

$F_{2,161}$= 0.14 p>0.05

TABLE 91: Mean (SD) Number of Sedentary Activities (4 Week Period) by Age of the Female Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=58	**N=50**	**N=56**
3.76	4.06	4.30
±1.86	±1.66	±1.78

$F_{2,161}$= 1.35 p>0.05

TABLE 92: Mean (SD) Number of Sedentary Activities (12 Month Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL	**HOUSEHOLDS**
N=85	**N=79**
5.84	6.43
±2.20	±2.47

$F_{1,162}$=2.55 p>0.05

TABLE 93: Mean (SD) Number of Sedentary Activities (4 Week Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL N=85	**HOUSEHOLDS N=79**
4.16 ±1.72	3.88 ±1.62

$F_{1.162}$=1.07 p>0.05

Thus no gender differences in age or residence type were found for sedentary activity behaviour.

ANALYSIS OF SEDENTARY ACTIVITIES IN REPERTOIRE BY RESIDENCE TYPE

The mean number of sedentary activities reported by age and sex for the residential sample are shown in the tables below (tables 94 to 97). No significant differences were evident between the sub-groups in sedentary behaviour.

TABLE 94: Mean (SD) Number of Sedentary Activities (12 Month Period) by Age of the Residential Sample

AGE GROUPS		
60-70 N=36	**71-80 N=50**	**81+ N=56**
5.91 ±2.01	5.70 ±2.55	5.76 ±2.18

$F_{2,139}$=0.10 p>0.05

TABLE 95: Mean (SD) Number of Sedentary Activities (4 Week Period) by Age of the Residential Sample

AGE GROUPS		
60-70 N=36	71-80 N=50	81+ N=56
4.36 ±1.78	4.08 ±1.89	4.30 ±1.83

$F_{2,139}$= 0.30 p>0.05

TABLE 96: Mean (SD) Number of Sedentary Activities (12 Month Period) by Sex of the Residential Sample

SEX	
MALE N=57	FEMALE N=85
5.68 ±2.38	5.84 ±2.20

$F_{1,140}$=0.18 p>0.05

TABLE 97: Mean (SD) Number of Sedentary Activities (4 Week Period) by Sex of the Residential Sample

SEX	
MALE N=57	FEMALE N=85
4.18 ±1.72	4.28 ±1.91

$F_{1,140}$=0.12 p>0.05

Similarly, no significant differences were evident between groups for the household sample (tables 98 to 101).

TABLE 98: Mean (SD) Number of Sedentary Activities (12 Month Period) by Age of the Household Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=79	**N=43**	**N=40**
6.59	6.30	5.87
±2.57	±2.42	±1.87

$F_{2,159}$=1.22 p>0.05

TABLE 99: Mean (SD) Number of Sedentary Activities (4 Week Period) by Age of the Household Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=79	**N=43**	**N=40**
3.61	4.02	4.05
±1.86	±1.21	±1.38

$F_{2,159}$= 1.46 p>0.05

TABLE 100: Mean (SD) Number of Sedentary Activities (12 Month Period) by Sex of the Household Sample

SEX	
MALE	**FEMALE**
N=83	**N=79**
6.25	6.43
±2.29	±2.47

$F_{1,160}$=0.22 p>0.05

TABLE 101: Mean (SD) Number of Sedentary Activities (4 Week Period) by Sex of the Household Sample

SEX	
MALE N=83	**FEMALE N=79**
3.88 ±1.62	3.77 ±1.59

$F_{1,160}=0.18$ $p>0.05$

Thus no significant age or sex differences were evident for sedentary leisure behaviour in the two residence groups.

Table 102 depicts the mean number of sedentary activities in each sub-sample's leisure repertoire (in the 12 month period).

TABLE 102: Mean (SD) Number of Sedentary Activities (12 Month Period) by Residence, Sex & Age of the Stratified Sample

	HOUSEHOLDS					
	MALE			FEMALE		
	60-70 N=41	71-80 N=22	81+ N=20	60-70 N=38	71-80 N=21	81+ N=20
TOTAL SAMPLE	6.68 ±2.40	6.36 ±2.47	5.25 ±1.55	6.50 ±2.77	6.23 ±2.42	6.50 ±1.98

	RESIDENTIAL					
	MALE			FEMALE		
	60-70 N=16	71-80 N=21	81+ N=20	60-70 N=20	71-80 N=29	81+ N=36
TOTAL SAMPLE	6.06 ±1.94	5.42 ±3.13	5.65 ±1.78	5.80 ±2.12	5.89 ±2.08	5.83 ±2.40
RESIDENTIAL HOMES	7.00 ±1.51	3.72 ±1.95	5.36 ±1.36	4.50 ±2.07	5.57 ±1.89	5.57 ±2.50
SHELTERED HOUSING	5.12 ±1.95	7.30 ±3.19	6.00 ±2.23	6.66 ±1.72	6.50 ±2.36	6.50 ±2.06

Residential home males showed a significant difference in participation across the age groups ($F_{2,27}$=9.30 $p<0.001$).

No significant differences were found between residential accommodation and households for any of the age groups for either of the sexes.

TABLE 103: Mean (SD) Number of Sedentary Activities (4 Week Period) by Residence, Sex & Age of the Stratified Sample

	HOUSEHOLDS					
	MALE			FEMALE		
	60-70 N=41	71-80 N=22	81+ N=20	60-70 N=38	71-80 N=21	81+ N=20
TOTAL SAMPLE	3.81 ±1.89	4.09 ±1.11	3.80 ±1.54	3.40 ±1.84	3.95 ±1.32	4.30 ±1.17

	RESIDENTIAL					
	MALE			FEMALE		
	60-70 N=16	71-80 N=21	81+ N=20	60-70 N=20	71-80 N=29	81+ N=36
TOTAL SAMPLE	4.25 ±1.88	4.00 ±1.95	4.30 ±1.38	4.45 ±1.73	4.14 ±1.89	4.31 ±2.06
RESIDENTIAL HOMES	4.5 ±2.07	2.91 ±1.45	4.18 ±1.25	3.13 ±1.25	3.68 ±1.25	3.77 ±1.88
SHELTERED HOUSING	4.00 ±1.77	5.20 ±1.75	4.44 ±1.59	5.33 ±1.44	5.00 ±2.58	5.70 ±1.89

As shown in the table above, comparison of the accommodation types with males in the three age categories found no significant difference. The only difference found for the female sample was between 60-70 year old females in households and residential accommodation ($F_{1,56}$=4.49 $p<0.05$); females living in residential accommodation reporting more sedentary activities.

ANALYSIS OF ACTIVE ACTIVITIES IN REPERTOIRE

Analysis of the inclusion of active activities in the samples' leisure repertoires (over the 12 month period) found significant differences according to age group ($F_{2,301}$=5.82 p<0.001), sex ($F_{1,302}$=13.15 p<0.001) and residence ($F_{1,302}$=64.74 p<0.001); the youngest age group, males and those living in their own homes reporting greater amounts of active activities. This is shown in the tables 104 to 106:

TABLE 104: Mean (SD) Number of Active Activities (12 Month Period) by Age of the Total Sample

AGE GROUPS		
60-70	71-80	81+
N=115	N=93	N=96
1.43	1.12	0.94
±1.13	±0.91	±1.07

$F_{2,301}$=5.82 p<0.001

TABLE 105: Mean (SD) Number of Active Activities (12 Month Period) by Sex of the Total Sample

SEX	
MALE	FEMALE
N=140	N=164
1.42	0.97
±1.13	±0.97

$F_{1,302}$=13.15 p<0.001

TABLE 106: Mean (SD) Number of Active Activities (12 Month Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL N=142	**HOUSEHOLDS N=162**
0.70 ±0.74	1.60 ±1.13

$F_{1,302}$=64.74 p<0.001

Over the 4 week period, the sex and residence results showed the same significant trends between groups. However no difference was significant between the three age groups. This is shown in tables 107 to 109.

TABLE 107: Mean (SD) Number of Active Activities (4 Week Period) by Age of the Total Sample

AGE GROUPS		
60-70 N=115	**71-80 N=93**	**81+ N=96**
0.87 ±0.92	0.69 ±0.81	0.64 ±0.88

$F_{2,301}$= 2.10 p>0.05

TABLE 108: Mean (SD) Number of Active Activities (4 Week Period) by Sex of the Total Sample

SEX	
MALE N=140	FEMALE N=164
1.04 ±0.99	0.48 ±0.68

$F_{1,302}=34.09$ $p<0.001$

TABLE 109: Mean (SD) Number of Active Activities (4 Week Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL N=142	HOUSEHOLDS N=162
0.44 ±0.64	1.01 ±0.98

$F_{1,302}=35.31$ $p<0.001$

Thus both time periods found that males and those living in their own homes reported more active activities. However over the 12 month period the youngest age group reported more active activities (this was not significant within the 4 week data).

ANALYSIS OF ACTIVE ACTIVITIES IN REPERTOIRE BY GENDER

No significant age difference was evident for the male sample (table 110 and 111). However, a difference between the residence groups was observed; males living in their own homes reporting more active participation (table 112 and 113). The female sample showed significant differences for both of these variables (tables 114 to 117). Post hoc analysis (of 12 month data) revealed the age difference to exist between the youngest and oldest groups.

TABLE 110: Mean (SD) Number of Active Activities (12 Month Period) by Age of the Male Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=57	**N=43**	**N=40**
1.16	1.25	1.30
±1.13	±0.91	±1.32

$F_{2,137}$= 1.53 p>0.05

TABLE 111: Mean (SD) Number of Active Activities (4 Week Period) by Age of the Male Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=57	**N=43**	**N=40**
1.14	0.88	1.07
±0.97	±0.91	±1.10

$F_{2,137}$= 0.85 p>0.05

TABLE 112: Mean (SD) Number of Active Activities (12 Month Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL N=57	**HOUSEHOLDS N=83**
0.78 ±0.81	1.84 ±1.12

$F_{1,138}$=36.88 p<0.001

TABLE 113: Mean (SD) Number of Active Activities (4 Week Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL N=57	**HOUSEHOLDS N=83**
0.60 ±0.73	1.35 ±1.03

$F_{1,138}$=22.67 p<0.001

TABLE 114: Mean (SD) Number of Active Activities (12 Month Period) by Age of the Female Sample

AGE GROUPS		
60-70 N=58	**71-80 N=50**	**81+ N=56**
1.24 ±1.12	1.00 ±0.92	0.67 ±0.76

$F_{2,161}$= 4.97 p<0.01

TABLE 115: Mean (SD) Number of Active Activities (4 Week Period) by Age of the Female Sample

AGE GROUPS		
60-70 N=58	71-80 N=50	81+ N=56
0.60 ±0.79	0.52 ±0.68	0.32 ±0.51

$F_{2,161}$= 2.60 p>0.05

TABLE 116: Mean (SD) Number of Active Activities (12 Month Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL N=85	HOUSEHOLDS N=79
0.64 ±0.68	1.34 ±1.11

$F_{1,162}$=24.44 p<0.001

TABLE 117: Mean (SD) Number of Active Activities (4 Week Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL N=85	HOUSEHOLDS N=79
0.33 ±0.54	0.65 ±0.77

$F_{1,162}$=9.36 p<0.01

Thus males and females in residential accommodation reported lower levels of active activities. Older females also reported lower participation rates (this age difference was not found for males).

ANALYSIS OF ACTIVE ACTIVITIES IN REPERTOIRE BY RESIDENCE TYPE

Analysis of the residential sample found no significant differences to exist between the three age groups or males and females over the 12 month period (tables 118 and 119). In addition the 4 week analysis replicated this for the age analysis but did reveal a difference in behaviour between the sexes; males reporting a wider repertoire of active activities (tables 120 and 121).

TABLE 118: Mean (SD) Number of Active Activities (12 Month Period) by Age of the Residential Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=36	**N=50**	**N=56**
0.72	0.82	0.57
±0.74	±0.71	±0.75

$F_{2,139}$= 1.51 p>0.05

TABLE 119: Mean (SD) Number of Active Activities (12 Month Period) by Sex of the Residential Sample

SEX	
MALE	**FEMALE**
N=57	**N=85**
0.79	0.64
±0.81	±0.68

$F_{1,140}$=1.47 p>0.05

TABLE 120: Mean (SD) Number of Active Activities (4 Week Period) by Age of the Residential Sample

AGE GROUPS		
60-70 N=36	71-80 N=50	81+ N=56
0.47 ±0.65	0.52 ±0.71	0.33 ±0.55

$F_{2,139}$= 1.15 p>0.05

TABLE 121: Mean (SD) Number of Active Activities (4 Week Period) by Sex of the Residential Sample

SEX	
MALE N=57	FEMALE N=85
0.60 ±0.73	0.33 ±0.54

$F_{1,140}$=6.25 p<0.05

The 12 month and 4 week analysis of the household sub-sample found a significant difference to exist between males and females in the number of active activities they reported; males reporting increased levels (tables 122 and 123) No significant age differences were evident (tables 124 and 125).

TABLE 122 Mean (SD) Number of Active Activities (12 Month Period) by Sex of the Household Sample

SEX	
MALE N=83	FEMALE N=79
1.84 ±1.12	1.34 ±1.11

$F_{1,160}$=8.20 p<0.01

TABLE 123: Mean (SD) Number of Active Activities (4 Week Period) by Sex of the Household Sample

SEX	
MALE N=83	FEMALE N=79
1.35 ±1.03	0.65 ±0.77

$F_{1,160}$=24.13 p<0.001

TABLE 124: Mean (SD) Number of Active Activities (12 Month Period) by Age of the Household Sample

AGE GROUPS		
60-70 N=79	71-80 N=43	81+ N=40
1.75 ±1.15	1.47 ±1.01	1.45 ±1.24

$F_{2,159}$= 1.31 p>0.05

TABLE 125: Mean (SD) Number of Active Activities (4 Week Period) by Age of the Household Sample

AGE GROUPS		
60-70 N=79	71-80 N=43	81+ N=40
1.05 ±0.97	0.88 ±0.88	1.05 ±1.08

$F_{2,159}$= 0.46 p>0.05

Thus no age differences were found in the active activity levels of residential and household subjects. Residential males were found to report higher active participation within the 4 week data and household males over the two time periods.

Table 126 shows the mean number of active activities reported by each sub sample over the previous 12 months to interview.

TABLE 126: Mean (SD) Number of Active Activities (12 Month Period) by Residence, Sex & Age of the Stratified Sample

	HOUSEHOLDS					
	MALE			FEMALE		
	60-70 N=41	71-80 N=22	81+ N=20	60-70 N=38	71-80 N=21	81+ N=20
TOTAL SAMPLE	1.92 ±1.10	1.59 ±0.85	1.95 ±1.39	1.55 ±1.17	1.33 ±1.15	0.95 ±0.82

	RESIDENTIAL					
	MALE			FEMALE		
	60-70 N=16	71-80 N=21	81+ N=20	60-70 N=20	71-80 N=29	81+ N=36
TOTAL SAMPLE	0.81 ±0.75	0.90 ±0.83	0.65 ±0.87	0.65 ±0.74	0.75 ±0.63	0.52 ±0.69
RESIDENTIAL HOMES	0.87 ±0.83	1.00 ±0.81	0.88 ±0.78	0.66 ±0.78	1.10 ±0.73	0.40 ±0.69
SHELTERED HOUSING	0.75 ±0.70	0.82 ±0.87	0.45 ±0.93	0.62 ±0.74	0.57 ±0.54	0.57 ±0.70

No age group differences were evident for household males ($F_{2,80}$=0.76 p>0.05), household females ($F_{2,76}$=1.99 p>0.05), residential males ($F_{2,54}$=0.50 p>0.05) or residential females ($F_{2,82}$=0.91 p>0.05).

In addition a comparison was made between household and residential age groups for the male and female samples. Significant differences were evident between the following groups:

- 60-70 year old Household and Residential Males ($F_{1,55}$=13.73 p<0.001)
- 60-70 year old Household and Residential Females ($F_{1,56}$=9.65 p<0.01)
- 71-80 year old Household and Residential Males ($F_{1,41}$=7.12 p<0.05)
- 71-80 year old Household and Residential Females ($F_{1,48}$=5.08 p<0.05)
- 81+ year old Household and Residential Males ($F_{1,38}$=12.47 p<0.01)
- 81+ year old Household and Residential Females ($F_{1,54}$=4.14 p<0.05)

Sub sample means for the 4 week period is shown in table 127.

TABLE 127: Mean (SD) Number of Active Activities (4 Week Period) by Residence, Sex & Age of the Stratified Sample

	HOUSEHOLDS					
	MALE			FEMALE		
	60-70 N=41	71-80 N=22	81+ N=20	60-70 N=38	71-80 N=21	81+ N=20
TOTAL SAMPLE	1.34 ±0.99	1.14 ±0.94	1.60 ±1.19	0.74 ±0.86	0.62 ±0.74	0.50 ±0.61

	RESIDENTIAL					
	MALE			FEMALE		
	60-70 N=16	71-80 N=21	81+ N=20	60-70 N=20	71-80 N=29	81+ N=36
TOTAL SAMPLE	0.63 ±0.72	0.62 ±0.81	0.55 ±0.69	0.35 ±0.59	0.45 ±0.63	0.22 ±0.42
RESIDENTIAL HOMES	0.38 ±0.52	0.27 ±0.47	0.36 ±0.67	0.38 ±0.74	0.21 ±0.42	0.23 ±0.43
SHELTERED HOUSING	0.88 ±0.83	1.00 ±0.94	0.78 ±0.67	0.33 ±0.49	0.90 ±0.74	0.20 ±0.42

Only females from sheltered housing showed a significant difference across the age categories ($F_{2,29}$=4.43 $p<0.05$); those aged between 71 and 80 reporting higher levels of participation.

Listed below are the groups between which a significant differences was found in the number of active activities they reported:

- 60-70 year old Household and Residential Males ($F_{1,55}$=6.92 $p<0.05$)
- 81+ year old Household and Residential Males ($F_{1,38}$=11.72 $p<0.01$)
- 81+ year old Household and Residential Females ($F_{1,54}$=4.05 $p<0.05$)

A significant difference was not evident for the 60-70 females in residential and household accommodation, however the p value was equal to 0.08. Similarly the difference found for 71-80 year old males in residential and households had a p value equal to 0.06.

A SUMMARY OF THE KEY FINDINGS ON THE NUMBER OF SEDENTARY AND ACTIVE ACTIVITIES IN REPERTOIRE

- A greater number of activities in subjects' leisure repertoires were sedentary as opposed to active.
- Sedentary leisure behaviour was found to be similar for each age group and for males and females. One difference was observed between subjects from residential accommodation and households; in comparison the latter reporting greater participation in sedentary activities.
- Age, sex and residence differences were found in active activity participation - older age groups, females and those in residential accommodation reporting lower active activity participation, the age trend was significant in the female sample.

♦ **Leisure Behaviour: Social and Isolated Activity Participation**

The following analyses were based upon the social and isolated nature of the activities reported over the 4 week period. It was not possible to perform this analysis for the 12 month period as the sample was not asked if they partook in their leisure pursuits alone or with others.

67.8% of the activities reported in the 4 week period were social in nature and the remaining 32.2% were done alone. The bar chart below shows the mean number of social and isolated activities in the four week period:

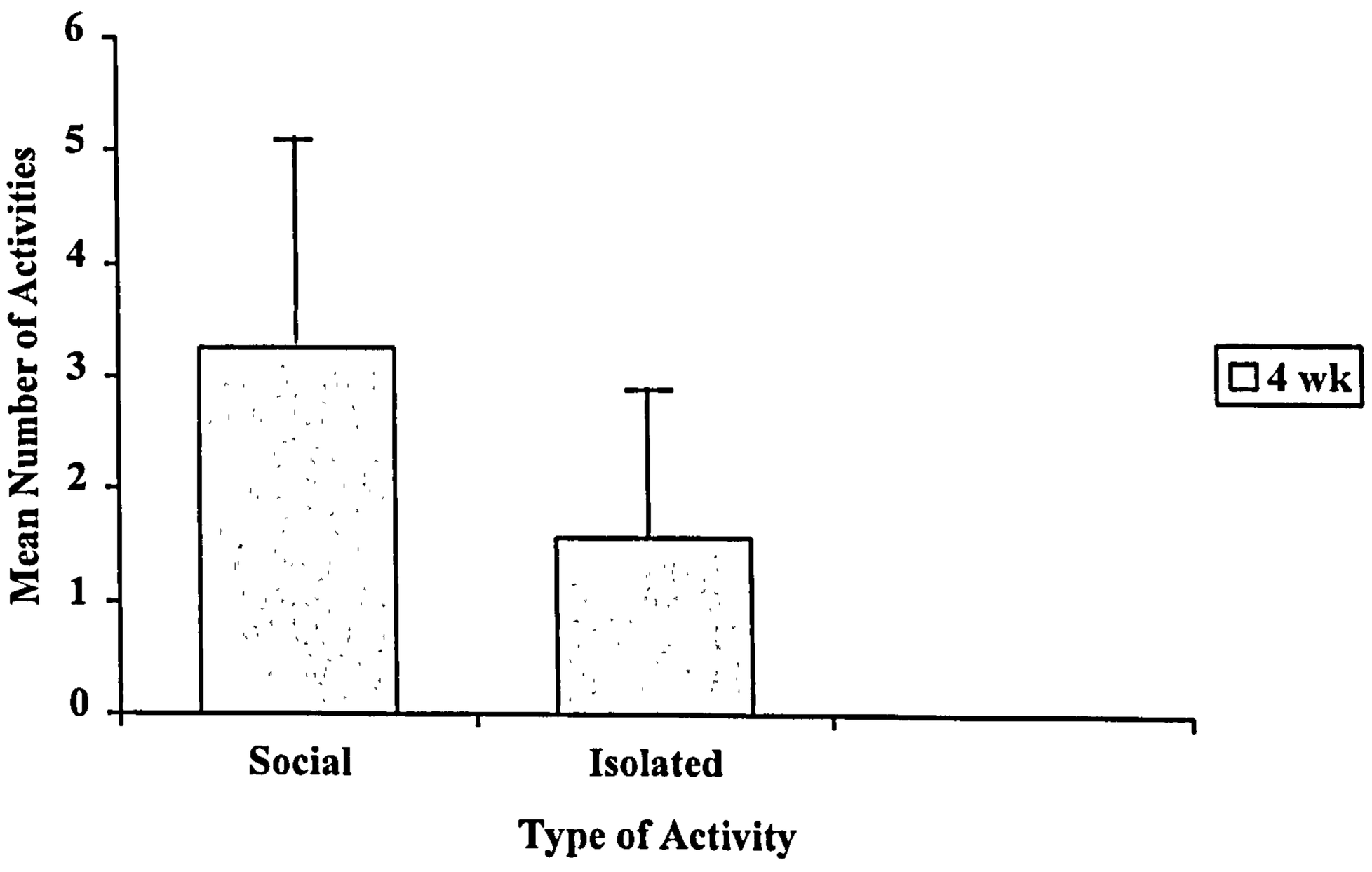

Figure 8: Mean (SD) Number of Social and Isolated Activities over the 4 Week Time Period

ANALYSIS OF SOCIAL ACTIVITIES IN REPERTOIRE

Table 128 to Table 130 depicts the mean number of social activities reported by the different age groups, sexes and types of residences. No significant differences were found. However the p value for the difference between males and females equalled 0.07; males reported a greater number of social activities on average.

TABLE 128: Mean (SD) Number of Social Activities (4 Week Period) by Age of the Total Sample

AGE GROUPS		
60-70	71-80	81+
N=115	N=93	N=96
3.21	3.23	3.34
±1.89	±1.88	±1.76

$F_{2,301}$= 0.16p>0.05

TABLE 129: Mean (SD) Number of Social Activities (4 Week Period) by Sex of the Total Sample

SEX	
MALE	FEMALE
N=140	N=164
3.46	3.08
±1.94	±1.74

$F_{1,302}$=3.33 p>0.05

TABLE 130: Mean (SD) Number of Social Activities (4 Week Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL N=142	**HOUSEHOLDS N=162**
2.25 ±1.82	3.26 ±1.86

$F_{1,302}$=0.001 p>0.05

ANALYSIS OF SOCIAL ACTIVITIES IN REPERTOIRE BY GENDER

Analysis of the male and female samples found no significant differences according to age group or residence types. This is shown in the tables 131 to 134:

TABLE 131: Mean (SD) Number of Social Activities (4 Week Period) by Age of the Male Sample

AGE GROUPS		
60-70 N=57	**71-80 N=43**	**81+ N=40**
3.42 ±2.04	3.23 ±1.95	3.68 ±1.83

$F_{2,137}$= 0.36 p>0.05

TABLE 132: Mean (SD) Number of Social Activities (4 Week Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL	**HOUSEHOLDS**
N=57	**N=83**
3.23	3.63
±1.96	±1.92

$F_{1,138}$= 1.43 p>0.05

TABLE 133: Mean (SD) Number of Social Activities (4 Week Period) by Age of the Female Sample

AGE GROUPS		
60-70	**71-80**	**81+**
N=58	**N=50**	**N=56**
3.00	3.14	3.11
±1.73	±1.84	±1.68

$F_{2,161}$= 0.10 p>0.05

TABLE 134: Mean (SD) Number of Social Activities (4 Week Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL	**HOUSEHOLDS**
N=85	**N=79**
3.27	2.87
±1.74	±1.73

$F_{1,162}$=2.15 p>0.05

ANALYSIS OF SOCIAL ACTIVITIES IN REPERTOIRE BY RESIDENCE TYPE

The mean number of activities reported in the repertoire of the residential sample and household sample are shown below by age and sex tables 135 to 138). Table 138 indicates that a significant difference was found between males and females in the household sample in the number of social activities included in their 4 week reported leisure repertoire ($F_{1,160}$=6.85 $p<0.01$); household males reporting a greater number of activities.

TABLE 135: Mean (SD) Number of Social Activities (4 Week Period) by Age of the Residential Sample

AGE GROUPS		
60-70 **N=36**	**71-80** **N=50**	**81+** **N=56**
2.97 ±1.83	3.42 ±1.92	3.29 ±1.73

$F_{2,139}$= 0.65 $p>0.05$

TABLE 136: Mean (SD) Number of Social Activities (4 Week Period) by Age of the Household Sample

AGE GROUPS		
60-70 **N=79**	**71-80** **N=43**	**81+** **N=40**
3.32 ±1.92	3.00 ±1.83	3.43 ±1.81

$F_{2,159}$= 0.61 $p>0.05$

TABLE 137: Mean (SD) Number of Social Activities (4 Week Period) by Sex of the Residential Sample

SEX	
MALE N=57	**FEMALE** N=85
3.23 ±1.96	3.27 ±1.74

$F_{1,140}$= 0.02 p>0.05

TABLE 138: Mean (SD) Number of Social Activities (4 Week Period) by Sex of the Household Sample

SEX	
MALE N=83	**FEMALE** N=79
3.63 ±1.92	2.87 ±1.73

$F_{1,160}$=6.85 p<0.01

Thus no significant differences in social activity behaviour were found between ages and residences. There is an indication that males reported more social activities over the 4 week period.

Sub-sample means for the number of social activities for the 4 week period is shown in Table 139.

TABLE 139 Mean (SD) Number of Social Activities (4 Week Period) by Residence, Sex & Age of the Stratified Sample

	HOUSEHOLDS					
	MALE			FEMALE		
	60-70 N=41	71-80 N=22	81+ N=20	60-70 N=38	71-80 N=21	81+ N=20
TOTAL SAMPLE	3.71 ±2.02	3.32 ±1.89	3.80 ±1.82	2.89 ±1.74	2.67 ±1.74	3.05 ±1.76

	RESIDENTIAL					
	MALE			FEMALE		
	60-70 N=16	71-80 N=21	81+ N=20	60-70 N=20	71-80 N=29	81+ N=36
TOTAL SAMPLE	2.69 ±1.96	3.33 ±2.03	3.55 ±1.88	3.20 ±1.74	3.48 ±1.86	3.14 ±1.66
RESIDENTIAL HOMES	2.88 ±1.55	2.73 ±1.19	2.36 ±1.43	1.88 ±0.99	2.89 ±1.24	2.92 ±1.49
SHELTERED HOUSING	2.50 ±2.39	4.00 ±2.58	3.78 ±2.39	4.08 ±1.56	4.60 ±2.37	3.70 ±2.00

No significant difference was evident across the age groups for household males ($F_{2,80}$= 0.39 p>0.05), household females ($F_{2,76}$= 0.25 p>0.05), residential females ($F_{2,82}$= 0.33 p>0.05), and residential males ($F_{2,54}$= 0.91 p>0.05). In addition comparisons across the age groups for residential home males ($F_{2,27}$= 0.63 p>0.05), residential home females ($F_{2,50}$= 2.02 p>0.05), sheltered housing males ($F_{2,24}$= 0.92 p>0.05), and sheltered

housing females ($F_{2,29}$= 0.52 p>0.05) found no significant differences in the inclusion of social activities.

No significant differences were evident between residential accommodation and households for any of the age groups for each of the sexes.

ANALYSIS OF ISOLATED ACTIVITIES IN REPERTOIRE

Table 140 to Table 142 shows the average number of isolated activities reported by the different age groups, sexes and types of residences. No significant differences were found between the sub-groups in the number of isolated activities reported.

TABLE 140: Mean (SD) Number of Isolated Activities (4 Week Period) by Age of the Total Sample

AGE GROUPS		
60-70 N=115	71-80 N=93	81+ N=96
1.64 ±1.37	1.55 ±1.47	1.45 ±1.22

$F_{2,301}$= 0.56 p>0.05

TABLE 141: Mean (SD) Number of Isolated Activities (4 Week Period) by Sex of the Total Sample

SEX	
MALE N=140	FEMALE N=164
1.64 ±1.49	1.48 ±1.23

$F_{1,302}$= 1.06 p>0.05

TABLE 142: Mean (SD) Number of Isolated Activities (4 Week Period) by Residence Type of the Total Sample

RESIDENCE TYPE	
RESIDENTIAL N=140	**HOUSEHOLDS N=164**
1.42 ±1.27	1.66 ±1.42

$F_{1,302}$= 2.35 p>0.05

ANALYSIS OF ISOLATED ACTIVITIES IN REPERTOIRE BY GENDER

Analysis of the male and female samples independently found no significant differences according to age group or residence types (tables 143 to 146). Although the female sample age difference had a p value of 0.06 (table 145).

TABLE 143: Mean (SD) Number of Isolated Activities (4 Week Period) by Age of the Male Sample

AGE GROUPS		
60-70 N=57	**71-80 N=43**	**81+ N=40**
1.77 ±1.51	1.61 ±1.68	1.48 ±1.22

$F_{2,137}$= 0.48 p>0.05

TABLE 144: Mean (SD) Number of Isolated Activities (4 Week Period) by Residence Type of the Male Sample

RESIDENCE TYPE	
RESIDENTIAL N=57	**HOUSEHOLDS N=83**
1.54 ±1.47	1.70 ±1.50

$F_{1,138}$= 0.37 p>0.05

TABLE 145: Mean (SD) Number of Isolated Activities (4 Week Period) by Age of the Female Sample

AGE GROUPS		
60-70 N=58	**71-80 N=50**	**81+ N=56**
1.50 ±1.20	1.50 ±1.28	1.43 ±1.23

$F_{2,161}$= 0.94 p>0.05

TABLE 146: Mean (SD) Number of Isolated Activities (4 Week Period) by Residence Type of the Female Sample

RESIDENCE TYPE	
RESIDENTIAL N=85	**HOUSEHOLDS N=79**
1.34 ±1.12	1.62 ±1.33

$F_{1,162}$=2.12 p>0.05

ANALYSIS OF ISOLATED ACTIVITIES IN REPERTOIRE BY RESIDENCE TYPE

The mean number of activities reported in the repertoire of the residential sample and household sample are shown below by age and sex (tables 147 to 150). Table 147 indicates a significant difference between the age groups of the residential sample in the number of isolated activities included in their 4 week reported leisure repertoire ($F_{2,139}$= 3.37 $p<0.05$). However, although the trend indicated that the youngest age group had the greatest isolated activity repertoire size, post hoc analysis found no two groups to differ at the 5% level.

TABLE 147: Mean (SD) Number of Isolated Activities (4 Week Period) by Age of the Residential Sample

AGE GROUPS		
60-70 N=36	**71-80 N=50**	**81+ N=56**
1.89 ±1.26	1.26 ±1.37	1.27 ±1.12

$F_{2,139}$= 3.37 $p<0.05$

TABLE 148: Mean (SD) Number of Isolated Activities (4 Week Period) by Age of the Households Sample

AGE GROUPS		
60-70 N=79	**71-80 N=43**	**81+ N=40**
1.52 ±1.40	1.88 ±1.53	1.70 ±1.32

$F_{2,159}$= 0.94 $p>0.05$

TABLE 149: Mean (SD) Number of Isolated Activities (4 Week Period) by Sex of the Residential Sample

SEX	
MALE	**FEMALE**
N=57	**N=85**
1.54	1.34
±1.46	±1.12

$F_{1,140}$= 0.87 p>0.05

TABLE 150: Mean (SD) Number of Isolated Activities (4 Week Period) by Sex of the Household Sample

SEX	
MALE	**FEMALE**
N=83	**N=79**
1.70	1.62
±1.50	±1.33

$F_{1,160}$= 0.12 p>0.05

The mean number of isolated activities for each sub-sample over the 4 week period are shown in Table 151.

TABLE 151: Mean (SD) Number of Isolated Activities (4 Week Period) by Residence, Sex & Age of the Stratified Sample

	HOUSEHOLDS					
	MALE			FEMALE		
	60-70 N=41	71-80 N=22	81+ N=20	60-70 N=38	71-80 N=21	81+ N=20
TOTAL SAMPLE	1.59 ±1.52	1.91 ±1.69	1.70 ±1.31	1.45 ±1.29	1.86 ±1.39	1.70 ±1.38

	RESIDENTIAL					
	MALE			FEMALE		
	60-70 N=16	71-80 N=21	81+ N=20	60-70 N=20	71-80 N=29	81+ N=36
TOTAL SAMPLE	2.25 ±1.44	1.29 ±1.65	1.25 ±1.12	1.60 ±1.05	1.24 ±1.15	1.28 ±1.14
RESIDENTIAL HOMES	2.00 ±1.20	0.46 ±0.52	1.09 ±0.94	1.63 ±0.92	1.05 ±1.03	1.04 ±1.08
SHELTERED HOUSING	2.50 ±1.69	2.2 ±1.99	1.44 ±1.33	1.58 ±1.17	1.60 ±1.35	1.90 ±1.10

No significant difference was evident across the age groups for household males ($F_{2,80}$= 0.33 p>0.05), household females ($F_{2,76}$= 0.68 p>0.05), residential females ($F_{2,82}$= 0.70 p>0.05), and residential males ($F_{2,54}$= 2.75 p>0.05). In addition comparisons across the age groups for residential home females ($F_{2,50}$= 2.02 p>0.05), sheltered housing males ($F_{2,24}$= 0.92 p>0.05), and sheltered housing females ($F_{2,29}$= 0.52 p>0.05) found no significant differences in the inclusion of isolated activities. However, for residential home males ($F_{2,27}$= 0.63 p>0.05) a significant difference was found by age. Post hoc

analysis by Tukey for the difference to be significant at the 5% level between the youngest age group and those aged between 71 and 80.

No significant differences were evident between residential accommodation and households for any of the age groups for each of the sexes.

A SUMMARY OF THE KEY FINDINGS ON THE NUMBER OF SOCIAL AND ISOLATED ACTIVITIES IN REPERTOIRE

- A greater number of activities in subjects repertoires were social as compared to isolated.

- No significant differences were found in social behaviour between age or residence groups but there was an indication that males reported more social activities over the 4 week period.

- The only difference in isolated activity involvement was found with subjects from residential accommodation; the younger age groups reporting on average more isolated activities.

4.1.3.1.2 Frequency of Participation

This section of analysis continued to examine the six categories of types of activities reported i.e. home based, out of home, sedentary, active, social and isolated. In addition analysis of the frequency of participation in individual activities is reported as a means of comparison with other data sources.

Concerning the analysis of the frequency of participation in the six categories of activity, three levels of activity participation were created. For each analysis the sample was divided into thirds. The first third had the lowest participation in the activity (Group 1), the second had moderate levels of participation (Group 2) and the final third the highest (Group 3). This method of dividing created three groups which represented low, moderate and high levels of participation with sufficient numbers in each group for analysis.

The above procedure was used for the analysis of all categories of activity except for active activity involvement. Due to extremely low levels of participation in this type of activity the above procedure did not seem appropriate and was replaced with the creation of two groups of participation. The first group reported no active activities (Group 1) and the second group reported one or more active activities (Group 2).

♦ **Out of Home Activities**

The following table indicates the percentage of each age group participating in each level of out of home activities. Chi Square analysis found no significant relation between the variables.

TABLE 152: Percentage of each age group reporting out of home activities by frequency of participation

	AGE GROUPS		
	60-70 N=115	71-80 N=93	81+ N=96
1.Low Participation	24.3	39.8	40.4
2.Moderate Participation	38.7	28.0	27.7
3.High Participation	36.9	32.3	31.9

x^2=8.17 p=0.09

Table 153 shows the proportions of the male and female samples within each activity group for out of home participation. A significant chi square noting a trend in the percentage of subjects in the cross-tabulation. Inspection of the tables indicated that a greater percentage of females reported low participation in out of home activities.

TABLE 153: Percentage of males and females reporting out of home activities by frequency of participation

	SEX	
	MALES N=140	FEMALES N=164
1.Low Participation	27.5	40.0
2.Moderate Participation	38.4	26.3
3.High Participation	34.1	33.8

x^2=6.80 p=0.03

Tables 154 depicts out of home activity level by the two accommodation types. Although a significant relation was found, inspection of the table shows a complex relationship between the variables. If the moderate and high categories are collapsed it does appear that a slightly higher percentage of subjects from residential accommodation subjects reported lower participation in out of home activities.

TABLE 154: Percentage of each residence group reporting out of home activities by frequency of participation

	RESIDENCE TYPE	
	HOUSEHOLDS N=162	RESIDENTIAL N=142
1. Low Participation	31.4	37.4
2.Moderate Participation	39.6	23.0
3.High Participation	28.9	39.6

x^2=9.66 p=0.01

♦ **Home Based Activities**

The following table indicates the percentage of each age group participating in each level of home based activities. No significant association was evident between the variables

TABLE 155: Percentage of each age group reporting home based activities by frequency of participation

	AGE GROUPS		
	60-70 N=115	71-80 N=93	81+ N=96
1.Low Participation	32.4	36.6	38.3
2.Moderate Participation	41.4	35.5	29.8
3.High Participation	26.1	28.0	31.9

x^2=3.07 p=0.55

Table 156 shows the proportions of the male and female samples within each activity group for home based participation. Again no significant association was found.

TABLE 156: Percentage of males and females reporting home based activities by frequency of participation

	SEX	
	MALES N=140	FEMALES N=164
1.Low Participation	34.8	36.3
2.Moderate Participation	38.4	33.8
3.High Participation	26.8	30.0

x^2=0.76 p=0.69

A significant association was found between the home based activity level reported by the two accommodation types; a greater percentage of residential subjects reporting moderate home based participation and a slightly greater percentage of households reporting low participation.

TABLE 157: Percentage of each residence group reporting home based activities by frequency of participation

	RESIDENCE TYPE	
	HOUSEHOLDS N=162	RESIDENTIAL N=142
1.Low Participation	36.5	34.5
2.Moderate Participation	34.6	37.4
3.High Participation	28.9	28.1

x^2=9.66 p=0.01

- **Sedentary Activities**

The following table indicates the percentage of each age group participating in each level of sedentary activities between which no significant association was found.

TABLE 158: Percentage of each age group reporting sedentary activities by frequency of participation

	AGE GROUPS		
	60-70 N=115	71-80 N=93	81+ N=96
1.Low Participation	31.5	31.2	33.0
2.Moderate Participation	32.4	37.6	26.6
3.High Participation	36.0	31.2	40.4

x^2=2.94 p=0.57

Table 159 shows the proportions of the male and female samples within each activity group for sedentary activity participation. No significant association was evident in the rates of reporting by males and females

TABLE 159: Percentage of males and females reporting sedentary activities by frequency of participation

	SEX	
	MALES N=140	**FEMALES N=164**
1.Low Participation	27.5	35.6
2.Moderate Participation	36.2	28.8
3.High Participation	36.2	35.6

x^2=2.82 p=0.25

Tables 160 depicts activity level by the two accommodation types. Again no significant relation was found in the crosstabulation.

TABLE 160: Percentage of each residence group reporting sedentary activities by frequency of participation

	RESIDENCE TYPE	
	HOUSEHOLDS N=162	**RESIDENTIAL N=142**
1.Low Participation	36.5	26.6
2.Moderate Participation	31.4	33.1
3.High Participation	32.1	40.3

x^2=3.72 p=0.16

♦ **Active Activities**

Table 161 indicates the percentage of each age group participating in each level of active activities. No pattern was detected in the rates of participation in active activities between the age groups.

TABLE 161: Percentage of each age group reporting active activities by frequency of participation

	AGE GROUPS		
	60-70 N=115	71-80 N=93	81+ N=96
1.No Participation	40.5	49.5	55.3
2.Some Participation	59.5	50.5	44.7

x^2=4.57 p=0.10

A significant association was found between males and females reporting of active participation. This is shown in table 162; a greater percentage of males, compared to females, participating in active activities.

TABLE 162: Percentage of males and females reporting active activities by frequency of participation

	SEX	
	MALES N=140	FEMALES N=164
1.No Participation	34.1	60.0
2.Some Participation	65.9	40.0

x^2=19.98 p=0.00001

Tables 163 depicts active activity level by the two accommodation types; indicating a significant relationship between the variables. A greater percentage of subjects in residential accommodation reporting no participation in active activities.

TABLE 163: Percentage of each residence group reporting active activities by frequency of participation

	RESIDENCE TYPE	
	HOUSEHOLDS N=162	RESIDENTIAL N=142
1.No Participation	34.6	63.3
2.Some Participation	65.4	36.7

x^2=24.51 p=0.001

- **Isolated Activities**

Tables 164 to 166 indicate the percentage of each age group, males and females and accommodation groups participating in each level of isolated activities. No significant association was found between the variables.

TABLE 164: Percentage of each age group reporting isolated activities by frequency of participation

	AGE GROUPS		
	60-70 N=115	71-80 N=93	81+ N=96
1.Low Participation	31.5	38.7	38.7
2.Moderate Participation	30.6	28.0	33.3
3.High Participation	37.8	33.3	28.0

x^2=2.92 p=0.57

TABLE 165: Percentage of males and females reporting isolated activities by frequency of participation

	SEX	
	MALES N=140	FEMALES N=164
1.Low Participation	33.6	38.1
2.Moderate Participation	34.3	27.5
3.High Participation	32.1	34.4

x^2=1.65 p=0.44

TABLE 166: Percentage of each residence group reporting isolated activities by frequency of participation

	RESIDENCE TYPE	
	HOUSEHOLDS N=162	RESIDENTIAL N=142
1.Low Participation	35.2	37.0
2.Moderate Participation	28.3	33.3
3.High Participation	36.5	29.7

x^2=1.69 p=0.43

- **Social Activities**

The following table indicates that no significant association was found between the percentage of each age group participating in the levels of social activities.

TABLE 167: Percentage of each age group reporting social activities by frequency of participation

	AGE GROUPS		
	60-70 N=115	71-80 N=93	81+ N=96
1.Low Participation	35.1	33.3	30.1
2.Moderate Participation	33.3	33.3	33.3
3.High Participation	31.5	33.3	36.6

x^2=0.78 p=0.94

In addition no significant association was found between frequency of participation in social activities and males and females (table 168).

TABLE 168: Percentage of males and females reporting social activities by frequency of participation

	SEX	
	MALES N=140	FEMALES N=164
1.Low Participation	28.5	36.9
2.Moderate Participation	35.8	31.3
3.High Participation	35.8	31.9

x^2=2.37 p=0.31

Tables 169 depicts activity level by the two accommodation types. The crosstabulation indicates a higher percentage of subjects who live in their own home reporting lower participation rates in social activities and a higher percentage of residential home subjects reporting moderate participation.

TABLE 169: Percentage of each residence group reporting social activities by frequency of participation

	RESIDENCE TYPE	
	HOUSEHOLDS N=162	**RESIDENTIAL N=142**
1.Low Participation	39.0	26.1
2.Moderate Participation	28.3	39.1
3.High Participation	32.7	34.8

x^2=6.42 p=0.04

Thus concerning frequency of participation in different types of activities: no associations were evident between the rates of participation reported by the age groups; association were found between sex and out of home activities and active activities; in addition associations were evident between residence and out of home, home based, active and social participation

♦ **Individual Activities**

The following table shows the average number of times the most commonly reported activities were reportedly undertaken in the four week period; some being done on an almost daily basis on average (television) and other less frequently (gardening) by those reporting them.

TABLE 170: Frequency of Participation in Selected Activities

Activities	Total Sample Number of Episodes	Number of Subjects Reporting Activity	Average number of Episodes per 4 Weeks
Walking	446	35	12.7
Shopping	897	77	11.7
Visiting Others	384	47	8.2
Gardening	227	37	6.1
Television	6922	261	26.5
Newspapers	1241	56	24.8
Drinking	367	36	10.2
Visits at Home	1104	97	11.4
Reading	2887	124	23.3
Radio	2424	92	26.4
Sitting Relaxing	1374	51	26.1

The frequency of participation in sporting activities is depicted in the table below: indicating that only a small number of subjects were involved in each activity but at times their participation rate being high.

TABLE 171: Frequency of Participation in Selected Sporting Activities

Activities	Total Sample Number of Episodes	Number of Subjects Reporting Activity	Average number of Episodes per 4 Weeks
Swimming	49	8	4.1
Bowls	92	12	7.7
Golf	19	3	6.2
Keep Fit	8	2	4.0
Exercises	127	5	25.4
Cycling	38	2	19.0
Snooker/ Pool	12	2	6.0
Dancing	33	8	4.1

Lastly, the frequency of some of the leisure activities not typically cited in leisure studies and the less popular activities are examined in the table below:

TABLE 172: Frequency of Participation in Selected Activities

Activities	Total Sample Number of Episodes	Number of Subjects Reporting Activity	Average number of Episodes per 4 Weeks
Housework	772	32	24.1
Pets	138	5	27.6
Taking Care of Grandchildren	286	17	16.8
Napping	140	5	28.0
Educational Classes	27	5	5.4

4.1.3.2 Quantitative Analysis of the Activity Adoption Process

Analysis of the process involved in adopting a new activity included only 62.2% of the sample; the remaining 37.8% of subjects felt unable to answer these questions as they had not begun any new activities for a long period and were unable to remember the process involved. The results indicated that 81.5% found it easy to adopt the new activity, 78.8% found social contact was an element of taking part in the activity and 81.1% of these reported this was an important element to their participation. All of the sample gave a reason for starting the activity, such as, "to socialise more" (12.7%), "the activity itself" (23.8%), "to fill in time" (10.6%) and "to help others" (11.1%). In addition subjects identified enjoyable factors which were inherent in their participation such as the social element of the activity (26.5%) and the activity itself (20.6%). Almost all the sample (93.7%) identified a specific key event which lead to adoption of the activity. The most common being "someone introduced me to the activity" (25.8%). Analysis of the responses by age group, sex and residence was carried out to identify similarities and differences in the process of activity uptake. Table 173 summarises these findings. In general similar reports on the elements in the model were found in all sub-samples. Interesting only a small percentage of all sub-groups reported that having activity specific knowledge was important. The Brandenburg Model elements were further examined using qualitative techniques. Results of this analysis is reported in Chapter 5.

TABLE 173: Analysis of Brandenburg Model Elements by Sex, Age, and Residence

	MALE SAMPLE	FEMALE SAMPLE	60-70 SAMPLE	71-80 SAMPLE	81+ SAMPLE	HOUSEHOLD SAMPLE	RESIDENTIAL SAMPLE
% OF SAMPLE IN ANALYSIS:	62.9	61.6	63.5	63.4	59.4	60.0	64.8
% REPORTING:							
Ease of Adoption	79.5	83.2	75.3	84.7	86.0	80.4	82.6
Social Contact Evident	78.4	79.2	76.7	79.7	80.7	76.3	81.5
Social Contact Important	79.5	82.4	73.8	84.6	86.5	74.7	87.8
Prevalent Reasons for Take Up of Activity Included	The Activity Itself. To Get Fit. To Fill in Time.	The Activity Itself. To Socialise More. To Help Others. To Fill in Time.	The Activity Itself. To Get Fit. To Socialise More. To Help Others. To Fill in Time.	The Activity Itself. To Socialise More. To Help Others. Practical Work.	The Activity Itself. To Socialise More. To Fill in Time.	The Activity Itself. To Help Others. To Get Fit.	The Activity Itself. To Socialise More. To Fill in Time.
Enjoyable Elements of Activity	Social Element. The Activity Itself.	Social Element. The Activity Itself.	Social Element. The Activity Itself.	Social Element. The Activity Itself. Feeling Useful.	Social Element. The Activity Itself.	Social Element. The Activity Itself. To Get Out of the House.	Social Element. The Activity Itself.
Key Event Leading to Adoption	89.8	97.1	90.4	91.7	100	95.9	91.4
Examples of Key Events	Some one introduced subject to activity. Time became available.	Some one introduced subject to activity. To socialise.	Some one introduced subject to activity. Time became available. To socialise.	Some one introduced subject to activity. Time became available. To socialise.	Some one introduced subject to activity. Opportunity became available. To socialise.	Some one introduced subject to activity. Time became available.	Some one introduced subject to activity. To socialise. Opportunity became available.
Importance of Information concerning Activity	28.4	31.7	31.5	33.9	24.6	37.1	22.8

4.1.3.3 Satisfaction with Leisure and Perceived Barriers to Participation

A wish to partake in more leisure activities was expressed by 58.6% of the sample. Of the remaining 41.4%, the most common reason for not wanting to increase individual leisure participation was satisfaction with present leisure repertoire (46.7% of sample). Other reasons given included personal health (14.1% of sample), regarding themselves as being "too old" to partake in leisure (13.3% of sample) and a feeling, perhaps most surprisingly, of having no time to partake in further activity (11.1%).

Of those who wanted to increase their leisure repertoire, health problems were the most common constraining factor (47.2% of sample). This was followed by 'no place to take part in activity' (14.2% of sample), 'no available opportunities' (12.2%) and 'not enough time to participate' (9.1% of sample).

Analysis of the male and female subjects independently (Table 174) found a similar desire to increase participation in the two groups.

TABLE 174 : The percentage of subject responses to the question 'Would you like to take part in more leisure activities than you do at present?' by sex

	SEX	
	MALE	**FEMALE**
YES - I want to increase my participation in leisure	60.7	56.7
NO - I am satisfied with the leisure participation I have at present	39.3	43.3

$x^2=0.50$ $p>0.05$

For those females who did not want to partake in more leisure activities, the major reasons were that they were content with their current leisure involvement (45.2%), that they were constrained by their health (16.4%), that they were 'too old' for leisure participation

(16.4%) and that they did not have enough time (8.2%). The male percentages are similar for these reasons: 48.4% felt content with current leisure behaviour, 11.3% felt constrained by their health, 9.7% reported being 'too old' to partake, and 14.5% said they did not have the time to increase participation levels.

Table 175 shows the perceived relevance of various constraints to male and female subjects; poor health being the major constraint to both males and females.

TABLE 175: Constraints to Leisure Participation

FEMALE %	PERCEIVED CONSTRAINTS	MALES %
16.7	No place to partake in activity	11.6
3.9	Financial Limitations	3.2
7.8	No Time to Increase Activity Participation	10.5
2.9	Transport Limitations	3.2
4.9	Lack of Information Concerning Available Leisure Activities	3.2
45.1	Poor Health Limitations	49.2
2.9	No-one to Partake in Activity With	4.2
3.9	No Self Motivation	2.1
11.8	Worries about Participation Hazards	12.6

Analysis of the three age groups within the sample also found no significant association with the desire to increase leisure participation (x^2=1.82 p>0.05) as shown in table 176.

TABLE 176: The percentage of subject responses to the question 'Would you like to take part in more leisure activities than you do at present?' by age

	AGE GROUPS		
	60-70	71-80	81+
YES - I want to increase my participation in leisure	60	63.7	53.1
NO - I am satisfied with the leisure participation I have at present	40	36.3	46.9

x^2=1.82 p>0.05

60% of the youngest age group, 63.7% of the 71-80 age group and 53.1% of the oldest age group wished to increase their leisure participation. The table below details the reasons subjects felt constrained from increasing participation rates. Poor health was a constraining variable across all groups but was reported by a greater number of subjects in the older age group. Younger subjects reported time and place factors while older subjects had worries about participation hazards.

TABLE 177 Constraints to Leisure Participation by Age

PERCEIVED CONSTRAINTS	AGE GROUPS		
	60-70 %	71-80 %	81+ %
No place to partake in activity	19.7	13.9	8.2
Financial limitations	4.2	4.6	1.6
No time to increase activity participation	14.1	9.2	3.3
Transport limitations	5.6	1.5	1.6
Lack of information concerning available leisure activities	7.0	3.1	1.6
Poor health limitations	35.2	46.2	62.3
No-one to partake in activity with	4.2	4.6	1.6
No self motivation	4.2	4.6	0
Worries about participation hazards	5.6	12.3	19.7

No significant associations was evident between wanting to take part in more activity and the different forms of accommodation (x^2=0.94 p>0.05). The relationship between these variables is shown in the table below:

TABLE 178 The percentage of subject responses by residence to the question 'Would you like to take part in more leisure activities than you do at present?' by residence

	RESIDENCE	
	HOUSEHOLDS	RESIDENTIAL
YES - I want to increase my participation in leisure	61.1	55.6
NO - I am satisfied with the leisure participation I have at present	38.9	44.4

$x^2=0.94$ $p>0.05$

Similar percentages of subjects in both accommodation types expressed the desire to increase their participation in leisure activities. The factors cited as constraints to increased participation are listed in the table below:

TABLE 179: Constraints to Leisure Participation by Residence

HOUSEHOLDS %	PERCEIVED CONSTRAINTS	RESIDENTIAL %
15.5	No place to partake in activity	12.4
4.6	Financial Limitations	2.3
13.6	No Time to Increase Activity Participation	3.4
4.6	Transport Limitations	1.1
5.5	Lack of Information Concerning Available Leisure Activities	2.3
34.6	Poor Health Limitations	61.8
5.5	No-one to Partake in Activity With	1.1
4.6	No Self Motivation	1.1
11.8	Worries about Participation Hazards	12.4

A time factor particulary effected household subjects compared to those from residential accommodation. Poor health was an issue for both groups, however reported by more subjects who lived in residential accommodaiton. Worries about participation was also relevant to both groups

The specific activities the total sample wanted to partake in but felt constrained from doing so are shown in Table 180. Examination of the table shows that subjects often expressed a wish to partake in activites which were active (dancing, exercises etc.) in nature or involved getting out and about (days out, holidays etc.).

TABLE 180 : Leisure activities subjects felt constrained from participation in.

Activity	Percentage of subjects
Days Out	7.8
Walking	1.1
Dancing	0.6
Swimming	1.1
Holidays	2.2
Educational Classes	0.6
Housework	1.7
Going for a Drink	5.6
Exercises	1.7
Gardening	2.2

4.1.3.4 Attitudes to Leisure and Health

To improve health status 71.1% of the sample reported particular health related behaviours (e.g. diet) that they specifically did as a means to this end. Of these subjects, only 24.7% actually stated that they participated in leisure activities as a means to improve health. While 19.1% participated in sports and 45.3% reported walking as an adopted behaviour to improve health. In addition 27.3% of the sample reported taking prescribed medicines to improve health. Other behaviours mentioned were gardening (12.1%), housework (14.9%), sleeping (5.6%) and not taking medications (3.7%).

Of the total sample, 35.2% wanted to adopt further behaviours to improve health. Of these, 56.1% wanted to have greater sport participation as a means to achieving improved

health status. Only 22.4% wished to partake in more social activities and 12.1% wanted to take up a hobby to improve health. Other behaviours mentioned included improving diet (7.4%), losing weight (5.6%), stopping smoking (12.3%) and cutting down on alcohol (0.9%).

The most frequently mentioned constraining factor which prevented people from performing these behaviours was poor health status. This was reported by 37.1% of subjects. Other prominent perceived restraining factors included; motivation (28.6%), no place to do behaviour (12.4%), no time (6.7%), embarrassment (3.8%) and uncertain of safety (3.8%).

4.1.3.5 Knowledge and Use of Community Based Leisure Services

Feeling part of the community was reported by 69.7% of the sample. Moreover, 69.3% of the sample felt it a good idea to provide leisure services for people over 60 within the community. The table below indicates the services which these subjects felt in would be 'a good idea to provide' aimed at older people.

TABLE 181: Suggested Ideas for Service Provision for Older People

SERVICES	%
Over 60's Club	18.4
Transport Passes	11.8
Social Clubs	10.8
Central Organisation	9.4
Practical Help	9.4
Activity Clubs	7.5
Accommodation	6.6
Community Centres	4.7
Church Clubs	2.8
Educational Classes	2.4
Sports Facilities	1.4
Specialist Care Group	0.5

7.9% of the sample felt it was not 'a good idea' to provide services for older people. Primarily because these subjects expressed that it was 'depressing' to group older people together (24%) and they felt that they 'did not want to be with just older people' (24%). Other reasons given why subjects did not feel services aimed at older people should be provided included; 'I am too young to think of such things' (20%), 'services should include all ages together' (16%) and 'I do not like organised leisure' (8%). The remaining 8% felt unsure as to why they did not feel services for older people should be provided.

In addition 14.9% of the sample when asked if providing services for older people 'was a good idea' replied that it 'depended'. The major qualifying reason given was 'it depends on the person, they would not suit me' (94.3%). Other subjects expressed that they felt that the services were only aimed at 'people with mental health problems' (1.9%) and 'people who are inactive' (1.9%).

The remaining 7.9% of the sample were unsure as to whether services for older people were 'a good idea' or not.

Only approximately half (48.8%) of the subjects knew of any services available and furthermore only 15.8% actually used any of the available leisure services. Local day centres (43.7%), activity groups (18.7%) and church social centres (12.5%) were the three most popular services used by those who reported taking part in available services. Of the subjects who used a particular facility 72.9% were highly satisfied with it, 14.6% described it as average and 12.5% said they were not at all satisfied with the facility.

Only 37.7% of subjects were totally satisfied with the range of leisure opportunities available to them, while 10.6% were totally dissatisfied. No significant differences were found between satisfaction with range of leisure opportunities and the different age groups (x^2=7.54 $p>0.05$), the different sexes (x^2=1.37 $p>0.05$) or the different forms of accommodation (x^2=3.46 $p>0.05$).

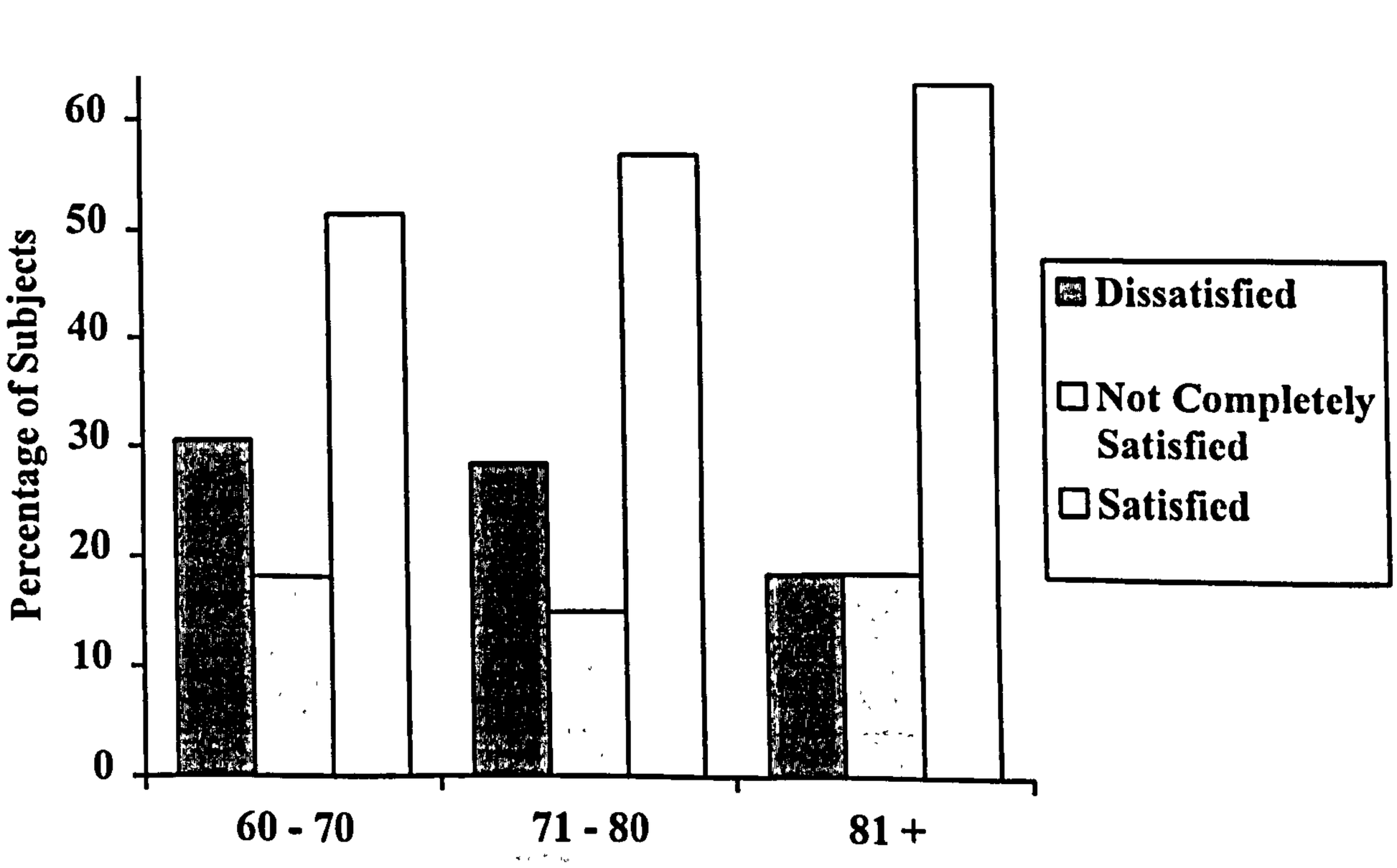

Figure 9: Satisfaction with the Range of Leisure Opportunities by Age

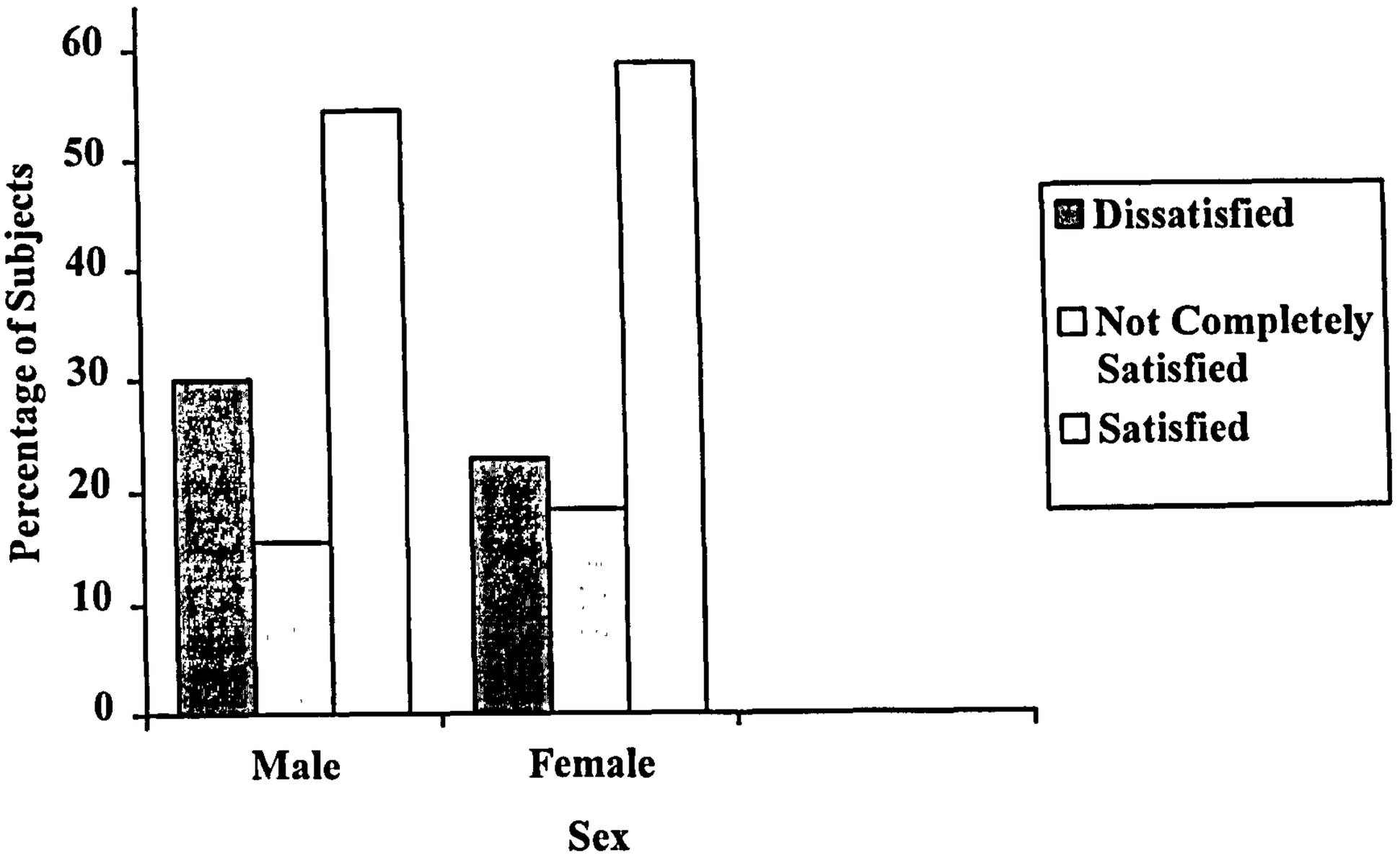

Figure 10: Satisfaction with the Range of Leisure Opportunities by Sex

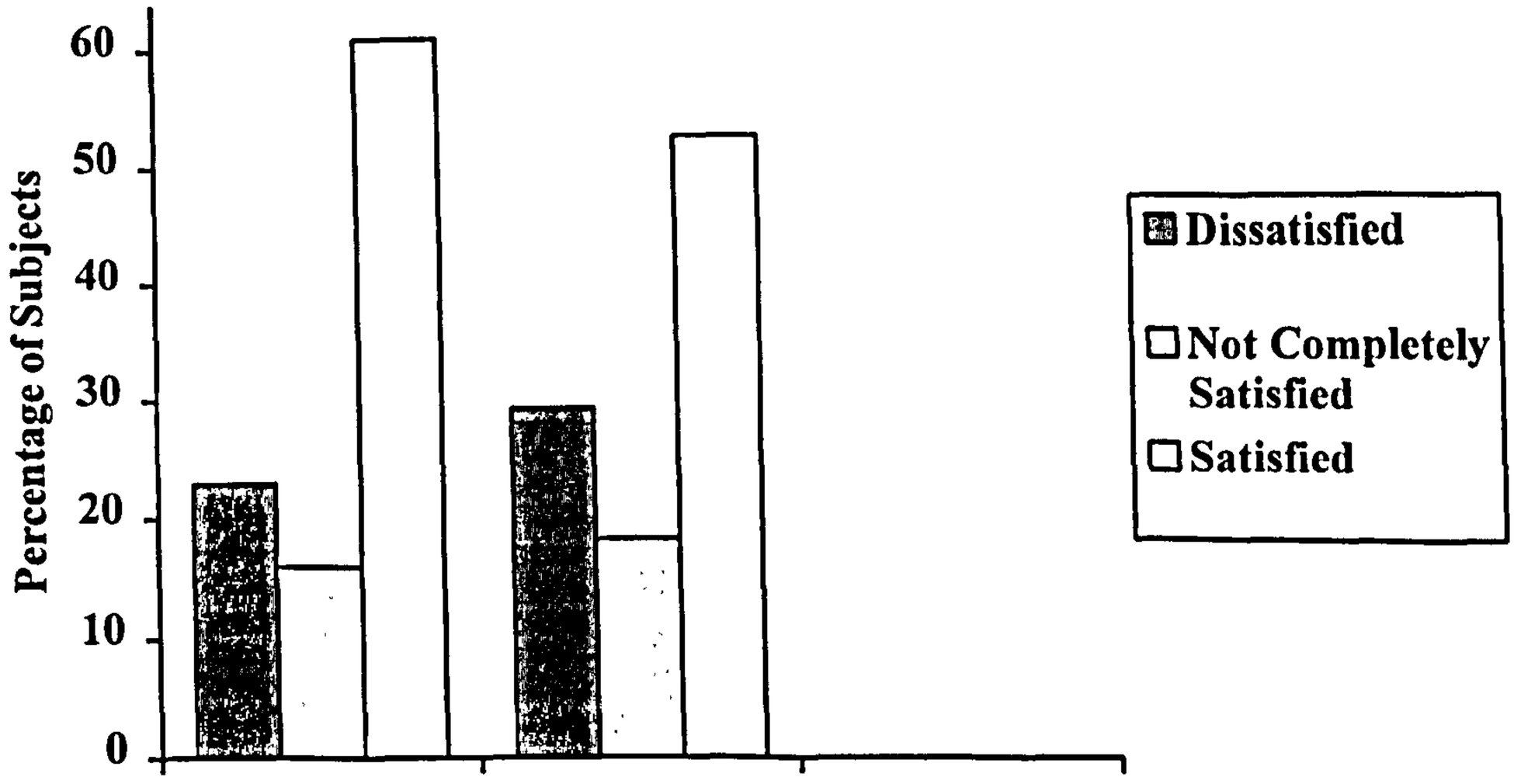

Figure 11: * Satisfaction with the Range of Leisure Opportunities by Residence**

24.2% of subjects were totally satisfied with the promotion of leisure opportunities and 31.8% were totally dissatisfied. No significant associations were found according to age (x^2=7.32 p>0.05), sex (x^2=2.61 p>0.05) or residence (x^2=3.11 p>0.05). The graph below shows the Likert Scale responses given to the question which asked subjects to rate their degree of satisfaction on the way in which leisure opportunities are promoted:

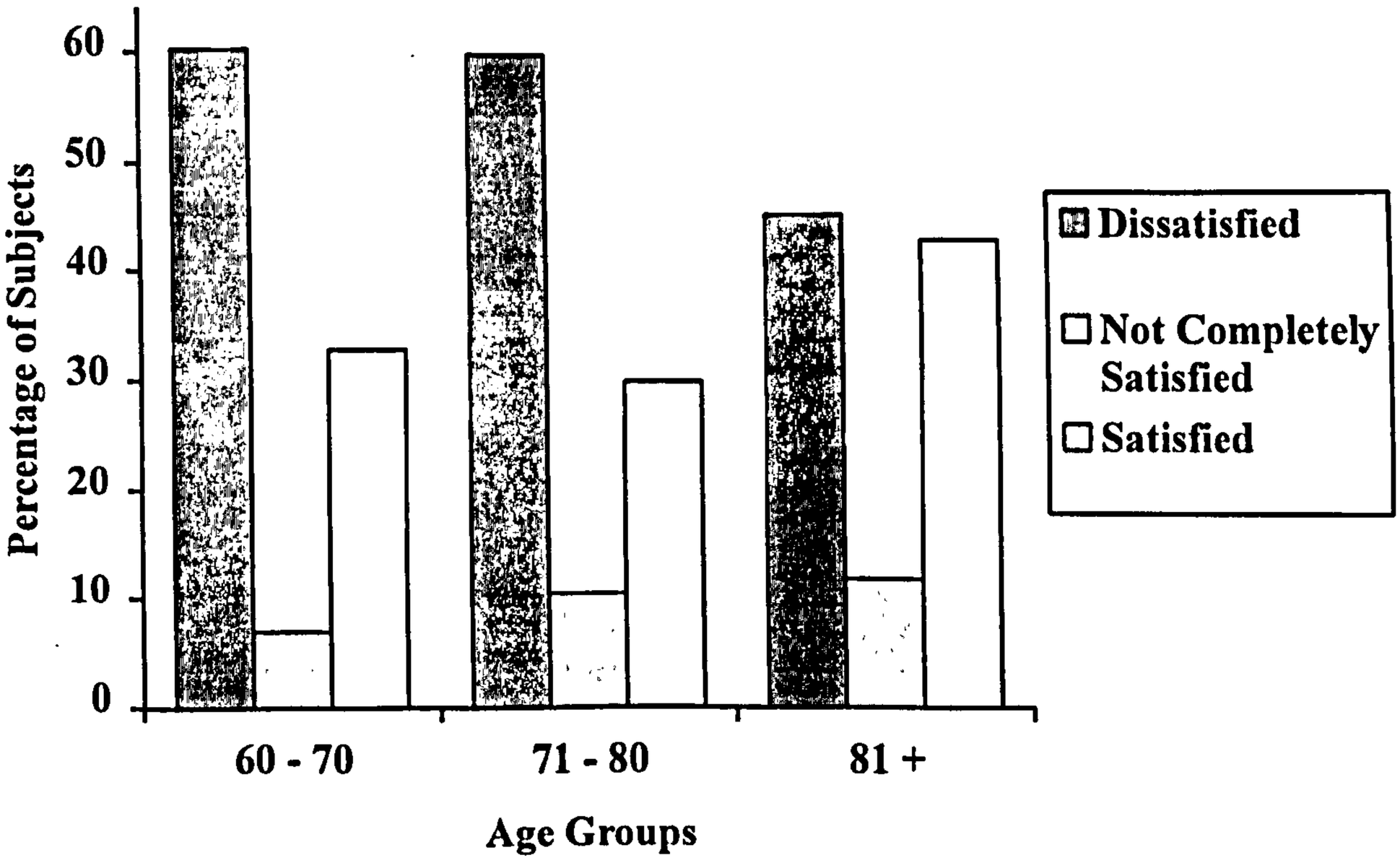

Figure 12: Satisfaction with the Promotion of Leisure Opportunities by Age

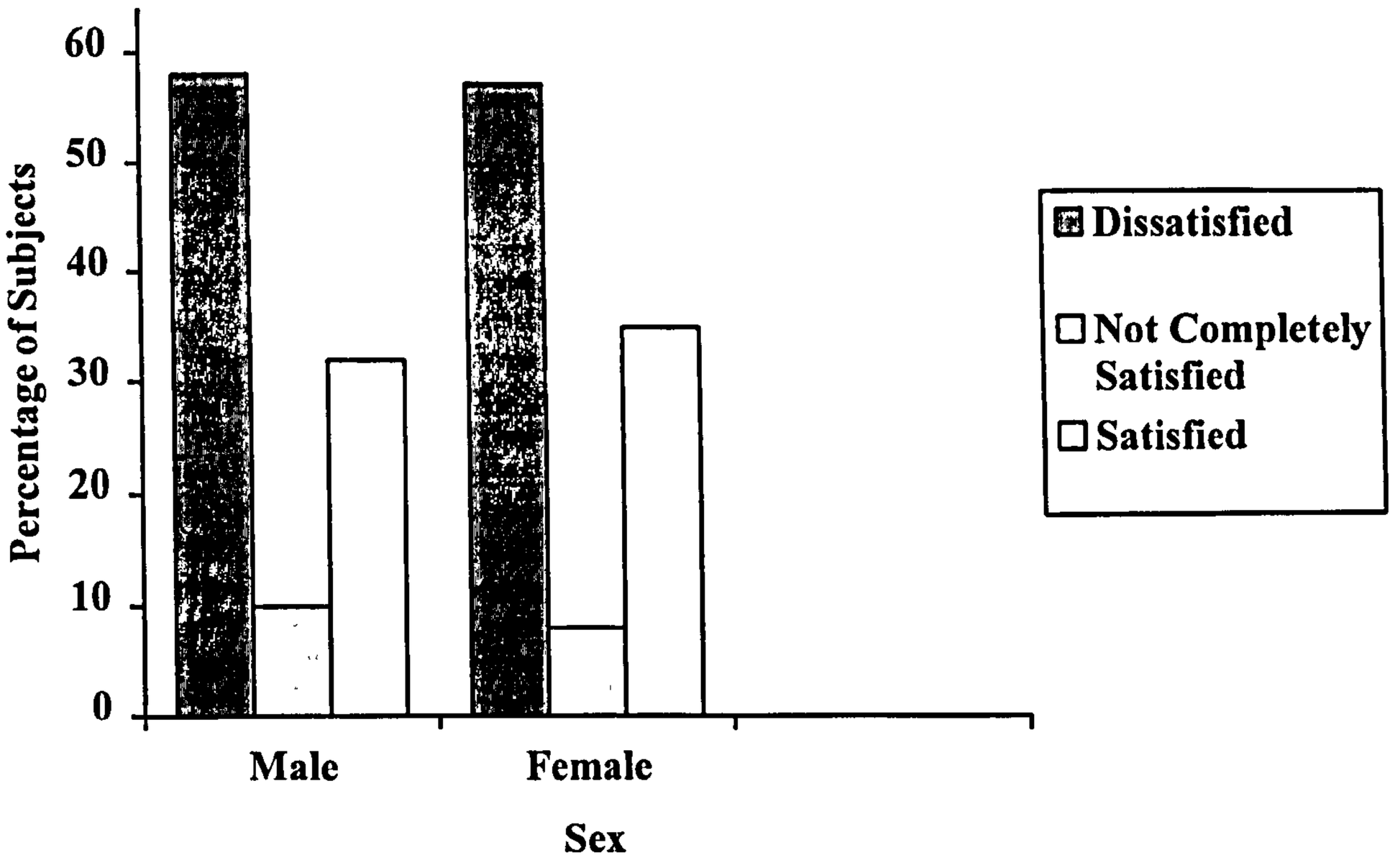

Figure 13: Satisfaction with the Promotion of Leisure Opportunities by Sex

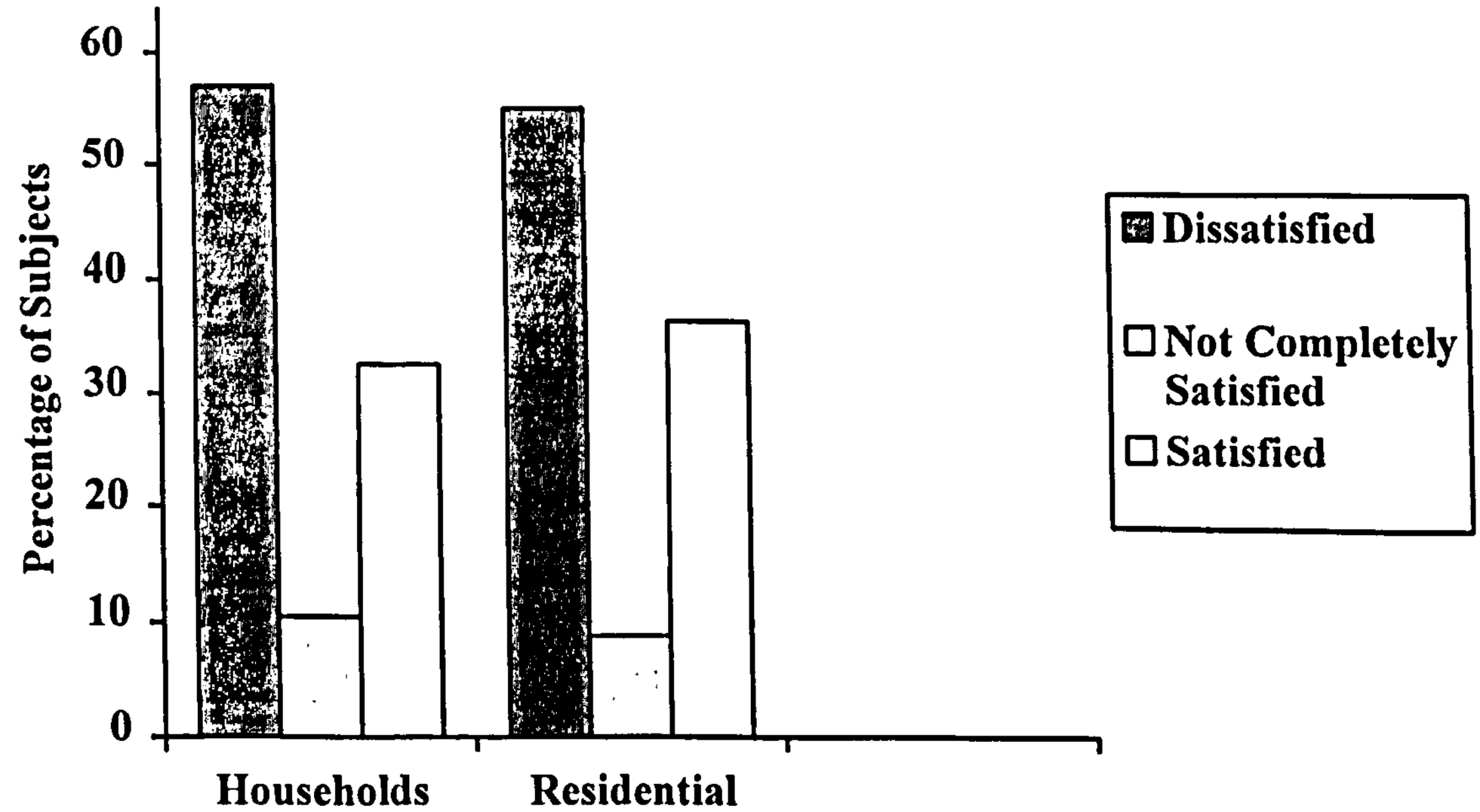

Figure 14: Satisfaction with the Promotion of Leisure Opportunities by Residence

With regard to the cost of leisure activities, 26.8% were totally satisfied while 41.2% were totally dissatisfied. No significant associations were evident according to age (x^2=5.05 p>0.05), sex (x^2=0.70 p>0.05) or residence (x^2=6.37 p>0.05). The figure below depicts the responses given by sub sets of the sample:

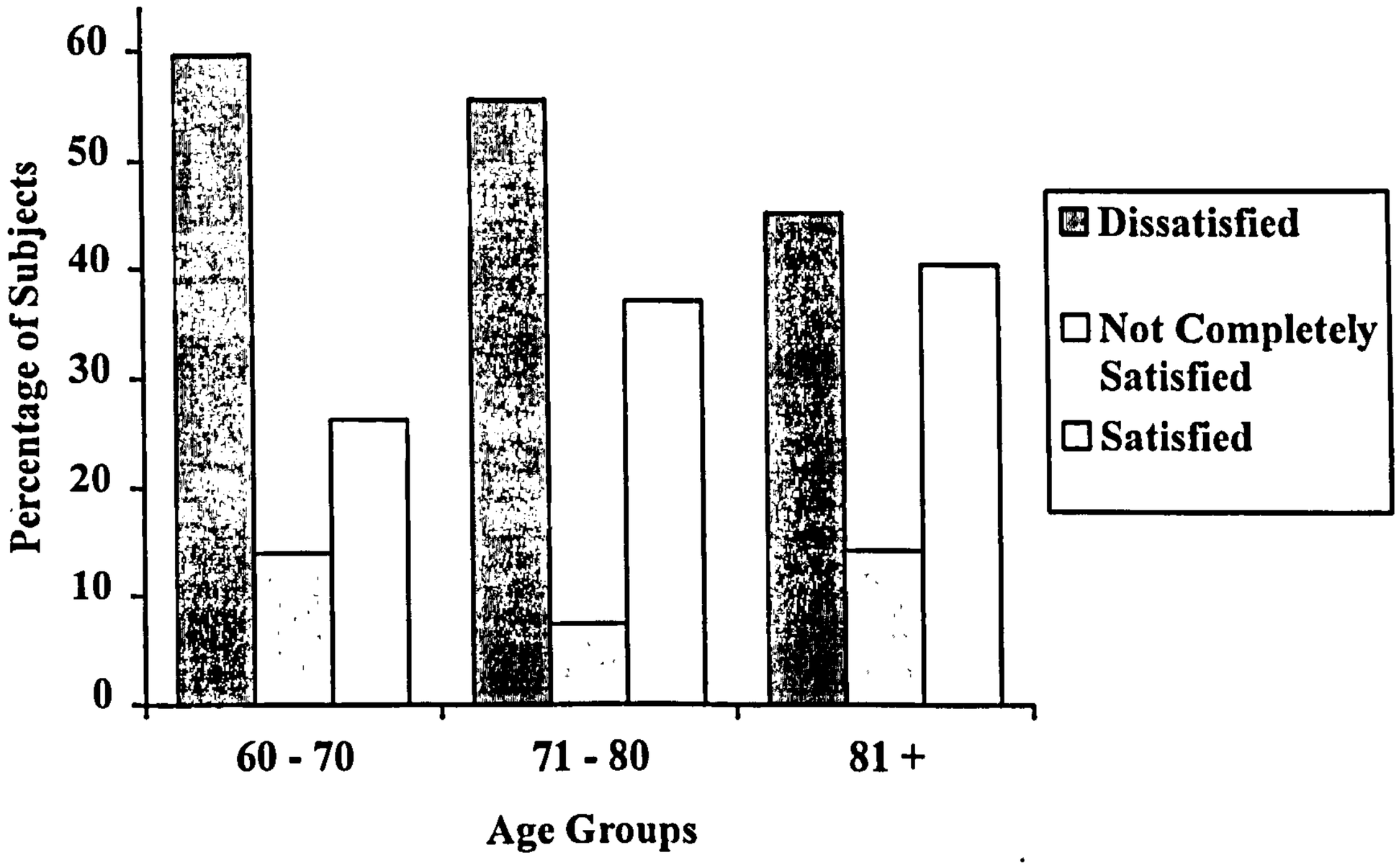

Figure 15: Satisfaction with the Cost of Leisure Opportunities by Age

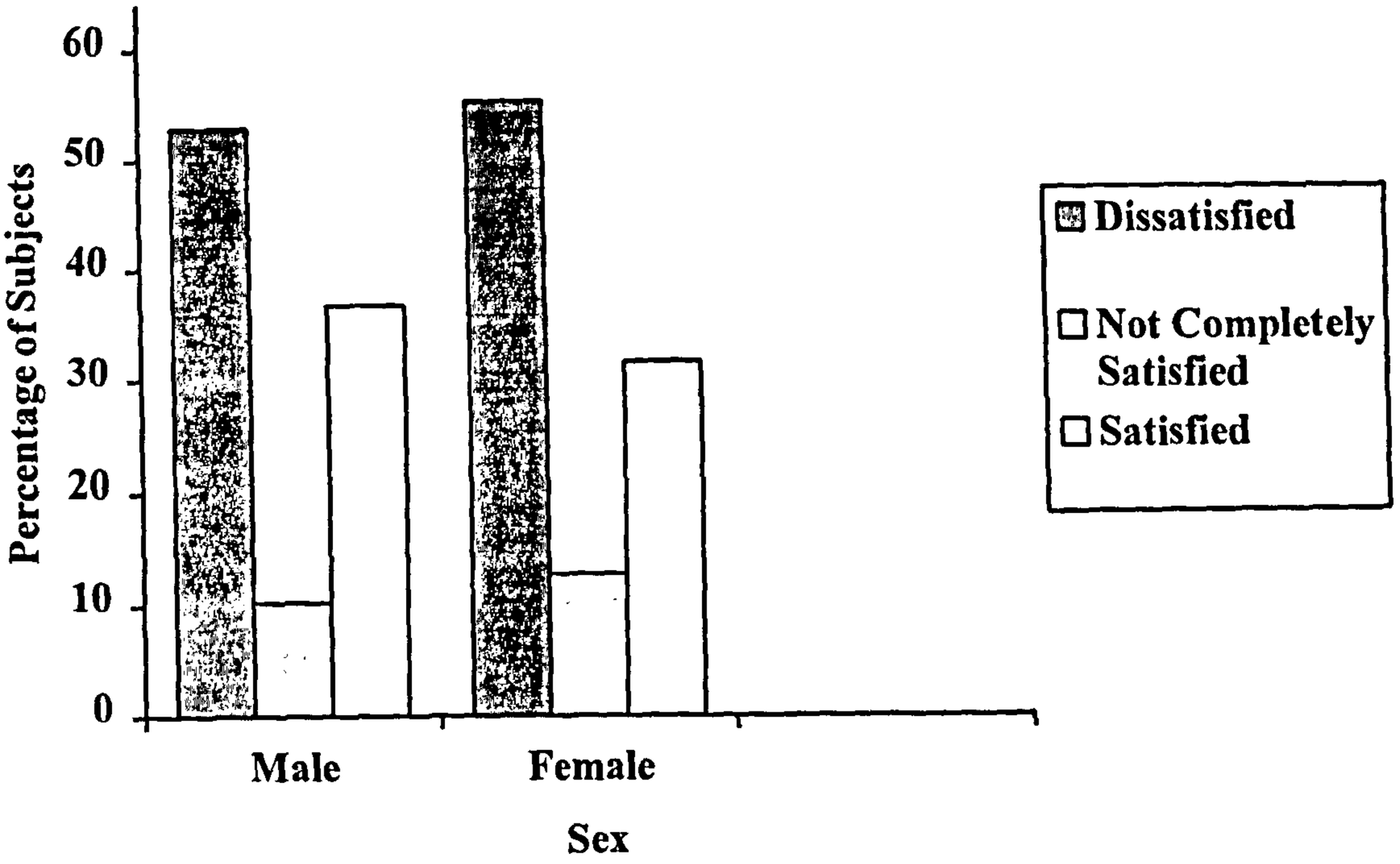

Figure 16: Satisfaction with the Cost of Leisure Opportunities by Sex

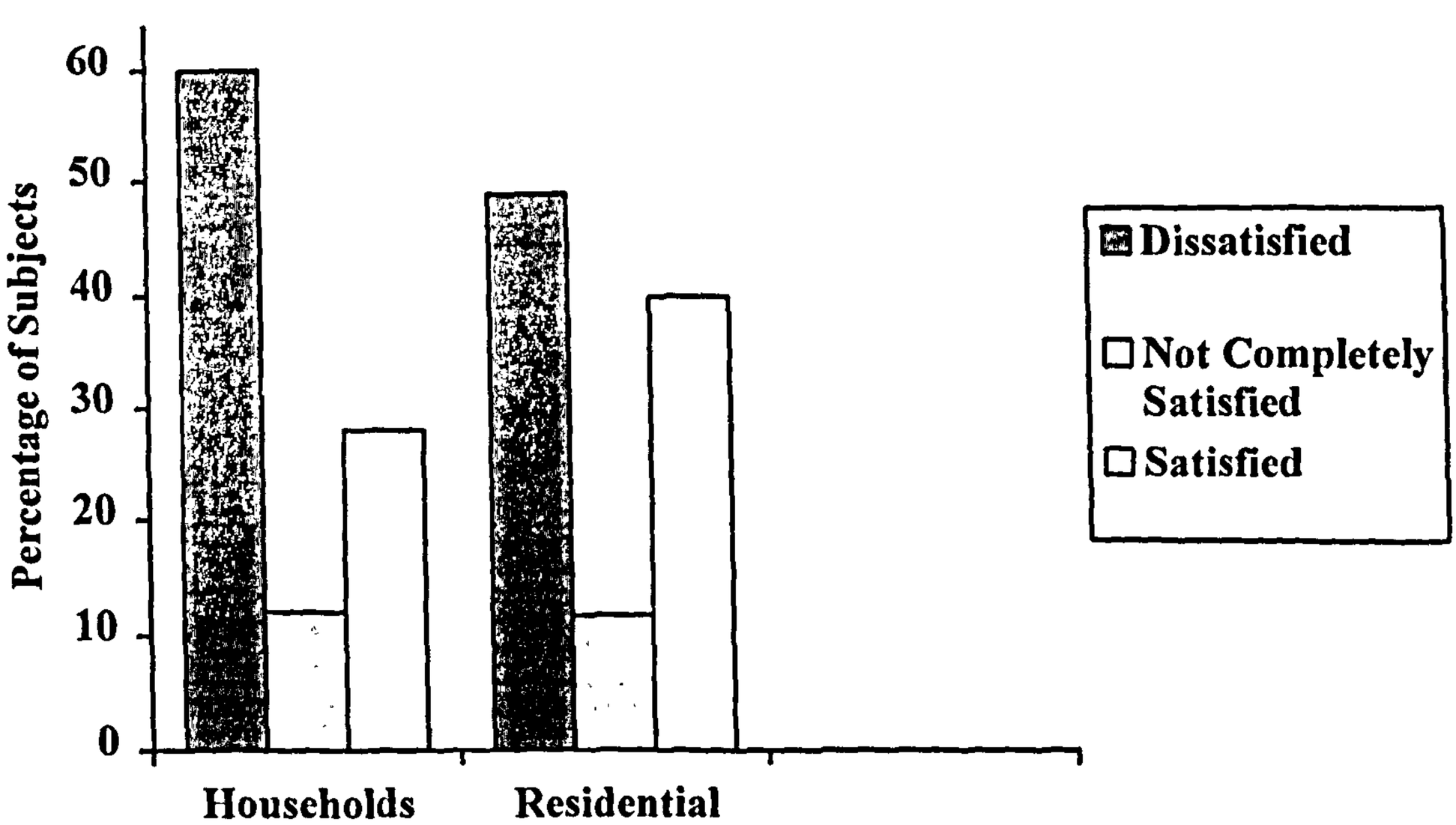

Figure 17: Satisfaction with the Cost of Leisure Opportunities by Residence

The following pie chart indicates the age groups subjects preferred to spend their leisure time with

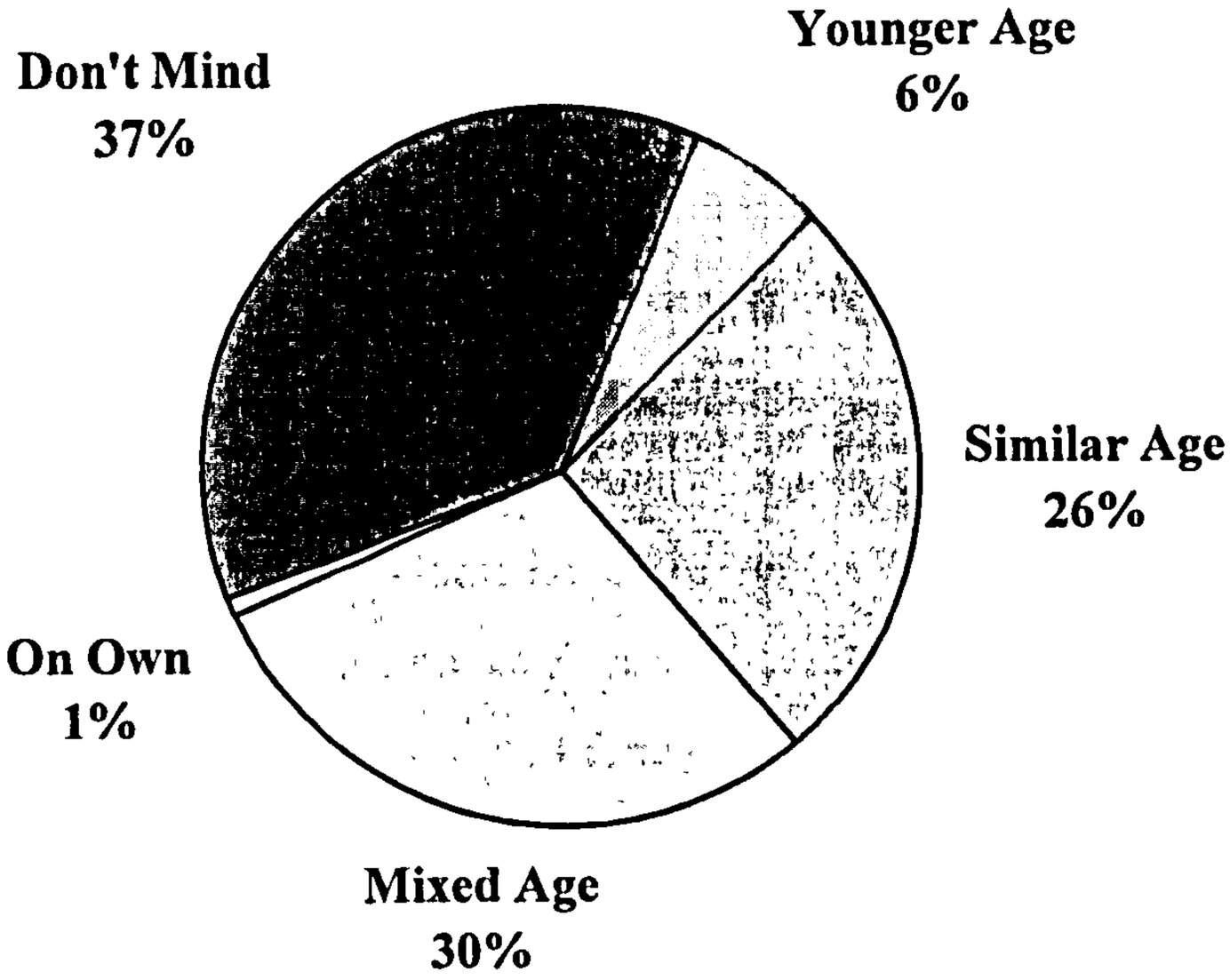

Figure 18: Percentage of Subjects Expressing Leisure Time Preferred Age Group

37.5% of the sample felt that there were no other leisure services they would like to see provided. A further 18.4% felt that they would like to see further provision but were unable to specific exactly what. Of the remaining sample the following suggestions were made for future leisure provision:

TABLE 182: Suggested Ideas for Future Leisure Provision

LEISURE SERVICE	%
Improved Transport Facilities	16.9
Activity Centre for Older People	13.1
Over 60's Social Club	10.8
Community Centre	10.0
Practical Help in Home	10.0
Sports for Older People	6.9
Educational Classes	4.6
Leisure for Youth/Unemployed	4.6
Home Based Activities	3.1
Improved Security Outdoors	2.3
Library	1.5
Church Groups	1.5
Facilities for Housebound	1.5
Holidays	1.5
Specialised Care Groups	1.5
Improved Health Support Services	1.5
Individual Help in Getting Out	1.5
Dance Halls	0.8
Music Classes	0.8
Voluntary Work Opportunities	0.8
Company in House	0.8
More Sheltered Accommodation	0.8
More Police on the Beat	0.8
More Local Shops	0.8
Relaxation Classes	0.8
General Social Activities	0.8

4.1.3.6 Cross-sectional analysis of the association between leisure behaviour and well-being and socio-cultural factors

♦ **Well-being[1] of the sample**

The following two sections examine leisure behaviour by a number of measures of well-being. As described in chapter 3 several measures of well-being were included within the interview schedule. The table below gives an overview of the well-being of the sample according to these measures. The responses are divided by thirds of the sample. This process provided an indication of low, median and high scores whilst maintaining sufficient subjects within each category for analysis.

TABLE 183: Well-being of the Sample

WELL-BEING MEASURE	RATING[2]	PERCENTAGE OF RESPONSES
Health status	Excellent	19.1
	Good	31.0
	Fair	18.5
	Not so Good	31.4
Comparison of health with others	More Healthy	41.8
	About Average	17.8
	Less Healthy	40.5
Life Satisfaction	Low Life Satisfaction (0-8)	44.1
	Median Life Satisfaction (9-10)	24.3
	High Life Satisfaction (11-14)	31.6
Malaise	Low Malaise (0-6)	42.1
	Median Malaise (7-10)	28.0
	High Malaise (11-15)	29.9
Self Esteem	Low Self Esteem (1-6)	20.1
	Median Self Esteem (7-8)	30.9
	High Self Esteem (9)	49.0
Personal Control	Low Personal Control (1-2)	59.5
	High Personal Control (3-4)	40.5
Social Support	Low Social Support (0-7)	34.9
	Median Social Support (8-12)	28.6
	High Social Support (13+)	36.5
Satisfaction with Social Support	Low Satisfaction (0-6)	38.5
	Median Satisfaction (7-8)	30.6
	High Satisfaction (9+)	30.9

[1] For the purposes of this section the term 'well-being' includes the social support measures
[2] The numbers in brackets represent the range of scores included within the category.

4.1.3.6.1 Leisure Repertoire and Well-being

Table 184 depicts the association analysis between the total number of reported activities and well-being

- **Total number of reported activities and well-being**

TABLE 184:Total Number of reported activities and well-being

WELL-BEING MEASURE	x^2 VALUE		P VALUE	
	4wk	1 year	4wk	1 year
Health status	15.03	24.60	0.02	0.000
Comparison of health with others	6.92	13.13	0.14	0.01
Life Satisfaction	12.21	12.16	0.02	0.02
Malaise	21.68	11.50	0.000	0.02
Self Esteem	4.81	5.21	0.31	0.27
Personal control	8.33	0.49	0.02	0.78
Social Support	63.86	6.71	0.09	0.15
Satisfaction with Social Support	36.22	13.99	0.02	0.01

Health status ratings were found to be significantly associated with the number of activities reported as part of leisure repertoire over the 12 month period. If a subject reported only a few activities they were more likely to rate their health as fair or poor. As the number of activities subjects reported increased i.e. as leisure repertoire widened health ratings of good or excellent were more likely. This association was also significant over the four week period. Subjects were asked to rate their general health in comparison to the health of others of their own age. There was a significant association found between this and the number of activities reported in leisure repertoires over the 12 month period. For the remaining well-being measures were a significant association was found (life satisfaction, malaise, personal control

and satisfaction with social support) the trend was similar; the wider leisure repertoires being associated with positive well-being as shown in the example below:

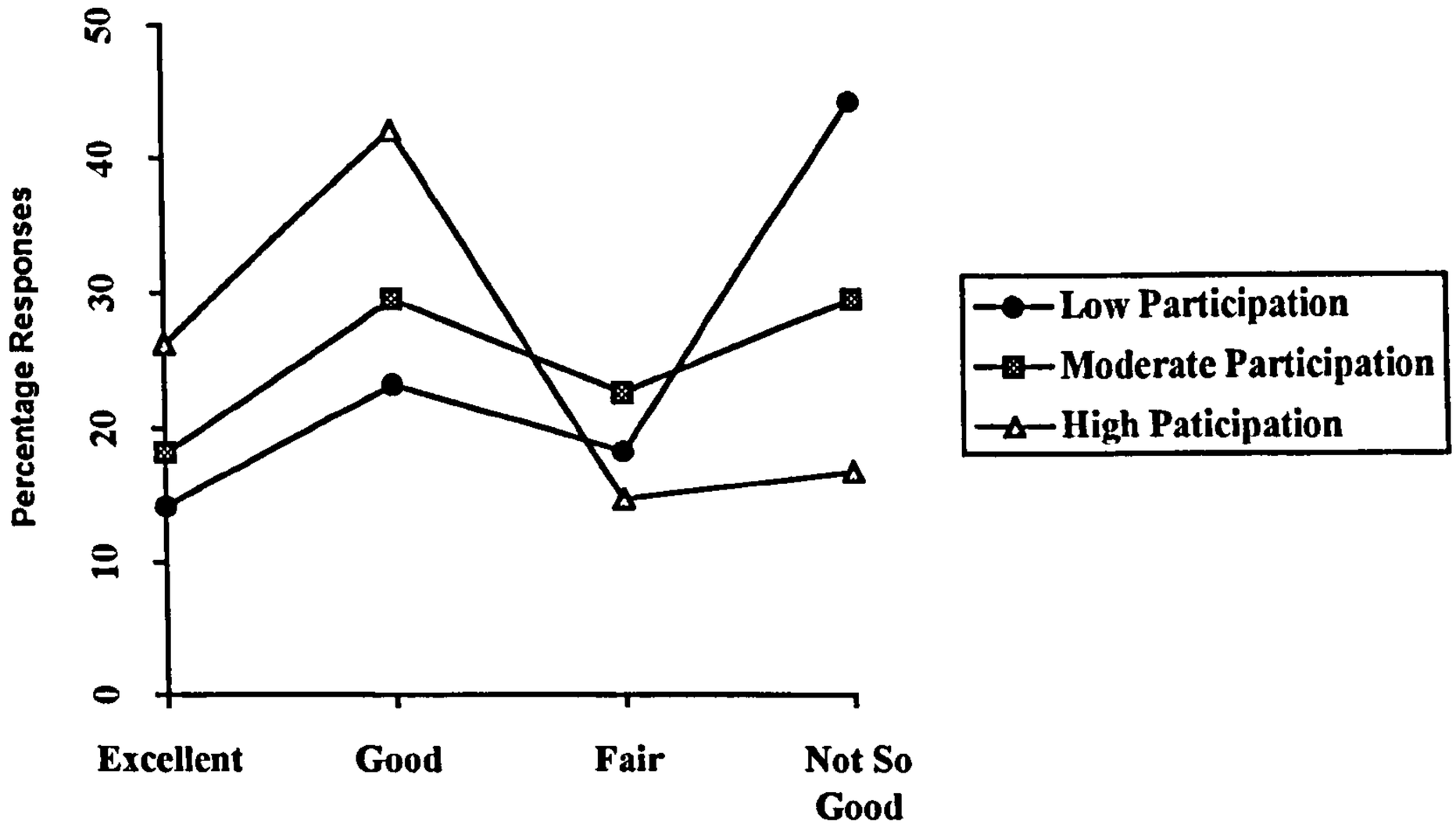

Figure 19: Relationship Between Leisure Repertoire Size and Health Status

♦ **Number of home based activities and well-being**

TABLE 185: Number of home based activities and well-being

WELL-BEING MEASURE	x^2 VALUE		P VALUE	
	4wk	1 year	4wk	1 year
Health status	7.79	1.90	0.25	0.93
Comparison of health with others	7.58	2.05	0.11	0.73
Life Satisfaction	1.91	4.14	0.75	0.38
Malaise	3.15	2.10	0.54	0.72
Self Esteem	10.01	4.95	0.04	0.29
Personal control	2.51	2.59	0.29	0.27
Social Support	2.71	2.65	0.61	0.62
Satisfaction with Social Support	3.15	1.95	0.53	0.75

The analysis of home based activities (Table 185) found no significant relationships between the number of home based activities in repertoire and well-being, except for the association between the number of home based activities in four week leisure repertoire and self esteem. The cross-tabulation indicated that fewer of the subjects reporting low participation in home based activities had a low self esteem and a greater number of them had a higher self esteem compared to the other two activity groups. This relationship is shown in the figure below:

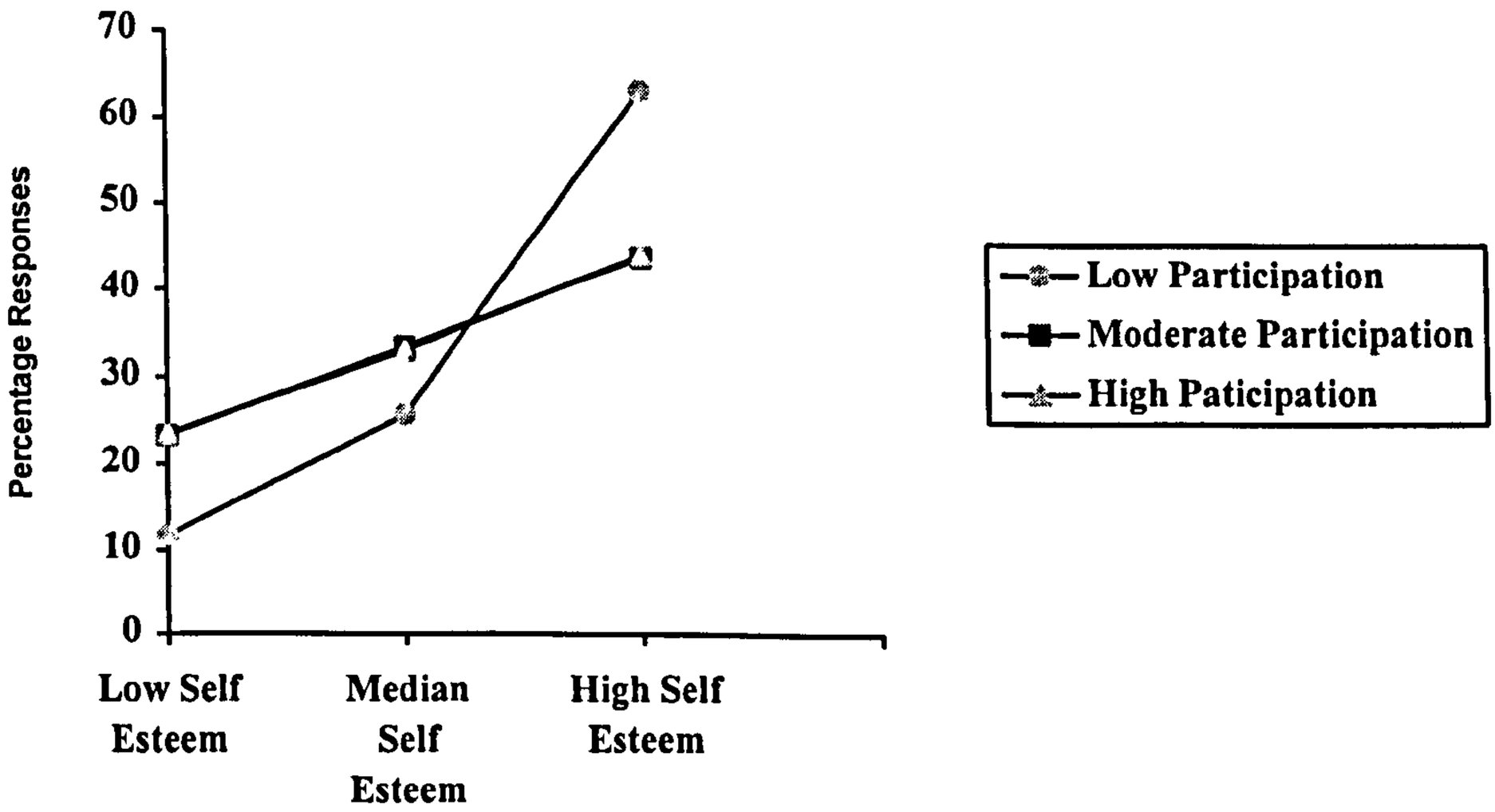

Figure 20: Relationship between the size of home based leisure repertoire and self esteem

♦ **Number of out of home activities and well-being**

TABLE 186: Number of out of home activities and well-being

WELL-BEING MEASURE	x^2 VALUE		P VALUE	
	4wk	1 year	4wk	1 year
Health status	29.31	1.26	0.000	0.97
Comparison of health with others	12.83	2.28	0.01	0.68
Life Satisfaction	15.38	0.77	0.004	0.94
Malaise	8.02	0.54	0.09	0.97
Self Esteem	19.33	1.85	0.001	0.76
Personal control	10.82	1.23	0.01	0.54
Social Support	18.46	4.77	0.001	0.31
Satisfaction with Social Support	18.10	4.35	0.001	0.36

Interesting there were no significant relationships found between the well-being measures and 12 month leisure repertoire but many between well-being and four week repertoire. Analysis of the cross-tabulation indicated wider out of home leisure repertoires were associated with positive reports of well-being and social support. An example of this is presented in the figure below:

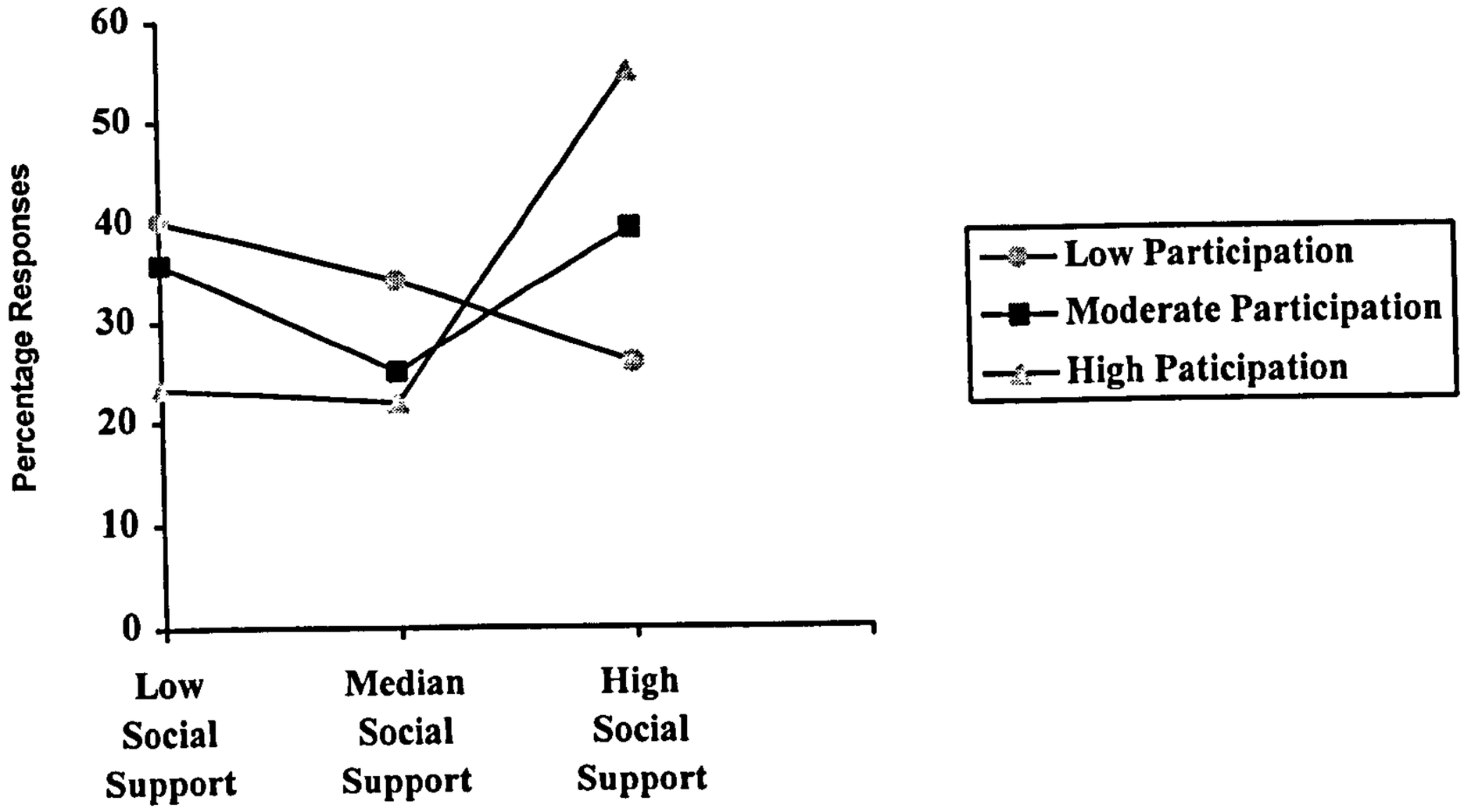

Figure 21: Relationship between the size of out of home leisure repertoire and social support

- **Number of sedentary activities and well-being**

TABLE 187: Number of sedentary activities and well-being

WELL-BEING MEASURE	x^2 VALUE		P VALUE	
	4wk	1 year	4wk	1 year
Health status	4.75	15.23	0.58	0.02
Comparison of health with others	0.93	3.78	0.92	0.44
Life Satisfaction	6.42	14.22	0.17	0.01
Malaise	8.44	4.94	0.08	0.29
Self Esteem	2.29	2.38	0.68	0.67
Personal control	0.17	0.93	0.91	0.63
Social Support	13.43	4.56	0.01	0.34
Satisfaction with Social Support	7.16	26.00	0.13	0.000

Only four significant associations were found between the size of sedentary repertoire and well-being. Furthermore the majority of these were observed within the twelve month time repertoire. The four week data found that as the size of the sedentary

repertoire increased the social support score also increased. Increases in the twelve month reported sedentary repertoire were associated with more positive ratings of health status, life satisfaction and satisfaction with social support. This latter relationship is shown in Figure 22.

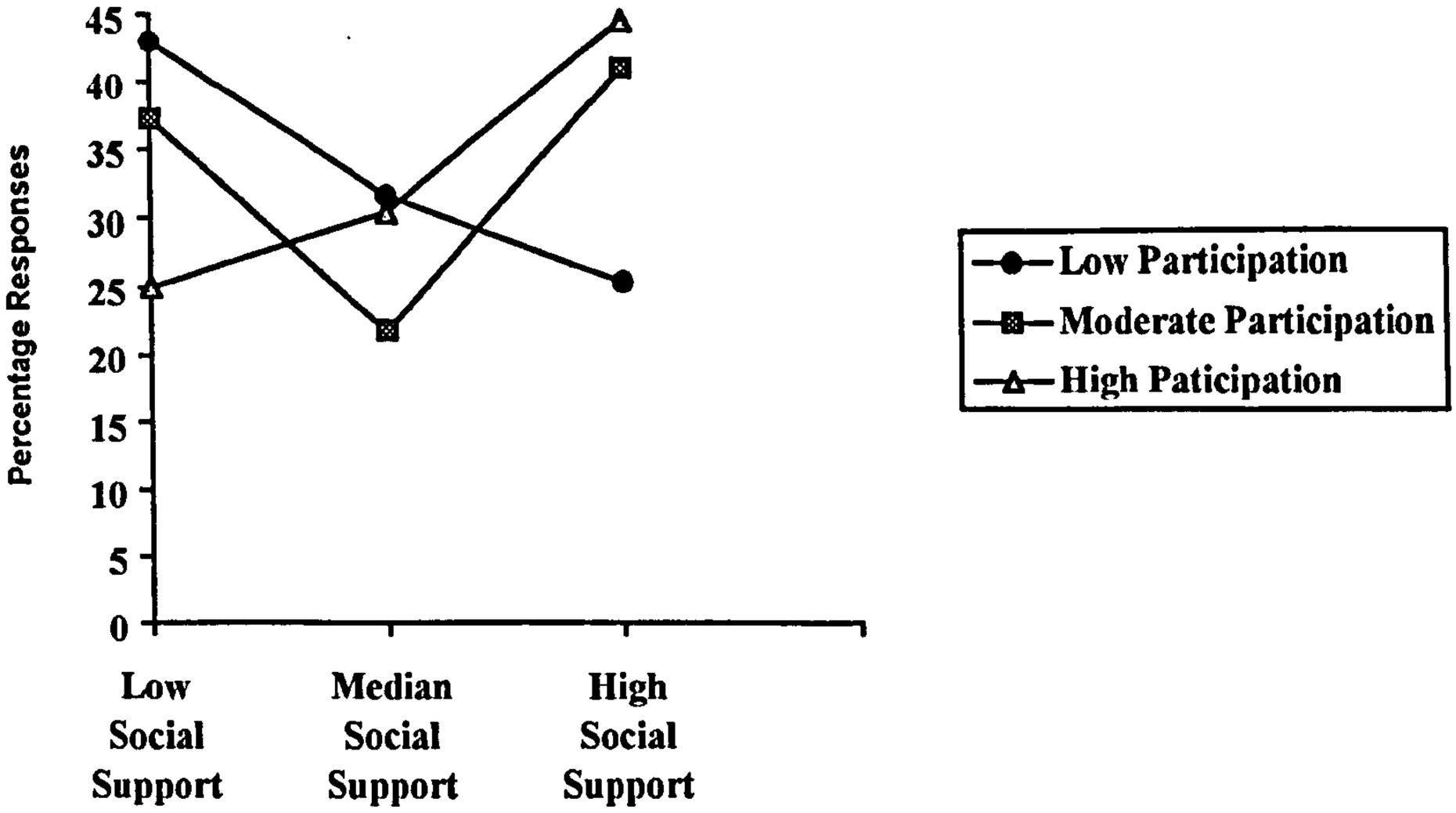

Figure 22: Relationship between the size of sedentary leisure repertoire and satisfaction with social support

- **Number of active activities and well-being**

TABLE 188: Number of active activities and well-being

WELL-BEING MEASURE	x^2 VALUE		P VALUE	
	4wk	1 year	4wk	1 year
Health status	20.64	15.54	0.001	0.001
Comparison of health with others	10.73	5.04	0.005	0.08
Life Satisfaction	10.44	8.46	0.005	0.02
Malaise	14.68	16.69	0.001	0.000
Self Esteem	7.02	8.45	0.03	0.02
Personal control	9.06	6.28	0.002	0.01
Social Support	2.54	3.10	0.28	0.21
Satisfaction with Social Support	5.77	5.91	0.06	0.05

The size of active leisure repertoire significantly associated with all well-being measures except for social support. This was the same for both time periods. The results indicated that larger repertoires were associated with positive well-being responses. One example is given in the figure below:

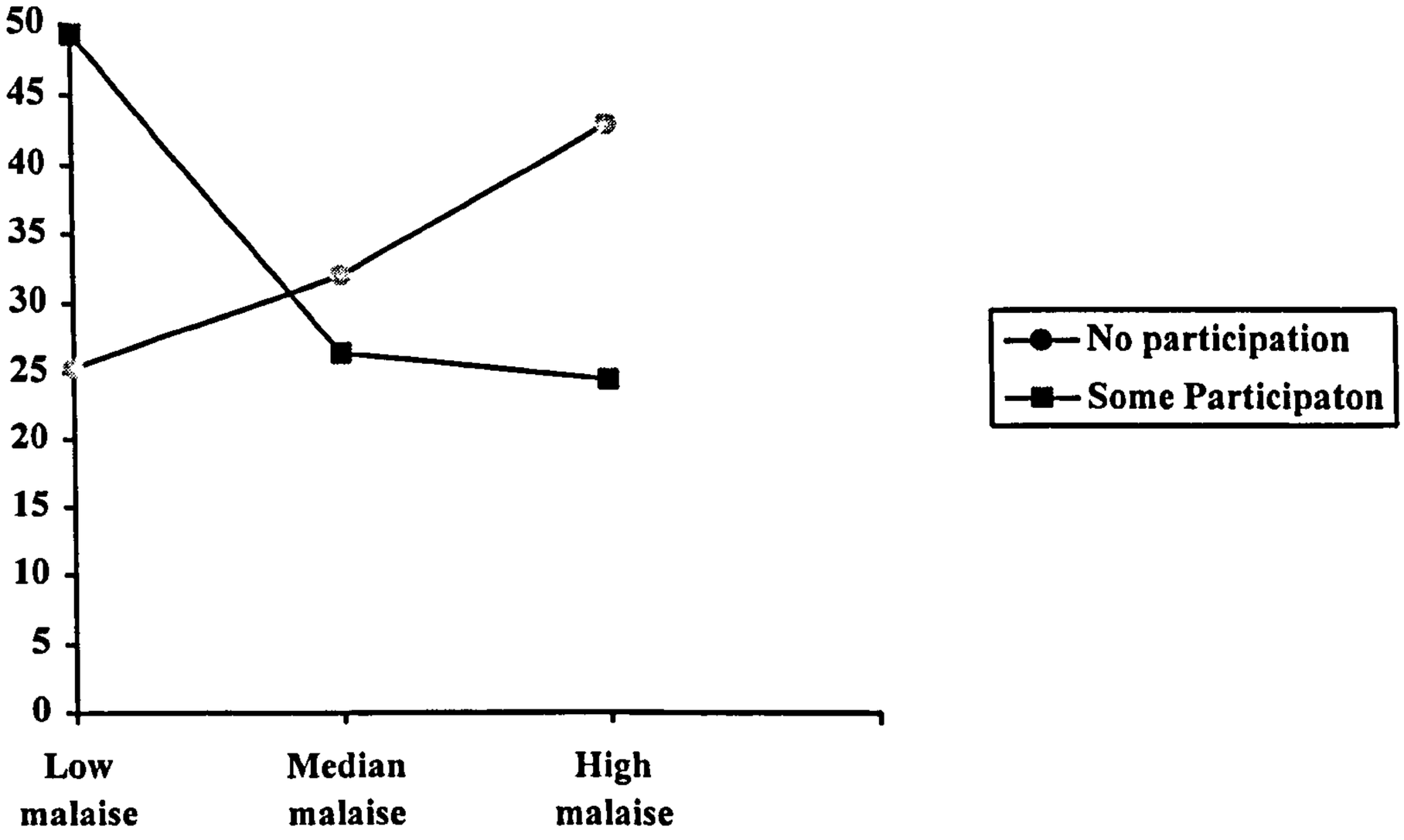

Figure 23: Relationship between the size of active leisure repertoire and malaise

Note: The term 'high malaise' relates to poor psycho-social well-being

♦ **Number of social activities and well-being**

As explained previously (Section 4.1.3 p.146) the analyses for social and isolated activities is based solely on four week data.

TABLE 189: Number of social activities and well-being

WELL-BEING MEASURE	x^2 VALUE	P VALUE
Health status	7.91	0.25
Comparison of health with others	3.57	0.47
Life Satisfaction	21.31	0.000
Malaise	15.54	0.01
Self Esteem	4.79	0.31
Personal control	3.89	0.14
Social Support	28.76	0.000
Satisfaction with Social Support	29.88	0.000

Not surprisingly social repertoire associated with the social support measures (as the size of the repertoire increases so does the amount of social support and satisfaction with support). In addition significant associations were also evident with life satisfaction and malaise. The more positive well-being rating being associated with larger social repertoires. This is shown in the example below:

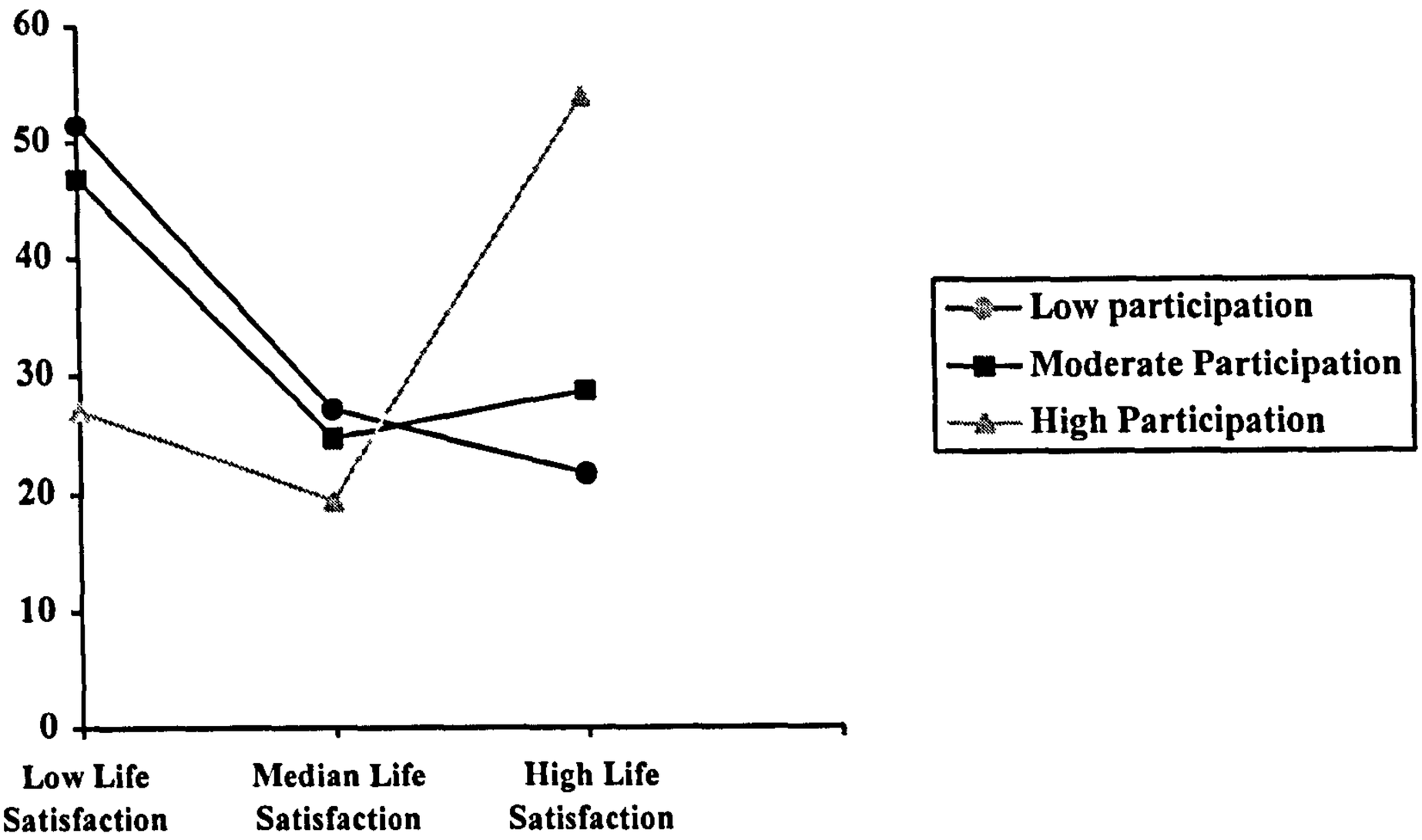

Figure 24: Relationship between the size of social leisure repertoire and life satisfaction

- **Number of isolated activities and well-being**

TABLE 190: Number of isolated activities and well-being

WELL-BEING MEASURE	x^2 VALUE	P VALUE
Health status	5.16	0.52
Comparison of health with others	2.84	0.59
Life Satisfaction	9.46	0.05
Malaise	0.57	0.97
Self Esteem	3.78	0.44
Personal control	0.38	0.83
Social Support	21.56	0.000
Satisfaction with Social Support	17.81	0.001

Significant associations between isolated activity repertoire and well-being were found for the social support measures and for life satisfaction rating. Lower isolated activity

involvement was associated with higher social support ratings. In addition, as shown in the figure below, higher participation was associated with lower ratings of life satisfaction:

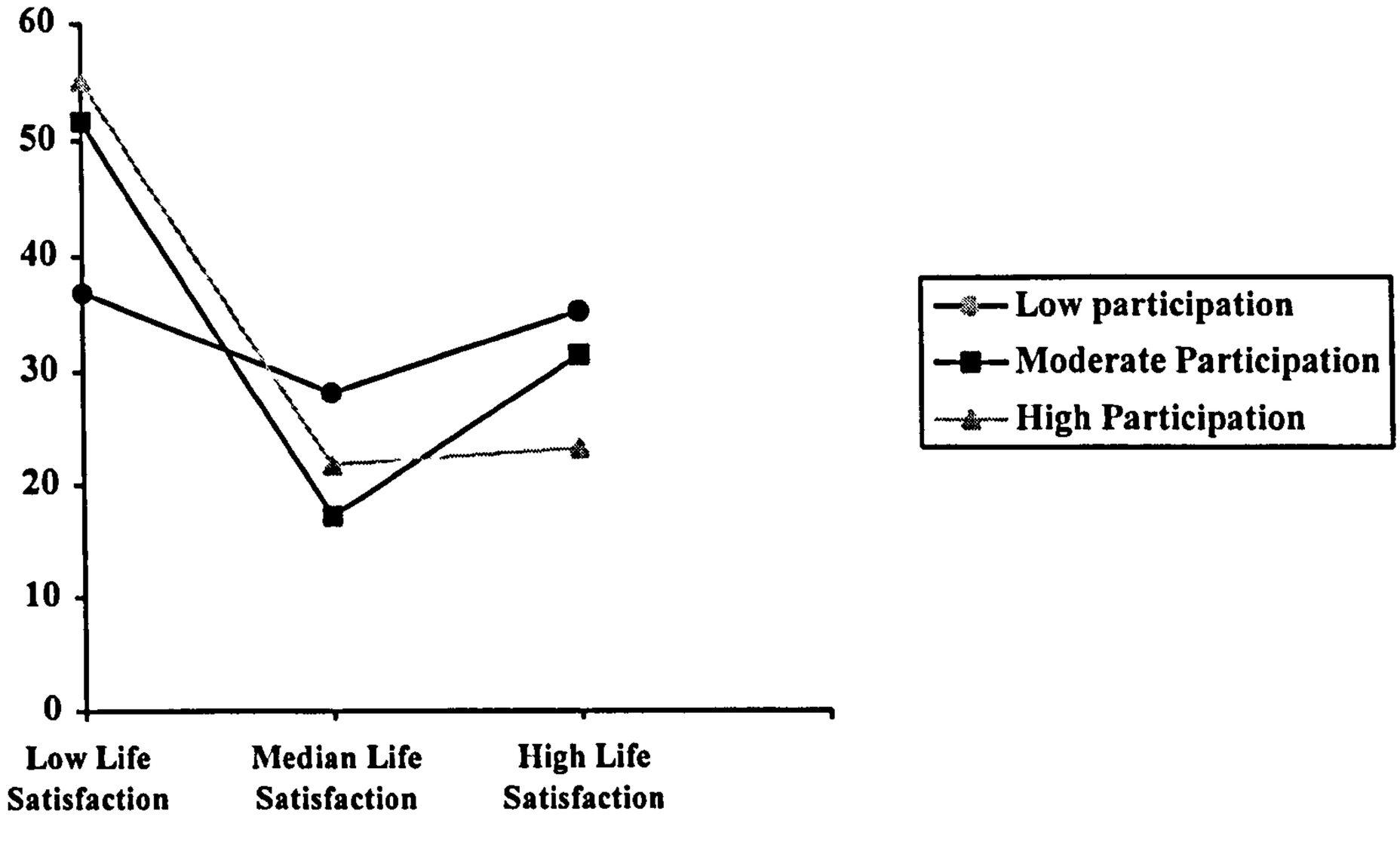

Figure 25: Relationship between the size of isolated leisure repertoire and life satisfaction

Thus the total number of activities and the number of out of home, sedentay, active and social activities were related to well-being.

4.1.3.6.2 Frequency of Leisure Participation and Well-being

Frequency data was calculated from four week reported leisure behaviour (as described in section 4.1.2 of this thesis).

- **Total frequency of participation in leisure activities and well-being**

Table 191 depicts the relationship between overall frequency of leisure participation and the well-being measures.

TABLE 191: Total frequency of participation in leisure activities and well-being

WELL-BEING MEASURE	x^2 VALUE	P VALUE
Health status	4.47	0.61
Comparison of health with others	3.37	0.50
Life Satisfaction	1.08	0.90
Malaise	8.30	0.08
Self Esteem	4.97	0.29
Personal Control	0.09	0.96
Social Support	5.35	0.25
Satisfaction with Social Support	1.40	0.84

As Table 191 indicates no significant associations were evident between total frequency of participation and well-being measures.

- **Frequency of participation in home based activities and well-being**

TABLE 192: Frequency of participation in home based activities and well-being

WELL-BEING MEASURE	x^2 VALUE	P VALUE
Health status	9.81	0.13
Comparison of health with others	9.08	0.06
Life Satisfaction	3.87	0.42
Malaise	3.71	0.45
Self Esteem	8.84	0.07
Personal Control	3.41	0.18
Social Support	4.25	0.37
Satisfaction with Social Support	2.38	0.67

As with total frequency, no significant associations were found between participation rates in home based activities and well-being (Table 192).

- **Frequency of participation in out of home activities and well-being**

TABLE 193: Frequency of participation in out of home activities and well-being

WELL-BEING MEASURE	x^2 VALUE	P VALUE
Health status	2.034	0.003
Comparison of health with others	12.59	0.01
Life Satisfaction	10.06	0.04
Malaise	5.50	0.24
Self Esteem	10.20	0.04
Personal control	2.79	0.25
Social Support	14076	0.005
Satisfaction with Social Support	8.83	0.07

Certain well-being measures were significantly associated with the frequency of participation in out of home activities; namely, health status, comparison of health with others, life satisfaction, self esteem and social support. Examination of these cross-tabulations found that a greater rate of participation in out of home activities was associated with more positive well-being ratings. This is shown in the figure below:

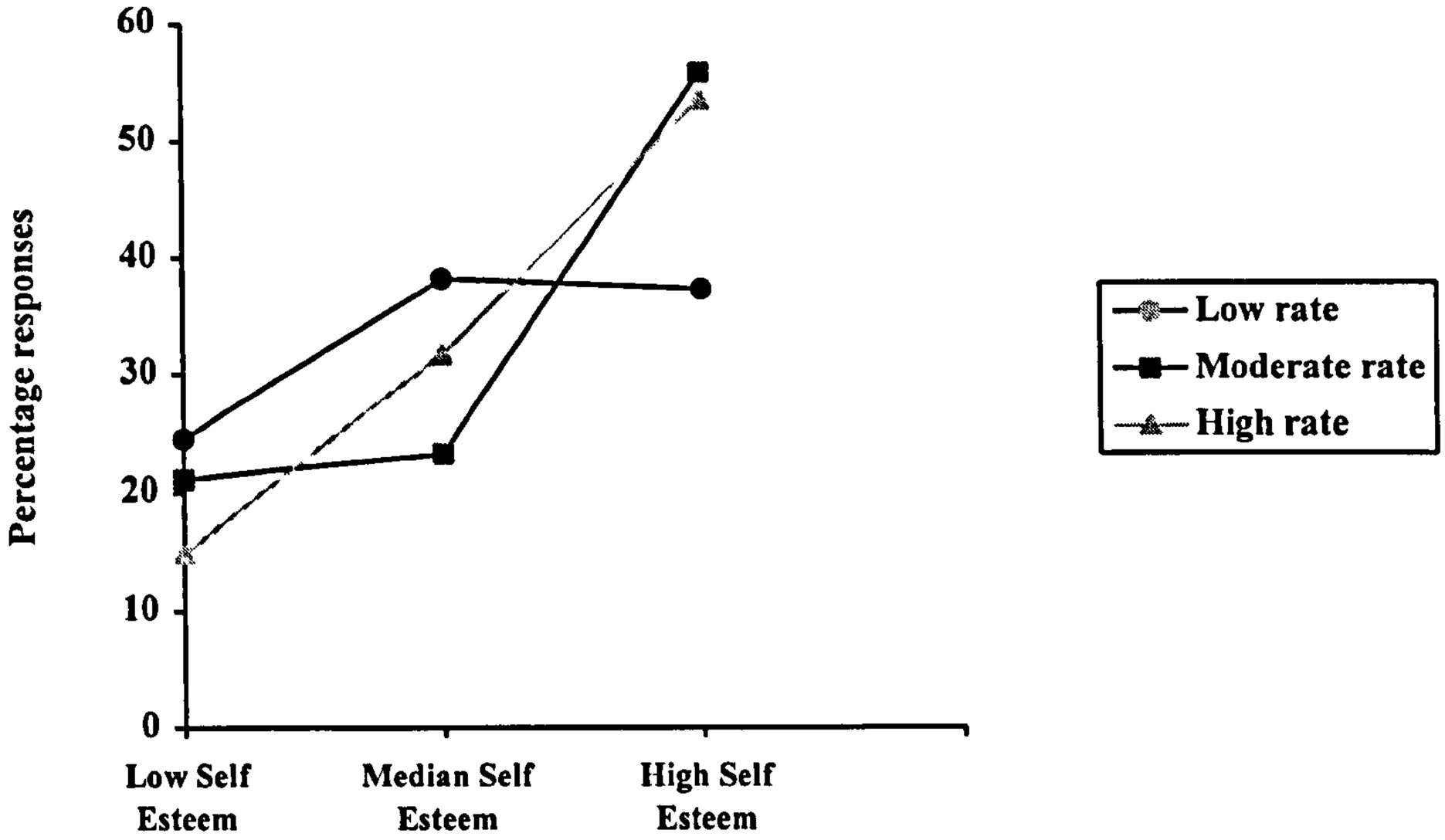

Figure 26: Relationship between the rate of participation in out of home activities and self esteem

- **Frequency of participation in sedentary activities and well-being**

TABLE 194: Frequency of participation in sedentary activities and well-being

WELL-BEING MEASURE	x^2 VALUE	P VALUE
Health status	6.10	0.41
Comparison of health with others	4.91	0.30
Life Satisfaction	7.73	0.10
Malaise	3.15	0.53
Self Esteem	4.54	0.34
Personal control	0.76	0.68
Social Support	6.27	0.18
Satisfaction with Social Support	1.19	0.88

No significant associations were evident between well-being and frequency of sedentary leisure behaviour (Table 194).

- **Frequency of participation in active activities and well-being**

TABLE 195: Frequency of participation in active activities and well-being

WELL-BEING MEASURE	x^2 VALUE	P VALUE
Health status	19.50	0.000
Comparison of health with others	10.43	0.005
Life Satisfaction	10.56	0.005
Malaise	14067	0.001
Self Esteem	8.58	0.01
Personal control	9.51	0.002
Social Support	2.76	0.25
Satisfaction with Social Support	6.21	0.05

Rate of participation in active activities was found to be significantly associated to all well-being measures except amount of social support. As expected higher rates of participation were associated with more positive measures of well-being. This is shown in the example below:

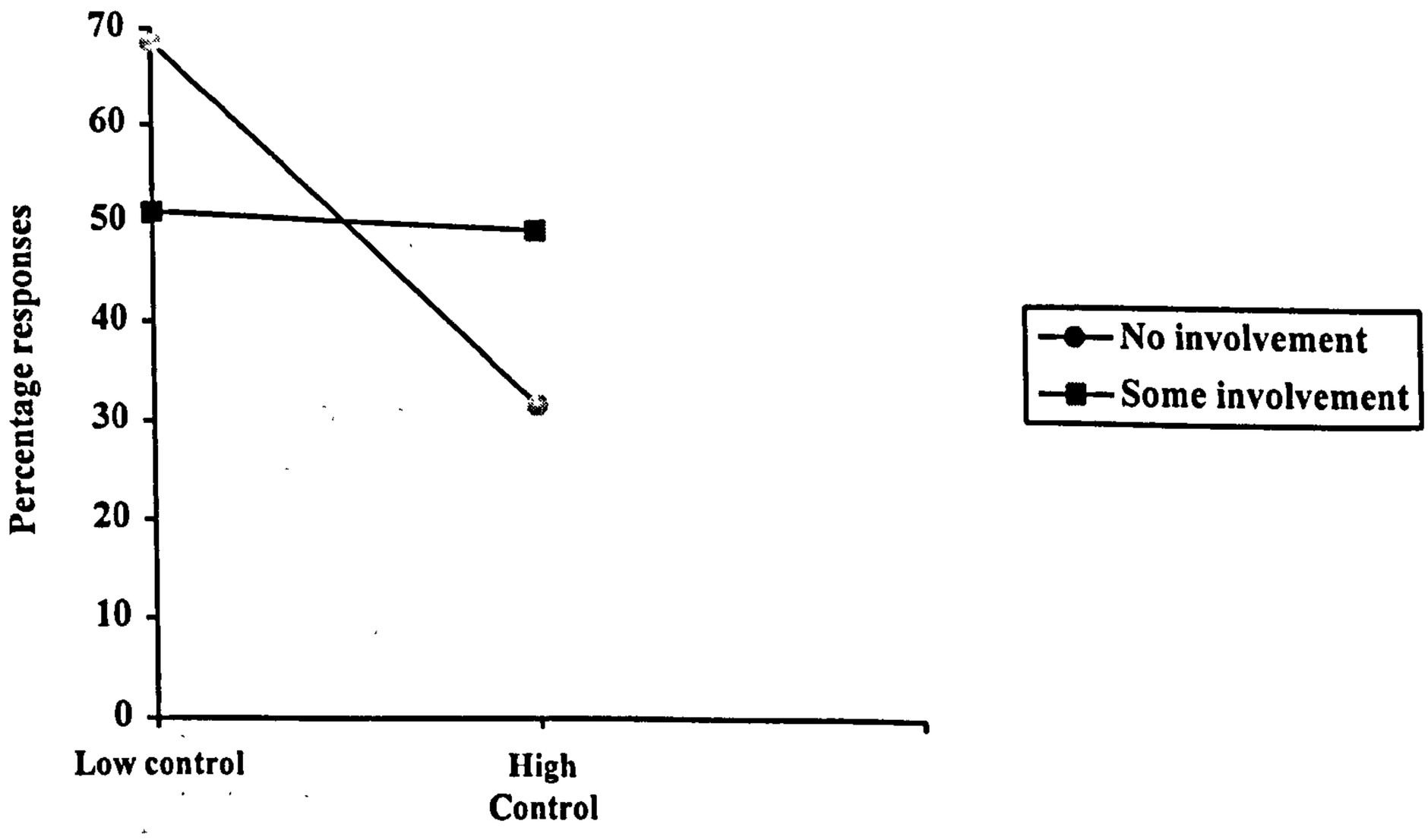

Figure 27: Relationship between the rate of participation in active activities and personal control

♦ **Frequency of participation in social activities and well-being**

TABLE 196: Frequency of participation in social activities and well-being

WELL-BEING MEASURE	x^2 VALUE	P VALUE
Health status	6.09	0.41
Comparison of health with others	1.28	0.87
Life Satisfaction	5.12	0.28
Malaise	7.05	0.13
Self Esteem	3.06	5.55
Personal Control	0.59	0.74
Social Support	23.72	0.001
Satisfaction with Social Support	15.01	0.005

Frequency of involvements in social activities associated with the social support measures; increased frequency of social activities was associated with larger social support ratings.

♦ **Frequency of participation in isolated activities and well-being**

TABLE 197: Frequency of participation in isolated activities and well-being

WELL-BEING MEASURE	x^2 VALUE	P VALUE
Health status	8.52	0.20
Comparison of health with others	4.58	0.33
Life Satisfaction	8.06	0.09
Malaise	6.24	0.18
Self Esteem	19.01	0.001
Personal control	2.56	0.28
Social Support	8.73	0.07
Satisfaction with Social Support	21.45	0.000

A significant relationship was found between self esteem and rate of isolated activity involvement. Similarly satisfaction with social support was also found to be associated with this type of involvement. This is shown below:

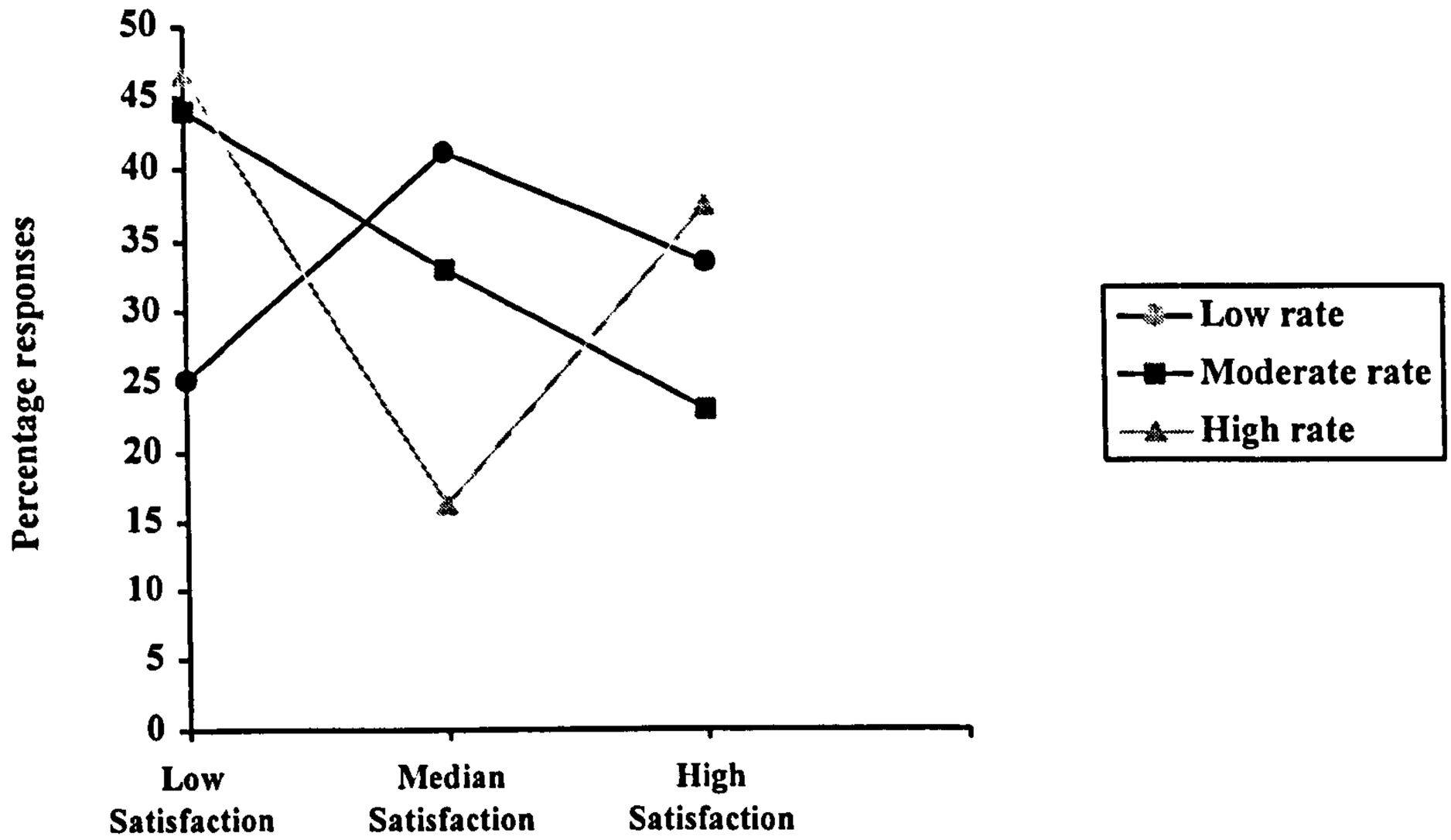

Figure 28: Relationship between the rate of participation in isolated activities and satisfaction with social support

Thus in conclusion overall frequency was not related to well-being. However, frequency in out of home and active activities were associated with certain measures of well-being and social activities specifically associated with social support.

4.1.4 Discussion

Representativeness of the Sample

The sampling procedure used in this study was designed to obtain similar numbers of subjects from the two accommodation types, males and females and people of the three age groups for interview. The process adopted was successful in obtaining sufficient subjects within each of these groups, although some groups were more difficult to access than others. An example of this was 60-70 year old males in residential

accommodation. These challenges to the fieldwork were not surprising as, for example, within residential accommodation there is a greater number of females and people over the age of 75 years thus causing difficulties in access to other groups. Perhaps more importantly it should be highlighted that the sampling methodology did not control for other factors which may influence how the results are interpreted. To maintain sufficient numbers for analysis the methodology adopted limited the number of sub-groups. Thus although the study aimed to examine leisure behaviour by age, sex and residence type, it is recognised that there are other factors which it did not control for. An example of such factors would be the leisure behaviour of people from minority ethnic groups which were not investigated as this was not the aim of the study. In fact the findings do not represent the needs of these communities as the sample was predominately white. In addition, although the majority of subjects had had a full time education, a large majority had no educational qualifications. This may be a factor associated with these particular cohorts however the results need to be interpreted within this context. The majority of the sample had been born in Liverpool and reported feeling a part of the community. Such factors may limit the findings to individuals within similar communities and with similar community feelings. This may effect the generalisabilty of the results to other localities.

In addition it is recognised that the findings concern three cohorts of people. Thus care must be taken when comparing the behaviour of each cohort. It would be unwise to assume that the differences identified between the youngest and oldest group are due to ageing per se. For instance these differences may be highlighting historical factors specific to the particular cohorts of people and not the ageing process. To use the oldest age group as a comparison may also be misleading due to the fact that they may be a select group, having lived to that age (Warnes, 1991).

Although difficult to assess, studies of this type are possibly hampered by the selective nature of respondents over which it has no control. For example it may be that 'active' people would agree more readily to participate in such work. It is impossible to assess this without information on those who refused to take part. Nevertheless the study did achieve a 77% response rate and this should be considered when interpreting the

results. The study did obtain a higher percentage of interviews within three wards (which had a higher percentage of older people in its ward population), however, in general the sample was widely dispersed within the city council boundaries. The higher percentage in particular wards may be explained by the localised nature of residential homes and sheltered housing; as the wards, such as Allerton, Warbreck and Grassendale, in which a slightly higher percentage of the sample were obtained are also the wards with a large number of residential homes and sheltered housing.

From analysis of leisure behaviour by mean reports it was found that in certain instances the standard deviations were greater than the mean values. The possibility of skewed samples is acknowledged however statistical advice suggested that the tests employed were powerful enough to negate possible adverse effects. In addition caution has been taken interpreting the means of small sub samples, such as 60-70 years old males in residential accommodation. It is recognised that larger samples may be required to increase the power of the statistical tests used.

Despite the possible limitations of the study the cross-sectional analysis of leisure behaviour has provided a unique knowledge base of information concerning the older population of Liverpool. This is particularly relevant considering the large (and increasing) numbers of older people within the city. In particular the study has examined leisure and ageing of the population in their eighth decade and above which is particularly salient to Liverpool when considering the future projections of the population structure. The only other data sources to drawn on are large scale surveys of the whole population, such as the GHS or NFS. This cross-sectional study information, combined with the data derived from the qualitative studies (Chapter 5), provide an direct investigation into older peoples' leisure behaviour and suggests some of the possible determinants and consequences.

Several key themes concerning the leisure behaviour of older people in Liverpool have been identified from this stage of the study. These are discussed below:

Definition of Leisure

Lay views of leisure were the basis of this study. It was felt that one way to examine perceptions of leisure in retirement could be to examine what is defined as leisure by older people. This, in conjunction with more detailed analysis from the qualitative work, would have implications for the role of leisure in later years as there is evidence to suggest that different meanings are afforded to leisure across the life span (Midwinter, 1992).

It has been theoretically suggested that retirement is a time of 'pure leisure'. However this is inconsistent with the low levels of activity reported in leisure studies (Long, 1986). The current study is no exception to this level of reporting. Nor is it inconsistent with the view that retirement can be conceptualised as a time of inactivity; the majority of activities reported being sedentary in nature. However, it does question traditional concepts of what is considered to be leisure via the diverse contents of individual reported repertoires. For example, the inclusion of 'housework' and 'napping' as leisure pursuits does not fit easily with the lists of activities asked about in many large scale surveys. This wide definition of leisure may not apply to other age groups and may be a function of the methodology employed. The current methodology 'allowed' subjects to create their own definition of leisure. Thus, if a subject considers all their time as leisure time then they may respond in a way which 'justifies' how they use that time i.e. sitting relaxing or napping. However under another methodology when a subject is primed to respond to certain categories of leisure behaviour, the definition of leisure is then defined to them and their responses more likely to be curtailed within it, even if asked 'Are there any other leisure activities you participate in?' the subject is still likely to respond within the framework of leisure previously presented.

The definitions of leisure presented by Stokowski (1995) are relevant to this discussion. Stokowski proposed that leisure is defined in three ways; Leisure as activity, leisure as time and leisure as attitude. In the first definition leisure is defined as activity which is free from specific responsibilities such as work or family commitments. When leisure is defined in this way, Stokowski believes, it is not based on a feeling but implies a

reality imposed from the outside, independent of the individual. This concept is in some way divergent from activities reported by the subjects in the current study as activities were reported which were work related or evolved around family commitments, such as housework and looking after grandchildren. The subjects in the current study seemed to be working within a definition of 'leisure as time'. Their descriptions of leisure describe what they do with their time such as sitting relaxing. However there is a paradox between the apparent definition used to describe leisure behaviour and that used when asked what leisure activities subjects would like to do. Responses to the latter are clearly based on leisure as posed from the outside and thus takes the emphasis from the person.

Initial examination of the leisure activities reported by subjects in this study and that reported in other studies may lead to the conclusion that the sample under current study were less involved in leisure activities or were under reporting their leisure involvement. However, the subtle differences in the methodologies employed between this study and other large scale surveys may explain the differences in leisure behaviour each has documented. Comparison of the percentage of subjects reporting particular activities in the current study with other data sources has proved variable. Certain activity percentages were consistent, such as watching television and swimming. However in the majority of cases the current study found lower percentage reports of participation in leisure activities. For example the current study found 12.2% of interviewees mentioned participation in gardening over the previous four week period whereas the GHS percentage for this time period was 48.5. These divergent results may be explained by the methodology adopted as in the current study leisure was defined as subjective phenomenon whilst the GHS asked specifically about participation in named activities. However other data suggests similar patterns to that indicated in the current study, such as, the Carnegie Report which tables a similar percentage of people participating in outdoor sports (17%) to the current study (18.4%).

Similar themes do come from the many data sources and the literature. One major concern being the consistent low participation rates in sports and other physical activities. The most common activities reported by the current study are also consistent

with the literature (see Section 1.4.1); television, gardening, visiting and reading being some of the more frequently cited pastimes. As expected the content of leisure repertoire was more likely to be home based, social and sedentary rather than out of the home, isolated and active. This is consistent with other research findings (e.g. Singleton, 1985) concerning the older population.

Leisure Repertoire

Leisure repertoire is defined as the range of leisure activities an individual is involved in. The samples' average size of leisure repertoire was perhaps the most surprising finding of all. In general, an extremely small number of activities were recorded over the two time periods. This is particularly surprising, as Verhoven (1977) suggests, as older people have an abundance of leisure time and that leisure is thought to characterise the 'Third Age' (Midwinter, 1992).

Comparing the two time periods found that on average a greater number of activities were recorded over the twelve month period compared to the four week period. This was expected as the twelve month period would include activities not done on a regular basis . This is concurrent with other research findings (GHS, 1993). The actual mean figures indicating the size of repertoires were similar to that found in the study by Mobily et al (1984).

1. Age and Leisure Repertoire

The widely reported (Mobily, 1984; Kelly, 1986, Tokorski, 1991) inverse relationship between leisure and ageing is shown from the trend between the three age groups. This has to be treated with caution as it is from cross-sectional data. Also, although significant, the difference in the actual number of activities reported is minor. This perhaps reflects the extremely low participation in leisure overall by any age group.

This age trend differs by analysis of the independent variables and also by the types of activities reported:

(a) Variation of inverse relationship by independent variables

Although differences between the three age groups was evident for the total sample (in the twelve month data) subsequent analysis revealed that this held only for analysis of the male sample and the household sample i.e. older males and older subjects living in their own homes reporting smaller number of activities. It was not significant for the female sample or for those living in residential accommodation. Age therefore seems to be an associated factor to size of leisure repertoire for males and people living in their own homes. Perhaps older men have activities in their repertoires which will be affected by the ageing process, such as activities that require physical exertion e.g. sports, which for varying reasons are no longer participated in later years whereas womens' repertoires may in the main be constituted of activities that are not relinquished in later years. Analysis of the types of activities within leisure repertoire may indicate the validity of this. Another explanation of this finding may be a distinguishing factor between the two group which age is acting as a proxy for. For example suppose that age was acting as a proxy for health status and men over the age of 80 had a lower health status than women of this age. This may then account for the age difference in the male sample but not the female. The age related finding for subjects within residential accommodation may again be answered by analysis of the content of leisure repertoire or may similarly be due to other factors which distinguish this group from the household group. Such factors could include, health status, attitudes towards leisure or receptiveness towards participation. Subsequent stages of this thesis will address some of these issues.

(b) Variation of the inverse relationship by activity types

The widely reported inverse relationship between leisure and ageing only held true in this sample for out of home activities and active activities. The other activity types (home based, sedentary, social and isolated) showed no significant differences between the age groups. This supports the American work of Kelly (1986) who postulated that

the negative association between leisure and ageing may only exist for certain types of activity

2. Gender differences in leisure repertoire

In both time periods males reported more activities than females. However, this sex differences was only significant for the four week data. Further analysis indicated that this seemed to be the case for men and women who lived in their own homes (and not residential accommodation). This is inconsistent with previous research concerned with older people, for example the American work of Mobily et al (1984), who found that females had a slightly high repertoires compared to males (although the study concluded that sex was only minimally related to leisure repertoire scores). This latter study used a response methodology to set categories of leisure activities which differs from the approach taken in the current study. These differences in approach may account for the disparity in results. One possibility is that male and female responses to the methodologies employed differed.

Analysis of gender differences in the types of activities reported found significant differences between males and females in the number of out of home and active activities reported for both time periods. Concerning out of home activities men in the household sample reported greater participation. For reporting of active activities again men reported greater participation, however this time, in both residential samples (over one or both of the time periods). The differences in active participation between the sexes is well documented (GHS, 1993). However there is a paucity of data concerning out of home leisure behaviour to compared the current study with, especially when considering subjectively defined leisure behaviour.

3. Residence Differences in Leisure Repertoire

The sample of subjects from households reported wider leisure repertoires compared the subjects from residential accommodation. However this was only significant over the 12 month period. This significant residence difference held when the male and female

samples were analysed independently. Although no comparable data is available to assess this finding it does highlight the advice of McAvoy (1979) who stressed that service planners should take into account that needs may be different according to residence. This study has therefore highlighted the importance of residence type in analysis of older populations.

Out of the home, home based, active and social differences in leisure behaviour were found between the two accommodation groups. In general people who lived in their own homes reported more out of home and active activities compared to subjects from residential accommodation. The female sample from households also reported more home based activities and the male sample from households more social activities than their residential counterparts. It seems clear that there are specific issues relating to an individual's residence. This could be the effects of residence alone, however, residence may be reflecting a difference between the two groups either measured or unmeasured in this work. This will be address further in Chapter 5 of this thesis.

Frequency of Participation

No differences were found between the three age groups frequency of participation in any type of activity. Gender differences were found for out of home and active activities; males participating to a greater frequency in both. While residence differences were found for out of home, home based active and social activities; residential home subjects certainly having greater home based and less active participation. Thus gender and residence seem to distinguish the sample to a greater extent compared to chronological age.

As mentioned previously the finding that males partake in active activities to a greater extent than females is well documented. However, it is more surprising that the participation in out of home activities is greater than reports from females. Overall it is perhaps not surprising that males are more frequently involved in active activities and activities outside of the home because they partake in more of them - their repertoire for these types of activities is wider. Similarly the types of activities which distinguished

the residence groups in terms of the reported repertoire are also the activities which distinguish the residence groups on frequency of participation. This finding is logical when you consider that wider repertoires would be associated with increased activity participation.

Leisure and Well-being

Wider total repertoires and wider repertoires of out of home, active and social activities were in some way positively associated with measures of well-being and social support. To a lesser extent frequency of participation in these types of activity was also positively associated with well-being measures but overall total frequency was not significantly associated with well-being. Thus this data indicates that repertoire is an important concept in association with well-being. This contributes to the debate around the idea that "...little suggests that frequency of activity alone causes a person to be happy" (Howe, 1988). Howe reports of the study emphasising the importance of leisure quality rather than quantity. Perhaps a wider repertoire is indicative of increased satisfaction with leisure and thus indicative of leisure quality. The finding for the association between total frequency and well-being are surprising. Possible explanations could be that the four week period was too long a period to achieve accurate recall, or that the activity levels were so low that they did not distinguish between the groups. Frequency was associated with well-being for active and out of home activities. This has implication for elements of leisure which can be utilised in health promotion strategies.

The current study has shown an association between leisure and ageing and as such no causal relationship can be inferred from this work. Thus from this current knowledge we are unable to infer if well-being leads to greater participation or whether greater participation leads to increases in well-being. However, work with other age groups, and in fact the policy promoting activity within the older population, are based upon this premise, particularly in relation to the health status benefits of exercise. The relationship between other forms of activity and well-being is less conclusive. The work by McMurdo et. al. (1992) concluded that improvements in certain aspects of

performance (including life satisfaction and perceived health status) were evident after participation in an exercise class. Further work is needed to the wider older population and to other sub-groups within it (such as those living in residential accommodation). Other work could lead us tentatively to speculate on the causal nature of the association, such as the research examining the resilience of self esteem related to activity levels (Coleman, 1993) and the association between leisure and life satisfaction and social integration (Kelly,1987) and personal control (Iso-Ahola, 1980) as replicated in the current study. In light of these findings the extremely low levels of participation in leisure, and specifically out of home and active leisure, is a cause for concern.

Barriers and Enhancers

Approximately 59% of sample wanted to partake in more leisure activities. The major constraint to participating was identified as poor health. This factor was particularly salient to older subjects and those in residential accommodation. This constraint has been mentioned by some other researchers (e.g. Mobily, 1984) but not others (Carnegie Report, 1993). Other constraints to leisure behaviour included no place to do the activity, no available opportunities, not having enough time and worries about participation hazards.

There was no obvious differences in the constraints reported by males and females. However as mentioned in relation to poor health, age and residence differences were observed. Interesting age differences in constraints indicated that for younger age groups constraints surrounded actual participation, e.g. no place to do activity, no time, lack of transport and paucity of information on service provision. Whereas prominent issues constraining older people were poor health and worries about participation hazards. McGuire et al (1986) found that subjects over the age of 75 were primarily limited from leisure involvement by health whereas time becomes an decreasingly salient factor across the life-span. The current study provides support to these findings. Subjects living in their own homes reported constraining factors as; - having no time, no transport, no information concerning services, having no-one to participate with and having no self motivation whereas for the residential sample poor health was the main

constraining factor. Again implicating the importance of accommodation type in examining the experience of leisure. As with other studies of constrains on later life participation (McGuire et al, 1986) the current results are surprising as finance was not cited as a common constraint to leisure behaviour. The work of Mark Abrams (1990) would suggest that this would be a major factor. The qualitative results in Chapter 5 discuss this issue in more detail.

Of those who did not wish to participate in more leisure activities the reasons subjects gave included (a) satisfaction with current leisure behaviour (b) health reasons (c) being too old for leisure pursuits and (d) having no time to participate in further activity. Poor health is a common strand throughout influences upon behaviour. The final two, feeling too old and having no time, are perhaps more surprising. Feeling too old may have connotations for the definition of leisure being used maybe in terms of activities which are the exclusive preoccupation of the young and not relevant to the lives of older people. Having no time has been mentioned in other studies (McGuire, 1986) of older people as a constraining factor.

If subjects wanted to increase activity levels they often expressed a wish to partake in activities which were active (swimming) in nature or involved getting out and about (days out). Thus indicating a receptiveness to the types of activity associated with well-being.

Attitudes to Leisure and Health, and Service Use

A large majority of the sample reported individual health behaviours that they specifically did as a means of improving health and over 30 % wanted to adopt further behaviours to improve health. Sport and exercise were commonly associated with improving health and to a lesser extent so was social activities and leisure in general. However despite this, and the fact that a large majority of the sample wanted to increase their leisure repertoire, only small percentage actually used the available leisure services. Indications of why people were not using the services were interesting. It could be suggested that it is a combination of (a) constraining factors to behaviour,

such as poor health and (b) attitudes towards the services which are provided. For example approximately 23% of the sample expressed concern about the provision of services specifically for older people. Some of the subjects felt that these services were not applicable to them and for people with declining physical or mental health. A similar pattern of satisfaction was derived from the three age groups, from males and females and from subjects in different accommodation types. The quantitative findings suggested that approximately 50% of each sub-group were totally satisfied with the range of activities available to them but were totally dissatisfied with the promotion of leisure opportunities and the cost of leisure pursuits.

Locally based services which had a social element were components of the most commonly reported services that subjects used. Suggested ideas for future leisure provision was in the main about community based services. An interesting element to this finding is that it is not far from the types of leisure services currently being provided e.g. improved transport, activity centres, over 60's clubs and sports for older people and complies with the leisure as activity definition of Stokowski. However other ideas may stretch the current remit of leisure services e.g. home based activities, individual help to get out, more local shops and increased security.

Activity Uptake

Approximately 40% of the sample were unable to remember the process whereby they took up a new activity. This suggests the nature of leisure in terms of being consistent throughout the life-span and the desire for novelty decreasing as individuals age.

Analysis of the elements of the Brandenburg model found support for the elements of opportunity, favourable social milieu, receptiveness and a key event. The importance of having activity specific knowledge was not supported. The majority of subjects considering it unimportant to have this information prior to uptake. This concurs with the findings of Howe (1988). There were no obvious differences between the sub-samples in the details of this process. The prevalent reasons for taking up the activity and the examples of key events being similar regardless of age group, gender or

residence. A predisposition towards the activity, having the time to participate and the social elements associated with activities were obviously important factors across the groups. These factors were explored further using a qualitative approach (see Chapter 5).

In conclusion the study has documented extremely low participation levels in leisure generally, and specifically in out of home and active activities, in the sample of older residents in Liverpool. To varying degrees significant differences in participation were found between the different age groups, residence types and males and females. It has been discussed that the differences due to age and residence may be due to the fact that they are masking as a proxy for another variable. One such variable could be health status as poor health is a common factor mentioned in relationship to leisure and ageing. A positive association was evident between leisure participation and well-being, in particular between leisure repertoire and well-being. Furthermore certain types of repertoires are associated with well-being, namely, out of home activities, social activities and active activities. Although overall frequency was not associated with well-being but rates of participation in certain types of activity (out of home and active) were associated with well-being. Regardless of age, sex or residence, the subjects expressed a wish to partake in further leisure pursuits, although their current use of leisure services was minimal. The qualitative work in chapter 5 will examine these issues in more detail.

4.2 Cross-Sectional Analysis of the Association Between Leisure Behaviour and Physical and Functional Capability

4.2.1 Introduction

Table 198 shows the part of the study discussed in this section. In addition to investigating leisure behaviour and aspects of well-being and a variety of socio-cultural factors, the study also examined certain physical and functional capabilities of the sample as a contribution to understanding leisure behaviour. As is discussed in chapter 3 the emphasis was upon assessment of functional status

TABLE 198: Focus of Section 4.2

METHOD	MEASURES	PAGES
Physical and Functional Measurements /Structured Questionnaire	Subjective Functional Ability Actual Functional Ability Anthropometric measures Strength Flexibility Reaction Time	231-241 242-247

The table below lists the contents of the assessment procedure (for a more detailed discussion of the battery of tests used see chapter 3)

TABLE 199: Contents of Functional Assessment

Battery of Tests
♦ Grip Strength Test.
♦ Lateral Bending Test
♦ Shoulder Abduction Test
♦ Reaction Time Test
♦ Functional Ability Demonstrations
♦ Physical Appraisal Questionnaire

4.2.2 Methods

All subjects who took part in the interview schedule (see Section 4.1) were asked to participate in the functional appraisal. This was carried out in the subject's own home environment. Firstly, all subjects completed a screening questionnaire (Appendix 4) to exclude those subjects unsuitable for particular tests (for criteria see Appendix 5). The subject was then asked a series of questions from a short physical appraisal questionnaire (Appendix 6). This was designed to collect data on the subject's perceptions of his or her functional status in terms of certain activities of daily living. In addition certain questions explored lifestyle behaviours which relate to health e.g. smoking habits. Following this, all subjects were asked to take part in the following test procedures (for detailed test protocols see Appendix 7):-

A blood pressure reading (using a manual sphgmomameter) was taken twice, before and after the physical appraisal questionnaire, to improve the reliability that a blood pressure reading was gained as near to resting as possible. By the second reading the subject would have been at rest for approximately 15-20 minutes. The subject's height, weight, and demi-span (the distance between the suprasternal notch at the top of the sternum and the end of the middle finger of the left hand) were then measured. Body Mass Index (BMI) was calculated from the subject's height and weight measurements:

BODY MASS INDEX = WEIGHT (kg) / HEIGHT^2 (M) (Lichenstein et al., 1988):

The anthropometric measurements were followed by the two flexibility measures; shoulder abduction and lateral bending. To measure shoulder abduction, a strap was fitted firmly around the middle of the subject's left upper arm (measured between the acromial process of the collar bone and the olecranon of the elbow). The goniometer was attached to a velcro patch on the strap so that it was facing posteriorly. The plumb line needle was checked to ensure that it was swinging freely when the subjects arms were relaxed by their side. The subject then stood with his/her head and upper and lower back at the edge of a vertical support, with which the subject had to keep in contact whilst standing upright but relaxed. This was to minimise the contribution of lumber curvature to the shoulder movement. The importance of maintaining an erect stance (shoulder level and eyes looking forward) throughout the test manoeuvre was explained to the subject. The goniometer was set to zero when the subject's arm was hanging vertically. The subject was asked to raise their arm 45 degrees to the left of the forward position, and lift it as high overhead as possible bringing the arm in towards the head, without his/her back losing touch with the upright (it was important to check that the support was not impeding arm movement in any way). The manoeuvre was demonstrated and whilst the subject was actually being tested s/he was closely watched to ensure that the correct body position was maintained. When the maximum overhead position of the arm was achieved, and if the movement had been correctly performed, the highest steady reading was taken from the goniometer dial. Otherwise the subject was asked to relax and then repeat the manoeuvre. After a reading was taken the subject was asked to relax and let his/her arm hang down by his/her side again. If the goniometer reading was not within two degrees of zero the trial was discounted and another measurement attempted. The process was repeated, with intervening rests of a few seconds, until three successful attempts were recorded. The goniometer and the strap were then removed and the process was repeated for the right arm. The technique is illustrated in Figure 29.

Figure 29: Technique Employed To Measure Shoulder Flexibility

To measure lateral bending the subject was asked to stand in an upright position against a vertical support, with feet placed together and arms relaxed by their sides. The position of the subject's fingers were located and recorded on the subject's leg. The subject was asked to bend towards the left, keeping their back straight and running their fingers down their leg, for as far as it felt comfortable. The lateral bending position was also performed for the right side. The point the finger tips reached with each movement was recorded and the total distance measured. Particular attention was taken to prevent any hip rotation.

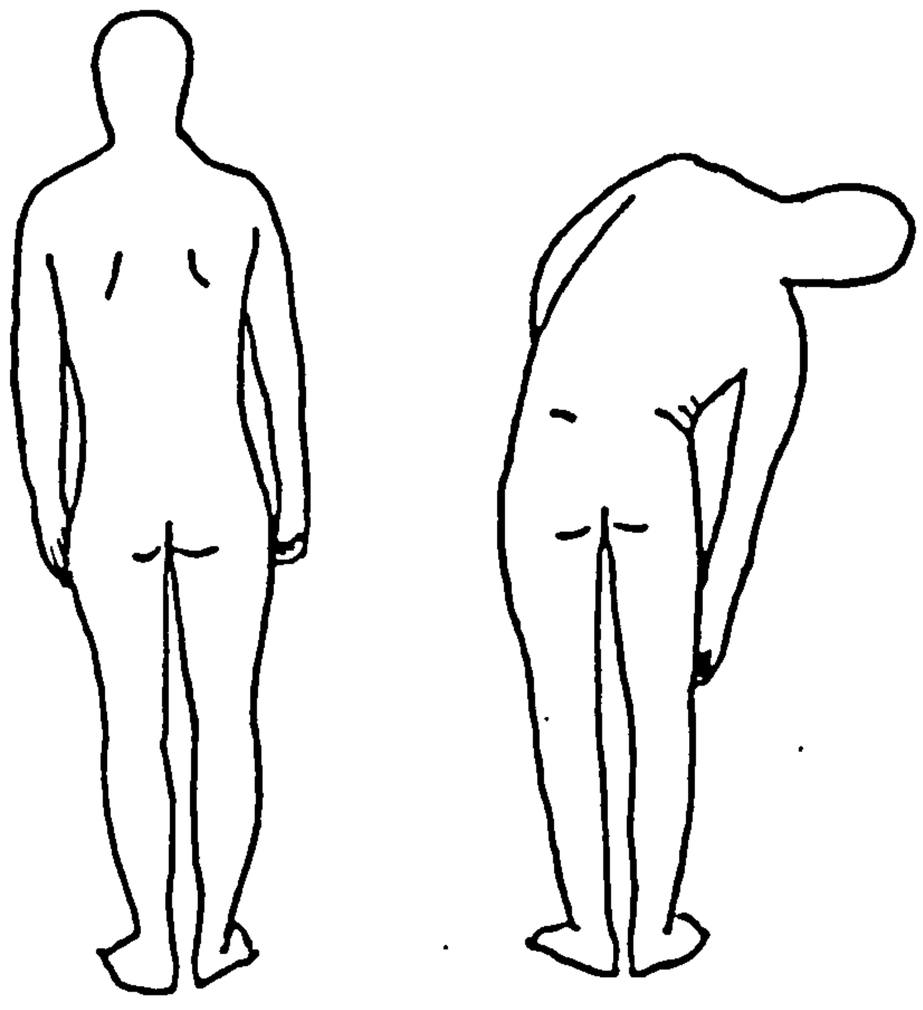

Figure 30: Technique Employed To Measure Lateral Bending

While the subject was standing a hand grip strength measure and a skinfold measure were performed. The test procedure for the measurement of hand grip strength was demonstrated to the subject, showing the body position, how the width of grip could be adjusted on the hand-piece of the dynamometer, and how a grip could be steadily forced by starting with the arm by the side of the body and slowly bringing it up through 45 degrees out in front of the body. During this movement a steady gripping action can be performed. The subject stood erect with his/her left arm hanging loosely by his/her side. Holding the dynamometer in his/her hand the subject was asked to perform the movement as previously described. During the gripping action, verbal encouragement was given to the subject. The subject rested his/her hand for two minutes and were encouraged to flex his/her fingers to relax his/her hand and restore blood flow to the muscles. The reading was recorded to the nearest 0.1 Kg and converted into Newtons (N). Three trials were recorded and the process was repeated for the right hand. The technique is illustrated in Figure 31.

Figure 31: Technique Employed To Measure Hand Grip Strength

Measurements of skin fold thickness were taken on the following sites (with the use of skin fold calipers);

- **A triceps skinfold measure** - on the posterior aspect of the arm, midway between acromion and olecranon processes, in line with the shaft of the humerus.

- **A biceps skinfold measure** - on the anterior aspect of the arm, midway between acromion and olecranon processes, in line with the shaft of the humerus.

- **A subscapular skinfold measure** - at the level of the inferior angle of scapula taking the measure in line with the ribs.

- **A suprailiac skinfold measure** - one and a half inches above the anterior, superior iliac spine, taking the pinch in line with fibres of external abdominus muscle.

All skinfold measures were taken three times on the right side of the body. The average measurement was recorded to the nearest millimetre. The total of all four measurements were taken and used to calculate the percentage body fat with the use of standardised tables.

Simple reaction time was measured by means of a portable computer. The time taken for the subject to respond to a single known visual stimulus was recorded. There were three practice trials and twenty test trials. The mean reaction time in milliseconds (msecs) and the standard deviation was recorded for the test trials.

Finally, general tests of function were carried out. All functional tests were demonstrated by the tester prior to being performed by the subject. For the demonstration of putting a key in a lock and a plug in a socket the equipment was mounted on a horizontal panel and placed on a surface 72cm high in the subject's home. If the subject needed spectacles he/she was allowed to wear them. The subject used his/her dominant hand to perform the action. Performance was graded according to 'unable', 'performed with difficulty' and

'performed without difficulty'. Two attempts were allowed for each task. Four codes were used to rate success: 'success 1st attempt" 'success 2nd attempt', 'success 3rd attempt with difficulty' and 'failure'. For the purpose of the test 'difficulty' is defined as anything which deviates from the demonstrated action. This included difficulties older people may experience in performing the test due to poor eyesight or arthritic fingers.

To demonstrate the ability to get out of a chair, each subject was asked to rise, with their feet apart and arms folded, from a stool or chair (approximately 420mm in height). The test was performed twice and was graded according to 'unable', 'with difficulty' and 'without difficulty'. 'Difficulty' was defined as in the previous tests i.e. 'with difficulty' means that the subject could perform the test but with a rocking action, sliding to the front of the chair, or employing other extraneous movements. 'Without difficulty' meant that the subject could perform the test smoothly according to the demonstrated action. The subject was allowed to attempt the test with arms free to swing if he/she could not perform the test successfully with arms folded. Five codes were used to rate success: 'success 1st attempt', 'success 2nd attempt', 'success 3rd attempt with arms', 'success 4th attempt with arms' and 'failure'.

To demonstrate their ability at touching toes, each subject was asked "Are you able to cut your toenails?". If the answer was "yes" then the subject was asked to touch the toes on his/her opposite side using a method of their own choosing but which involved knee as well as hip flexion. Success/Failure was recorded by the ratings: 'success 1st attempt', 'success 2nd attempt', 'success 3rd attempt', 'success but with difficulty' and 'failure'. Three attempts were allowed for each side. If the answer was "no" then enquiries were made to discover the cause of the problem i.e. was the subject unable to reach their toes or was it due to some other reason, such as, poor eyesight or hard toenails?

Test measurements were subjected to analysis of variance between the independent variables of age, sex and accommodation. Questionnaire results and functional ability ratings, involving nominal data, were analysed using the non parametric Pearson Chi Square Test. Level of significance was taken as $p<0.05$. All analysis was performed using SPSS statistical package.

4.2.3 Results

100 subject's took part in the physical appraisal; 58 lived in their own homes and the remaining 42 lived in some form of residential accommodation. 38 subjects were male and 62 female. 42 subjects were from the 60-70 age group, 36 of the 71-80 age group and 22 of the oldest group.

4.2.3.1 Analysis of Questionnaire and Functional Ability Ratings

The following table shows the ratings of subjective physical activity:

TABLE 200: Percentage Ratings of Subjective Physical Activity

RATING	% SAMPLE
Very Physically Active	16
Fairly Physically Active	33
Not Very Physically Active	34
Not At All Physically Active	17

This rating correlated significantly with subject's perceptions of his/her ability to walk for 20 minutes (x^2=40.72 $p<0.01$), and the ability to walk up stairs (x^2=92.02 $p<0.001$); subjects who rated themselves as physically active were more likely to feel they could successfully perform these actions. In addition physically active ratings were significantly associated with ratings of being able to get out and about with no (or little) support (x^2=28.11 $p<0.001$), ratings of health status (x^2=10.70 $p<0.01$) and ratings of comparison of health status with others (x^2=29.82 $p<0.001$).

Further analysis by Chi Square test found no significant association between ratings of physical activity and the subject's age, sex or accommodation type ($p>0.05$).

Furthermore, no relationship was found between ratings of physical activity and scores on the measures of personal control (x^2=0.75 p>0.05), malaise (x^2=10.14 p>0.05). or life satisfaction (x^2=5.98 p>0.05). However, a high physical activity score was found to be significantly associated with a high self esteem score (x^2=12.60 p<0.05).

- **Subjective ratings of functional ability and age:**

Analysis of the subjective ratings of functional ability showed a general age trend towards more positive ratings by the younger age groups. The tables below show some examples of the responses given when subjects were asked about their ability to carry out certain activities of daily living:

TABLE 201: Relationship between Age and Self Reports of the Ability to Walk up 20 Stairs?

	AGE GROUPS		
RATING	**60-70**	**71-80**	**81+**
1.Easily	40.5%	30.6%	22.7%
2.Fairly Easily	26.2%	22.2%	22.7%
3.With Difficulty	26.2%	16.7%	27.3%
4.Not At All	7.1%	30.6%	27.3%

x^2=8.67 p=0.19

The percentage of subjects giving a rating of 'easily' decreased from the 60-70 age group to the 71-80 group, and then to the oldest age group. However, percentage ratings of 'with difficulty' and 'not at all' tended to increase from the youngest age group to the oldest group. As expected subjects in the older age groups tended to be more likely to have a greater amount of difficulty managing stairs.

TABLE 202: Relationship between Age and Self Reports of the Ability to Walk Continuously for 20 Minutes?

	AGE GROUPS		
RATING	**60-70**	**71-80**	**81+**
1. Able to Walk	64.3%	58.3%	45.5%
2. Unable to Walk	35.7%	41.7%	54.5%

x^2=2.104 p=0.35

A greater proportion of the oldest age group felt they had problems walking, compared to the other two age groups.

TABLE 203: Relationship between Age and Self Reports of the Ability to get Out and About on Foot

	AGE GROUPS		
RATING	**60-70**	**71-80**	**81+**
1. Unaided/ With Stick	88.1%	69.5%	59.1%
2. With Help/ Unable	11.9%	30.6%	40.9%

x^2=7.40 p=0.03

Only a small percentage of the youngest age group needed help to get out and about. However 40.9% of the oldest age group needed assistance or was unable to get out. This trend was statistically significant.

- **Actual ratings of functional ability and age**

The table below show the relationship between age and ability to complete one of the tests of function.

TABLE 204: Relationship between Age and the Demonstration of Standing from Sitting

	AGE GROUPS		
RATING	**60-70**	**71-80**	**81+**
Success 1st/ 2nd Attempt	36.0%	28.4%	17.9%
3 or More Attempts or Failure	64.0%	71.6%	82.1%

x^2=5.5 p=0.06

Inspection of Table 204 reveals that a higher percentage of the oldest subjects needed more than one attempt to successfully perform the standing from sitting test. Analysis by Chi Square did not find a significant association between the subject's age and the number of attempts taken to complete the test (x^2=5.5 p=0.06).

No significant associations were evident between age and the demonstration of putting a plug in a socket (p>0.05) and the demonstration of putting a key in a lock (p>0.05). Over 65% of each age group performed both of these tests on the first attempt.

♦ **Subjective ratings of functional ability and residence type:**

Analysis of the relationship between accommodation and ability to complete the tests of function found more positive ratings by those who lived in their own homes. The following table illustrates this:

TABLE 205: Relationship between Residence Type and the Self Reports of Walking up 20 Stairs

	RESIDENCE TYPE	
RATING	**HOUSEHOLDS**	**RESIDENTIAL**
1. Easily	43.1%	19.0%
2. Fairly Easily	25.9%	21.4%
3. With Difficulty	20.7%	26.2%
4. Not At All	10.3%	33.3%

x^2=11.24 p=0.01

A greater percentage of subjects in residential accommodation were unable to walk up stairs. In addition, when subjects could attempt to climb stairs, a smaller percentage of those from residential accommodation reported having no difficulty.

TABLE 206: Relationship between Residence Type and Self Reports of the Ability to Walk Continuously for 20 Minutes?

	RESIDENCE TYPES	
RATING	**HOUSEHOLDS**	**RESIDENTIAL**
1. Able to Walk	65.5%	47.6%
2. Unable to Walk	34.5%	52.4%

x^2=3.20 p=0.07

A greater percentage of subjects living in assisted accommodation felt unable to walk for 20 minutes.

TABLE 207: Relationship between Residence Type and the Ability to Get Out and About on Foot

	RESIDENCE TYPES	
RATING	**HOUSEHOLDS**	**RESIDENTIAL**
1. Unaided	62.1%	40.5%
2. With Stick	20.7%	23.8%
3. With Help	15.5%	14.3%
4. Unable	1.7%	21.4%

x^2=11.73 p=0.008

A significant association was evident between the ability to get out and about on foot and type of residence; a higher percentage of subjects from residential accommodation reporting being unable to do this.

When subjected to Chi Square analysis the residence trend noted (i.e. of negative ratings by subjects in residential accommodation) this was significant for stair climbing and getting out and about. The association between the ability to walk continuously for 20 minutes had a p value of 0.07.

- **Actual ratings of functional ability and residence type**

The tables below show the accommodation groups ratings of successful completion of the functional demonstrations.

TABLE 208: Relationship between Residence Type and Demonstration of Standing from Sitting

	RESIDENCE TYPES	
RATING	**HOUSEHOLDS**	**RESIDENTIAL**
Success 1st/ 2nd Attempt	31.3%	24.7%
More than 3 Attempts or failure	68.7%	75.3%

x^2=1.12 p=0.29

For the demonstration of standing from sitting, a slightly greater number of subjects from residential accommodation appeared to have greater difficulty in performing the task. Chi Square analysis did find a significant association between the two factors.

No significant associations were found between the accommodation types and the demonstration of putting a plug in a socket ($p>0.05$) and the demonstration of putting a key in a lock ($p>0.05$). Over 60% of subjects in each accommodation type performed both of these tests on the first attempt.

♦ **Subjective Ratings of Functional Ability of Males and Females**

The following tables indicate that there were no significant associations between subjective reports of functional ability of males and females.

TABLE 209: Relationship between Gender and the Self Reports of Walking up 20 Stairs

	SEX	
RATING	**MALES**	**FEMALES**
1. Easily	34.2%	32.3%
2. Fairly Easily	28.9%	21.0%
3. With Difficulty	21.1%	24.2%
4. Not At All	15.8%	22.6%

x^2= 1.30 p=0.73

TABLE 210: Relationship between Gender and Self Reports of the Ability to Walk Continuously for 20 Minutes?

	SEX	
RATING	**MALES**	**FEMALES**
1. Able to Walk	55.3%	59.7%
2. Unable to Walk	44.7%	40.3%

x^2=0.19 p=0.66

TABLE 211: Relationship between Gender and the Ability to Get Out and About on Foot

	SEX	
RATING	**MALES**	**FEMALES**
1. Unaided	57.9%	50.0%
2. With Stick	15.8%	25.8%
3. With Help	21.1%	11.3%
4. Unable	5.3%	12.9%

x^2=4.22 p=0.24

- **Actual Ratings of Functional Ability of Males and Females**

In addition no relationships were evident between gender and demonstrated ability.

TABLE 212: Relationship between Gender and Demonstration of Standing from Sitting

	SEX	
RATING	**MALES**	**FEMALES**
Success 1st/ 2nd Attempt	27.2%	29.9%
More than 3 Attempts or Failure	72.8%	70.1%

x^2=0.20 p=0.66

There were no significant associations found between gender and the demonstration of putting a plug in a socket ($p>0.05$) and the demonstration of putting a key in a lock ($p>0.05$).

4.2.3.2 Relationship between subjective and actual ratings of functional ability and well-being

The following table indicates the relation between subjective ratings of ability and well-being.

TABLE 213: Subjective Functional Ability and Well-being

SUBJECTIVE FUNCTIONAL ABILITY		X^2 VALUE	P VALUE
Self reports of ability to walk up stairs			
	Life Satisfaction	14.68	0.05
	Malaise	14.74	0.05
	Self Esteem	16.58	0.01
Ability to walk for 20 minutes			
	Life Satisfaction	4.68	0.09
	Malaise	14.48	0.001
	Self Esteem	5.28	0.07
Ability to jog for a short while			
	Personal Control	4.75	0.05
Ability to get out and about			
	Malaise	5.82	0.05
	Self Esteem	6.50	0.04

However no associations were evident between demonstrated functional ability and well-being.

4.2.3.3 Analysis of Physical Appraisal Measurements:

The following section presents the results of the measurements taken during the physical appraisal. The mean values have been dissociated by accommodation, age and sex and are presented below. Analysis of Variance was employed to assess differences in measurements between the different groups. Within the tables significance levels are indicated by an *; * indicating $p<0.05$; ** indicating $p<0.01$; ***indicating $p<0.001$.

♦ **Mean Measurements of Residence Groups:**

TABLE 214: Physical Measurement by Residence

	RESIDENCE TYPES	
MEASUREMENTS	**HOUSEHOLDS**	**RESIDENTIAL**
BMI *	26.11 (±3.66)	24.27 (±3.17)
Demi Span (cm) ***	85.39 (±5.87)	83.49 (±4.87)
Left Lat. Bend (cm)	12.56 (±4.32)	11.56 (±4.55)
Right Lat. Bend (cm)	13.34 (±4.95)	12.27 (±4.75)
Right Shoulder Ab.(Deg)	130 (±2.43)	138 (±2.70)
Left Shoulder Ab.(Deg)	126 (±2.13)	123 (±2.72)
Left Hand Grip (N) **	243.24 (±98.69)	123.25 (±73.95)
Right Hand Grip (N) *	242.26 (±104.41)	155.78 (±63.20)
% Body Fat	27.17 (±4.16)	28.53 (±4.09)
Reaction Time (ms) *	0.54 (±0.19)	0.64 (±0.16)
SD Reaction Time (ms)***	0.16 (±0.07)	0.22 (±0.09)

The above table shows the mean values of the various measures recorded for those subjects living in their own homes and those living in residential accommodation. Analysis of variance between the groups showed three of the measures did not distinguish between the two groups; namely, lateral bending, shoulder abduction and percentage body fat ($p>0.05$). However, the results of body mass index (BMI), hand grip strength and reaction time speed were significantly different between the two groups. BMI tended to be higher for those who lived in their own homes ($F_{1,88}=5.82$ $p=0.02$). Subjects who lived in their own homes tended to have stronger hand grips (Left: $F_{1,59}=8.42$ $p=0.01$ Right: $F_{1,58}=5.47$ $p=0.02$). Reaction time was also different; those living in their own homes tending to have a faster response ($F_{1,80}=6.07$ $p=0.02$). The difference in the variance around the reaction time scores was significant at the 1% level ($F_{1,81}=12.21$ $p=0.0008$).

- **Mean Measurements for Males and Females**

TABLE 215: Physical Measurement by Sex

	SEX	
MEASUREMENTS	**MALE**	**FEMALE**
BMI ***	27.08 (±3.89)	24.44 (±2.99)
Demi Span (cm)	87.43 (±5.38)	82.49 (±4.69)
Left Lat. Bend (cm) *	13.54 (±4.14)	11.30 (±4.37)
Right Lat. Bend (cm) *	14.33 (±5.06)	12.04 (±4.57)
Right Shoulder Ab. (Deg)	130 (±2.76)	129 (±2.38)
Left Shoulder Ab. (Deg)	130 (±2.48)	123 (±2.24)
Left H. Grip (N) ***	276.77 (±102.44)	160.52 (±75.72)
Right H. Grip (N) ***	307.23 (±76.23)	155.59 (±62.90)
% Body Fat ***	24.04 (±3.09)	29.71 (±3.14)
Reaction Time (ms)	0.57 (±0.22)	0.58 (±0.15)
SD Reaction Time (ms)	0.17 (±0.09)	0.18 (±0.07)

Differences between the sexes for a variety of mean measurements are shown in the table above. Only one of the measures is not lower for females when compared to the male subjects; percentage body fat which is significantly higher for female subjects ($F_{1,64}$=51.21 p=0.0000). Demi span was also significantly different between males and females ($F_{1,40}$=10.045 p<0.001); females having a lower measurement.

Reaction time and shoulder abduction did little to distinguish between the male and female subjects (p>0.05). However, a significant difference was evident for left ($F_{1,59}$=34.50 p<0.0000) and right ($F_{1,58}$=51.89 p<0.0000) hand grip strengths, and left ($F_{1,80}$=5.42 p=0.02) and right ($F_{1,80}$=4.53 p=0.04) lateral bending measures. In addition BMI was significantly higher for the females. ($F_{1,88}$=13.12 p<0.0005).

- **Mean Measurements of Age Groups**

TABLE 216: Measurement by Age

	AGE GROUPS		
MEASUREMENTS	**60-70**	**71-80**	**81+**
BMI *	27.87 (±3.75)	24.34 (±2.81)	24.62 (±3.71)
Demi Span (cm)	85.47 (±5.23)	85.77 (±6.04)	81.55 (±4.82)
Left Lat. Bend (cm)	12.12 (±3.94)	12.42 (±4.80)	12.07 (±5.03)
Right Lat. Bend (cm)	13.36 (±5.26)	12.98 (±4.29)	11.91 (±4.98)
Right Shoulder Ab. (Deg) * **	136 (±2.32)	132 (±2.58)	111 (±2.06)
Left Shoulder Ab. (Deg) **	129 (±2.27)	129 (±2.35)	110 (±2.01)
Left Hand Grip (N) *	239.20 (±93.37)	213.27 (±118.41)	120.78 (±56.30)
Right Hand Grip (N)	243.83 (±98.30)	226.78 (±129.75)	154.40 (±59.35)
% Body Fat	26.91 (±4.27)	28.40 (±3.82)	28.09 (±4.42)
Reaction Time * (Ms)	0.53 (±0.17)	0.61 (±0.19)	0.65 (±0.17)
SD Reaction Time (Ms) * **	0.15 (±0.07)	0.19 (±0.07)	0.21 (±0.10)

Table 216 shows the mean measurements taken of the three age groups. Three of the measurements seem to differ between the three age groups; namely shoulder abduction, hand grip and reaction time; left grip strength ($F_{1,58}$=3.36 p=0.04) and left ($F_{1,85}$=0.09 p=0.01) and right ($F_{1,84}$=6.82 p=0.002) shoulder flexibility measurements are lower in the oldest age group. A post-hoc Tukey test concerning the left shoulder flexibility measure found the difference to lie between the youngest and the 71-80 year old subjects and the 81+ group. Concerning the right shoulder abduction means, a Tukey test found the 81+ age group to significantly differ from both the 60-70 group and the 71-80 group. The significant difference in the left hand grip measure was revealed through a Tukey test to be between the youngest and oldest group. The 81+ age group also took on average longer to react to the stimulus in the reaction time test ($F_{2,79}$=3.61 p<0.03). The variance around this mean was also greater ($F_{2,80}$=4.15 p<0.02) in comparison with age group 1 and 2. Further analysis by a Tukey test found the 81+ group to have significantly more variablity in reaction time than the youngest age group.

- **Measurements by activity participation**

Significant negative correlations were found between the number of activities subjects participated in (over 12 months) and their speed of reaction time score (r=-0.61 p<0.01) and the SD of the mean reaction time (r=-0.43 p<0.01). A significant negative correlation was also found between reaction time score and the number activities participated in over the 4 week period (r=-0.44 p<0.01). Thus, higher levels of activity involvement appeared to be associated with faster reaction time speeds.

In addition wider repertoires also were significantly correlated with flexibility measures over the two time periods; lateral bending (left: 12 month - r=0.28 p<0.05; 4 week - r=0.38 p<0.01)(right: 12 month - r=0.31 p<0.01; 4 week - r=0.32 p<0.01) and shoulder abduction (left: 4 week - r=0.32 p<0.05)(right: 12 month - r=0.37 p<0.01; 4 week - 12 month - r=0.32 p<0.01).

Hand grip strength was only significantly correlated with four week data (left: 4 week - $r=0.32$ $p<0.05$; right - $r=0.30$ $p<0.05$); thus larger repertoires were positively correlated with stronger grip strengths.

4.2.4 Discussion

Approximately a third of the interview sample completed the physical appraisal. Of this sub-sample approximately 60% lived in their own homes and 62% were female. In addition the oldest age band made up 22% of the sample, marginally lower than expected.

Approximately 50% of the sample reported themselves as being either 'very physically active' or 'fairly physically active' whilst the other half of the sample described themselves as 'not very physically active' or 'not at all physically active'. Thus the sample reflected different levels of subjectively rated physical ability. These ratings correlated with other subjective accounts, health status and self esteem. In addition certain subjective ratings of functional ability were related to various well-being measures, such as life satisfaction, malaise, self esteem and personal control. Thus indicating a relationship between these variables.

This section of work was dependent upon the individuals volunteering to take part. All subjects had initially been randomly selected (to take part in the interview) and were subsequently asked to participate in the physical appraisal. As with all work of this nature the study may have been hampered by the selective nature of the respondents. However, analysis of the mean number and types of leisure activities reported by this age group (see table 217 in section 4.3) indicated that the leisure behaviour of this sub-sample was indicative of that of the whole sample. Thus, it does not appear that only the 'more active' subjects agreed to participate in this subsequent stage of the study.

Physical and Functional Capabilities and Age

The data suggest that subjects report more functional difficulties as they get older. In addition the older age groups demonstrated greater difficulty in performing the tasks of functional ability. However, these between group differences in functional ability were only statistically significant for getting out and about. Three of the physical measurements significantly differed between the age group involving flexibility, strength and reaction time; the older age groups indicating poorer performance on the tests. A certain degree of physical deterioration in inevitable with age but many of the age related changes assumed to be the result of the ageing process may in fact be a result of disuse (McMurdo, 1992). However, as reported in section 1.4, activity levels often decrease with age. Therefore those subjects with lower activity levels are the same ones experiencing lower functional ability (although not significant). In the current study the older age groups reported taking part in significantly fewer out of the home and active activities, a greater percentage of this age group being housebound. The relationship between leisure participation and functional ability is addressed below. However the finding that the functional differences are not significantly different between the age groups adds fuel to the discussion concerning the use of chronological age as a meaningful indicator of the ageing process. Alternatively to explain this finding the validity of the measures should be considered and their ability to distinguish between the groups. When we look at the sedentary nature of leisure behaviour of the group it is perhaps surprising that any physical differences are observed between the groups. Considering that physical differences are evident one may have expected greater differences in functional ability. This again highlights the importance of the validity of the measurements used. Previously they have been used within the NFS, however with an older age group than in the current study and thus the tests may not be sensitive enough for assessment of functional ability in younger subjects.

Physical and Functional Capabilities and Residence

A residence trend was evident in the subjective reports and actual performance of functional ability; subjects from residential accommodation reporting and demonstrating

greater difficulty with functional tasks. The difference between the two groups was only significant for the subjective ratings of climbing stairs and the ability to get out and about on foot. In addition the physical ratings found significant differences between the two accommodation groups in BMI, grip strength and reaction time speed. BMI tended to be higher for those who lived in their own homes. The latter also tended to have stronger hand grips and faster reaction time speeds. Thus this analysis seemed to distinguish the two residence groups in terms of functional/physical ability to the same, if not to a greater degree, than the age categories. The analysis of activity patterns by residence also indicated certain differences between the groups, in terms of residential subjects reporting smaller leisure repertoires and lower frequency in leisure participation. This again suggested that those with lower functional, and physical ability, are the same as those with lower reports of activity involvement. However from this work the direction of this relationship is unclear.

Physical and Functional Capabilities and Leisure

Higher levels of activity involvement were correlated with faster reaction time speeds, increased flexibility and increased strength measurements. This data suggests an association between function and leisure involvement but does not infer causation. As suggested by the analysis of age groups and residence, an association between activity and functional /physical ability is again inferred. The outstanding question, which cannot be addressed empirically by this work, concerns the causation of the relationship. Tentatively, from the work of McMurdo et al (1992), it could be suggested that if increases in physical activity were achieved improvements would be possible in physical/ functional abilities and in well-being. However further longitudinal work is needed to determine this especially in older people from certain subgroups (e.g. residential accommodation) and for different types of activity (e.g. getting out and about). Thus further work is required to assess to what extent does functional inability inhibit activity participation and to what extent does inactivity cause functional decline?

4.3 Explanatory Models of Leisure Behaviour

4.3.1 Introduction

Previous analysis of the cross-sectional studies has indicated that leisure repertoire, and in particular the types of activities included within leisure repertoire, were important variables associated with well-being. However, the study had not gone beyond bi-variate analysis of the data. This section describes a further stage of analysis to examine the relationships between the cross-sectional study variables and leisure repertoire using a multivariate technique. The reason for using such a technique was to acknowledge that many factors almost certainly interact to determine leisure behaviour.

Multiple regression estimates or predicts the scores of one variable (the dependent variable) from two or more predictor (independent) variables. However the element of prediction is not always the main purpose of this type of analysis. It can be employed primarily to determine the variables which are most strongly related to the dependent variable and to estimate the percentage variation in the dependent variable explained by the resultant equation (Cramer, 1994). This latter concept lead to the use of multiple regression in the present study. It was employed to examine which variables were most strongly related to leisure repertoire and to find out how much of the variation in leisure repertoire could be explained by these variables. It was hoped that this analysis would directly contribute to the discussions of the development of possible interventions aimed at leisure behaviour.

4.3.2 Methods

Multiple regression analysis was chosen to attempt to establish models which would help to explain the variance observed in the number of activities in total repertoire. In addition the technique was employed to explore the different types of activities within leisure repertoire i.e. social or isolated, out of home or home based and active or sedentary. The data on leisure behaviour collected in the cross-sectional study (Section

4.1) was used and coded in exactly the same manner as previously described in Section 4.1.2.3.

Variables were chosen from the cross-sectional study to enter into the analysis. These were chosen either because (a) they were indicated from previous analysis to be important in association with leisure behaviour or (b) relevant literature had indicated they may be associated with leisure behaviour. The variables chosen to input into the analysis included the three independent variables used throughout the previous analysis (age, accommodation type and sex) in addition to marital status. The various well-being measures were also included (health status, comparison of health with others, malaise, life satisfaction, self esteem, personal control, rating of physical activity, amount of social support and satisfaction with social support). As the rating of physical activity was included within the analysis, only those subjects who took part in the functional assessment were included in the analysis (i.e. N=100). As the data are from a cross-sectional study cause and effect are not implied by the final models.

A forward step-wise multiple regression technique was employed using the statistical package Genstat. This process involved firstly entering into the regression equation the variable which was most strongly related to the behaviour being measured. This was then followed by variables which are the next most strongly related to behaviour once their relationship with other variables is taken into account. At each subsequent stage to the first, variables can be added, deleted or exchanged (Weisburg, 1985). It should be noted that even if the variables are selected by the procedure this does not necessarily mean they are of practical importance. This is because the range of variables offered may not include key variables (or there may be errors of measurement) and variables, alone or in combination, may act as proxies in terms of variance explained. Thus a high degree of subjective interpretation of the resulting equation may be required. From the computed F value it is possible to establish whether a significant amount of variance is explained by the overall model and by the addition of each independent variable. The level of significance was taken as $p<0.05$.

4.3.3 Results

Analysis of the leisure behaviour of 100 subjects were used for the current analysis. The table below shows the mean number of activities within each type of repertoire for this sub-sample against the means for the whole sample: indicating that the patterning of leisure behaviour was similar within the two samples.

TABLE 217: Mean Number of Activity Types in 4 Week Leisure Repertoire for the Whole Sample and for the Multiple Regression Sample

Mean Number of Activities in:	Mean for Total Sample N=304	Mean for Multiple Regression Sub-Sample N=100
Total Repertoire	4.85	4.83
Social Repertoire	3.26	3.22
Isolated Repertoire	1.55	1.55
Out of Home Repertoire	1.55	1.65
Home Based Repertoire	3.18	3.18
Active Repertoire	0.74	0.75
Sedentary Repertoire	4.02	4.08

The following sections present the results from individual multiple regression analyses for each repertoire type listed in Table 217.

4.3.3.1 Modelling Total Leisure Repertoire

TABLE 218: Factors in Regression Equation for Total Leisure Repertoire

Total Number of Activities in 4 Week Repertoire	% Variance Explained	F Value	Degrees of Freedom	P
Constant + Physical Activity Rating	17.8	8.16	3,96	<0.05
+ Subjective Health Status Rating	23.8	3.53	3,93	<0.05
+ Marital Status	26.5	2.11	3,90	NS
+ Personal Control	28.9	4.03	1,89	<0.05
+ Accommodation Type	29.8	2.23	1,88	NS
+ Health Rating Compared to Others	31.1	1.80	2,89	NS

This combination explains a significant proportion of the variance in the size of leisure repertoire over the 4 week period ($F_{(13,86)}$ =4.44 $p<0.05$). Thus indicating that 31.1% of the observed variability in the number of activities within leisure repertoire is modelled by these factors (Adjusted R^2=0.56). Examination of the variables which are found to add significantly to the proportion of variance explained found that larger leisure repertoires were associated with: (a) subjects who rated themselves as being very physically active (b) subjects who had positive perceptions of personal health status and (c) subjects who had higher ratings of personal control. Following analysis of the residuals, the remaining variance appears to be random i.e. suggesting that there are no major factors unaccounted for.

4.3.3.2 Modelling the Number of Social Activities in Leisure Repertoire

TABLE 219: Factors in Regression Equation for Social Repertoire

Total Number of Social Activities in 4 Week Repertoire	% Variance Explained	F Value	Degrees of Freedom	P
Constant				
+				
Marital Status	21.5	9.84	3,96	<0.05
+				
Physical Activity Rating	29.1	4.59	3,93	<0.05
+				
Personal Control	31.9	4.85	1,92	<0.05
+				
Accommodation Type	35.3	5.90	1,91	<0.05
+				
Sex	38.0	4.88	1,90	<0.05
+				
Satisfaction with Social Support	39.5	2.12	2,88	NS
+				
Others	40.3	1.57	2,86	NS
+				
Age	41.0	1.51	2,84	NS
+				
Malaise	41.6	1.44	2,82	NS
+				
Self Esteem	42.5	1.63	2,80	NS
+				
Health	42.8	1.15	3,77	NS

This combination explains a significant proportion of the variance in the number of social activities in the overall leisure repertoire over the 4 week period ($F_{(22,77)}$ =4.37 $p<0.05$). Thus indicating that 42.8% of the observed variability in the number of social activities within leisure repertoire is modelled by these factors (Adjusted R^2=0.65). Analysis of the variables which significantly contributed to the variance explained found that a greater number of social activities were reported as a part of a repertoire if: (a) subjects were living with a spouse and (b) subjects had negative perceptions of being physically active (c) subjects had higher ratings of personal control (d) subjects lived in residential accommodation and (e) subjects were female. The remaining variance appears to be random following analysis of the residuals.

4.3.3.3 Modelling the Number of Isolated Activities in Leisure Repertoire

TABLE 220: Factors in Regression Equation for Isolated Repertoire

Total Number of Isolated Activities in 4 Week Repertoire	% Variance Explained	F Value	Degrees of Freedom	P
Constant				
+				
Marital Status	8.5	4.06	3,96	<0.05
+				
Physical Activity Rating	11.7	2.15	3,93	NS
+				
Life Satisfaction	14.1	2.30	2,91	NS
+				
Malaise	18.1	3.25	2,89	<0.05
+				
Sex	20.1	3.22	1,88	NS
+				
Social Support	20.5	1.23	2,86	NS
+				
Satisfaction with Social Support	21.0	1.28	2,84	NS

This combination explains a significant proportion of the variance in the number of isolated activities in the overall leisure repertoire over the 4 week period ($F_{(15,84)}$ =2.76 $p<0.05$). Thus indicating that 21% of the observed variability in the number of isolated activities within leisure repertoire is modelled by these factors (Adjusted R^2=0.46). Analysis of the variables which significantly contributed to the variance explained found that greater number of isolated activities were reported as a part of a repertoire if: (a) subjects were not living with a spouse and (b) subjects had a lower rating of malaise. Following analysis of the residuals the remaining variance appears to be random.

4.3.3.4 Modelling the Number of Out of Home Activities in Leisure Repertoire

TABLE 221: Factors in Regression Equation for Out of the Home Repertoire

Total Number of Out of Home Activities in 4 Week Repertoire	% Variance Explained	F Value	Degrees of Freedom	P
Constant + Physical Activity Rating	17.3	7.89	3,96	<0.05
+ Personal Control	25.6	11.76	1,95	<0.05
+ Health	29.2	2.61	3,92	NS
+ Satisfaction with Social Support	31.4	2.45	2,90	NS
+ Social Support	33.3	2.26	2,88	NS
+ Others	35.0	2.21	2,86	NS
+ Malaise	37.1	2.39	2,84	NS
+ Marital	39.7	2.22	3,81	NS
+ Accommodation Type	40.5	2.07	1,80	NS

This combination explains a significant proportion of the variance in the number of out of home activities in the overall leisure repertoire over the 4 week period ($F_{(22,77)}$ =4.37 $p<0.05$). Thus indicating that 40.5% of the observed variability in the number of out of home activities within leisure repertoire was modelled by these factors (Adjusted R^2=0.64). Analysis of the variables which significantly contributed to the variance explained found that a greater number of out of home activities were reported as a part of a repertoire if: (a) subjects had positive perceptions of being physically active and (b) subjects had higher ratings of personal control. The remaining variance is assumed to be random following analysis of the residuals.

4.3.3.5 Modelling the Number of Home Based Activities in Leisure Repertoire

TABLE 222: Factors in Regression Equation for Home Based Repertoire

Total Number of Home Based Activities in 4 Week Repertoire	% Variance Explained	F Value	Degrees of Freedom	P
Constant + Marital Status	1.1	1.37	3,96	NS
+ Physical Activity Rating	2.4	1.44	3,93	NS
+ Self Esteem	3.5	1.49	2,91	NS
+ Malaise	4.5	1.50	2,89	NS
+ Satisfaction with Social Support	4.7	1.11	2,87	NS
+ Social Support	5.2	1.23	2,85	NS
+ Accommodation Type	5.9	1.57	1,84	NS

This combination did not significantly explain a significant proportion of the variance in the number of home based activities in the overall leisure repertoire over the 4 week period ($F_{(15,84)}$ =1.41 p>0.05).

4.3.3.6 Modelling the Number of Active Activities in Leisure Repertoire

TABLE 223: Factors in Regression Equation for Active Repertoire

Total Number of Active Activities in 4 Week Repertoire	% Variance Explained	F Value	Degrees of Freedom	P
Constant				
+				
Personal Control	11.1	13.42	1,98	<0.05
+				
Physical Activity Rating	18.6	3.97	3,95	<0.05
+				
Accommodation Type	23.7	7.38	1,94	<0.05
+				
Subjective Health Status Rating	26.1	2.04	3,91	NS
+				
Sex	28.5	4.03	1,90	<0.05
+				
Self Esteem	29.6	1.71	2,88	NS
+				
Health Rating Compared to Others	29.7	1.02	2,86	NS
+				
Malaise	29.7	1.01	2,84	NS

This combination explained a significant proportion of the variance in the number of active activities in the overall leisure repertoire over the 4 week period ($F_{(15,84)}$ =3.79 $p<0.05$). Thus indicating that 29.7% of the observed variability in the number of active activities within leisure repertoire was modelled by these factors (Adjusted R^2=0.55). Analysis of the factors which significantly added to the total variance explained indicated that a greater number of active activities in repertoires were associated with: (a) subjects who had a higher rating of personal control (b) subjects who felt physically active (c) subjects who lived in a household (as opposed to residential accommodation) and (d) subjects who were male. The remaining variance is assumed to be random following analysis of the residuals.

4.3.3.7 Modelling the Number of Sedentary Activities in Leisure Repertoire

TABLE 224: Factors in Regression Equation for Sedentary Repertoire

Total Number of Sedentary Activities in 4 Week Repertoire	% Variance Explained	F Value	Degrees of Freedom	P
Constant + Physical Activity Rating	10.4	4.83	3,96	<0.05
+ Marital Status	13.9	2.30	3,93	NS
+ Accommodation Type	18.1	5.79	1,92	<0.05
+ Subjective Health Status Rating	21.9	2.50	3,89	NS

This combination explains a significant proportion of the variance in the number of sedentary activities in the overall leisure repertoire over the 4 week period ($F_{(10,89)}$ =3.78 $p<0.05$). Thus indicating that 21.9% of the observed variability in the number of sedentary activities within leisure repertoire is modelled by these factors (Adjusted R^2=0.47). Analysis of the factors which significantly added to the total variance explained indicated that a greater number of sedentary activities in repertoires were associated with: (a) subjects who felt physically active and (b) subjects who lived in residential accommodation. The remaining variance is assumed to be random following analysis of the residuals.

4.3.4 Discussion

Multiple regression analysis of the data has highlighted interesting relationships between factors in attempting to model the leisure behaviour of the sample. The interpretation of the findings is complex but certainly directs attention to certain factors, and combinations of factors, which merit further attention. In addition the variables which were offered yet not entered into the models (or not significant within the models) are also of interest. The most notable example being that of the factor age. Age was only entered into one equation (modelling the variance between reports of

social repertoires) however it explained less than one percent of the variance which was not a significant change to the overall variance explained. This finding is inconsistent, not only with current thinking surrounding the inverse relationship between leisure participation and age, but also with the work of Mobily et al (1984). The latter was an American study which similarly attempted to model leisure repertoire. Age was found to offer the most explanatory power in relation to leisure repertoire. The major difference between the current data set and the work of Mobily et al was the collection of data on leisure behaviour. Whilst the current study did not define leisure to its sample the Mobily et al. study asked subjects to respond to set leisure categories (of which they had to participate in at least once a month).

A finding consistent with the Mobily study is the explanatory power of self perceived health in predicting total repertoire. The current study also entered physical activity rating. This was part of most regression equations and also explained a significant amount of the variance, thus implying that health status, and in particular physical ability, are important factors to consider in explaining leisure behaviour.

Following the two most powerful predictors of leisure behaviour, physical activity rating and personal control, other significant factors inferred from the analysis are marital status, accommodation type, sex, malaise and subjective health status. It is interesting that two of the independent variables used in previous analysis are present (accommodation type and sex) however age is not within the models. This again questions the use of chronological age as a measure of the ageing process and implicates other factors which are important to the association between leisure and ageing. As expected accommodation type is highlighted. This confirms the previous convictions of the study that accommodation type was an important discriminatory variable between older subjects. The qualitative analysis examines residence differences in more detail (see Chapter 5).

Some of the well-being measures were included within the equations but did not significantly change the amount of variance explained. These included the social support measures, self esteem and life satisfaction. A major use of this type of analysis

is to explore the possible indicators in the relationship between a dependent and an independent variable. Further work, taking a more liberal view on significance level, may find these factors are implicated. Their omissions are surprising as all three have been established to be associated with leisure behaviour and the latter two, self esteem and life satisfaction, are commonly used as measures of well-being. Whereas personal control is usually not a component of the analysis. Thus this study has important implications for the elements of well-being of relative importance in association to the variance in leisure behaviour.

As the data are all derived from cross sectional work cause and effect cannot be implied by the model. Application of the findings reported in the literature (McMurdo, 1992) concerning the causal relationship of activity upon well-being to the current study could suggest that the factors modelled were causing the variance in observed leisure behaviour. However, not all the well-being measures and types of activity used within the current study have been subjected to longitudinal analysis. Thus we can only conclude that the associations are evident and certain factors, and combinations of factors, seem important in relation to leisure repertoire and different types of leisure repertoire.

4.4 Quantitative Assessment of Attitudes Towards Ageing and Leisure held by Individuals Closely Involved with Older People

4.4.1 Introduction

Table 225 shows the focus of this section. As discussed in the introduction to this report attitudes towards ageing are often negative in our society. This is evident in many aspects of our present culture from the language that is used to refer to older people to the apparent lack of status afforded to older people in policy issues.

TABLE 225: Focus of Section 4.4

METHOD	MEASURES
Questionnaire	Socio-cultural attitudes towards ageing

It is important to assess attitudes as they are inherent to the prevailing sociocultural environment which, it has been argued, are salient to the behaviour of individuals within the environment. However past research has not always indicated negative attitudes towards older people and ageing (Milligan et. al. 1989). Several authors have discussed the methodological problems of assessment within this field concluding that it important to determine what is being measured (attitudes, beliefs or knowledge). The many different tools that have been used have confounded this problem as they may have been measuring different concepts (see Section 3.6). This has meant that empirical research is unable to provide a clear picture of the prevailing attitudes in society.

The present study aimed to (a) develop an instrument which would provide an insight into how individuals perceive older people and the ageing process (b) examine if in general attitudes are positive or negative concerning older people and the ageing process and (c) examine the subtleties of the attitudes held.

4.4.2 Methods

4.4.2.1 Development of an Assessment Tool

A list of 51 attitude statements were compiled from previous studies (Harris et al., 1988) and from suggestions from people involved with older people. A complete list of these statements are shown in Appendix 8. The statements varied in concept;

CONCEPT	EXAMPLE OF STATEMENTS
♦ activity and ageing	'it is important for people to slow down as they age'
	'older people should maintain active lives'
♦ leisure activity and ageing	'leisure activities are only a means for filling in time for older people'
	'a person's variety of interests decreases with age'
♦ the ageing process	'mental functioning declines with age'
	'older people have the ability to learn new skills'
♦ health and ageing	'ageing means a deterioration in health'
	'retired people could do more to improve their health'
♦ ageing in our society	'society undervalues older people'
	'only youthful images are positive images'
♦ personal feelings about growing older	'getting old scares me'
	'growing older doesn't necessarily mean growing lonely'
♦ feelings about retirement	'retired people have the time to enjoy themselves'
	'older people's lives are empty'
♦ feelings towards older people	'in general, most older people are alike'
	'I enjoy the company of older people'

The statements were arranged to ensure explicitly conflicting statements did not follow each other. They were given to 75 subjects, who were asked to respond to each statement by marking on a likert scale their level of agreement (the scale range was: strongly disagree, disagree, unsure, agree, strongly agree). All subjects were handed

the questionnaire with a front sheet attached explaining that the aim of the study was to explore how they felt about growing older and their opinions of older people in our society. The front sheet stated that there were no correct answers to the statements and asked subjects to give an answer which best described their present feelings. Subjects were sought from a variety of places including students of the University's departments which were health related. An attempt was made to administer the questionnaire to equal numbers of males and females of a variety of ages.

Each statement was scored on a scale of 1 to 5; 1 referring to a negative response and 5 to a positive response. Thus higher scores inferred more positive attitudes towards ageing and older people. This involved a value judgement on the direction that the statement should be scored in. For example if a subject replied 'strongly agree' to the statement 'Older people are boring' this would have been scored as 1 inferring a negative attitude towards older people. However, it was not possible to use such judgement decisions with statements which were more ambiguous such as 'Getting old is worse for women than for men'. With such statements it was possible to correlate the samples' total scores against the score for this question. If a response of strongly disagree was associated with higher total scores then the response strongly disagree was given a score of 5.

To determine which of the 51 statements could best indicate attitudes the Internal Consistency Method of Item Analysis was used. This involved correlating each item with a reliable criterion of the attitude which was being measured and thus retaining those items with the highest correlations. The criterion used was the total pool of items i.e. thus correlating item score with total score. Therefore a high positive correlation would indicate that a high (positive) score was given to the item and a high (positive) total score was achieved or that a low (negative) score was given to the item and a low (negative) score was achieved. The items achieving positive correlations indicated that that item was a good indicator of the subjects' attitudes.

This procedure was carried out on all 51 items and 30 statements were found to have positive correlations significant at the 1% level. (A further 10 were significant at the

5% level however these were discarded). These 30 statements were then used to formulate the attitude questionnaire (Appendix 9).

4.4.2.2 Use of the Assessment Tool

The assessment tool was given to 27 individuals who were involved in the qualitative interviews of attitudes towards ageing (see Section 5.2). These individuals were closely involved with an older person / persons. Of those asked 17 completed the questionnaire and returned it. The table below details the sample who completed the attitude questionnaire and their relationship to older people is described.

TABLE 226: Attitude Study Sample

PROFESSIONALS	OTHERS
4 Wardens	3 Carers
1 Home Managers	1 Friend
3 Care Assistants	1 Son
1 Senior Carer	1 Niece
1 Leisure Centre Worker	1 Grand-daughter

The same instructional front sheet was used as in the developmental work described above (see Appendix 10).

4.4.3 Results

- **Total Score**

The possible range of scores was between 30 and 150. The samples' scores ranged from 88 to 143. A score of 90 indicating a balanced view. The mean total score of the sample was 116 (±13.03). Indicating that the direction of attitudes in general was positive.

♦ **Item Scores:**

The table below lists the 30 attitude statements used and the mean score attributed to each.

TABLE 227: ATTITUDE STATEMENTS

STATEMENT	MEAN	SD
1. Older people are a burden on society	4.7	0.6
2. Older people who partake in new interests should be discouraged	4.6	1.1
3. Society undervalues older people	4.6	0.6
4. Life after retirement could be wonderful	4.6	1.2
5. Older people should maintain active lives	4.5	0.5
6. The majority of older people are senile	4.4	0.9
7. Physical activity can maintain acceptable levels of fitness in older people	4.4	0.5
8. People should maintain activity levels whatever their age	4.4	0.5
9. Older people are boring	4.3	1.0
10. Leisure activities are only a means of filling in time for older people	4.2	0.6
11. A part of ageing is to withdraw from society	4.2	0.6
12. Getting older is worse for women than for men	4.2	0.7
13. Older people's lives are empty	4.2	0.8
14. Older people are not capable of being active people	4.1	1.1
15. Only 'youthful' images are positive images	4.1	0.8
16. It is impossible to be as happy in old age as when younger	4.1	0.6
17. One of the only pleasures older people have is to reminisce	4.0	0.9
18. Retirement is an exciting time to do the things you never had time for before	3.9	0.8
19. It is important for people to slow down as they age	3.8	0.9
20. Active older people will always be rare	3.7	0.9
21. A persons variety of interests decreases with age	3.5	0.9
22. I look forward to retirement	3.5	1.0
23. People have less control over their lives as they get older	3.5	1.0
24. It is sad to get old	3.5	1.3
25. Getting older scares me	3.2	1.4
26. I don't mind getting older	3.2	1.4
27. Ageing means a deterioration in health	3.1	1.0
28. Mental functioning declines with age	2.9	1.1
29. Most older people are set in their ways and unable to change	2.8	1.2
30. As people grow old they depend on others more	2.3	0.6

As can be seen from the table, seventeen of the statements were generally awarded a score above 4, indicating positive attitudes towards those items. three items has a score under 3, indicating negative attitudes to those items and ten items had a score of approximately 3. A score of 3 indicating an uncertainty in response.

4.4.4 Discussion

The results from this study suggest that this sample of people who are closely involved with an older person or persons, held positive attitudes concerning the ageing process and older people. The subjects held that life after retirement could be wonderful, that it is possible to be as happy in old age as when younger and that older peoples' lives are not empty. In terms of society they felt that older people were undervalued, that they were not a burden and that it is not a part of ageing to withdraw from society. Subjects also disagreed that only 'youthful' images were positive ones. The subjects indicated positive attitudes concerning activity and ageing by responding that they felt older people should maintain active lives, that physical activity could maintain acceptable levels of fitness in older people, that older people should be encouraged to partake in new interests and that leisure activities are more than merely a means for filling in time. Interestingly the statement 'people should maintain activity levels whatever their age' received a positive response indicating that people should not slow down as they get older. However, several of the statements were responded to with some uncertainty including 'It is important for people to slow down as they age'.

All the statements which were personalised were responded to with some uncertainty. For example, 'I don't mind getting older', 'Getting older scares me' and 'I look forward to retirement'. Other statements that this group were uncertain about included whether active older people would always be rare, that ageing means a deterioration in health, that retirement is an exciting time to do the things you never had the time to do before and whether people have less control over their lives as they get older.

Only three of the items were classified, from examining the mean responses, as indicating negative attitudes. Subjects agreed with the statements that 'most older

people are set in their ways and unable to change', 'as people grow older they depend on others more' and 'mental functioning declines with age'.

These results are congruent with the findings of an American study using a similar methodology (Harris et. al. 1988). This American work found that 11 of 13 statements responded to were positive concerning ageing. The exceptions were feelings of increased dependency in old age and the feeling that life does not get easier with age. The issue of dependency is confirmed by the present study as inherent to the negative views people hold about ageing.

It is possible that results of general positive attitudes towards older people could be explained by the methodology used. Wingard (1983) reported that attitude statements that were comparative in nature i.e. comparing a young and old person would tend to evoke an ageing stereotype whereas isolated judgements i.e. solely rating an older person would not evoke a judgement based on the stereotype. The former approach highlights age as the salient factor upon which to make the judgement. In the present study two of the statements included highlight this comparison; 'It is impossible to be as happy in old age as when younger' and 'Only 'youthful' images are positive images'. However, both of these statements produced a positive response with a mean score of over 4, indicating a positive response.

Another methodological issue highlighted by Wingard (1983) was that studies which ask about ageing in general produced different results to studies which focus on a specific individual, such as a relative e.g. a grandmother. The present study was clearly about ageing in general and if an individual had been specified the results may have been different. The results presumably depend on the nature of the contact each subject has with the specified individual. This information would be important in examining the results. This leads to another issue which could help explain the results of this study; the subjects themselves and the nature of the contact that they have with older people. It has been suggested that often attitude data is examined in terms of demographic variables when they are only acting as a proxy measure to indicate the

subjects' prior experience and role relationships with older people and their knowledge about ageing and older people;

"It is the 'proximal' variables that are likely to demonstrate stronger, more consistent relations to attitudes about the elderly than are the distal demographic and cultural or ethnic 'labelling' variables" (Wingard 1983 p.164).

The expression of attitudes needs to be taken in the context of the individual expressing them, including the importance of their prior experiences and relationships.

The validity of such approach should also be addressed in two ways; firstly concerning the actual methodological process and whether subjects respond in a way as to seek approval and secondly, in terms of how the attitudes expressed relate to actual behaviour towards older people. The current study has employed qualitative techniques to further examine these issues further (see Chapter 5).

These methodological issues open up the discussion to the type of methodology best equipped to assess attitudes. Lutsky (1986) cautioned against over generalising from the premise of one study. Attitude studies, he concluded, show the complexity of social attitudes and the methodological difficulties in assessing them. In the present study a qualitative approach to assessing attitudes may serve to (a) provide a comparison to the quantitative work carried out and thus have implications for assessing it's validity, (b) allow investigation into the relationship between prior interaction with older people and attitudes held and (c) explore the basis upon which attitudes are expressed. This approach has obvious limitations in terms of representatives but will aid the discussion of the findings of the quantitative study in terms of methodological issues and meaning.

4.5 Summary of Quantitative Findings

The quantitative studies of leisure and ageing have documented the leisure behaviour of older people in terms of age, sex and residence type and has investigated the association between leisure behaviour and certain measures of well-being and functional ability. In addition preliminary assessment of attitudes towards ageing and ability within the socio-cultural environment has been carried out through this work.

The quantitative studies have established that older people report low levels of participation in leisure and that their involvement is characterised by sedentary, home based and social activities. The variables of residence type and sex differentiated the samples leisure behaviour to a greater extent than chronological age alone. For example males and people who lived in their own homes reported greater amounts of active and out of home activities.

Leisure repertoire was found to be associated with various well-being measures whilst frequency of overall participation in activity was not. In particular certain types of repertoire were important (out of home, active and social) in relation to well-being. The frequency of participation in out of home and active activities was also associated with well-being. In addition associations were found between leisure activity level and functional status.

The importance of residence types was further suggested through the functional assessment as it distinguished the sample according to measures of ability to a greater extent than chronological age.

Multivariate analysis implicated that two of the most powerful variables relating to leisure repertoire were ratings of physical ability and personal control. Other variables highlighted by the analysis included health status, marital status, malaise, accommodation type and sex.

It was found that a majority of subjects wanted to increase their leisure participation and a major constraint to this was poor health status. However, different constraints were identified as important to different age groups and different residence types. Analysis of the Brandenburg Model (1982) of Activity Adoption revealed support for the elements of opportunity, favourable social milieu, receptiveness and the presence of a key event. However little support was gained for activity specific knowledge.

Attitudes towards ageing and leisure activity were found to be positive when analysed by attitudinal statements in a sample of people closely involved with older people. However the validity of this approach is questioned and further addressed through qualitative techniques in the following chapter.

In addition Chapter 5 examines further the issues of activity and ageing, established from the cross-sectional studies, in a sample of older people using qualitative techniques. In particular the elements of the Brandenburg Model (1982) are further explored.

CHAPTER FIVE

QUALITATIVE ANALYSIS OF THE ASSOCIATION BETWEEN LEISURE AND AGEING

5. QUALITATIVE ANALYSIS OF THE ASSOCIATION BETWEEN LEISURE AND AGEING

To enhance and complement exploration of the knowledge base derived from the quantitative investigations, qualitative techniques were employed. This part of the study aimed ultimately to provide a greater understanding of the quantitative findings by exploring the possible meanings and interpretations it could hold. An important element of this work was to focus on the findings relevant to possible interventions as this was to be the subject of the concluding stage of the project. The intention was to explore the issues and trends established by the interview schedule findings in an attempt towards a greater understanding of leisure behaviour. The main purpose was to explore those subtleties of leisure behaviour which are better examined by qualitative rather than quantitative approaches (Sage, 1989) i.e. to examine the process and beliefs which lie behind documented leisure behaviour, what leisure means to those doing it and its significance in relation to other aspects of their lives.

Qualitative methods appeared particularly appropriate as leisure had been defined as a subjective phenomenon. Howe (1988) recognised that this opens up the study of leisure to the use of qualitative research methodology. Qualitative techniques are proposed to enable the researcher to describe personal outcomes, or the meaning and role of leisure, in the lives of subjects as expressed in their own terms and from their own perspective. Although data collected in this way cannot be generalised to a given population, its value lies in the kind of data it is capable of generating: concrete, highly differentiated, richly detailed and accessible to meanings and interpretations (Fischer, 1983). Fairhurst (1990) believed that recognising that 'social ageing does not take place in a social vacuum' has implications for the research methods adopted. The challenge of Fairhurst's thinking for the present investigation seem to be to place the wealth of leisure behaviour information obtained into the context of older people's lives.

A major finding of the quantitative work was a significant decrease in the number of certain types of activities, namely active and out of home activities. The previous studies had highlighted the importance of certain factors which may be associated with this finding, such as poor health, personal control, residence types and physical abilities. In addition analysis of constraints to behaviour and the elements of the Brandenburg Model (1982) implicated the importance of opportunities, receptiveness and socio-cultural environments to activity adoption. A more in-depth understanding of these factors in relation to the leisure behaviour of older people and a need to place these findings into the context of older people's lives seemed imperative areas to explore before theorising could take place with regard to the value of intervention strategies.

From this standpoint two studies were carried out: The first involved a series of focus groups with older people who had previously completed the interview schedule. Certain findings of the quantitative cross-sectional analysis were the focus of these groups. Secondly a number of in-depth interviews were carried out with people who were in regular contact with older people to assess their attitudes towards ageing and leisure behaviour.

5.1 A Focus Group Analysis Exploring Leisure Behaviour

5.1.1 Introduction

Table 228 shows the focus of this section. The primary aim of this particular study was to explore issues relating to activity and ageing which had arisen from the cross-sectional analysis. However, the intention was to explore the finding but also to allow identification of other issues which may not have been identified previously. Focus group methodology was employed as it allowed both of these aims to co-exist.

TABLE 228: Focus of Section 5.1

METHOD	MEASURES
Focus Groups	Leisure and Ageing Process of activity adoption Barriers and enhancers to leisure Attitudes towards leisure services Attitudes towards leisure and health

Of particular interest from the quantitative studies was the process of activity adoption as described by the Brandenburg Model (1982) and explained in Section 1.5.4 (see Figure 2) of this thesis. This model has gained support from the cross-sectional work and other studies of leisure (e.g. Howe, 1988). It merited further consideration as it recognises that variable factors are important in understanding participation in leisure and also it had the potential to have practical implications for leisure promotion. Previous work examining this model had specifically looked at the activity adoption process. However in the current study the model was utilised to examine generally the factors important to leisure and ageing.

5.1.2 Methods

Five focus groups were held with older people. The groups were chosen from different accommodation types. The following table summarises the groups held:

TABLE 229: Details of Focus Groups

	GROUP 1	GROUP 2	GROUP 3	GROUP 4	GROUP 5
NUMBER OF SUBJECTS	5	7	5	5	7
TYPE OF RESIDENCE	Own Home	Own Home /Sheltered Housing	Sheltered Housing	Residential Home	Residential Home
MEAN AGE	75.8 yrs	72.4 yrs	70.2 yrs	87.4 yrs	75.4 yrs

The original intention was to hold 6 focus groups; two groups with people from each accommodation type. However, due to certain circumstances the numbers for one of the sheltered housing groups was low and therefore these subjects were invited to join one of the community groups.

To allow for refusals approximately 10 people were invited to groups 1 to 3 and on average 6 attended. Reasons given for non attendance included being away on holiday, being unwilling to travel, having pre planned arrangements and poor health. In addition 3 people did not reply to the invite and relatives informed us that two of the people who were invited had passed away. These groups were held on University premises in an informal room. All subjects were offered help with transport arrangements if needed and all travelling expenses were paid. All subjects had previously completed the interview schedule and an attempt was made to invite people of different ages and who reported different levels and types of leisure behaviours.

Groups 4 and 5 were held in different residential homes where interviews for the initial stage of the project had been conducted. Where possible all subjects previously interviewed took part in the focus groups and, in addition, other residents were asked to join the discussion. Residential home staff were not encouraged (but could not be entirely excluded) to be part of the groups.

In all but one of the groups two facilitators were present from the research team. Sessions began with an introduction of the facilitators and the project and the reason for the group discussion. This was followed by an ice breaker which gave each subject the chance to speak at an early stage. One facilitator explained how the rest of the session would run and the discussion began. The session ended with time for refreshments.

The discussions were focused by an interview guide used by the facilitators who promoted, but did not lead, the discussion. The box below shows the interview guide used:

INTERVIEW GUIDE

1. How do you feel about ageing?
2. How do you feel society in general views older people?
3. Do you feel activity is important to your health?
4. .... is it important as you get older?
5. Do you think society expects older people to be active?
6. What affects your participation in leisure activities?
7. How do you feel about leisure service provision in Liverpool?
8. Research - reason for participating

This guide was developed to examine the variables of opportunity, social milieu and receptiveness as described in the Brandenburg et al model. However it was not strictly

adhered to and was used as a mere guide for the discussion to remain focused upon these topics hopefully allowing relevant individual perspectives and experiences to emerge. Discussions were video recorded for subsequent analysis and were fully transcribed. The transcripts were analysed by detailed examination of salient ideas and themes evident within them. Comparisons were made between the two accommodation groups.

5.1.3 Results and Discussion

The following material is based upon the themes identified from the focus group transcripts. Throughout the section verbatim quotes are presented to illustrate the basis upon which the category of themes was created.

A striking result of the focus group analysis was the difference in emphasis placed by those from various accommodation types on the three elements of the Brandenburg model under scrutiny. The elements of opportunity, receptiveness and social milieu appeared to hold different levels of salience and different meanings to subjects from the three accommodation types interviewed. This is explored in more depth below.

♦ OPPORTUNITY

Opportunity, an element of the Brandenburg Model, refers in the model to the presence of favourable socio-environmental conditions or at least the absence of constraints which lead to activity involvement. The community groups and those from sheltered accommodation placed particular emphasis on the importance of favourable opportunities to their leisure behaviour. Particular constraints and enhancers identified by these groups are listed below:

CONSTRAINTS:

Lack of Finance

There was a general feeling across the community/ sheltered group that finance was a constraining variable. As this dialogue from group 1 illustrates:

Subject 4: ... there is things I would like to do and if I was able to do them I probably couldn't because financially they would be beyond me ... you know things like horse riding, playing golf and anything there are all sorts of things ... like going away and doing absailing on these weekends but you have got to pay ... you have got to pay quite a lot of money ....

.....

Subject 4: I can't think any one who retires ... or very few people who retire and don't have some financial drop

Subject 1: Oh yes every body does

Subject 3: I used to belong to the Liverpool Sailing Club down in Speke and I used to go sailing quite a lot ... and err ... I couldn't afford it now

Subject 4: Well this is it ... that's one of the things ... I didn't mention sailing cos it doesn't appeal to me but that is one of the things I meant .... I think would be restricted by lack of cash ...

In some cases the financial problem was described in terms of the sheer expense of the activity.

Group 2

S5: ..... when you go on to talk about other things like theatre and things like that it has become so expensive now a days

.....

S3: It does help that the evening classes .. if you are a pensioner are free

S5: No but other thing beside that like the theatre or a concert or something like that it becomes very expensive and particularly for concerts and things like that in an evening where it isn't terribly safe if you are going on your own and so it is a taxi there and another one back and then a theatre ticket and it becomes very expensive

Often the groups emphasised that in general retirement was a time of financial pressure the implication being that leisure activities suffered as other necessities were paid for.

Group 2

S5: But another thing you see is finance .. you are often limited by finance ... I am not talking about expensive holidays but for example with Community Tax one pensioner gets a 25% reduction ... and I think that finance does come in to what you could do and would like to do in your retirement .....it is not that that you would want to have expensive holidays but all kinds of other things it would make a difference .. I mean like you have to be careful cos you have to have money available in case anything goes wrong with the house ..

This was also illustrated in a quote from group 3

Subject 4: .... as I say most people's financial circumstances dictate what they can do ... I mean if my finance dictated it I would be lounging on the beach now in Tahiti .... I am not bothered about the money .. you can't take that with you but it can constrain you doing what you like

Subject 2: Oh yes and you don't know how long you have got to make your money last and when you are not working it is all out isn't it

One of the worries about retirement was the financial insecurity that it could bring. One subject described how since he had become to feel comfortable with his retirement income he felt able to involve himself in leisure activities more.

Group 1

Subject 1: Well I wasn't looking forward to retirement because I was always afraid at what was at the end of the line .... like financially ... I mean I used to think will I have enough money after I retire ... but I had occasion to go back and I was talking to one of the chaps I work with and he said to me "Now how do you manage" and I said "How do you mean" and he said "Well financially" and I said - well look at it this way when I worked in X every third weekend on the job I was on we worked Saturday and Sunday you see and I said now that I have retired I said ... even then I didn't get enough money but now I have retired I can manage because I know what I am going to get every week and I said you sort of pace yourself don't you .... so no matter much

Subject 5: We live according to our means don't we

Subject 1: Right yeah ... and people say to me "So how can you afford to go on holiday about 4 times a year" and I say "Well I adjust my lifestyle to accommodate" and I mean I am fortunate that my wife does work and so we make the most of it .. Well my children say to me "Are you going away again" so I say "Yeah why not" so they say "Well you won't have any money left" so I say "Well I am not going to live forever"

Subject 4: I saw a card which is probably relevant .... it's a couple of months ago now ..... you know these stickers they have on the back of cars when you are behind - 'Retired, spending the kids inheritance and enjoying every minute of it'!

In a couple of instances during the discussion about the limiting nature of finances in retirement, subjects from different groups highlighted that there were activities that did not cost money or cost very little.

Group 3:

Facilitator: And you mentioned finance and that is something again that often stops people from doing

(All subjects agree)

Subject 2: Oh yes, I don't think the pension is enough you know

Subject 5: Yes, but there is bowls and things like that

Subject 4: Well yes there is yeah

Subject 2; You don't have to pay for the bowls at the park

Subject 4: No, no

Lack of Information

A consistent theme across the community and sheltered groups was the lack of information available concerning available services and benefits to older people. This is illustrated by an abstract of the discussion in group 1.

Subject 1: Well I found when I retired .... I don't know if anyone else found the same thing ..... that if you want to know anything or if you want to find out anything you have to go out and look for it .... I mean nobody ..... you don't get any leaflets ..... you get a booklet of with all the phone numbers in and invariably you ring up and you can't get hold of anyone anyway ..... but they never tell you ... I mean one instance which is a simple thing really when I retired when I was 65 someone said to me "Have you got your bus pass" well I said "How do you get your bus pass" - it may sound daft but I thought they would send you something through but they said "Oh you have to go down to Hatton Garden"

Information was thought especially important to certain groups of older people.

Group 1

Subject 1: That's what I say you see I say I count myself very fortunate that I can get around and I am reasonably healthy .... but it is as Ken just said there are a lot of older people, or even younger people, who are not well and nobody ... nobody tells them ... if they are on their own there on their own that's it .... nobody will tell them what's going on or what they can receive ... I mean I am sure ... there are plenty of things going on ..... even like this organisation I go to ... err they are only waiting for people to sort of get in touch with them and they will have someone there to pick them up ... we all use our own cars where we can you know ..... pick them up and take them in and then take them home and make sure they are in you know safely and but as I say people aren't made aware and once they are in doors that's it you know .... nobody ... they seem to be shut off from the world.

This group felt that there were problems with the lack of people who were having access to the information.

Group 1

Subject 1: At this centre I go to on a Tuesday we have a chap from clerks and gardens and he gave a talk on the old homes .... all the historical homes in Liverpool and all the parks and everything ... and he left leaflets and now I never knew ... that chap *(Subject 3)* goes walking ... now they do walks around the parks .... Well I mean it is not generally known that is it?

Subject 3: That's right

Subject 1: Unless you have been to one of these talks ... they have leaflets but how many people go round picking leaflets up ... if someone gives you a leaflet you crumple it up and put it in a bin don't you

Subject 4: They do have leaflets in Libraries .....

Subject 1: Yeah but how many people go to libraries ... I think that the if the corporation issued a booklet with useful services for retired people in it ... you know

.....

Subject 4: I have got one of these cards ... have you *(Subject 1)* got one of these leisure card things

Facilitator: Leisure Passes

Subject 1: Oh yeah ... now I didn't now how to get one of them but they said you can ask in one of those centres ..... but I didn't know that until 12 months ago ... when somebody said to me you can get a pass for Peter Lloyd

Subject 4: Well I knew cos I was going regularly swimming anyway to Peter Lloyds

Subject 1: But what happens with anybody who sort of can swim and they have never been to the baths for years say they don't get to know about it do they

Subject 4: The trouble is that they have got leaflets about it but they are in the baths

Subject 1: Yes that is what I mean

Facilitator: So they are in the wrong place

However, members of group 3 felt that you could find out about services if you were interested enough to look for it.

<u>Group 3</u>

Facilitator: How about getting to know about leisure services

Subject 3: That's a good point - How do you?

Subject 1: Well not a lot of people know how to go about it do they really

Subject 5: They are probably there and we don't know about it

....

Subject 4: Yes no I was talking about the private ventures ... in that you find out about them the same as any member .... an instance - suppose you were interested in rambles well ... Liverpool Rambling Association .... well were is that you look in the phone book and you will find it

Subject 3: Yes that's right

Subject 4: I think when you interested in something you will find out about it

Subject 2: You will find out about it that's right

Subject 3: Yes

Subject 5: Yes

Subject 4: I don't see that it should be leaflets through your door on this one just because everybody is older

Subject 3: No I don't and they couldn't post to everybody and if they did 9 out of 10 wouldn't be interested and so that would be a waste

Subject 4: That's right

Lack and Type of Facilities

Facilities were not always seen as amenable to the needs of older people.

Group 1

Subject 1: Well just one that I can think of quickly .... a leisure service you can go on the boat right ... you can go on with your bus pass

Subject 4: Can you?

Subject 1: You can go down to the ferry and you can cross to the other side .... but if you want to go back without paying a fare you have got to get of the boat and go up to the top and if the tide is out believe me it is a good walk up the hill ... and you have to walk back to the boat and probably by the time you get back it is another half an hour before the next one

Subject 4: What have you got to do when you get to the top?

Subject 1: You have to go to the booking office or something and show your pass ... and then you go back again and get on the boat

.....

Subject 4: And when you are half way down coming back the skipper says "Ah here he is lets go"

Subject 1 Yeah lets see how old he is. Yeah that is one thing

In addition the geographical access of services was stressed as an important factor.

Group 2

S5: Some of the classes I find depending where you live can be in weird places and if they are in evenings it is not very pleasant going on your own .... you have a walk to the bus stop and then when you get off the bus you have a walk to the place and in this day and age I don't think it is terribly safe

.....

S3: But the point is they don't put enough .... like there is a few things that I am interested in like chess and they don't put them on in your area ... you might not get classes in your area ..... you just don't have the .. if it far away you just don't have the travel facilities to do it ... I suppose also the people in the area are also given priority

The timing of the activities were also important as well as the other people who used them.

Group 2

S5: I suppose it is getting accommodation to take classes for older people during the day

S3: We need more classes during the day and in your area or certainly near enough for you to travel

Facilitator: Are there any other services that you would like to see provided?

S3: Somewhere where we could all get together .... mind you they do have ... I went to one in Townsend but they were a lot of old people ... I mean really old people .... and really old mentally old

...

S3: The day .. you need interests more during the day rather that during the night and err you don't have to pay for if possible

Services for older people in general were considered to be adequate. However when discussing leisure services negative aspects such as, once again, the expense of them were felt important. In addition it was felt there were a lack of certain facilities, such as bowling greens, and concern was expressed about enabling people to go out who otherwise could not. However there were certain differences in opinion in what other services should be provided perhaps reflecting a diversity of interests.

Facilitator: So how do you feel about leisure service provision in Liverpool ... any sort of services that help you to be active

Subject 1: There are only the clubs aren't there

Subject 2: That was I was saying there isn't enough err .... golf courses or bowling greens ... which there could be there is room for them

Subject 5: Well there is only the clubs that people go to isn't there

Subject 3: Yes but something like outdoor life like George - you wouldn't want to go to a club would you?

Subject 4: I doubt it

Subject 1: I wouldn't want to go to a golf course

Subject 3: Well a bowling green then

Subject 2: No but a lot of men do don't they?

Subject 1: Not when they are 80 odd surely

Subject 3: Yes

Subject 2: Oh yes they do

Subject 3: We have got one ... he goes every day he does ... he loves it

Subject 5: Then there is that man that died in our place - Mr. Woods .. he loved his bowls

The overriding factor did not seem to be a lack of facilities but issues concerning the current facilities such as their expense and location. In particular men in the groups felt that the leisure services at present were patronised by mainly women members.

<u>Group 3</u>

Subject 4: Well as I say the reason I don't go anywhere is probably because you mentioned all these groups and most of them are aimed at people over 60 and there are not many 60's men there really

Group 1

Subject 3: ..... I joined an organisation called C.A.I.R. - Calderstones Activities in Retirement - you name it they do it . I just joined it for the rambling section at the moment ..... you get to know a lot of people .. but the trouble with the membership is that I would say 85% of it is female .. and of the 85% female about 80% are retired school teachers .. so even though they are very pleasant and very chirpy we are lacking some male members.

Safety

Safety as a restraint to leisure did not come up in all of the groups, although there were references to travelling to places that were unsafe.

Group 2

S5: Some of the classes I find depending where you live can be in weird places and if they are in evenings it is not very pleasant going on your own .... you have a walk to the bus stop and then when you get of the bus you have a walk to the place and in this day and age I don't think it is terribly safe

No-one to take part in activity with

This was not a strong theme in any of the discussions except in the respect that widowhood was emphasised as a time of difficult readjustment to life in general and leisure in particular was seen by at least two of the respondents as activities once shared with their spouse.

Group 1

Subject 4: Well I am restricted at the moment ... for two reasons really .... my wife died and a lot of the interests we had were together

.....

Subject 3: Well to some extent I am a bit like Tom.... my wife dies in February of last year .. and I haven't done very much at all since then ....

Health Problems

Health problems came up in the discussions regularly as a major restriction to activity with comments such as

Group 3

Subject 1: It all bills down to your state of health ... I think you get to a stage when you can't do anything

and

Group 1

Subject 4: It's like the Community College ... they run a retired centre ... for retired people to do golf, swimming, roller skating, bowls err ... art, learn languages .... you name it they did it you know and ballroom dancing as well .... we went to a lot ..... golf on a Wednesday morning in Allerton and then you had to get a lunch out and then dash to West Derby to go dancing in the afternoon because of my knees and all and my wife's hip problem we found that eventually we had to give it up .....

Some of the discussion emphasised that it was particular health problems, not age, that were causing the restriction to participation.

Facilitator: You were going to make a point Ken

Subject 3: Yes .... I was just saying that I think health has got an awful lot to do with it you will find ... well I am 79 in July ..... well I can get out quite a lot .... and there are people in their 50's who are absolutely crippled and they seem to age like old people don't they?

(Subject 1 nods in agreement)

Subject 4: It's health and lifestyle isn't it

Subject 3: Yes because sometimes if their..... their health is so bad they're immobile and err and a lot of people sort of vegetate quickly because they are immobile now ....but if you have got your health and you can get about and you can occupy yourself both mentally and physically well .... it makes you feel younger even if you are not

However there were suggestions that although health was restricting, leisure participation could take place with assistance.

Subject 5: Well you know Winnie

Subject 1: Yes

Subject 5: Well I have got two sons who come on Monday for a lunch you know and err there is a church across in Gateacre Village you know and Winnie broke her hip ... 6 months ago she is only small and her hands are crippled with arthritis you know .. and anyway one of the sons in turn will take her and I down to the club on a Monday and oh she really ... after when she comes back she's really marvellous you know ... we get a taxi back ... and she loves it ... and of course it is getting her out as well

<u>The Ageing Process</u>

Old age was generally viewed as a time of progressive loss of function. All subjects seemed resigned to this loss. They distinguished between loss in terms of physical decline and mental decline. The former was definitely viewed as inevitable and the latter was described as the 'dread of old age'. These changes, associated with ageing, were felt to have obvious implications for the amount and types of activities people felt able to partake in and this was often described in terms of 'having to slow down' to cope with these changes.

This concept of 'slowing down' with age came from all the groups. It was interesting that this idea was so prevalent since it was as it was not promoted as an explicit part of the discussion. However this idea seemed engraved within subject's attitudes towards ageing and leisure. The community groups and sheltered groups expressed a greater

degree of objection to the idea that they personally should be slowing down but still believed it to be inevitable with age (see 'Attitudes towards Ageing' below).

ENHANCERS

Good Service Provision

There was generally a positive attitude to the services that were provided. Praise was given to various types of facilities, such as adult educational classes, activity centres and sports leisure passes.

Group 2

S2: I think we have got that many things that we can go to that we didn't have years ago ..... We have these pensioners things .. that have outings and that and they have the social services people that I you are trying to get out they take you out to these centres kind of thing and that makes people go out other wise they would be looking at the wall all day long .. but they do encourage you

Subject 1: Yeah I think there are plenty of leisure services if you got to know about it

Subject 4: I think comparatively it is good from what you hear about other people in other places

Subject 1: I mean other places they don't get bus passes

Some of the discussion revolved around the benefits of providing facilities.

Group 1

Subject 1: See at this centre now there are people there who ... there is one lady who lives up the road and she was telling me she stayed in for five years solid ... she lost her husband ... he had cancer and then she got cancer and she locked herself in behind the door and she said "I never went out" - people used to do her shopping ..... and for five years until somebody got to know and came to see her and they said "Look you have got to come with us" and she finished up at this centre and now she is one of the most active members at the centre ... she has still got cancer but they have little groups ... like four ladies go out to clubs and different things like that and it is good ....

Good Public Transport Provision

Transport was a very important element to maintaining independence and activity. In general the fact that older people are given a free bus pass was seen as very important. Other forms of transport such as using a car or taxi were expressed as enhancing activity patterns by some although expressed as an expensive means to do so by others.

Group 1

Subject 1: I must tell you I have got a car and I am fortunate in having the car but I have a car cos I am a chronic bronchitis and I am very disabled through this you know I have got to be careful how I go and where I go ....

Subject 1: I mean other places they don't get bus passes

Subject 4: They have to pay so much

Subject 1: And I mean I suppose really £3 or something wouldn't be a miss towards a bus pass if they were going to help the City out

Subject 2: They could have £10 a year off me

S6: I am only sorry I had to give the car up

S5: No I gave my car up willing ... the main reason being I was only driving about 25 miles a week ... at one time I was all over the country in my car ... but I thought what am I keeping a car on the road for ... when it is costing me money ... I might as well be getting taxi's

S4: That's the same reason why I gave it up ... I got my pass and a rail card

Facilitator: That means that public transport must be very important to you

(All subjects agree with this)

S2: If I didn't have my bus pass I would be lost

S4: I am a bit concerned now when they privatise the railway whether the rail card will stay

S3: They are like gold to us

S4: I use mine a lot ...

Subjects emphasised the importance of being able to have days out and visit family and friends which financially they may have been unable to afford otherwise.

Group 3

Subject 3: I think we are very lucky for buses in Liverpool

Subject 5: My son lives on the last stop on the train ... Garswood and that the last on our pass ... yes and it is two stops after that ... and you have to pay about £1.30 return but it is worth it

.....

Subject 3: You can go to Southport

Subject 2: Or West Kirkby

Subject 1: If you are going to Manchester you can go a certain length and then pay the extra

Subject 3: But it is pounds to go to Southport I am sure

Subject 4: Oh it is yes

Subject 3: And we go free ... I don't think there is any need to stay in unless you are ill

Subject 5: Well my son lives on the stop called Hall Road station .. second house from the station so I can go there for the weekend

Increased Time Availability

All subjects agreed that time in the day for leisure was not something they felt short of.

Group 1

Subject 4: I think I felt younger if anything when I retired cos I got that 'I can do anything I please feeling' ..... you are not sort of tied down to doing something when somebody you don't like anyway tells you you have to

Subject 2: That's the best part

Subject 4: Yes it makes you feel young again

Subject 5: So you can do it when you like ... so if I want to do a bit of gardening I can go out and do it

Having Motivation

With increased time availability came less structure. One subject reflected that often he did not get out of bed until late because he had nothing to get up for. This led to discussions about the importance of feeling motivated. The idea of having family and companions (including pets) was expressed in terms of creating motivation which could lead to some structure.

Social Support

Having family and friends was a theme that came up in all groups but was particularly salient to Group 3:

Subject 1: Well in our sheltered unit we have got people in there who have no family... some of them are in a really bad way

Subject 5; You often think what you would do if you didn't have anybody

Subject 3: Well we have got family and I feel guilty .. if you know what I mean ... you don't mean to feel guilty but you are ... my grandsons come you know and I think of Flo with nobody

Subject 5: Yes

Subject 2: Well I know a lady who lives by herself ... she wishes now she had changed but she feels it is too late now .... she lives by herself, she has got no relations at all and she has only got a home help and she looks forward to the home help coming

There were several instances where activities / behaviours were described which involved explaining the importance of social support. The importance of mixing with others was highlighted at several points in the discussions.

Group 3

Subject 4: That's something I noticed in err .... shortly after I first got divorced I went to live in this bed sit you know ... there were lot of old people in the road they were a lot older than me ... and err ... I found that women who were on their own who didn't go out .... I am thinking of three in particular ... in a very short space of time they went off their trolleys you know ... they went mental

Subject 3: That's what you *(Subject 2)* mean ... they need visitors don't they

Subject 2: They need somebody yeah

Subject 4: I think they need somewhere where they can socialise and get out ... that's what they need

Subject 1: Oh yeah

Subject 3: That's why I like people

Subject 5: Well it keeps your mind .... working doesn't it

Subject 3: I think loneliness is the worse thing about old age ... loneliness is the curse of old age is what they say .... it must be terrible

Subject 2: Yes

Subject 1: A lot of people in our place are so lonely cos they choose to be lonely

Subject 5: Yes

Subject 1: ... cos we could have a lot more going on if they .were supported

Subject 5: ... if they would mix

Subject 1: But they don't seem to want to .... before there used to be a lot more going on than nowadays didn't there Mary but the people *(residents)* just don't support it

Group 3

Subject 3: Going out to meet people is good ... I go out on a Tuesday to St Austin's Over 60's and I meet a lot ... mostly women and they all talk ... it is grand when I come back and on a Wednesday I go to the Town Women's Guild ... and again I feel good after that ... I wouldn't like to be in all the time and not meet anybody else except the other residents ... you need a broader outlook

Subjects in general but particularly from residential homes often expressed their need for visitors, this was often described as the need to see significant others, such as, close

family and friends. In one residential home the idea of a shared identity between residents within the home was discussed as a missed opportunity.

Group 4

S2: But people could be more united with one another when you are in a home ... you know altogether ... be as a group like

Facilitator: And you don't feel that is the case

S2: No I don't myself but I can only speak for myself

RELEVANCE OF OPPORTUNITY TO OTHER FOCUS GROUPS

Some of the identified enhancers and constraints were also expressed as important by the residential home subjects, such as time availability and safety. However, in contrast to the findings presented above the individuals from residential accommodation felt that a number of the potentially constraining factors, salient to the lives of the community/ sheltered group members, were not applicable to their lives and would not affect their behaviour. In fact one of the residential home groups was almost hostile to the idea that the discussion was applicable to their lives. This related to factors concerning community service provision and the availability of public transport. The residential group members did not feel that these factors were relevant to them.

Group 5

Facilitator: The next question then ... only one more after this ..... How do you feel about the services that are provided in Liverpool?

S2: How would we know when we are only in here *(the residential home)* .. we don't go out

Facilitator: So you don't use any of the services

S2: So we can't answer that question

Facilitator: Would you like to?

S2: If we were able to do that we would be able to be outside and look after yourself

Facilitator: How about you were telling me one of the ladies goes to a centre

S4: Yes she goes every Thursday

S3: What did you say

Facilitator: I was saying about the lady who goes to the centre .. would anyone like to do that?

S1: Oh I wouldn't like to go out ... would you Mol?

S2: Oh I used to like to go the centre - it was a day out and you did different things .... you get that way that you can't do what you used to do

When asked what constrained their behaviour the discussion with subjects from residential homes was focused to a greater degree on their physical capabilities and health matters.

<u>Group 4</u>

Facilitator: So is there anything else that you think that affects what you do .. what you get involved in?

S1: I get very .. you know my brain gets a little tired and my legs are no use

Facilitator: So that's physically you are not able to do things

S1: I just get the shakes

<u>Group 5</u>

S1: Before you *(S2)* came in here did you get out?

S2: Yes me and June we used to go together to various pensioner things ... and we used to go down the Cathedral and get our photographs taken ... go into the Cathedral and get our photographs taken ... remember going with Sister ... going into the Cathedral .. we have been out a few times with the Sister's ... we went to Mark's and Spencer's and went down for shopping .... you know got taken down cos there was a sale on

S4: .....Yes we did go out

S3: Yes we used to go out a lot didn't we when we first came and could walk around .... when we could walk around on our own

Facilitator: Do you not go out so much now?

S4: No

S2: No .. my legs won't go now

S1: No

S3: What did you say?

Facilitator: Do you not go out as much now?

S4: No ... no way

S2: No you see cos you are sitting so long ... you are sitting

S3: All day long ... sitting down

.....

S2: You are better off if you can keep active

S1: Well it makes you feel as though people have got an interest in you

S2: Yes

Facilitator: When you are involved in activities

S1: When it comes to say using a part of your legs then you feel as if you daren't not to really and you always want somebody with you ... when you are able to walk yourself then you can walk out then ... me and her used to walk out and go the Swan and go shopping the two of us

Facilitator: But you were saying that you are not able to walk that far now

S2: Well she is in a chair and I can't walk that much cos I have got used to sitting that long

S3: That's the trouble we have been inactive too long

S2: You see you can continue walking about on your own but now I am not safe walking round on my own ... but you get tired sitting down but what can you do .. you can't be active ..

The subjects in the residential groups seemed resigned to inactivity.

<u>Group 4</u>

Facilitator: You know you *(S4)* were saying that you feel younger than you are .. is that what is important - how you feel about your age?

S4: No sometimes I think I really feel as if I should feel me age because err ... when you are young you feel as if you really want to dash ... you know keep going and hurry up and it ends where you can't ... you just can't

Group 5

S2: You would love to do the things that you did when you were young but you can't ... your body won't allow you ... you have got to get older cos the Lord want's you to .. you can't say because you are getting older that you can't do this and that you have to try and help yourself

Facilitator: So it is all about how you feel and how you approach it as a person

S2: Yeah ... if I feel I could do thing I would do it to try and keep myself going

S3: You naturally slow down don't you

S2: Oh you must do if you are getting on

S1: Yes no choice

Any ideas of partaking in leisure seemed to be of activities that were organised (thus requiring little effort on the individuals behalf) and often within the home environment and sometimes expressed in terms of a reason for doing it e.g. walking a dog, going shopping.

Group 4

S4: ..... when I lost me husband I sort of suffered and nothing interested me .... nothing at all interested me and I sort of .... in a sense I gave up .... I give up

Facilitator: But you were saying that you have started to do more now

S4: Yes, I go out more now .. on my own and we take the dogs for a walk

.....

S4: Cos you see most of them here .... I go out on my own ... but most of them in here don't

S5: Well I can't go out cos I feel as if I need an arm to hold on to with me stick

S4; And you see Liz and Larry can't go out on their own .. you see they have to have a carer with them

Facilitator: Do you *(S5)* go out if there is someone with you ... will you go out then?

S5: Oh yes of a morning time

S4: A carer takes three

S5: Every morning they say "Are you ready - do you want to go out now" and if you have different messages then

S4: We go up Lark Lane to the post office ... like I said I am going a bit further now ... yesterday I went to Aigburth Road ... went to Kwik Save in Aigburth Road ... the carer was with me you know

Group 5

S1: People like to spend their times doing different things ..... I can pass me time away reading but some people can't can they .. they may like games or something .. like games of Ludo and Snakes and Ladders

S3: What did she say .. like what

Facilitator: Like game of Ludo and Snakes and Ladders ... Would you like to do things like that

S3: I would enjoy them if I was playing them but I wouldn't think of wanting to start playing them and having a go

The home environment was a factor which had to be adjusted to.

Group 4

S4: We can't do much .. when you are in a home you can't do much cos you are sitting down most of the time

Facilitator: But would you like to do things though

S4: Well ... I feel sometimes that I want to do something like you know ... such as dust a house or ewbank it or

Facilitator: To do something ....

S5: For a change

Facilitator: ... for a change

S4: Well you can't here because the carers do it all .. we are just sitting down ... but mind you since I have been here ... I did read at home but I never had as much time as I have got here to read and now I am reading and reading and reading .. me daughter can't keep up with fetching me books

Facilitator: So you would like other things to do?

S4: Well I would say .... do you mean as regards doing work or something?

Facilitator: Well anything ... either outside or inside .. housework or anything

S4: Well I don't think I could do it now .. you know cos I have I have knocked of ... I have been here twelve months now and cos I am not at home .. well to tell you the truth I have got that lady like feeling ... you know doing nothing

Facilitator: But sometimes you feel you would like to do something

S4: Yes but there again I know I can't

Group 5

Facilitator: Do you think things have changed since you were younger?

S2: Oh a lot .... a lot has changed over my life ... well I have had a good life but when you come to err be older ... you are just ... restricted ... you have to do what you are told and you are not used to that ...

S1: That's right

S2: But people could be more united with one another when you are in a home ... you know altogether ... be as a group like

Facilitator: And you don't feel that is the case

S2: No I don't myself but I can only speak for myself

Facilitator: Of course yes

These themes can perhaps be further understood by examining the individuals willingness to partake in leisure activities.

- **RECEPTIVENESS**

This again is an element of the Brandenburg model which postulates that an individual must have a willingness or a desire to enter into a new experience. It may be generated by such factors as life cycle changes, change of dwelling place or simply boredom with what one had been doing. In some cases, a strong and long standing desire to do a specific activity is the basis of receptiveness.

Within this theme again an important difference seemed to emerge in the attitudes/ willingness towards actual activity involvement between those in community/ sheltered accommodation and those who lived in residential accommodation. These attitudes can be seen in terms of subjects' beliefs about activity and ageing and by what subjects felt to be appropriate services that should be provided.

The attitudes towards activity and ageing were positively expressed by subjects in both residence groups but perhaps more strongly held by those of the former accommodation group. The community/ sheltered groups referred to the 'inevitable slowing down' component of the ageing process. However, those subjects from residential accommodation went further and expressed that a withdrawal from activity was inevitable even suggesting that they were 'too old' for leisure involvement. This is illustrated by the quotes below from two different residential home groups:

<u>Group 5</u>

Subject 1: We don't want to do anything now do we?

Subject 2: No

Subject 1: We have done all our activity .... we are in our twilight years.

<u>Group 4</u>

Facilitator: So there isn't any other things you would like to see provided for you?

Subject 5: No

Subject 4: Not now... not at our age

Subject 5: We are a bit too old now

Subject 4: Yes

Facilitator: Do you feel like that .. that you want to slow down

Subject 1: Yes .. I am alright .. happy ... as long as I can see my family .. they come to see me that's all that matters

Facilitator: Do you find that you want to do less now than when you were younger

Subject 1: Your life just changes and you change with it as you get older

Facilitator: How about you *(S3)* Winnie?

Subject 3: I just do as much as I can really

The residential home groups did feel that certain activities like short walks, reading, television and personal care were important to them and their health. This, however, seemed to be the extent of the involvement of (leisure) activity in their lives. The subjects appeared resigned to this as an integral part of growing older, one subject in Group 5 commenting "Well you automatically slow down *(as you get older)*... its just like a worn out thing". In fact separate analysis of the responses of each residential groups indicated a slight distinction between the 'horizons' of activity involvement subjects' held; the residential group which had a greater mean age seemed to have their horizons limited to personal care and minor activity (such as helping out with domestic activity) whereas the other 'younger' group talked of taking short walks (usually) with carers.

A complete acceptance of withdrawal from activity was not evident in the community/ sheltered groups. A greater degree of (leisure) activity was still part of their lives. They talked of the benefits to them of getting involved in activity (although they often felt constrained from taking part in it for the reasons discussed above).

<u>Group 1</u>

Subject 1: Well I never learnt to swim till when I retired when I was ... 63 ... I was 63 when I retired and I learnt ... and I was told years ago by the doctors on account of my condition to learn to swim and I found that it has been very helpful ..... you know plus you know this tapestry .... you just get lost in that ...

.....

Facilitator: So we have talked about activity and health and the next bit .... just relating really to what you are already saying - Is activity important as you get older

Subject 3: Oh yes

Subject 1: Yeah ... without a doubt

Subject 5: Oh it is

Subject 2: Yes ... wear away but don't rust away

Subject 3: Both mentally and physically

Facilitator: So although you said before you might want to slow down ... it is not stopping

Subject's 1/3/4: No ... no

Subject 1: I don't think you want to slow down I think you have to slow down

Subject 4: It is not a bad think to slow down

Subject 1: Oh no it's a good thing to slow down

.....

Facilitator: What do you think happens if you are not active .... if you stop being active

Subject 1: Well I hate to think

Subject 2: I don't think you would even be fit enough to get out of the chair

Subject 4: I think you become irritable .... in my case .....I have become irritable in the last few months because of my state of mind

Facilitator: Because you are limited

Subject 4: Yeah ..... and I think just sitting there all day .... well it depends if you are sitting there reading .... or pursuing some kind of hobby that involves reading or whatever then that's different

Subject 3: I did know one chap who retired, sat down and did nothing .... well he just sat down and watched television all day and he died very quickly

The community/ sheltered groups stressed the distinction between physical and mental activities and the abilities needed and benefits gained from participating in each.

<u>Group 2</u>

Facilitator: Should we move on to the next question ..... Do you feel activity is important to your health?

(All subjects, except S5, nod and say yes)

Facilitator: A consensus of opinion

S5: What exactly do you mean by activity?

Facilitator: Arr now you tell me what you mean ... what activities are important?

S3: Mental activity ... I mean mentally I am quite alert but physically I walk dead slow and you know ten past nine I got off the bus at the bottom of Aigburth Road and I walked so leisurely really and you know it was nearly twenty five past before I got here

.... twenty five past ten ... it was ten to ten went I got off the bus and I walked so slowly up the road now I would of taken about three minutes to walk up that road at one time

S4: I think you should really expect to slow down physically but there is no reason why you should slow down mentally

S5: I think mental activity is very important

S2: Yes

S5: No matter what it is as long as it keep the brain active

S3: They really waste the old people ... a great deal .... they really waste when they say "Oh you are too old" they are wasting ... sort of pushing people aside .. we are wasted .. it makes me sick

Group 2

S6: You have got to keep your mind alert ... don't give in .. don't give in ... keep on going what ever you do ... keep on trying

S5: It's amazing how much you use your brain if you stop and think

S6: Doing the crossword is good

.....

S5: Even knitting and working out a knitting pattern is a mental activity

S2: Yes

.....

Facilitator: In terms of health do you think physical activity is more important than mental activity?

S5: I think you need a bout of both

S4: I think they are both important

S6: But you have got to slow down in the physical activity

S4: Well that is true

S6: It becomes impossible to do it ..... I mean the things I used to do ..... I used to play football, cricket and the biggest thing for me is that now I can't even play golf anymore .... that's my biggest thing ... I just can't do it

.....

S3: It is the mental agility that keeps the physical up you know

S5: You can cope with physical disabilities if you are mentally alert

Group 3

Facilitator: .... Do you feel activity is important to your health?

Subject 2: Yes definitely

Subject 5: Yes

Subject 2: Yes it is

(Subject 1 and 4 nod in agreement)

Facilitator: Why?

Subject 5: Well only because it keeps you going and you know it keeps your mind active

Subject 2: And your health and your movement

Subject 3: Like in bad weather when you can't go out you don't feel anything like as happy ... even if you can just go the post office or the shops

Subject 5: Like you see people sitting .... and the longer you sit you go "Oh God" you know

Subject 2: I often feel like that yes

Subject 1: I think it is a well known medical fact ... the fact that it is important to your health

Subject 5: Of course it must be

Subject 3: Yes I think it is

Subject 1: To put it another way .. I think mentally you think you are capable of doing far more than physically you are able to .. I do that

In fact the community/ sheltered groups reported being annoyed by suggestions from other people around them to slow down when they felt quite capable of doing activities (see below). Overall, the community/ sheltered group discussion did talk about slowing down but also suggested that the 'micro' issues had a relevance to their lives. In contrast the residential groups had the dominant theme of the acceptance by these individuals that leisure was for people who were younger and 'more healthier' than them. Certain events were identified by group members as having a negative influence on the receptiveness to activity. These included widowhood, divorce, retirement and ill health. All were described in terms of having an effect on an individual's willingness to remain involved in activity. In addition it was possible to extract from the discussions

certain beliefs that individuals held which would indicate a positive or negative receptiveness towards activity. The positive statements are listed in the table below:

TABLE 230: Positive Beliefs Relating to Activity

GROUP	STATEMENT/ BELIEF
Group 1: community	activities give you an interest physical activity leads to improved health status creative activity is relaxing need to keep body and mind active for health activity important as you get older inactivity leads to decline
Group 2: community/ sheltered	mental and physical activities are important to health social activities are important annoyance occurs when told to 'slow down' feel as capable as when younger older people's capabilities are missed because of their age
Group 3: sheltered	physical, mental and social activity important to health psychologically activity is important activity more important as you get older can't take part as much when older but it is important to try older people are more capable mentally than physically
Group 4: residential	activity does keep you healthy - physically and mentally important activities are personal need and walking it is no good sitting down all day for your well-being
Group 5: residential	activity associated with improved health activity involvement gives individual an interest mental and social activities important missed past activity involvement reading is an important activity

The negative statements/ beliefs included:

TABLE 231: Negative Beliefs Relating to Activity

GROUP	STATEMENT/ BELIEF
Group 1: community	Have to 'slow down' as you get older
Group 2: community	Have to 'slow down' in physical activities with age
Group 3: sheltered	Don't feel there is any purpose to create activities
Group 4: residential	Have to slow down as you get older Too old for leisure services to be provided for us
Group 5: residential	Inactive now and unable to do anything about it Feel forced to slow down Do not wish to do any more activities at our time of life

The discussions did not provide any detail concerning possible developments in services. There were no concrete ideas concerning this. There were however possible indications from those in private households/ sheltered accommodation for issues services should be dealing with, such as, assisting people who were unable to get out. This idea of being able to get out of the house was an element of the discussions in this group. It seemed to be an important concern which was expressed in such terms as taking long bus trips for the sake of it and going shopping for bargains.

Group 3

Subject 3: I like getting the bus across to New Brighton ... and there are plenty of seats there and as soon as you get there somebody sits besides you

.....

Subject 3: Well I haven't been for years it is lovely and there are cafes there and all I do is go and sit on the seat and have a cup of tea or an ice cream and it has taken me perhaps an hour and a half to do that and I have seen people ... watch young people and old people out of the window and when I come back from there I feel great

♦ **SOCIAL MILIEU**

The Brandenburg model interprets the social milieu in which an individual lives as their reference group e.g. family and/or peers, who must be perceived by the individual as being favourable towards, or at least accepting of, the new activity. The transcript analysis indicated that subjects who lived in their own homes or in sheltered accommodation did not feel the attitudes of others could be classified in any one way.

Group 1

Subject 4: Most people seem to be completely indifferent to me ..... there is no sort of lobbying 'Down with the old people' or 'Lets help the old people'

Facilitator: No extremes then

Subject 3: I think you can split it into three sections ... err some people actively dislike the elderly, some people as you *(Subject 4)* say are indifferent and the third lot seem to be very helpful indeed .....

However, in general they felt that their peer group was supportive and they also felt encouraged that Liverpool had good leisure service provision for older people and transport passes to enable people to be active. However they did indicate that other social groups, such as family members, did try and encourage them to 'slow down' purely because of their age and regardless of their health status.

Group 2

S4: One of the things I find annoying is that my own children ... or even my grandchildren say "Granddad you shouldn't be doing that" .... and I think - why shouldn't I - I am quite capable of doing it

S3: That is like my daughter she was up her this morning .. she is seven months pregnant and she was leaving to go back down to Swansea .... anyway we were talking about me coming here and she said "all you have to do is read your road map - go and get it and I will look for you" .. it really annoyed me and I finally said to her "I can read it myself you know when you are gone" ... but it really did annoy me ... saying that she would do it when I am very capable myself of doing it

Conversely subjects from residential settings felt other people's attitudes were unimportant to them as they did not want to, or felt unable to, remain engaged in activities. In one instance when asked whether they felt people in society expected them to be active one subject replied " Some of them do ... I wouldn't say everybody does but there are some people outside *(of the residential home)* who expect you to err .. you know... I mean for instance crossing the road there are some nasty drivers that beep their horn for you to hurry up...". In addition, in residential home group 5, one subject replied that slowing down was an automatic occurrence that was not influenced by others attitudes.

Related to this discussion of the social milieu within which people co-exist is the feeling people have towards the society in which they live. There were three strong themes which emerged concerning this: attitudes towards the behaviour of young people, the breakdown of the family unit and attitudes towards the present government.

The attitudes towards young people were expressed in terms of (a) critical views concerning their behaviour (and a lack of appropriate discipline by guardians when dealing with their behaviour) and (b) feelings that society was neglecting the needs of young people.

The breakdown of the family unit was seen as a change in relationships between people which had implications for the level of respect people held for each other.

The policy implications of the present government were seen by some of the groups (from private households and sheltered accommodation) to be discriminatory in nature towards older people.

Group 1

Subject 4: Well this is it ... that's one of the things ... I didn't mention sailing cos it doesn't appeal to me but that is one of the things I meant .... I think would be restricted by lack of cash ... but yeah you can't see anyone every subsidising that sort of thing can you ... well I can't anyway ..... I feel that this Government, without being political in anyway, because of what has been on the news lately are biased against older people anyway ... look at these people on National Health and because they are over 65 they have been written off .... which is a time you need more err National Health Services than ever and you have paid longer than anybody else

Group 3

Subject 1: I don't feel the Government feel very kindly towards old people ... I am sure they would like to ...

Subject 5: ... like to see us all drop off

Subject 1: .... get us all wiped out if they could

Subject 4: It cost them a lot of money you see

Subject 1: Saving money is a more important thing Lindsey: Well that is discrimination isn't it ... blatant discrimination

Subject 4: Well I think this Government does discriminate against older people and you know talking about subsidising is one thing they are never going to do and you know your Local Authority cant do it because the money has to come from Central Government anyway and it should be subsidised because everybody is going to be old .... and everybody will benefit eventually

- **ATTITUDES TOWARDS AGEING**

The concept of 'slowing down' with age was a common strand that came strongly from all group discussions. However inherent differences were apparent in the extent which people personalised this concept to themselves. The majority of residential group subjects seemed resigned to certain aspects of ageing, at times not only to the concept of slowing down but also displaying a feeling of resignation to inactivity.

Group 4

Facilitator: How do you *(S1)* feel about getting older?

S1: Oh I just take each day as it comes ... you know you are only born to die aren't you ..... that's what they say

Facilitator: So they say

S5: None of us are teenagers so you don't take anything for granted ... just one day at a time ... that's all there is to it ... there is no good worrying ... it won't get you no where

S4: I feel younger than I look

S5: She is the girl

Facilitator: You feel younger than you look ... Oh very good that is very good

S5: How old are you Flo?

S4: 74

S5: 74 ... I am 88 ... you know you just accept it as you get older

Facilitator: Do you think ..... do you feel as old as your age tells you - you should be?

S4: No I feel younger than my age .... and you are inclined to dash and err it doesn't do really .. you are inclined to hurry you know but it doesn't do really you have got to slow down

Whereas subjects who lived in their own homes accepted that the concept of 'slowing down' was inevitable during the ageing process but felt themselves quite capable of performing most activities and they resented the fact that there were some activities they had to perform either more slowly or not at all.

Group 2

Subject 3: ..... I went for a job .. after I was widowed in `88 .. in `89 I went for a job with the education and they actually gave me a school to go to - the address was in Woolton - I was thrilled and on the way out they said to me "Oh I am sorry Mrs. X we have to ask how old you are" - well I was 67 .. no 68 I think .... 67 or 68 ... and they said "Oh I am sorry then" .. well that really annoyed me because you feel quite capable and all that .... you know I have just recently decorated my house .. there is all sorts we can do .. in fact in some ways I feel that we are better than the young ones

.. there is so much capability in older people but they are qualities that get missed because of your age

Facilitator: How does everybody else feel about that?

S5: I think it is the limitation of energy that I find annoying

Facilitator: Is it yes

S4: You just slow down

S5: I suppose I am a get up and go person and I find that err .. gardening I can't cope with the same ... I used to do my own decorating but I just can't cope the same .. that's the one sort of limitation

Facilitator: Yes

S2: I think one of the things I find now is that time is going over and I can't accept that I am going old ... and like the lady *(S5)* says I try to do the things that was doing ten years ago and the family say to me "Slow down .... What are you doing that for" and I think I can still do it .. do you know what I mean

<u>Group 2</u>

S1: See I want to go up a ladder but my wife says "No you shouldn't do this" you see ... that's the thing you see .... mind you I do realise that one has to be more careful going up a ladder at my age than I used to but err ... you are being reminded all the time of your age

S4: It is hard cos there is such a broad spectrum of activities what suits one doesn't suit another

S3: That's the idea we don't all sort of age the same .. I mean there is a lot of people younger than us and they are old ... I mean to say and then you get "She is too old to drive" "She is too old to go to college" you know what I mean ... but you are not

S4: The last err French class that I attended that was a day class and the oldest there was 92 and he had lived in Brazil and he spoke what ever language it was and he was now at this class

S4: I can't honestly think of anything, apart from going to work, that I was doing 20 years ago and that I am not doing now maybe not at quite the same speed but still doing it

Facilitator: Yes

S4: You know I am still gardening ... I am still decorating even though the family don't agree about me going up ladders .. they seem to think I am going to fall of the top of them

A part of one of the discussions with people from private households revolved around whether people identified with their age or whether they felt it was irrelevant to them. The idea emerged that the group may look at others, of a similar age, and classify them by their age but they did not feel 'old' themselves.

<u>Group 1</u>

Subject 5: Well one thing I don't think you have to think about your age ... I don't think so .... you haven't got to think how old you are ....

Subject 4: It's not that you don't have to .... you just don't think of it

Subject 5: ..... you just have to carry on and then the day comes when I say to myself "I can't do the same today" but ... you don't think about your age I don't .....

.....because it makes you older ..... and when you see these old people in town ... you know when you go around Marks and Spencer .. I saw this old lady last week on two sticks and I said to myself "How does she get down here" .... you know you have got to have a determined will

Subject 1: Well I laughed when Evelyn *(Subject 5)* cause probably .... now being honest if you seen Evelyn like in the precinct and she had done that you didn't think she could you would say "I seen this old lady" but to her and to me ..... I am not an old man .... you know I have been listening to the radio and I have heard them saying this fella 58 was mugged you see .... and I said to me wife - my wife is 9 years older than me err younger than me - I must tell you - and I said to her "Fancy mugging a poor old fella like that" - so she said what are you going on about ..... I never thought of it that way ..... you know

Subject 4: I have found .... used to find I would often come back and say to my wife "I was talking to this old chap" and when I thought about it he was probably seven or eight years younger than me .... but to me he was an old person and I ..... you don't think of yourself like that

Subject 1: You don't think of age do you

Subject 5: You don't think of yourself as growing old

Subject 4: You know I have got arthritis that's a thing that particularly comes with age but you don't feel old .... I feel arthritic err it doesn't sort of dwell with me that it is because of age .... it is that is just wrong

Subject 1: That's right because young people have arthritis now

Three of the groups felt that the main dread of old age was to decline in mental capability and the consequences this had for personal integrity.

<u>Group 2</u>

S3: It is the mental agility that keeps the physical up you know

S5: You can cope with physical disabilities if you are mentally alert but I think it is very sad when older people lose their mental faculties

<u>Group 5</u>

S2: I say you need not worry how old you are, or what is your lot, as long as you have got your senses about you

S1: That's the main thing

S2: Yes that is the main thing as long as you have got your senses about you

S1: As long as you have got it on top

.....

S2: That is what I am saying when you have got your senses about you ... you can go the toilet when you like but if you have to call the girls to take you it is embarrassing ... I think so

S1: You see some poor people they don't know when they are going to go

Facilitator: Yes I understand

S1: And it is embarrassing for them

Facilitator: Is that one of the worse things do you think?

S2: I don't worry about getting older ... I only worry that God leaves me with my senses until I go ... that's all I worry about me and for what I am doing ... because for once God help them ... when your senses goes ... you are in a different world altogether

S3: Your in God's hands then aren't you ...

Residential care was a concern expressed by one of the private household groups.

Group 2

S5: To me you see I absolutely dread if I have to go in a home ... dread it .... you see I have no family .. I have nobody so the day will come when I have to go in a home and I dread it more than ... although I am religious ..... I really think I would take something because I have seen so much to me it is dreadful, most gruesome and I mostly I feel what do they do interesting to them

S3: It is like they are just waiting

S4: They are just waiting to die .....

The 'fear' was expressed in terms of (a) inactivity and (b) loss of dignity. These fears were also expressed by other groups as aspects of old age they felt concerned about.

In summary the focus group analysis support elements of the model proposed by Brandenburg (1982). However it has suggested that criteria such as opportunity and receptiveness differ in importance to subjects from different accommodation types. This finding highlights the importance of accommodation type in explaining the leisure behaviour of older people.

5.2 Assessment of Attitudes Towards Ageing and Leisure Activity held by Individuals Closely Involved with Older People

5.2.1 Introduction

Table 232 shows the component of the study discussed in this section.

TABLE 232: Focus of Section 5.2

METHOD	MEASURES
In-depth Interviews	Attitudes towards personal ageing, Older people and activity and ageing

In addition to the implication that older peoples' attitudes concerning ageing and activity can influence their own behaviour, it has also been suggested that the attitudes of people in contact with the older people can have a profound effect upon their behaviour. (Kosberg, 1983). This view is supported by social psychological research concerning the effects of stereotypes as discussed in Section 1.3.2 of this thesis. A full investigation of the topic was beyond he remit of the current study. However, it was felt that an impression of the effect could provide valuable insights when interpreting the results of the thesis. Thus the present investigation, in conjunction with the study of attitude statements (Section 4.4), aimed to examine the prevailing attitudes of a group of people in close regular contact with older people. Some of the sample from the studies reported previously were based in various residential/ sheltered accommodations and were thus in close contact with managers, wardens, care assistants and volunteers. It has been suggested that such health professionals will share the "...cultures negative attitudes towards the old." (Kosberg, 1983 p.133) and may `handicap' the aged with their low expectations. Thus the aim of the present study was to explore attitudes towards ageing and activity in a sample of people who have regular contact with older people. This included examining the attitudes held by a range of people, with various kinds of relationships with older people. This included

people who work within residential/ sheltered care and providers of leisure services aimed towards older people as well as others who had regular contact in some other capacity.

5.2.2 Methods

A review of attitude measuring techniques was carried out for the quantitative study of attitude assessment (Chapter 3). This revealed considerable variation in the kinds of assessment instruments and procedures used to explore peoples' attitudes towards older people. This methodological diversity has undoubtedly contributed to conflicting results about the typical contents, extremity and correlates of attitudes about ageing and the aged (Wingard and Dorman, 1983). In particular many assessment instruments have been found to measure knowledge, beliefs, preferences or intentions instead of attitudes. The qualitative data collected in the present study would prove a useful comparison to the quantitative data collected previously.

An interview guide (Appendix 11) was constructed to explore a series of topics:

- attitudes towards personal ageing
- attitudes towards older people
- attitudes towards activity and ageing

Subjects were recruited in one of two ways:

1. Through residential homes/ sheltered housing/ leisure facilities previously identified by the researcher and contacted at an earlier stage of the project.

2. Through advertisements placed in a local newspaper, community/ leisure facilities and local University Departments. The advert requested volunteers who had regular close contact with older people/ person.

A total of 27 in-depth interviews were completed: 14 were with 'Professionals', 5 with Voluntary Sector Workers and 8 with Relatives/ Carers/ Friends of older people.

TABLE 233: Attitude In-depth Interviews

PROFESSIONALS	VOLUNTARY WORKERS	OTHERS
4 Wardens	3 Community Activity Workers	3 Carers
3 Home Managers	2 Older People Activity Workers	1 Carer/ Ex Warden
4 Care Assistants		1 Son
1 Deputy Home Manager		1 Niece
1 Senior Carer		1 Grand-daughter
1 Leisure Centre Worker		1 Friend

Arrangements were made for a convenient time for interview and the interviews took place in either the subject's work place or their own home. Interviews were conducted away from others where possible and were tape recorded. The interviews were transcribed and analysis identified themes and concepts which emerged from the transcripts.

5.2.3 Results and Discussion

The following discussion is based upon the themes which emerged from the interview transcripts. Verbatim quotes are used to illustrate the themes throughout the discussion. The main basis of the analysis was to derive an indication of how people, who were in close contct with older members of the commuity, viewed ageing in general, and activity and ageing in particular. The discussion is separated into these two areas.

♦ AGEING

Personal views of ageing

There were mixed views concerning ageing. Some subjects felt worried about getting older themselves, some felt they could not think about it at this stage in their lives and two of the subjects felt they looked forward to getting older given good health and ample finances.

Interviewer: Has this job effected your view of growing old?

Subject: Yes ... because when I worked at St. Vincent's - the hospice for the dying - I thought death was a terrible thing but I only seen the bad cases ... now since being in here I can't wait to retire ..... because I think they have got plenty going for them ....

Interviewer: What do you think are the best thing's about retirement?

Subject: Err ... the best thing's about retirement .... oh not getting up of a morning, not haven't to answer to anyone .... I mean I would enjoy retirement ..... but there again I have provided for me future .... a lot of these people haven't ... I think it all depends on finances ...

Interviewer: How do you feel about ageing?

Subject: I think I worry about the process ... not so much for the fact ... err vanity reasons cos I am one of those who couldn't care less as long as you have got your health and that's everything but ...err but nobody cares and that is the truth .... I mean even families don't care ..... and you know I am going to be the next ... generation of older people if you know what I mean and it is frightening ....

Various negative aspects of ageing were identified including the fact that 'nobody cares about older people'. Others were the fear of isolation, poor health and no meaning in life.

Subject: I wouldn't like to be retired out in a street ... err I think when you retire in a place like this *(sheltered accommodation)* you have got plenty of company ... but it would be so easy to get lonely ... because you know you have got all your work mates and suddenly you are not working so you are not seeing them .... I think people could be left lonely .... if you weren't the outgoing type ... cos I have had women come in here and I got one particular lady ... I wont tell you her name ..... came into me ... she had nursed her husband for eight years and he had been dead two years and she said over that ten year period she lost all her friends ... had no connections and she lived in this house for two years after her husband had died .... virtually frightened of being alone ... lived in a bad area ... never been on holiday for I couldn't tell you how many years .... but she came in here and she looked a right sorry soul you know and within three months she was buying new clothes she was looking good .... she was excited about going on days out and she said she felt as if she had a new lease of life ...

Subject: Certain illnesses I would not like to have cos I can see the end result .. you know ... she the end sort of thing .. ermm but it has given me one idea in that when I get older I wouldn't like to be stuck in a house or a flat on my own .... I would be with other people.

Subject: No I don't think people want to get old ... you get people saying "What's the use of getting up to day" - they can't see the point in going on ...

Isolation was seen as an important problem but it was felt that there was a need to look deeper into this as there are problems for elderly people en-mass but there are also specific problems for groups of people - like ethnic minority groups who were perhaps isolated further because of cultural differences.

Positive aspects indicated included a time to enjoy things and no responsibilities (only two subjects mentioned the positive aspects).

Interviewer: Do you see any positive aspects to retiring?

Subject: I think that if you have got things to do then it can actually be very positive in that you can take on a lot more ..... it does err give you the time to do things ..... but I can imagine it could be really easy, certainly for me, to become lethargic and think oh well I haven't really got much to do today .... I think you would have to make a positive effort .... a conscious effort to go out and do something rather than just sit in and watch the telly all day ....

Activity was felt to be an important element of healthy ageing.

Interviewer: Do you see any positive aspects to life being older?

Subject: If it was me I would try and keep as active as I can ... I would go places...even if it was only to the library...just to keep me mind active.

Interviewer: Does it frighten you? *(That people are so inactive as they get older)*

Subject: Yes it does really ... only looking on my side....cos look at them they don't look their ages and you think they were old. I do think...it's sad really ...like we have got one man here...50 odd .... and all he wants to do is sleep all day you know and you know coming in to a Home gives people the idea that their life is finished with ...which really it is the starting of a life.

Interviewer: Being aware of this has it effected how you feel about retirement?

Subject: I think it has really ... making sure that I am going to be doing something when I am old and grey and you know ..... I think I would get myself involved in some activity whether it be a job .... which fair enough maybe it won't be because of circumstances .... but certainly getting myself involved in other activities .... I mean I think there is a lot of things that people could do as they get older ... I mean for example, I sometimes write letters for Amnesty and I thought even if your health is going then you can still write letters and you can still kind of have that err ... thing to do .... and I mean I think that is really important .... I don't know whether I would carry on with a job after a certain age I would probably get fed up with it or whatever I would

certainly make sure that I was doing something all the time because I think by doing something then you feel better in yourself.

Certain themes emerged from the interviews concerning the population of older people today. Some, not all, subjects said they felt older people were so accepting of their circumstances and that at times they seemed "stuck in their ways".

Subject: .....the pensioners I am working with now are a tough breed and they don't make them like that any more .... they just don't ..... they are too proud as well because a lot of them won't ask .... I have been shocked when I have gone round and seen what some have been living on and knowing that they have been able to claim for other things ... I have made sure that they do get everything they are entitled too .... but that is only because somebody younger than me has told me and I have told them .... and I make all leaflets and that all readily available to them so that if they think they are missing out on something they come and talk to me and we go from there ... but I think the next lot coming in ... the next generation .... like my age ... my pensionable age when I become a pensioner I think I would be well clued up on what I could have and what I am entitled to .... I don't think I will be as quiet and as accepting ... they accept things so easily as if it's just part of life .... "Oh it's one of those things" and you know when you try to tell them that if they stood up and were heard a little bit they could change things they go "Oh no that's the way of the world" .... they are just not used to fighting for things ..... if people kick up enough fuss something will be done ... elderly people now perhaps have never had much say or control of things like ... during the war and that and maybe this makes them more accepting of things.

Subject: .....I mean they go out and buy something and I say "..that's too big for you or too small for you" and they say "oh it doesn't matter it will do....and that not just personal clothing that goes down to food as well .. you know...that opinion from them is taken on food as well. If you.. like a loaf of bread .. they are used to cutting their bread.. so they won't have a sliced loaf in the house ..you know...even though it's convenient to have a sliced loaf they won't have it.. their fingers might be gnarled with arthritis or whatever and they are trying to cut the bread... and the breads all crumbled and

everything because they haven't got the ...you know... why can't they get a sliced loaf... you know...things like that...the choices...the choice ...I am trying to get back to what I said before the choice ...they will choose something and they will ask you opinion of it ...even a loaf of bread .. they will ask your opinion "Have you had that bread before?" "Yes, I think it is fine" "Oh I had it and I didn't like it" "Well if you didn't like it don't buy it again"...you know ...but they will go out and buy it again even if they don't like it because they can't be bothered to try something else...it's like a rut isn't it ...I don't know I can't answer it .. I wish I knew the words to just sit down and describe it too you...but I don't

Another theme to emerge was employment opportunities. Interestingly this came into the interviews of the older peoples' activity group leaders and one family member interview but not in any of the others. They talked of the wealth of knowledge and skills that older people had and that forced retirement from work affected individuals self esteem and confidence.

Subject: When I am at home I live with my granddad and he is 73 now and I just think .... I mean his age is just no obstacle I mean he's ... err ... he's worked an awful lot ... he has always worked kind of in pubs for as long as I have been alive and that and at the moment he kind of works every lunch time in a pub and loves it and he works two nights like from midnight to five in the morning at a hotel and .... I mean it just sort of keeps him going all the time and ... you know .... he has always got something to do and ..... you know .... I just think that because he is so very active and because he has got kind of a role to play and err .... you know because he feels valued because he has got a job at that age .... then err .... I think .... I don't know .... I think it does him an awful lot of good.

One activity leader felt that young and older people could mix well because they both had no power within our society - the power being with the working masses. This lead to a feeling of being distinct from those who were working. It was felt that this was happening consistently at younger ages as people were being taken from the labour force; "once you get to 45 nowadays no one wants to know". The subject felt that this

process promoted myths about older people and caused alienation and undervaluing of older people.

Societal views of ageing

There was a general feeling that older people are undervalued.

> Subject: When you are 65 years of age they are burdens..... they are no good to anyone...because no one does one to do anything for that age cos they are more interested in young people...so that they think they are no good for anyone ....they have done their service and no one wants them anymore .... that's the impression they get

> Interviewer: Do you feel we don't value elderly people then?
> Subject: Definitely not ... with the lack of opportunities and respect we give to them ... you know its like in these homes ... I have seen some of them around here ... you know we were thinking of Mum going in on a weeks respite and you know I couldn't let her go ... they have the sort of attitude .. you know "Oh she is sick so she has to lie down - oh but we will have to let them get up a bit cos they get bed sores"

> Subject: you know they *(older people)* have fought ... some of them in two world wars now ...and what have they got now ... nothing ... it doesn't half get on my nerves .. in Germany and everywhere they are well looked after ... our old people aren't looked after ...they are treated like they are muck .... "Oh sweep them away get rid of them because they are useless"
> Subject 1: Even their own children do that

It was felt that family life was breaking down with the exclusion of grandparents.

> Subject: I think once a lot of people retire ...because families have got their own families and their own jobs ... and like grandparents seem to become less important so they don't

get visited as much and then the grandparents themselves feel as though people aren't bothering with us anymore so this is our life.

However some subjects did feel that a great deal of the caring responsibilities towards older people were being taken on by family members and concern was expressed that as the process of family breakdown continued about who would take on the responsibilities of caring.

Subject: ....today we have a lot of divorces that you are not going to have the bonding and I think that in years to come we are going to require an awful lot of homes because whatever happens the bonding has gone with the children and the children won't be as close ..... yes I think we are going to require a lot of homes in the future

Negative views were seen as prevalent.

Subject: .... well my opinion is that people tend to look on old people as weak, frail and there is a lot of stereotypes there

One subject talked of the role of the media in the promotion of stereotypical images.

There was also the feeling that society was not interested in older people.

Subject: I think a lot of people worry about it .... especially in your 40's and 50's when you feel that when you get old you just get tossed to one side and left and it shouldn't be like that ... they have so much to tell you and so much that they can give and yet it is such a shame that people don't see that .... there has to be a lot of solutions to these problems there has to be .... but everyone seems to be just sitting back and not doing anything

♦ ACTIVITY AND AGEING

In general subjects maintained that activity levels decreased with age. Although some subjects were keen to guard against treating older people as an homogenous population.

> Subject: Every body is differently obviously...you know take each person as you find them...kind of thing... treat each person as an individual even in the elderly .. well also in the elderly.. you have to treat each person as an individual...they all have their different needs ....they all have their different way of thinking..

It was suggested that there was a large population of 'active' older people, however the focus of attention was often on the negative health issues associated with ageing.

The concept of slowing down was once again mentioned as part of the ageing process.

> Subject: People just tend to reach an age were they are physically and mentally tired and really do not want to use the initiative anymore to get involved with activities they just want to slow down .....we have tried to get people to do different activities and pursue different interests but in the main people don't want to do this .... it is part of ageing ...when it comes to it people just don't want to get involved they are quite content and happy to slow down and not do any activities

Subjects talked of the importance of activity as people get older.

> Subject: We should definitely be trying to keep people active cos it is better for them cos they will have a much better time and you know some of them might tend to vegetate or go into a depression .. so ermm .. I think it is good.

Carer talking about father:

> Subject: ..... cos you think well I wish somebody would come out for the day and take him out in the car ... even if it was just for a drive he's seeing activity outside and you find that he comes alive

The subjects described the benefits of partaking in activity in terms of physical, social and mental improvements/ maintenance. They felt leisure could promote "a worthwhile existence" and "a good quality of life". They talked of the role of leisure in older peoples' lives as a means to "keep them going" and to "keep them interested". Lack of activity was described in terms of "they just withdraw" and "they tend to vegetate or go into a depression".

A strong theme that came from the interviews with professionals was the difficulty in trying to get older people involved in activities. There was the feeling that it was important to encourage older people.

> Subject: ..... you have got to keep them interested .. you know...other wise they just withdraw.
> Interviewer: Is it difficult to keep people interested?
> Subject: Sometimes it is.... but if you talk to them...even about the weather...you know like.....or even about the flowers you can get their interest... you have got to get their interest.

> Subject: ..... You have got to have people about them who can encourage them to carry on with activities or hobbies that they had and involve them...It's vital to keep them stimulated and interested with carrying on their lives.
> Interviewer: Does that become difficult?
> Subject: Well it can be especially if they come into residential care and unless you have got a staff who are enthusiastic, well officers and teams, who are really interested in really keeping people motivated and interested in things they used to do outside the home ...you know maybe skills they have lost because they have been on their own and

so on and a bit depressed and haven't cared for themselves properly..... if one can find out what they were interested in - what they did like to do and so on then obviously we would promote that within residential and stimulate them into leading a worthwhile existence - you know - a good quality of life.....so that is paramount.

However, it was generally felt a difficult task to get people involved and motivated.

Interviewer: In light of this its hard to know how to promote activity?

Subject: We have tried and the things we have tried to do here...we have even brought ...errm.. people doing craft work to demonstrate .... but they are not interested at all

Subject ..... I mean the activities of an afternoon here are singing or playing games but even that they just ermm ... you have to work really hard. I think the whole top and bottom really is television ... that has ruined ...well they say at home any way it ruins family life ... and if they could have the television on all day they would be quite content ... but we don't believe in it ... tapes, records ... but the television doesn't go on till half past five ... you know... but I really think that if we put that television on they would be made up ... but ermm think it is what you try ... you know we go to Tea Dances ...we have entertainment in the homes and a lot of them don't want it .... a lot of them don't want it at all.

<u>Leisure behaviour of older people</u>

Social activities were highlighted as important to people.

Subject: .... the activities people do want to do are never physical they are usually have a social element like them liking visits from people or Day Centres or sometimes mind things like crosswords ... we have one lady and that is all she does ... but the people who do go out or do crosswords tend to be the one's in better health.

Subject: Company is the most important thing ... it's when you don't have any company it's then that the brain starts to like .... deteriorate ...doesn't it .... because there is nothing to keep it going .... no on to talk to

Interviewer: What kind of things do you find that people will do?

Subject: Not a lot. They like the socials here

Some subjects expressed concern for those people who through ill health could not get out of the house.

Subject: .....I think the ones that are active in here have a good time - not all of them. I would say that there is about half a dozen they go on holidays every year. I mean more than once a year -especially if the holidays are cheap - you know - and they are looking for days out and they go to the local clubs which have a lot of days out. They only just don't go to one club they go to a few clubs. They are out . That's why I feel sorry for the ones that can't go out - I really do - some are quite contented to stay in but if they had the choice like they would prefer to get out.

Most of the discussion in this section focused on the types of activities that were being organised for older people in sheltered or residential accommodation. Examples of activities mentioned included: days out, shopping, tea dances and day centres outside of the home. The majority of activities mentioned however were based within the home environment, for example, television, games, sing songs, crosswords, knitting, cards, bingo and gentle exercises.

A completely different attitude towards the activities people were getting involved in came from the interviews with the older persons activity leaders. For example one told of a man who had been involved in aviation but had not been a pilot and had wanted to therefore in his retirement, he was 'making up for it' by getting involved in a microflight project where he was contributing his knowledge. The activity leaders

emphasised the diverse range of activities members of their organisations were involved in.

Factors affecting leisure behaviour

Health was seen as a major factor limiting activity involvement.

> Subject..... like we have one lady who used to go swimming and now has problems with her breathing ... now she won't do anything because she is frightened of this .... she doesn't want to do anything ...

Carer talking about husband:

> Subject: Cos like years ago we used to like to go to the bingo you know when we were working ..... we used to like to go out but you can't go out now because of the safety and me husbands health .... so we are limited to the house and if we wanted to go on holiday cos I have got his machine upstairs

The importance of feeling safe to go out was also mentioned by other subjects.

> Subject: ... and I listen to them *(residents in sheltered accommodation)* and I talk to them and I know them all in the building and they are definitely afraid ... they are afraid .... even of a day time .... to go out of the building ...

Lack of opportunities to partake in leisure were also identified as a constraint to leisure behaviour.

> Subject: ..... sometimes I think all these things like gardening ... now my Mum never had a garden and she had a family to look after so ... you know there is so much that my mum hasn't done and I am glad that she is having the opportunity now ... but there should be more opportunities for her.

Access to facilities, in terms of their location and the fact that they need to be accessible to older people was felt essential to their usage.

Subject: ..... I wish the centre was a little bit nearer to here - you know we get brochures through for keep fit and things like that - I wish it was a little nearer to here where they could have access to it.

Transport provision was seen as a vital aid if it could meet older peoples' needs and the value of the free bus pass was noted.

Subject 1: ..... now I mean we have got an elderly lady a couple of doors away in number 90 and she is on here own in a big house like this all on her own like and I mean really she has got nobody ... now if she had transport ... you see that is another problem ..... I mean you have the Merseylink Bus but you have to order that about x amount of time before you need it ... I mean Mavis' mother might ... you know one morning Mavis might say to her to her mother do you want to go out for a couple of hours today ... well if Mavis could get the bus to put her in outside in the wheelchair...

Subject 3: But you see when the bus turns up she might not feel like going...

Subject 1: Well this is the thing .. you can't just ring up when the person feel like going ...when the person feels well enough .... you have to do it x amount of time in advance.

Subject 3: It's just like you have to make an appointment with the Doctor to be sick ... you have to know you are going to be sick next Tuesday to get an appointment .....

Subject 1: That's right ...

Another constraint to behaviour was the paucity and / or inaccessibility of the information on service provision.

Interviewer: Do you feel as a society we try to encourage older people to be active?

Subject: .... There is not a lot going on for them .... there are centres around and about but nobody gets to know about them .... you have to actively go out and seek the information ... but it shouldn't have to be so difficult.

Financial constraints were mentioned by only two of the subjects as influential to determining activity participation and the influence of past leisure behaviour on present involvement was mentioned by one subject.

The type of accommodation people lived in was mentioned only explicitly by two subjects as a factor effecting leisure behaviour. However, it was also inherent in many of the discussions with sheltered housing wardens as they listed the organised activities/ events that were provided by the housing units.

Interviewer: What do you think determines whether people remain active or not?

Subject: I think being in a community like this.

Interviewer: In the Sheltered Housing situation?

Subject: Yes....where they get together and go out.

Interviewer: Do you think it is more difficult for people who live in their own homes?

Subject: I think so. Cos we have got a couple of ladies here and if they were still in their own homes they wouldn't see anybody from one days end to the next.. Ones weeks end even ...you know...its just a matter of them being in one building they know they can come down to the lounge if they want and see somebody if they want to

Interviewer: .....so its the social side

Subject: ..... Yes and they know they only have to pull the cord and I am on the other end of it.

Interviewer: ...and the security.

Subject: Yes

The idea of doing activity for a purpose was highlighted as a factor which may limit peoples' involvement in leisure, since activity with no obvious purpose is less attractive.

Interviewer: Is it fair to assume from what you are saying that you feel activity important to healthy ageing?

Subject: Well yes ... I think it is also back to this idea of having a role to play and if you haven't got anything to do and you can't work for any reason ..... I suppose it is the same for many younger people as well ... but certainly for older people if they don't see

themselves as having a job to do ..... being a structured job like .... you know like he *(subject's Grandparent)* has got in the pub .... err .... or even just a role in the family ..... you know ..... cooking meals for the family or looking after children for somebody then err .... I think people can become very bored and I think that is the main problem is that .... err boredom you know you just get caught up in an ever vicious circle and err .... you don't want to get involved in activities because they haven't got that purpose

Subject 1: Now look at Mrs. X - she is a prime example of someone keeping themselves young - she is 80 and I mean she is active and everything - she keeps up and as regards us we have applied for a bus for the street and she rang us last night - you know what I mean and she arranges all the halls for us with the minister in her own little way - but that keeps her going - you know what I mean

Subject 3: She feels as if she is wanted

Subject 1: That's right

Subject 3: When you get old it is very nice to think that people need you and are not forgotten about

Two other variables mentioned were a supportive environment and personal attitude/ motivation. The following quote illustrates the former:

Interviewer: Do you think we do enough to try and encourage people to stay active?
Subject: No I don't think we do enough ...it is only when you come in contact with somebody like this and you see how enclosed their lifestyle is and .... I think they need encouragement ..... they need to be made aware of thing that they can participate in ... I think it is just the community are at fault really .... and I suppose a lot of families tend to leave their parents at a certain age ... and tell them they are past it when they are not.

Attitude towards activity was a strong theme of the interviews with professional subjects, especially those working within residential accommodation.

Subject:...we have got one chap there that he just thinks that because he is retired ...we try to keep them...you know ..come out in the Garden or whatever but he says "Oh no I've done my time". So you literally have got to push them to do anything. Cos they are quite content just to sit and decline in to themselves ... rather just sleep all day.

Interviewer: Why do you think people won' t get involved?

Subject: I think they just give up ... and lose interest altogether .. just give up in other words and you can see them going down and you watch them going down after a few years ... sad isn't it

Subject: .....you could say to someone "Now come on Mrs A... you can do it....you are great you can do it" "Listen my dear I am old now what do you expect from a 90 odd year old women". So they think cos they are classed as elderly and they are a pensioner that they shouldn't be able to do things...we say to them .. we do use examples and we say "We have got two 98 year old women and they run round" ..which they are ...they are very active for 98 and "Oh my dear ... I am old myself you know" and they think they shouldn't have to do it because they are old .

Subject: .....I think it's "What the point" - you know that type of attitude. They don't do anything all day. They can do things ... but they just don't want to - they don't want to go out. It's the odd few that if you organise anything, like... five will go, and some of them are confused any way - they are not bothered. They just want to sit in they don't want to go any where or get involved in anything....and - again - a few will walk around the garden if the weather is nice but that's it.

<u>Service provision</u>

There was a general belief that the amount of existing service provision was inadequate to meet older peoples' needs.

Subject: I think a lot of what already is being done is good .... I mean like to some extent with the transport services and these kind of things and meals on wheels and luncheon clubs and these kind of things and .... yeah I think they are good but I don't think that there is enough of them ....

Interviewer: What kind of facilities do you feel we should be providing?

Subject: Well as I said before we need to revamp everything ... we need a totally new approach to provide more .... as well as different things .... you know I used to go to this night class on a Friday to learn a language and there was an older women there who loved it ... now she would of done that a couple of times a week and I am sure she lived for that class almost ... it really gave her an interest and she picked it up really quick ... quicker than me .... now why can't we have more things like that ... more educational things .... why not there are a lot of interests out there that need to be catered for and a lot of life that can be given back.

There was a need for more services to get people out.

Subject: I would like to see more of them go out ... we have a lady who goes out to a church club it's in the Fazakerley area ... you know just more things like that for them to go out to ... you know purely for ... the elderly people in the community you know to mix and talk about what ...well I don't like this or that ... get them to join and see different things and talk to different people.

The social element that services could provide was seen as important.

Subject... yeah the social side of it is great because I think a lot of old people could be very cut off and probably need ..... well everybody needs contact with others ..... and so I think that it is great for the social aspect as well.

Transport facilities were a major factor and the value of bus passes was recognised.

Interviewer: What about for people in their own home?

Subject: Well I think there should be a lot more transport for them...getting them from A to B. A lot more transport and a lot more Day Centres

Safety was a factor mentioned by one of the carers interviewed.

Subject 1: But of a night time when you go out .... you know .... you wouldn't dare go out to err .... if we went over to the community centre or anything like that ... you know if there was anything on ... err ... you just take your life in your hands if you go out at night especially around here

It was also suggested that services should go to people in residential/ sheltered homes rather than residents having to go out to the services.

Interviewer: What do you think we could do to promote activity?

Subject: Well a lot more needs to be provided but it becomes difficult if people have to travel to it .... I think maybe more transport facilities should be provided or I think .... as far as we are concerned ... it would be better if things come here ... and then people don't have to travel ... if I arrange something some where then unless I arrange the transport people won't go but they will if I get a coach or order a taxi or whatever.

Interviewer: What kind of services do you think we need to encourage activity?

Subject: You know like they have in the Hospitals they have.... I have seen it on television one day....they have a mobile service where they went around in a van, mostly in the rural areas... where they went round for physiotherapy - mostly to take the pressure off the local hospitals - now that to me something like that for a keep fit. Because there is a lot of sheltered housing in the areas if they only did half an hour in a building - keep fit - we could put this up ourselves but I wouldn't know if I am doing the wrong thing. I might be exercising where I shouldn't - we have got exercise records but there again what I might say to somebody come on do this and they are doing it wrong.

The subject of getting people involved in services was mentioned as a difficulty to be faced.

Subject: Well I think that the services are good that are provided already but there is just not enough of them .... but I do think there is a problem even if the services were there

to getting people actually going in the first place .... I think they are a brilliant idea but as I say I think the problem is actually getting people to go there in the first place and finding out what they actually do and maybe .... you know .... having a friend who is from down the road and takes them along with them and says .... right I have a really good time when I go down here and .... you know my Granddad goes to this club every so often and he plays bingo and he thinks it is great ... and err ... and you know he never imagined himself doing that and he got talking to somebody in the pub and they were going on some sort of club outing and ..... he went along to that and that is how he got involved in it ..... so I think something really to focus on the idea of going to the club otherwise they are just not going to be used.

Advertising and locally based services were highlighted as ways in which to get people involved in the services provided.

Subject: .....there are loads of activities going on for people who do retire - the thing is I don't feel that they are advertised enough and ... well possibly they are if individuals go to the right places which is Age Concern or look in the Library but never on the radio do you hear advertised "If you are 50+ come along to this" or even you know with the Sports Centres they advertise but like the 50+ is a small writing down the bottom of the brochure.

Interviewer: Do you think advertising is one way forward to promote activities?

Subject: I think it is going to have to be really .... I think there should be a lot more promotion days for people for 50+ centres on a regular basis regardless of whether the leisure centres and activity centres are full up there are still more people out there that don't know. But I feel as though it is not so much it is the couple that get older ... cos they have each other to lean on .... err it is the people that are single and just sitting back and watching T.V. and getting older .. people need to go out and get them .... I am not quite sure how to attract them.

Interviewer: What do you feel about the range of activities that are offered?

Subject: I think they are diverse enough across the whole of Liverpool ... the problem is that a lot of older people don't have the money to travel ... don't have cars and so the activities provided immediately within their vicinity aren't always what is wanted .....

but I think the problem is in the leisure centres they are promoting a lot of sports activities whereas that is fine for the people who want them but to attract the elderly you have got to do more recreational based activities such as like tea dances ... so the leisure centres and the gyms are pushing the sport, sport , sport and it is not attracting people and I think if they get people in even if it is like a chess club or a bingo club or something like that they can promote the sport on the side.

Interviewer: So people come for perhaps another reason and then get involved in the sport...

Subject: Yeah ... I don't think there is enough like Day or Community Centre's ... I mean the one's that are provided ... I mean I don't know what is provided there really .... they are probably adequate but there is just not enough of them and I think there is a stigma as well if you go to a Day Centre it must mean you are pretty elderly ... it should be advertised totally differently .....cos I think a lot of people have got worries about age labelled activities ... so if it was something like err .. retirement leisure activity centre or something then it would attract more people in.

In addition it was suggested that an essential element of service provision would be to provide activity opportunities which were 'for older people, run by older people'.

One subject suggested that health promotion should begin at a younger age to influence people as they get older.

Interviewer: What do you think should be done to promote activity for a older people?

Subject: .....I suppose you want to catch people as young as possible rather than go to them when they are over 60 and start emphasising they only have another 10 years ... whatever maybe if you are lucky ... err I suppose really the best thing is to start with the very young but probably the older people are the harder it is to pursued them to do something they have never done in their lives before ... for sure..... I mean I suppose you could sort of try and come down real heavy on all the old people - get out there and exercise - but I don't think it would work - I mean unless I don't know there were sort of real incentives like I don't know what you could offer them but err ..... I don't know I

think it's best to work on the younger people and hoping that their habits will then hold though for the rest of their lives.

From the analysis addition themes emerged which may have implications for service provision. One of these was the importance of bridging generations.

Subject: ... there are some kids in the street who were throwing stones at an elderly women's door and windows across the street .. she had been in hospital and had an operation on her eye ... anyway these kids were really getting to her so I went to them ... the three of them ... young lads and reasoned with them I did say that the lady had had her eye taken out but they weren't to know any different and said she had been very ill and had to rest ... and they left her alone ... you just need to explain to kids .. cos of the way things are today children don't have any caring cos they don't have no understanding about the problems and difficulties older people face ..... but I know in one of the homes some of the kids go and do a concert ... you know and they love it ... even the kids learn about older people from it ... so that's what I say you bring the two together .... there should be more integration on the generations .. the youngsters can learn off them ...even if they only see them in their struggle .... which life is a struggle for most of them ...err that's teaching the youngsters to feel compassion and some caring and some worry and they are all good feelings ... all positive feeling and at the end of the day the little old dears and old men they go back to their little flats and they can think of the days events ...

There was also the feeling that people get to a certain age and then expect service provision (Two sheltered housing wardens highlighted this).

Interviewer: Do you think as a society we value elderly people?

Subject: No... Sometimes I think its their own fault as well because no matter what you do they want more - not all of them - the odd ones - they want more - they want their pound of flesh because "I've have paid into it and I want it". I can tell by the services that are available. You know the Home Help Services - "Because so and so has a home help I want a home help" and I say well she can't do her hoovering because she has had a

heart attack or something like that she has got to take it easy "Well I am as old as her" - this is the way it goes. Then the other day someone was complaining about the home help and I said put it like this if you have to pay for it would you have one - "no I wouldn't have one, I wouldn't pay for the service that they would give me". But you know they are getting an hour a week, some of them, for the heavy work - the windows or the hovering and if they have to pay for it they wouldn't have it and so the people would do it themselves.

In summary, as with the quantitative study, there were mixed views expressed about personal ageing. In addition subjects also confirmed their beliefs that activity was an important element to healthy ageing. However despite this the concept of slowing down was integral to attitudes towards ageing. The idea of withdrawal was talked off especially by professionals and the difficulty of maintaining engagement in life as attitudes towards remaining active changed and constraints to leisure were faced. Contrary to the quantitative findings certain negative aspects of the ageing process were identified, such as the undervaluing of older people and the breakdown of roles in later life.

5.3 Summary of Qualitative Findings

Two qualitative studies have examined leisure and ageing from the perspectives of older people and from the perspective of others involved with older people.

Findings of the focus group studies with older people suggested a difference in emphasis placed on the elements of the Brandenburg Model by subjects from different accommodation groups and also implicated the concept of 'slowing down' to be an integral component of attitudes towards ageing. In addition it was implicated that this concept, associated with declining health, were defining characteristics of becoming 'old'.

This concept of ageing was also evident in the in-depth interviews with individuals involved with older people. In connection with this, the latter group highlighted the

difficulties of maintaining leisure in the face of declining health and declining receptiveness to remain active. From both qualitative studies a series of constraints were identified which were felt relevant to leisure behaviour in later years.

CHAPTER 6

GENERAL DISCUSSION

6. GENERAL DISCUSSION

6.1 The Study Findings

The primary aim of this study was to examine the relationship between leisure and ageing. This is important in light of the ageing population and the possible potential of leisure as a health promotion tool. The study documented the leisure behaviour of a sample of older people and investigated the factors which were associated with, or a consequence of, leisure behaviour. Two facets of the study merit particular consideration; the methodological approach taken and the resultant themes concerning leisure and ageing identified from the findings.

Methodological Approach

In order to maximise the value of the research the approach taken was pluralistic, that is multi theoretical in its perspective and multi methodological in its process. Kellaher et al (1990) described these approaches as theory triangulation and methodological triangulation. Within the current study, the methodological approach resulted from a concern to take a holistic approach to the study of older people and to utilise methodologies to (a) establish important factors concerning leisure and ageing and (b) to gain an understanding of the mechanisms controlling or explaining these factors. Thus, as described in Chapter 3, quantitative methods were employed to establish a data base of information on leisure behaviour and associated factors and subsequently qualitative methods were used to explore the meanings of these findings. The methods employed both complemented and contrasted with each other in the results they obtained. The methods complemented each other as factors which were highlighted as important in the cross-sectional study were further explained by the focus group analysis, for example, factors such as the constraining nature of poor health. However, in other instances, factors seemingly unimportant from the cross-sectional work were highlighted from the focus groups as salient to the relationship between leisure and ageing, for example the effects of financial resources.

Consideration of these factors questioned how adequately the original model of integrating methodologies (Figure 3, Chapter 3) described the overall process of the study. It was felt that the model below is a more accurate description of how the methodologies in parallel produced a picture of leisure and ageing.

QUANTITATIVE → RESULTS ← QUALITATIVE

Figure 32: Model of Integrating Methodologies

Source: Steckler et al., 1992

This between-methods triangulation (Kellaher et al., 1990) was used to cross validate the study findings (Steckler et al., 1992). Thus the finding that health status was an important factor in relation to leisure and ageing was prevalent in each approach, strengthening the validity of the importance of this factor. The value of this triangulation approach to the research process was also apparent in practical ways. For example, the cross-sectional study was a valuable source of identifying people with different levels of leisure involvement for the focus group work. It also identified individuals applicable to the attitude studies.

This study differed from many of the leisure studies concerning ageing in its approach to the measurement of leisure behaviour. In fact, it has concluded that in reality comparisons between the findings of this study and others are futile as each has measured different concepts. This study supports the idea of Long (1986) that retirement is 'pure leisure' as when subjects were asked to define leisure in their lives their definition was based on what they do with their (leisure) time and results in the inclusion of such activities as housework and napping in leisure repertoire. The definition utilised by subjects in the current study concurs with leisure as defined by

time (Stokowski, 1995). It differs from a leisure definition based on specific activities such as that used by many of the large scale surveys.

Leisure and Ageing

One of the interesting questions arising from this study was the ability of chronological age to explain differences in leisure behaviour. This issue was raised in both the quantitative and qualitative work. This may have implications for how research and policy responses should 'categorise' people in the future. Is chronological age the best indicator by which to define peoples' behaviour? Some (Kane, 1990) have stressed the benefits of using chronological age as a measure as it can be easily and accurately assessed and it is a universal concept. Bytheway (1990) proposes that it is a fundamental variable in the analysis of populations as it is a dimension upon which people vary along with other factors such as gender and ethnicity. However, its use relating to ageing research and policies has been criticised because of individual differences in physical and mental function and as it contributes to the prevailing attitude of 'the elderly' as one homogenous group (Victor, 1991). These differences may have an intrinsic (genetic) or extrinsic (environmental) foundation and also include differences from selective survival, differential challenges and cohort effects (Kane, 1990). For this reason gerontologists have questioned the use of chronological age as a measurement tool (Bytheway, 1990); an issue this study has highlighted in relation to leisure in later life as age was not found to be a major variable in the explanation of variance in leisure behaviour. However, in practice chronological age is the basis of a large majority of research projects and policy responses without discussion of its validity as a measure of the ageing process.

There are at least two definitions that are relevant to this discussion. Firstly, is the biological definition of ageing. Biological ageing cannot be related to one particular chronological age. There are wide individual differences in physiological and functional ageing. Despite this, the most commonly accepted definition of ageing is based upon chronological age. This is termed the societal definition of the older population which is centred on the age at which people retire from work. In Britain, the

statutory retirement age for women is 60 and for men is 65 years of age. This definition may be useful for statistical purposes but it takes no account of health or functional capability. The societal definition of our older population is also problematic in terms of the wide range of people it encompasses (Victor, 1991). The diversity of ages and social characteristics are particularly salient factors to consider (Warnes, 1991). The definition groups together people who, in some instances, are different in age by 40 years (Victor, 1991). This implies *"considerable contrasts not only in educational, occupational and personal experiences but also in their health"* (Warnes, 1991 p.187). Such arguments form the basis of analysis by cohorts as opposed to socially constructed concepts (Warnes, 1991) based on chronological years. In response to these concerns, research projects, such as this, have begun to distinguish between different groups within the older population. Concepts such as 'Young Old', 'Old' and 'Old Old' have been devised to distinguish between groups of older people. Organisations such as the World Health Organisation have produced operational definitions of such terms; 60-74 years olds being regarded as 'elderly', 75-89 year olds as 'old' and people over 90 years old as 'very old'. Social policy does not appear as advanced but has begun to use terms such as the 'Third Ager'. Bytheway (1990) comments on the use of the concepts 'young-old' and 'old-old' as an attempt to dispute one stereotype which has resulted in the production of two! Although these concepts go some way to address the problematic nature of defining the older population, definitions continue to be based upon chronological age and take no account of other factors relevant to the ageing process. In addition, little attention has been given to variables which differentiate the rest of the population such as gender, class and ethnicity (Victor, 1991).

Kane (1990) argues that the use of chronological age as a measurement tool is useful for analysis of group data but unreliable when considering the individual. Kane states that whether we are concerned with physiology or activity the older the subjects under study the greater is the variation between them. For this reason, age may not be an accurate indicator when determining needs for services. Age may be grossly correlated with service needs but it is not inevitable that an older person will require certain services. Certainly within this research other variables seemed more important to the discussion than chronological age per se, such as health status and subjective perceptions of

personal physical ability which were highlighted in the current study. This experience of ageing has been noted by others (Kelly, 1986) but little suggests that it has been translated into a policy or practical level in terms of defining the 'older population'. The models of defining age, presented in Section 1.1.3, are relevant to this discussion. This study lends little support to the chronological model of definition whilst having obvious implications for the biological model; whereby physical changes to the individual are used as a measure of age. How feasible this concept would be as an operational definition is debatable. One may argue that if one or two key physical/ functional measures were at best universal to the ageing process, or at least highly correlated with it, then the concept of defining age by physical changes may not only be useful but also could accurately reflect the experience of ageing. Alternatively, there may be other defining variables which could be used as a 'proxy' measure implicating functional/ physical ability. A preliminary suggestion of a 'proxy' variable, suggested from the findings of the current study, would be residence type. However the are implications of categorising people by health and residence that potentially could create stigmatised sub groups of older people. This is discussed later in this section.

The current study could also be argued to lend support to the behavioural model of ageing. This uses stereotypical behaviours, such as inactivity, as a measure of age. Inactivity was a prominent theme of ageing emerging from both the quantitative and qualitative studies, with the prevalent concept across all groups of 'slowing down' with age. Often this factor was implicit in subjects' definitions of older people This concept, together with declining physical ability, seemed inherent to the defining characteristics of becoming old by subjects throughout the study. If the definition of old age is based on declining health, inactivity and the philosophy of 'slowing down' then the connotations for leisure of being part of 'old age' seem incongruent ideas. The current study has highlighted the importance of residence type in understanding the relationship between activity and ageing. Residence type differentiated the leisure behaviour of the sample and also the constraints the sample reported. This is an important finding as it suggests that the experience of leisure is different in the two groups, and implies the need for different responses to promote leisure.

If inactivity is associated with old age, one definition of ageing could be based upon leisure behaviour; in terms of the size and content of leisure repertoires and the frequency people partake in active and out of home activities. As Midwinter (1992) highlighted leisure is the one common experience of all older people. The current work has suggested that receptiveness towards leisure would be an important element of this definition. These distinguishing factors (i.e. leisure behaviour and receptiveness) would certainly be important in strategies for promoting leisure. This would seem a more useful way of targeting strategies than chronological age per se. For example, the constraints faced by a 70 year old active women may differ greatly from a 70 year old inactive women. Thus a diverse strategy of leisure promotion which recognises that the needs of inactive older people may be different from active older people whatever their age may more successfully address the leisure needs of the whole older population.

Other constructs, such as, functional ageing, social ageing and psychological ageing have also been proposed. These concepts attempt to describe realistically the ageing process but are problematic in statistical terms as they are not easily measured. Bytheway also believed that they can be conceptually problematic as they are based on a distinctive perspective or construct

> *" .. we are formulating methods of measuring things that are themselves intangible but which we believe to have a certain existence or meaningfulness"* (Bytheway, 1990).

Thus the context in which the measurement is formulated should be taken into account and the validity of the concept examined.

The current research has emphasised the importance of subjective views of health and ageing and thus implicates a subjective view of old age. This concurs with the personal model of ageing, by which personal views of the individual on how they relate to the ageing process are used as a measure of age. Further work on this construct would be beneficial. There are obvious conceptual difficulties in using this as a measure, for example on how the ageing process is defined. However, important concepts suggested by the current study would be health status, physical ability and personal control.

The question remains to what extent is old age a social construct or, to what extent does it describe the experience of ageing. The variability between groups shown in the current study in both the 'conditions of life' and the 'experience of life' suggests that a move away from one homogenous definition of all individuals over retirement age has to be useful. The current study did find chronological age useful statistically in the analysis of three cohorts but further suggests that there are other variables which more accurately relate to perceptions of growing older. Health, physical abilities and personal control being the major factors implicated. However it is important to consider that the implications of this discussion go beyond leisure and ageing. Age is the basis of many social policies and thus, if we are questioning the use of chronological age as a measure of the ageing process, this will have implications for such social policies. One example being enforced retirement at particular chronological ages.

It was interesting that, when modelling the variance in leisure repertoire, chronological age was not a significant variable, whereas health and physical abilities did explain a percentage of the variance. However, it could be argued that the concept of an ageing definition being based upon physical/ functional changes may lead to a sub culture of older people who are further stigmatised. This is possible considering society's negative views towards physical decline. If the work of Harris et al (1988) was found to be relevant to the British population, then what were originally termed 'ageist' attitudes would actually be better explained as 'healthist' attitudes. To define the older population by declining health, would have the potential to alienate from society the people who fall within the boundaries of the definition. Hepworth (1995) cited the work of Jerrome (1992) whose subjects made the distinction between an active, independent later life and an inactive, dependency in later life. For Jerrome's subjects the markers of old age in this case being illness and incapacity as echoed by the current study findings. The distinction made by Jerrome is similar to the conceptions of subjects as expressed in the focus groups of the current work; of people without declining physical abilities or health problems and people with them. Jerrome also found that health was defined as a 'moral standard' which was to be aspired to; it was morally correct to resist the ageing process

and its resultant dependency. This concurs with the findings of Willliams (1991) who maintained that:

> *"many people accepted that it was legitimate for the very old to sink into passivity, ...Vigour was sustained by keeping up normal interests and activities, decay was courted by sitting down and doing nothing"* (Williams, 1990 p.71)

Hepworth relates this to the sociological model of Goffman (1968) which described that the 'moral career' of the self through life is derived from what is normal and socially acceptable for that time. Thus Hepworth concluded that social categorisation is essentially a process of moral categorisation. Jerrome argued that the social world tends to stigmatise those with lower physical abilities and poor health status and thus they are denied Goffman's 'full social acceptance' (Hepworth, 1995 p.182). As Hepworth argues unless the realities of physical and functional changes are addressed, and the hostilities against them negated, positive views of old age are unlikely to occur. These negative attitudes were apparent within the current study from older people themselves and also from others within the socio-cultural environment. The analysis of the focus groups and in-depth attitudinal interviews revealed a theme summarised as the 'dread of old age'. The 'dread of old age' was characterised by declining physical/ functional or mental health/ abilities. What is needed is *"a critical response to the tendency in 'liberal capitalist culture' to display hostility towards physical decline and 'to regard health as a form of secular salvation"* (Hepworth, 1995)

Another important factor in modelling leisure behaviour was the subjective perception of personal control. This is a very important issue when the physical, economic and social changes associated with old age are considered. Overall the experience of being old is characterised by a process of disempowerment. Analysis of the constraints identified in the current study conceptually fit with the changes associated with ageing process i.e. physical, social, economic, environmental. However the relevance of the constraints within these themes often varied for different sub-groups of older people. An example being the difference found in the constraining nature of transport between subjects from residential accommodation and those who live in their own homes. The

implication being that the experience of ageing is different according to factors such as health status and residence. It is thus inadequate to conceptualise the older population as one homogenous group. It could be postulated that the social construct of old age is one defining factor of the whole group in terms of role and behaviour expectations. However, within this group people vary along dimensions of health, socio economic status, social support and other 'resources' which can affect the experience of post retirement. Older people are often seen as a social problem - as a 'burden on society'. However if we accept the proposition that old age is a socially constructed concept which has created a culture in which the expectations and attitudes towards older people are negative and the ethos one of inactivity ('slowing down') then the argument could be reversed to suggest that 'society is burdening older people' with the development of this social construct.

One of the interesting differences found between the residence groups were the attitudes towards leisure activity, in particular the constraining nature of receptiveness. The qualitative studies found that subjects from residential homes showed passivity in behaviour and were in general unreceptive to engagement in leisure activities. This finding may be reflecting a 'real' difference between the residence groups, however, another explanation is that it is only a perceived difference originating from the coping strategies of older residents within residential care. The latter explanation fits with two strands of thought (a) the disempowering effects of poor health status and dependency leading to residential care fostering coping strategies to justify the experience and (b) the concept of overadaptation (Iso-Ahola, 1980)) whereby individuals change their expectations of what they strive to do, accepting "even the most dehumanising forms of leisure" (p.173) as acceptable. This is related to the loss of personal control and institutionalisation which again highlights the importance of personal control in later years. Kurst and Propst (1991) stated that loss of roles, prejudice and lowered status are important elements which can deter opportunities for personal control. Thus, as Midwinter (1992) stressed that part of the challenge must be to establish that an individual's identity is not solely work orientated and that people can have a meaningful retirement. As argued by Young and Schuller (1991):

> *"It is absurd in modern conditions to conceive of the age groups beyond 60 as inconveniently detained in a useless life space waiting for the arrival of death"* (p.233)

This study has implications for the various social theories of the ageing process (section 1.2.3.2). The difference in receptiveness towards activity between the two accommodation groups has implications for the disengagement and activity theories of ageing. Whereas it may suggest disengagement by the residential subjects it may not be an inevitable process mutually between the individual and society but may be an adaptation by the individual to cope with the situation they are faced with. The data (quantitative and qualitative) in the current study certainly supports the propositions of the activity theory; that maintenance of activity in later years can maintain well-being. However the current study would stress breath of activity involvement as well as frequency of participation. The idea of activity theory that withdrawal from the social world has to be resisted and people have to remain active is consistent with the findings of people in residential accommodation. It was felt in certain instances that individuals in residential homes had disengaged from the social world and thus no longer saw the relevance of activity to their lives. One important question is why this disengagement occurs and why some older subjects seemed so accepting of this process. It was not uncommon for subjects from residential homes to feel that they had to be accepting of the changes associated with the ageing process as 'there is nothing that can be done about it'. This acceptance, often expressed by residential home subjects, was a consistent finding of the focus group studies and it concurs with the quantitative findings of the relevance of personal control. Discussions of the importance of different types of control, such as primary and secondary, have taken place by other authors (Thompson, 1991) not specifically in relation to leisure but in general related to promoting well-being in populations faced with threats to control, threats such as declining physical health. It has been suggested that secondary control strategies (cognitive coping strategies) are important to well-being in the face of loss of control. This seems particular relevant to the disempowering nature of the residential home environment.

One proposition concerns the status of becoming old in our society. This has implications for the Age Stratification Model in terms of the social roles expected of people living in residential homes and the status afforded to them by society.

The Life Cycle Development Approach is concerned with role changes across the life span. One of the underlying factors inherent in the current research was that leisure did not appear to be a significant life category for older people Leisure does not have the meaning that it could have given the reduction in other roles, such as the work role. It is proposed that this factor could be at the crux of the understanding of leisure and ageing; the meanings of leisure to people often appearing trivial.

The outstanding question concerns how can we improve the status of leisure in older peoples lives. This question is concerned with the Continuity and Role Theories. The factors Clausen (1972) talks of which underlie an individual's performance in a life course role could indicate how we should begin answering this question - personal resources, such as health; sources of support and guidance that help orientate the individual, opportunities available or obstacles encountered and individuals effort. These factors relate to the findings of the current work in terms of the following:

- importance of health status and physical ability,
- the importance of social support and information,
- the various barriers and enhancers to leisure behaviour and
- the importance of individual receptiveness to activity involvement.

One addition to this list would be the influence of the socio-cultural environment in which the person lives, which was also looked at in this study. The Socio Environmental Theory is based on the influences of the social environment and the expectations it suggests for individual's behaviour. Incongruence between these expectations and activity resources leads to diminished life satisfaction. This process can be related to the moral theories of ageing, discussed earlier. If an individual aspires to remain active, and resists the withdrawal from the social world, then diminished life satisfaction would result when the individual can no longer live up to these

expectations. However this does not explain why physically able, independent older people still report low levels of activity involvement.

The current study lends preliminary empirical support to the Attribution Theory in which personal control correlates with 'successful ageing'. Personal control, as discussed previously, was one of the main aspects highlighted from the multiple regression analyses as explaining part of the variance shown in leisure behaviour and implied the value of increased personal control.

In addition the current study has implications for the Political Economy Theory. As suggested by this study this theory is concerned with old age as a socially constructed state and thus examines the social and economic factors which condition many of the experiences which older people face. This concurs with many constraints subjects experienced in their leisure behaviour but does not account for the overriding constraint of poor health status as identified in the current study. There is little evidence that in the past older people have been expected to be political (militant) in their behaviour and only few are involved in any collective 'voice' promoting the rights of citizenship of older people within our society. This may change in the future as the older population becomes an increasing proportion of the electorate, and consequently if ageism is brought to the fore of the political agenda.

Despite the potential of leisure to contribute to the later years, the low reports of involvements in leisure activities from the current study and others suggests that older people do not 're-engage' in later life through leisure (Abrams, 1996). This is also shown in the current study by the minimal usage of leisure services by older people. The study has indicated that a relationship exists between leisure participation and certain subjective and objective measures of the quality of life in later years. Other work (e.g. McMurdo et al, 1991) has indicated that for physical activity a causal relationship can be established with certain measures of function and well-being. However further work is needed to assess the implications of other types of activities i.e. non physical activities. The current study has highlighted the importance of active, social and out of the home activities to older people; all in terms of the size of repertoire

and active and out of the home activities also in terms of frequency. The final stage of the study aimed to assess the implications of this work for strategies of intervention and theoretical models of leisure and ageing. This is discussed in the following sections.

6.2 Leisure promotion intervention strategies

6.2.1 Theoretical Basis for Intervention Strategies

As shown in section 1.1.2, the Planning Officer of Liverpool City Council indicates that leisure is on the agenda at a local level. Also, nationally leisure is an integral part within the Healthy Cities Initiative and of Health Education Authority Policy. The focus is particularly upon improvements in quality of life: "adding years to life" (WHO, 1986).

Within current leisure provision three factors seem integral to the approaches taken. Firstly, age specific activities are common, often treating older people as one homogenous group. This approach is firmly based on chronological age and not individual need. The emphasis on one homogenous population is changing as with development of activities for 'Third Agers'. This tends to be based still on chronological age but focusing on narrower age groups. A second factor integral to leisure approaches is that the responses are often solely based on demographic trends without an analysis of the meanings and experiences within these trends. Financial limitations are obviously a constraint to this process but perhaps the process of service development could be re-thought to include the views of those at whom the service is aimed. This is evident in some initiatives such as the Liverpool City Health Plan (1996). Thirdly, the health promotion emphasis is often on the individual and lastly, the current service delivery is characterised by community based organised services. This does not fit with the concept of leisure as defined in the current study and thus it appears that a wider definition of what constitutes leisure in later years would be required to truly serve the community of older people.

It has been suggested that a proactive response in promoting positive health in later years would be appropriate in contrast to the reactive response of dealing with functional decline and dependency. Thus in this sphere it has been suggested that monitoring healthy life expectancy should be integral to social policy (Midwinter, 1992). A beneficial proactive approach would appear to enable people to continue participation in the activities within their current repertoire. The approach would need to value the contents of repertoire as previous research has suggested that continuity of behaviour is important. This concurs with the finding from the current study that a large proportion of older people could not remember taking up a new activity, and often, of those who could, the activity was being re-started and was not completely new to them. Specifically, it has been noted that promoters need to encourage participation in activities which are familiar to older individuals rather than aiming to facilitate adoption of activities that are completely new experiences. This is consistent with the developmental theories of novelty seeking (Iso-Ahola, 1980). It is suggested that a focus on activities which facilitate social contact and personal responsibilities will lead to improvements in well-being.

The various models of leisure and ageing can have implications for the re-engagement process during later years through leisure. In particular this study supports the Brandenburg et al (1982) Model. This attempts to address the complex nature of influences upon leisure and ageing by examining the relationships between a number of variables not only concerned with the individual but also environmental factors, such as the socio-cultural environment.

In the recent Carnegie Enquiry into the Third Age, Midwinter (1992) promoted the idea of leisure as a significant life category on a par with such life components as health, housing and finance. Perceptions of the role of leisure uncovered in the current study suggested that leisure is far from being a significant life category in older people lives. This provides an immense challenge to those concerned with leisure promotion both on a policy and practical level. Some writers (e.g. Long and Wimbush, 1980) have identified important characteristics which an individual should gain from a leisure service. These include:- recognition as an individual, self expression, being considered

part of the community, occupying free time satisfactorily and a sense of achievement. Verhoven (1977) recognised that the challenge for those providing leisure services was to transform retirement into a "major career" (p. 415) by creating an environment which enhances leisure participation. The current study would suggest that to 'create an environment which enhances leisure participation' involves, and yet goes beyond, creating opportunities and minimising constraints. An equally important element would address issues to do with cultural attitudes towards ageing and physical decline.

It has been suggested that although it is obviously not the role of any government to adopt a policy which dictates leisure participation it's role is to find ...

"... some harmonious zoological balance .... between allowing sleeping dogs to lie and fluttering the dove-cotes of social policy." (Midwinter, 1992 p.17)

The Carnegie Enquiry (1993) commented that the majority of the organised leisure in this country is run by 'well-to-do, younger and middle aged, white males as opposed to older people, women and ethnic minority groups' (p. 18). The report welcomed; the development of leisure programmes for older people within the overall provision by some local authorities; the positive attitude to leisure among younger generations and the finding that if more and better facilities are provided they will be used. This premise that a proliferation of 'better facilities' will increase service usage is unfounded. The evidence from the current study suggests that leisure service usage is minimal and as Bernard (1990) highlighted, the removal of constraints does not necessarily ensure participation. This reflects the complex relationship between factors determining participation in later years.

In addition the Carnegie Report specified that leisure providers should involve older people in leisure provision (in both consultation and as a resource) and to concentrate on activities that were enjoyable, affordable and accessible, which address some of the constraints identified in the current study. Furthermore, local authorities should monitor provision, including the needs of the less vocal and the less well off, they should produce, disseminate and target information about facilities and consider subsidised

access and provision for less affluent groups again concurring with issues arising from the focus groups in the current study.

Haywood (1990) and McGuire (1986) postulated that policies need to minimise the constraints influencing older people to encourage them to use facilities. However, Neugarten (1985) warned that an age based approach to service provision only serves to encourage the stereotype that older people are a 'problem' group. This highlighting an important underlying question which arose from the current study concerning the usefulness of responses based on chronological age. Neugarten argued that policies should be based on need rather than chronological age. She believed that age is an increasingly irrelevant factor when determining various health and social factors and that individuals' needs should be the central premise upon which policy makers respond. This is reflected in Neugarten's (1985) conception of old age as a 'biologically based distinction that history and culture have exaggerated and elaborated into an enforced social category that has came to be not only culturally useless but also detrimental to its members'. This reiterating the social construct of old age incorporating a diverse category of individuals who are in the main 'burdened' by its creation.

Neugarten (1985) argued that age related policies, in some cases, may benefit many people who are lesser in need and thus aggravate inequalities. In addition, she argued such approaches fail to meet the needs of disadvantaged sub-groups of older people such as the poor or the frail. However, Neugarten recognised that the removal of age related policies may not only jeopardise the progress made to date but may also lead to the removal of many supportive and protective policies which may be beneficial to many older people. Thus an age irrelevant policy approach would be harmful if the majority of older people are affected by disadvantaged circumstances such as health limitations and lower incomes (Nelson, 1985) as were many in terms of their leisure behaviour in the current study. Nelson (1985) argued that age irrelevant policies may be appropriate for those aged 60-75. However, for those over 75 years, 'old age' and associated factors may be a very real experience. This may have partly lead to the development of the third age movements in recent years. Attitudes towards some of the Third Age initiatives has been to focus on those under 75 years of age. Thus there

appears an implicit point of defining concepts of age as life stages. This concept is again based on functional abilities which appears inherent within popular thought as to what constitutes old age. Other writers (Haywood, 1990) have also postulated that policies and other responses to leisure and ageing need to be clearly based on perceived need. Haywood (1990) advised that the aim should be to minimise constraint, maximise opportunity and thereby make activities less socially exclusive. Findings from the current work would suggest approaches to achieving this by highlighting the prevalent constraining factors and the opportunities people would like to see available to them. The work also suggests that a wide definition of what we mean by constraining factors should be adopted to include the constraining nature of negative attitudes towards activity in later life and issues concerned with receptiveness.

There is caution from some writers (Singleton, 1985) who warn that if in reality the majority of activities are sedentary and home based then leisure providers may be creating services that no one will use! The reality as painted by this current research does reflect this picture and thus appears to contradict a community based delivery of organised activities approach. Such delivery may not meet the current needs of older people. In fact this study presents a definition of ageing which does not easily fit with traditional concepts of leisure i.e. provision largely being based outside of peoples' homes and active in nature. In fact, Verhoven (1977) recognised that the immediate home surroundings may have all the resources needed for satisfaction. This has obvious detrimental implications for organised community based leisure. Ultimately, according to Verhoven (1977), the aim of the service provider is to not to have older people disengage from society which seems contradictory to advocating home based participation unless new creative ways of promoting leisure can be devised. In the current study home based participation was not associated with well-being. However, it must be recognised that older peoples' leisure is primarily home based and perhaps creative ways of encouraging leisure in the home environment which advanced well-being would be possible. One element of this approach is that it is based on the idea of leisure being brought to the individual and thus the responsibility is assumed away from

that individual. This was discussed by Stokowski (1995) in terms of leisure being defined as activity based not on a feeling within the individual.

Furthermore McAvoy (1979) stressed that service planners should take into account that needs may be different according to residence. This was an important distinction made in the current study in terms of differing behaviours and constraints to behaviour. McAvoy (1979) suggests that an examination is required of physical inability as a constraint to determine 'what part of this problem is learned behaviour, societal pressure or actual physical disability'. This would inform a policy response to this major constraint. The current study suggests that such analysis of the receptiveness to be involved in activities would also benefit from this type of enquiry to inform policy responses.

Kart (1994) looked beyond the present older population and believed that leisure should be placed in a life course perspective. People should be educated in leisure early on in life. A similar argument was put forward by McGuire et al. (1986) who argued that the shift in constraints throughout adulthood should be examined, therefore analysing constraints in a life span perspective.

In addition to the discussion so far the current quantitative and qualitative findings have identified other implications for promoting positive health through leisure. For example a major part of any strategy will be to decide what types of activities it is attempting to promote. This study found that leisure repertoire was associated with well-being for active, social and out of the home activities, whereas, frequency of activity was only important for active and out of home activities in relation to well-being. This suggests strategies should aim to broaden the experience of these types of activities as well as promote frequency of participation in active and out of home activities are going to have a greater impact on quality of life.

The disempowering process of ageing and the importance of personal control in activity participation has been discussed previously in this section. Therefore, one approach may be through health promotion empowerment strategies. The aim would be to enable

people to choose leisure and for the choices to be available to them. Older people are disempowered to different levels and thus present as a diverse population. Health promotion strategies need to account for this and to avoid treating older people as one homogenous group. This is important as barriers and enhancers differ between sub groups of ages and residence as does receptiveness between the residential groups.

6.2.2 Implications for Intervention Strategies

Kelly (1986) reported on possible responses to the relationship between activity and ageing (and specifically of the declining participation rates in physical activities). One 'passive' approach was to see if future cohorts have increasing interest in physical activity. However, this does not address the needs of current generations of older people. Alternatively, Kelly suggested, a social policy response could be considered which could be more informed from research on how not to encourage activity, as some authors have suggested previous attempts have had little success (Abrams, 1990). From the current study it is possible to identify elements that may be important to service provision (listed below). These will not all be relevant to all services provided but they may have particular significance to the provision of some.

- Locally based services and home based service
- Community driven rather then service driven
- Based on need
- Involve older people in service planning and provision as they are the main 'stakeholders' of its provision
- Based on familiar activities / activities within repertoires
- Minimises constraints to use
- Does not treat older population as one homogenous group

The current study suggests that traditional leisure resources may need to be re-considered in terms of (a) the definition of leisure it adheres to and (b) what the range of responses could be to promote health and well-being

The same definition of leisure is often used across the life-span. The current study found that older peoples' definition of leisure includes, but goes beyond, what are traditionally thought of as leisure activities. This has implications for the types of activities to promote. In addition certain types of activity are associated with well-being in addition to active activities. The value of these, social and out of home activities, should be given recognition in terms of promoting health and well-being.

Leisure has been described as a response to resources - and traditionally this has been the basis of the literature and service responses to the promotion of leisure in later years. However, perhaps there is the need to re-think what is meant by resources to include such factors as receptiveness and attitudes towards older people and adequate and appropriate social support. Seen in this way the policy and practice responses could be quite diverse and not solely characterised by practical approaches e.g. facilities and transport. Approaches to promote leisure would also include creating supportive environments and tackling the issue of disempowerment. Responses within this could be at both the macro and micro levels and would include individual lifestyle approaches but also go beyond this to look at cultural issues surrounding leisure and ageing.

Kelly (1986) suggested that one policy response would be to encourage older people to change their lifestyles. However Leslie (1989) argued that lifestyle changes would not be maximised unless the 'environment' was conducive to them. This includes influences from the physical surroundings and also economic and social factors. This concurs with the findings of the current study in terms of the different types of constraint identified. In addition the current work emphasises the constraining nature of socio-cultural attitudes and adds to the list psychological constraints, in terms of perceived personal control.

Kelly (1986) suggested that positive approaches would concern geographical and social access to environments enhanced by factors such as location, scheduling and social support, the wide availability of the activity context currently available only to the wealthy and media images of being active with age. Television and radio are important

tools through which this message could be conveyed considering the high percentage of older people who report participation in these activities.

Research has expelled many of the myths associated with ageing and activity. However, many of the stereotyped beliefs still exist. The prediction is that ageism will become a political and social issue during the following years (McKeever and Perry, 1990). A role in dispelling ageism is evident for policy makers and service providers (McGuire, 1986). Encouragement is needed for people to realise their individual potential and thus challenge the widely held stereotypes which are imposed upon them. This highlights the importance of the existence of positive role models to which older people can relate.

The approaches discussed so far concur with the four pronged approach to the promotion of leisure for older age groups by Bernard (1990). This involves examining what is meant by the term leisure, striving towards countering negative stereotypes, providing (and improving) opportunities and activities and adopting a person orientated, rather than a facilities orientated, approach to provision. Within all of these approaches micro and macro issues are evident. In addition this study suggests that there are sub-groups of older people towards which specific leisure promotion strategies may be targeted. One such group is older people in residential accommodation who have particular needs in terms of leisure promotion. Three of the major issues for this group are health status (physical abilities), receptiveness and feelings of personal control. Their leisure behaviour is significantly different from others in terms of the amount of activities participated in and the types, less social, less active and less out of the home. Further research is required to examine the realities of factors such as receptiveness. However the work of McMurdo et al (1993) has demonstrated the acceptability of an exercise class to residential home subjects. This work needs to be extended to other residential settings and examine other types of activities.

The research suggests that the approach to promoting leisure in later life should not be primarily based in health education. The majority of subjects were well informed on the effects of lifestyle issues on health. The health education role may be grounded in

confronting attitudes towards activity in later life. However additional approaches, in the realm of health promotion, are suggested to deal with some of the complex issues concerning leisure in later life. Two ideas for strategies of health promotion emerging from this discussion relate to creating supportive environments and dealing with the disempowerment nature of the ageing process. These two strategies are consistent with the definition of health promotion as a *"process enabling individuals and communities to increase control over the determinants of health"* (WHO, 1986). Translated into practice creating supportive environments for leisure participation involves dealing with the barriers to participation. To some extent this approach has been adopted in providing such provisions as subsidised travel and leisure passes. Such practices were highly valued by the older people involved in this study. However, the current work suggests a wider approach, as discussed previously, concerned with such factors as attitudes within the socio-cultural environment and adequate levels of social support.

The nature of empowerment is central to the findings of the study. The WHO (1986) definition of empowerment concerns promoting means of personal control towards improvements in health. Presently the concept of empowerment has been described as a "growing general movement towards greater control by citizens in many areas of life" (Rissel, 1994 p.40). However the consequences of this approach must be considered. Hepworth (1995) argued that the underlying message of this approach is the demedicalisation of normal ageing; thus the attempt is to empower people to have some control over the ageing process. This is incongruent with the acceptance of physical decline as a component of the ageing process and thus to destigmatise physical inability in older people. The challenge is therefore to approach both perspectives without compromising the premise of each. From the current study the concept of well-being in later years is central to quality of life. It is proposed that issues of improving health include physical abilities yet go beyond this to incorporate issues of well-being, This is of relevance to those with declining physical abilities as much as it is to others. It could be argued that, for example, life satisfaction is of greater importance than physical maintenance of abilities. However, this issue is complex, as the concepts are entwined. Further work would be required to establish the potential to improve well-being in the context of declining physical function. An example which illustrates this consistent

theme has emerged from this research; this was the concern that whatever the functional status of individuals, the means to get out and about was an integral part of quality of life. The implication being that the two strategies of empowerment and promoting positive attitudes of the ageing process are not incompatible.

6.3 Recommendations and future work

Certain recommendations have emerged from this study for the application of leisure as a health promotion tool. Firstly, the study has implicated the importance of repertoire and encouraging a variety of activities in later life; specifically, out of home and active activities were related to well-being. In addition the importance of social activities to older people was emphasised from both the quantitative and qualitative findings. Further to this the study has highlighted that leisure promotion strategies may differ according to sub groups of older people as constraints differ between the people of different ages and residence types. Highlighting the inherent dangers of treating older people as one homogenous group. There is a clear implication from this study that residence is an important factor to explaining leisure behaviour. Residence type would be a clear dichotomy upon which strategies could be based. An important element of any health promotion strategy would be to disabuse the often held stereotypes of later life and encourage radically different viewpoints as a starting point to take health promotion a step further. A further emphasis on promoting health in older populations would be through empowering principles in a society where ageing is often associated with increasing individual disempowerment.

This study highlights many issues which would benefit from future research. One issue surrounds the notion of receptiveness to leisure and the inherent association between old age and the concept of 'slowing down'. As discussed above these issues are integral to the leisure of older people and would given their importance and nature merit additional qualitative enquiry to assist in the further understanding of the experience of leisure in later life.

6.4 Conclusions

Overall the study has contributed to the knowledge base and understanding of leisure and ageing. Specifically the study has documented the actual leisure behaviour of a sample of older people and related this to measures of functional ability and well-being. It has assessed the barriers and enhancers to leisure behaviour and the knowledge and use of leisure services in a sample of older people. It has examined the activity uptake process and assessed attitudes with the socio-cultural environment. Finally the implications of the empirical work have been discussed in terms of theories of ageing and activity and implications for service provision. Several conclusions can be drawn from this study:

- Leisure participation was extremely low and differed variably by age, sex and residence type
- Major explanatory variables of leisure behaviour were rating of physical ability and feeling of personal control
- Leisure repertoire and certain types of activities (social, active and out of the home) participated in were positively associated with well-being
- Frequency of participation was only associated with well-being for active activities and out of home activities
- Constraining variables differed by age and residence - poor health was emphasised by older subjects and those in residential accommodation
- Receptiveness to participation varied by residence

Interventions should (a) be based on a wide definition of leisure (b) not treat the older population of one homogenous group (c) deal with both micro and macro issues (d) be concerned to create supportive environments and empower individuals to use them and (e) contribute to creating positive attitudes towards activity and the ageing process.

Some of the important factors implicated from this study, in relation to leisure in later life were: personal control, health status, physical ability, receptiveness and socio-cultural environment. It has been argued that the promotion of leisure in later life requires an approach beyond health education. The complex nature of factors influencing the uptake and meaning of leisure activities to older people requires consideration of the individual within the culture that they live. Shakespeare's concept

of the 'Seven Ages of Man' depicts the physical changes associated with ageing which characterise and dominate the latter stages of life. Nearly four hundred years later this concept is not unfamiliar to our understanding of the experience of ageing. However, to conceptualise the experience of ageing for many older people today we may wish to provide detail to the concept of 'sans everything' to include 'sans wealth', 'sans status', 'sans control' and above all 'sans activity'.

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APPENDICES

APPENDIX 1

INTERVIEW SCHEDULE

Liverpool John Moores University

School of Human Sciences

Leisure Activities and Fitness of Elderly People in Liverpool.

LEISURE ACTIVITIES QUESTIONNAIRE

(To be completed by interviewer)

I.D. No.: ☐☐☐

Residential Code: ☐

Area: _____ ☐

(Information to be taken from screening questionnaire)

Sex	Male	1
	Female	2
Date of Birth	____ ____ ____	
Age in Years	____ ☐☐	
	60 and over but below 66	1
	66 and over but below 71	2
	71 and over but below 76	3
	76 and over but below 81	4
	81 and over	5 ☐

LEISURE ACTIVITIES

I would like you to concentrate on the leisure activities you have done in the last TWELVE MONTHS

1a. Can you tell me which leisure activities you have done in the last twelve months *(Interviewer write in activities done outside of the home)*											
b. How often did you *(Mention Activity)* during the last year?	Once	1	1	1	1	1	1	1	1	1	1
	<Once>Monthly	2	2	2	2	2	2	2	2	2	2
	Monthly	3	3	3	3	3	3	3	3	3	3
	Fortnightly	4	4	4	4	4	4	4	4	4	4
	Once Weekly	5	5	5	5	5	5	5	5	5	5
	More often in wk(not daily)	6	6	6	6	6	6	6	6	6	6
	Daily	7	7	7	7	7	7	7	7	7	7
c. Where did you do this activity?	Where Activity Done										
d. How did you get there?	Means of Travel										

e. (Interviewer write in home based activities)											
f. How often did you (Mention activity) during the last year?	Once	1	1	1	1	1	1	1	1	1	1
	<Once>Monthly	2	2	2	2	2	2	2	2	2	2
	Monthly	3	3	3	3	3	3	3	3	3	3
	Fortnightly	4	4	4	4	4	4	4	4	4	4
	Weekly	5	5	5	5	5	5	5	5	5	5
	More often in wk(but>daily)	6	6	6	6	6	6	6	6	6	6
	Daily	7	7	7	7	7	7	7	7	7	7

Now thinking about even more recently I'd like to talk about the last four weeks.

2a. First though, did anything happen in the last four weeks, like illness or holidays, which made it different from usual?

Yes 1 ->Q2b
No 2 ->Q2c

(If yes ask 2b)

b. What happened in the last four weeks to make it different from usual?

c. Which of the leisure activities that you have told me about have you done in the last four weeks?

(Interviewer write in activities)

d. How often have you done this activity in the last 4 weeks?	No of Times							
e. Did any other people take part in this activity with you?	Always 1 Sometimes 2 Never 3							
(If sometimes or always ask 2f) f. Were these people members of your household or people you work with or your friends?	Other members of h/hold 1 People at work 2 Friends 3 Other 4							
g. About how long did you spend *(Mention activity)* each time?	Hours Minutes							
(If appropriate ask Q2h) h. Were there any occasions when the effort you used made you breathe heavily or sweat a lot?	Yes 1 No 2							

I would like you know to concentrate on the leisure activity that you most recently started doing.

3a. *(Interviewer write in name of activity)*

b. How important was it for you to know about the activity at the time of taking it up?

c. Is it easy for you to do this activity?

EASY 1
DIFFICULT 2

d. In what way is it easy/ difficult?

e. How much does this activity bring you into contact with other people?

f. How important was this (the people) in taking up the activity?

g. Was there any special reason for taking up this activity?

h. Did you enjoy different aspects of this activity when you first started?

i. In light of our discussion so far, is there one particular thing that really "tipped the balance" which led you to take up this activity?

SECTION 2:-

BARRIERS TO PARTICIPATION

	CODE		SKIP TO	
4a. Would you like to take part in more leisure activities than you do at present?	Yes	1	Q4b+c	
	No	2	Q4d	

(If YES ask Q4b and 4c)
(If NO ask Q4d)

b. What activities would you do?

c. What stops you from doing these activities at present?
(if necessary prompt)

No place to do the activity around here	1		
Not enough money to participate	2		
Not enough time to participate	3		
Transportation to the activity is inadequate or it is too far to travel	4		
There is inadequate information on places to do the activity	5		
Personal health reasons	6		
Other *(please specify)* ...			
		Q5	

c. Why is this?

SECTION 3:-

KNOWLEDGE OF AVAILABLE SERVICES

	CODE	SKIP TO	
We will now turn to the services and organisations in Liverpool which provide opportunities for leisure activities.			
Firstly, can I ask....			
5a. How long have you lived in Liverpool?			
Less than 1 year	1		
1 year, less than 2 years	2		
2 years, less than 10 years	3		
10 years, less than 20 years	4		
20 years or more	5		
b. Were you born in this area? Yes	1		
No	2		
c. Do you feel part of the community? Yes	1		
No	2		
d. Why do you feel like this?			
6a. Do you prefer to spend your leisure time with:-			
people of a similar age group	1		
people of mixed age groups	2		
don't mind	3		
b. Do you think it a good idea that certain organisations are providing services specifically for use by your age group?			
Yes	1	Q6c	
No	2	Q6d	
Depends	3	Q6e	
Unsure	4	Q7	
(If YES ask Q6c) *(If No ask Q6d)* *(If DEPENDS ask Q6e)*			
c. Which services in particular are you thinking of?		Q7	
d. Why don't you think it is a good idea?		Q7	

	CODE	SKIP TO	
e. On what does it depend?			
		Q7	
7a. Do you know of any organisations/groups etc., aimed specifically at your age group, which provide some form of leisure services?			
Yes	1	Q7b+c	
No	2	Q7f	
(If YES ask 7b and c)			
b. Please give details...			
c. Do you use any of these services?			
Yes	1	Q7de+f	
No	2	Q7f	
(If YES ask Q7d, e and f)			
d. Please give details...			
e. What do you think of *(Mention Service)*?			
f. For the following please rate your degree of satisfaction on the scale of 5 (highly satisfied) to 1 (dissatisfied).			
(Give interviewee response card 1)			
i. the range of leisure opportunities currently available to you?			
ii. the way in which they are promoted?			
iii. the cost?			
		Q7g	
g. Are there any leisure services you would like to see provided in your area? *(Specify)*			

	CODE		SKIP TO	
8a. Do you know of any other organisations/ groups etc., aimed specifically at your age group, which provide other types of services?				
	Yes	1	Q8b+c	
	No	2	Q9	
(If YES ask 8b and c)				
b. Please give details...				
c. Do you use any of these services?	Yes	1	Q8d+e	
	No	2	Q9	
(If YES ask Q8d and e)				
d. Please give details...				
e. What do you think of *(Mention Service)*?				

SECTION 4:-

ATTITUDES TO LEISURE AND HEALTH

In addition to finding out your opinions on leisure we are also interested in how you feel about your health. The following sections relate to this.

Firstly.....

	CODE	SKIP TO	
9a. For a person of your age would you say that your health in general is... *(running prompt)*			
excellent	1		☐
good	2		
fair	3		
or not very good	4		
b. Compared to other people of your age would you say you are...			
more healthy	1		☐
less healthy	2		
or about average	3		
10a. Do you do anything at the moment to keep yourself healthy or improve your health?			
Yes	1	Q10b+c	☐
No	2	Q10c	
(If Yes ask Q10b and c)			
b. What are the three most important things you do to improve you health?			
Physical activities: Housework	1		☐
Gardening	1		☐
Walking	1		☐
Play particular sports	1		☐
Physical leisure activities generally	1		☐
Social activities: Type of social activity	1		☐
Mental state: Mental attitude/lack of stress	1		☐
Diet: Keep to a medical/slimming diet	1		☐
Drinking: Stopped or reduced drinking	1		☐
Smoking: Stopped or reduced smoking	1		☐
Medicines: Take Medicines	1		☐
Do not take medicines	1		☐
Sleep: Type of sleeping habits	1		☐
Others: *(Specify)*			☐
			☐
			☐
			☐
			☐

	CODE	SKIP TO	
c. Are there any things that you would like to do to keep yourself healthy but you don't?			
Yes	1	Q10d+e	
No	2	Q11	

(If YES ask Q10d and e)

d. What would you like to do?

Diet/nutrition generally	1		
Lose weight	1		
Cut down or give up smoking	1		
Cut down or give up alcohol	1		
Sport/exercise	1		
Social activities	1		
Pursue hobbies	1		

Others: *(specify)*

e. Why don't you do these things?

SECTION 5:- *(Give interviewee response card 2)*

MALAISE

I have a list of some common problems. Can you tell me whether within the last month you have suffered these - sometimes, often or always

	never	sometimes	often	always
11a. Always feeling tired	0	1	2	3
b. Difficulty sleeping	0	1	2	3
c. Trouble with nerves	0	1	2	3
d. Worrying over every little thing	0	1	2	3
e. Feeling depressed	0	1	2	3

The following questions concern how you feel about yourself.

SECTION 6:- *(Give interviewee response card 3)*

LIFE SATISFACTION

Below is a number of statements. After I have read each, can you indicate whether you agree, disagree or are uncertain.

	agree	disagree	uncertain
12a. I am as happy as when I was younger	2	0	1
b. My life could be happier than it is now	1	2	1
c. These are the best years of my life	2	0	1
d. The things I do are as interesting to me as they ever were	2	0	1
e. I would not change my past life	2	0	1
f. I've made a lot of foolish decisions in my past life	1	2	1
g. Compared with other people, I get down in the dumps often	1	2	1

SECTION 7:- *(Continue using response card 3)*

SELF ESTEEM

Again for the next section can you consider each statement and decide whether you agree, disagree or are uncertain of how you feel.

	agree	disagree	uncertain
13a. I feel that I have a number of good qualities	3	2	1
b. I am able to do things as well as most other people	3	2	1
c. On the whole, I am satisfied with myself	3	2	1

SECTION 8:- *(Give interviewee response card 4)*

PERSONAL CONTROL

I will now read out two statements. Please consider each and tell me whether you agree or disagree with them.

	agree	disagree
14a. Many times I feel that I have little influence over the things that happen to me	1	2
b. I think that it is best to let everything take its course	1	2

SECTION 11:-

CLASSIFICATION SECTION

		CODE	SKIP TO	
So that we can see how your opinions compare with those of others, we would like a few facts about you.				
17a. Are you *(running prompt)*	Married	1	Q18	
	Single	2	Q18	
	Separated/Divorced	3	Q17b	
	Widowed	4	Q17c	
(If divorced or separated ask 17b) *(If widowed ask 17c)*				
b. When did you separate/divorce?				
	less than a year ago	1		
	1-2 years ago	2		
	Over 2 years, up to 5 years ago	3		
	Over 5 years, up to 10 years ago	4		
	Over 10 years ago	5		
	Can't remember	6		
			Q18	
c. How long ago were you widowed?				
	less than a year ago	1		
	1-2 years ago	2		
	Over 2 years, up to 5 years ago	3		
	Over 5 years, up to 10 years ago	4		
	Over 10 years ago	5		
	Can't remember	6		
			Q18	
18a. Do you have any children?	Yes	1	Q18b	
	No	2	Q19	
(If YES ask Q18b)				
b. How many children do you have?				

	CODE	SKIP TO	
Now turning to your school days..			
19a. Did you attend a school? Yes	1	19b+c	
No	2	Q20	
(If yes ask Q19b and c)			
b. At what age did you complete your full time education?			
14 years or less	1		
15, but under 17	2		
17, but under 19	3		
19, but under 21	4		
21, years or more	5		
c. What is the highest qualification you have obtained, either while at school or gained after you left school?			
20a. Please give a description of your main job/ last main job...			
b. Are you still working? Yes	1	Q20c	
No	2	Q20d	
(If YES ask Q20c. If NO ask Q20d)			
c. Please give details			
		Q21	
d. When did you finish work?		Q21	

	CODE	SKIP TO	
I would now like to ask you about where you live			
(Interviewer note accommodation)			
21a. Accommodation:- Whole House	1		
Bungalow	2		
Purpose built flat, maisonette, bedsitter	3		
Self contained flat, maisonette, bedsitter in a converted house	4		
Sheltered accommodation	5		
Residential Home	6		
b. Do you live alone? Yes	1	Q22	
No	2	Q21c	
(If NO ask Q21c)			
c. Please give details of who you live with..			
22. Which racial group do you most associate with?			
Ethnic Group			
Indian (Inc. African) Pakistani, Bangladeshi	1		
Black African, West Indian	2		
Other non white	3		
White/European	4		
Other....			
23. During a normal week who would you see?			
Lets start with members of your family..			
Others..			

Finally, we would like to ask you about the people that you know.

SECTION 12:-

SOCIAL SUPPORT

24a. Do you have any close friends that you meet or contact regularly (at least once a month) (Please specify names)

ai. Do you feel happy/ satisfied with this? YES/NO

---

b. Of all the people you know, whom could you count on to help you with a problem (even though they might have to go out of their way to do so)?

bi. Do you feel happy/ satisfied with this? YES/NO

---

c. Of all the people you know, to whom can you talk frankly without having to watch what you say?

ci. Do you feel happy/ satisfied with this? YES/NO

---

d. Of all your family, friends, neighbours and acquaintances, whom do you think cares about you and appreciates you as a person?

di. Do you feel happy/ satisfied with this? YES/NO

---

e. Of all the people you know, which would comfort and reassure you when you needed it (eg. by putting an arm around you or holding you)?

ei. Do you feel happy/ satisfied with this? YES/NO

---

f. Do you feel that you are an important part of your families (or anyone elses) life? (Please specify who)

fi. Do you feel happy/ satisfied with this? YES/NO

g. How many good neighbours do you have that you meet or talk to regularly (at least once at month)?

gi. Do you feel happy/ satisfied with this? YES/NO

h. How many people with similar views and interests to yourself do you meet and talk to regularly?

hi. Do you feel happy/ satisfied with this? YES/NO

i. Whom would you say that you help or support in some way in day to day life? (Please specify who)

j. Do you think that any of your family, friends, neighbours or acquaintances expects too much from you in any way? (Please specify who)

Social Support:
Satisfaction:

That was the last question. Thank you very much. You have been very helpful.

This research study falls into two parts, the first being the questionnaire which you have just answered. Liverpool JM University very much hope that you will also help with the second part - not now but at a later date. The second part is quite different.

(Interviewer explain procedures involved)

If subject is willing to take part in physical appraisal ring code 1

1

Write appointment date and time below..

DATE:_____

TIME:_____

NAME:_____

ADDRESS:_____

_____

_____

_____

_____

_____

APPENDIX 2

INTERVIEW SCHEDULE

INTRODUCTION LETTER

Liverpool John Moores University
School of Human Sciences

AGE CONCERN LIVERPOOL

Dear

We are writing regarding a research project which is currently ongoing in Liverpool. The project is being run by Liverpool John Moores University with the support of Age Concern, Liverpool and requires the assistance of people living in the Liverpool area who are over 60 years of age.

The aim of the project is to investigate the leisure activities and preferences of people over 60 years of age. It is important for us to do this because even though we have an increasing number of elderly people in Liverpool we know little of how people spend their leisure time or what they think of the services available to them. We also know little of how activity can affect health.

If you are over 60 years of age, or if there is anyone in your household over this age, we would be very grateful if you or they would be able to give us a little of your time to discuss your leisure time. We can assure you that everything you tell us will be handled with strict confidentiality.

Two researchers are working on the project namely, Sharon Murphy and John Robinson. One of these two people may call at your house tomorrow afternoon and will be glad to explain the project in more detail or answer any questions that you may have. When Sharon or John call they will have identity cards stamped by the University with the Age Concern Logo on so that you can be sure who they are.

If you are over 60 years of age, or if any one in your household is, we would be very grateful of your help.

We look forward to calling on you tomorrow.

Yours sincerely,

Mr. J. Minten
Director of Studies

Prof. T. Reilly
Director of School

Director of School | **Professor Thomas Reilly** BA DIP PE MSC PhD I/ BIOL F ERG S | Mountford Building Byrom Street Liverpool L3 3AF
Telephone 051-231 2113 *Facsimile 051-298 1261*

APPENDIX 3

LIST OF REPORTED LEISURE ACTIVITIES

	PERCENTAGE OF THE TOTAL NUMBER OF ACTIVITIES REPORTED	
ACTIVITIES	12 MONTH	4 WEEK
Walking	2.8	2.4
Shopping	4.7	5.3
Church	1.9	2.3
Visiting	4.1	3.2
Gardening	2.8	2.5
Television	12.0	17.9
Decorating	0.5	0.07
Newspapers	2.6	3.4
Theatre	0.9	0.2
Holiday	2.3	0.07
Go to Watch Sport	0.4	0.1
Go for a drink	2.4	2.5
Visits at home	5.6	6.6
Looking after pets	0.4	0.3
Driving	0.3	0.3
Videos	0.5	0.8
Crosswords	0.9	0.9
Watching Sport on Television	1.1	0.9
Music	1.7	1.4
Parties	2.5	0.6
Exercises	0.2	0.3
Sitting Relaxing	2.1	3.5
Housework	1.9	2.2
Reading	6.4	8.5
Day Centre	1.3	1.4
Chat to neighbours	0.3	0.5
Wine Making	0.05	0
Visiting Library	0.6	0.6
Radio	4.5	6.3
Mind Grandchildren	0.9	1.2
Days Out	3.9	2.2
Night Social Club	1.8	1.2
Dancing	0.6	0.6
Swimming	0.7	0.6
Fishing	0.09	0.07
Bowls	0.6	0.8
photography	0.2	0.1
Voluntary Work	0.7	0.6
Caring	0.2	0.2
Telephone	0.7	0.8
Meal Out	1.6	0.7
Cinema	0.4	0.1
Educational Classes	0.6	0.2
Concerts	0.7	0.07
Ski-ing	0.05	0
Flower arranging	0.05	0
Plants	0.4	0.3
Painting / Drawing	0.1	0.07
Needlework	0.5	0.2
Parks	0.4	0.2

Hobby	0.1	0
Pools	0.09	0.1
Caravan	0.05	0.07
DIY	0.8	0.3
Committee Work	0.2	0.1
Competitions	0.05	0
Antique Fairs	0.09	0
Arts and Crafts	0.1	0.2
Jumbles/ Car Boot Sales	0.09	0
Golf	0.2	0.3
Bingo	1.2	1.5
Crochet/ Knitting	2.1	1.9
Music Lessons	0.05	0.07
Keep-Fit	0.2	0.1
Jog	0.05	0.1
Gym	0.05	0
Club Meetings	0.9	0.5
Musical Instruments	0.5	0.4
Painting/ Drawing?	0.05	0
Cooking	0.8	1.0
Letter Writing	0.7	0.5
Visit Library	0.09	0.07
Investigate family history	0.05	0
Art galleries	0.1	0.1
Weekends away	1.3	0.2
Indoor board games	0.4	0.5
Entertaining at home	0.05	0
Poetry reading	0.05	0.07
Jigsaws	0.2	0.1
Chatting to friends/neighbours?	1.3	1.8
Allotment	0.05	0.07
Cycling	0.1	0.1
Drinking in Home	0.1	0.07
Study in Home	0.05	0
Church Organist	0.05	0
Give Music Lessons	0.05	0.07
Cricket?	0.05	0
Smoking	0.2	0.3
Darts	0.2	0.07
Betting	0.5	0.3
Snooker/ Pool	0.2	0.1
Cards	0.8	0.4
Play for band	0.1	0.2
bird watching	0.09	0.1
Model railway	0.05	0.1
Creative/ Poetic Writing	0.05	0
Napping	0.1	0.1
Sitting in Garden	0.2	0.1
Receive Lunch from Voluntary Group	0.05	0
Tea Mornings	0.09	0.2
Feed Birds	0.05	0.07
Messages for others	0.05	0
Specialist Care Group	0.1	0
Dominoes	0.7	0.1
Sing Songs	0.1	0.07
Home Communion	0.05	0.1
Acting	0	0.07

Quizzes	0.05	0.07
Lunch at home	0.2	0.2
Run Raffles	0.05	0
Chess	0.05	0
choir	0.05	0.07
Charity Work	0.09	0.07
Visit Cafe	0.05	0.07
Museums	0.05	0
Motoring	0.09	0.07
Giving Lectures/ Talks	0.05	0
Potting Plants	0	0.07
Special Occasions	0.05	0
Chatting with other members of household	0.3	0.5
Personal Computer	0.05	0.07
Singing Alone	0.09	0.07
Afternoon Nap?	0.2	0.2
Special Family Events	0.05	0
Collecting things	0.05	0.07
Creative Writing?	0.05	0.07

APPENDIX 4

PHYSICAL APPRAISAL

SCREENING QUESTIONNAIRE

Liverpool John Moores University

School of Human Sciences

Leisure Activities and Fitness of Elderly People in Liverpool.

SCREENING QUESTIONNAIRE

I.D. No. ☐☐☐

1a. *(Interviewer note)*	Male 1 Female 2	☐
b. What is your exact date of birth		
c. So your age is...		☐☐
	YES	**NO**
2. Do you have any difficulty doing any of the following things?		
a. walking about the house without the aid of a stick or other support?	1	2 ☐
b. dressing or undressing without help?	1	2 ☐
c. getting in or out of bed without help?	1	2 ☐
	YES	**NO**
3. Has a doctor ever told you that you have high blood pressure?	1	2
If YES please give details...		☐☐

4. Have you had any history of heart trouble? If YES please give details...	YES 1 NO 2	☐ ☐☐
5. Do you ever feel breathless for any reason?	YES 1 NO 2	☐
6. Do you frequently have pains in your heart and chest?	YES 1 NO 2	☐
7. Do you frequently feel faint or have spells of dizziness/ loss of balance? If YES please give details...	YES 1 NO 2	☐ ☐☐
8. Has a doctor ever told you that you have a bone or joint problem that could be made worse by exercise?	YES 1 NO 2	☐
9. Do you have any physical disabilities of any kind? If YES please give details...	YES 1 NO 2	☐ ☐☐
10. Have you been in hospital in the last two years? If YES please give reason and outcome...	YES 1 NO 2	☐ ☐☐

	YES	NO	
11. Have you had any operations or major illnesses in the last six months? If YES please give details...	1	2	

	YES	NO	
12. Are you undergoing any treatment or having any regular checks made for anything at the doctors, or a hospital or a clinic at the moment? If YES please give details...	1	2	

	YES	NO	
13. Has a doctor ever told you that you have severe depression or any other illness/ condition? If YES please give details...	1	2	

	YES	NO	
14. Are you taking any pills or medication regularly for any of the following:-			
..for heart trouble	1	2	
..for chest pains or blood pressure	1	2	
..or anything else	1	2	
If YES please give full details *(ask to see bottle labels)*...			

	YES	NO	
15. Are there any (other) health reasons which restrict the amount of leisure activities you do these days?	1	2	☐
If YES please give details...			☐☐

16. Blood Pressure

1st measurement	Systolic in mm Hg	___
	Diastolic in mm Hg	___
	Heart rate in b/min	___
2nd measurement	Systolic in mm Hg	___
	Diastolic in mm Hg	___
	Heart rate in b/min	___
3rd measurement	Systolic in mm Hg	___
	Diastolic in mm Hg	___
	Heart rate in b/min	___
(4th measurement)	Systolic in mm Hg	___
	Diastolic in mm Hg	___
	Heart rate in b/min	___

(Ring code 1 if pressure greater than 160/90mm. Hg) 1 ☐

APPENDIX 5

PHYSICAL APPRAISAL

CRITERIA OF EXCLUSION

SCREENING QUESTIONNAIRE CRITERIA:

Questions 3 - 6 were included to assess the subjects cardiovascular health. If the subject was in pain at the time of screening then no physical tests were attempted. If periodic chest pains were reported then s/he were asked to attempt all tests except that for grip strength. The subject was excluded from the latter as this test involved substantial isometric effort which causes a rise in arterial blood pressure and this could possibly exacerbate the condition.

If subjects reported a high blood pressure and were found to have a pressure of 160/90 (or above) mm Hg when measured they were excluded from the hand grip strength test. Such isometric strength test cause blood pressure to increase and this could conceivably precipitate complications (e.g. strokes) for people with hypertension.

The shoulder abduction and hand grip tests were excluded if any pain or swelling was reported in the respective joints. If any joint on the left side of the body was injured then the right side was tested. If both sides were affected then the left side was measured if possible.

Exclusion due to recent operation was entirely specific to the type of operation undergone. For example, subjects were excluded from hand grip measurement if they had had recent hand surgery and were excluded from the shoulder abduction test if they had a recent history of a shoulder dislocation.

If a subject answered 'yes' to question 2b, indicating difficulty dressing/undressing without help, they were excluded from the estimation of body fat.

If a subject reported frequent spells of dizziness/ loss of balance they were watched very carefully whilst doing the lateral bending, flexibility test, to ensure they did not fall. If the complaint was very serious then the subject was omitted from the lateral bending test.

Finally, if a condition was reported in question 12 which is associated with any degree of cognitive impairment the subject was excluded from the study.

APPENDIX 6

PHYSICAL APPRAISAL QUESTIONNAIRE

Liverpool John Moores University

School of Human Sciences

Leisure Activities and Fitness of Elderly People in Liverpool.

PHYSICAL APPRAISAL

(To be completed by interviewer)

I.D. No.: ☐☐☐

Residential Code: ☐

Area: _____ ☐

		CODE	SKIP TO
(Information to be taken from the screening questionnaire)			
Sex	Male	1	
	Female	2	
Age in years	_____		

Before we take a few measures, such as height and weight, I want to ask you a few questions concerning how you feel about your fitness.

QUESTIONNAIRE

	CODE	SKIP TO	
1. Compared with other people of your age would you say you are.... *(running prompt)* ...very physically active	1		☐
...fairly physically active	2		
...not very physically active	3		
...or not at all physically active	4		
2a. Do you think you could walk continuously for 20 minutes without stopping? YES	1	Q2b	☐
NO	2	Q3	
(If YES ask Q2b)			
b. Do you think you could run or jog continuously for 10 minutes without stopping? YES	1		☐
NO	2		
Now stairs			
3. If I asked you to walk at a normal pace up a flight of, say 20 steps, would you be able to do so... *(running prompt)* ...easily	1		
...fairly easily	2		☐
...with difficulty	3		
..or not at all	4		
4a. Do you have any difficulty following a conversation with background noise? YES	1		☐
NO	2		
b. Do you have any difficulty reading ordinary newspaper print even if glasses or contact lenses are worn? YES	1		☐
NO	2	-	

	CODE	SKIP TO	
5. Are you able to get out and about on foot outside the house... *(running prompt)*			
..unaided	1		
..with a stick/support only	2		
.. with help only	3		
..or cant you get out at all	4		
6a. Do you smoke or have you done so regularly in the past five years?			
YES - current	1	Q6b	
YES - ex smoker	2	Q6b	
NO	3	BP	
(If current or ex smoker ask Q6b)			
b. About how much do (did) you smoke a day (or week if infrequently)?			
No per day ___			
No per week ___			

7. Blood Pressure

1st measurement	Systolic in mm Hg	___
	Diastolic in mm Hg	___
	Heart rate in b/min	___
2nd measurement	Systolic in mm Hg	___
	Diastolic in mm Hg	___
	Heart rate in b/min	___
3rd measurement	Systolic in mm Hg	___
	Diastolic in mm Hg	___
	Heart rate in b/min	___
(4th measurement)	Systolic in mm Hg	___
	Diastolic in mm Hg	___
	Heart rate in b/min	___

(Ring code 1 if pressure greater than 160/90mm. Hg) 1 ☐

RECORD SHEET

ANTHROPOMETRY:

Height

Measured height

Actual height - 000.7

Weight

Measured weight

Height/Weight Ratio

Under 1
O.K. 2
Over 3

Demi Span

Distance between suprasternal notch and end of middle finger

LATERAL BENDING:

a) Left side: total distance measured

b) Right side: total distanced measured

SHOULDER ABDUCTION:

Dominant arm	Left	1
	Right	2
	Ambidextrous	3

a) Have you had any surgery to, or dislocated your shoulder, on either side within the last six months?

YES	1
NO	2

(If YES ask b)

b) Which side did you dislocate/ have surgery on?

Right	1
Left	2
Both	3

IF PROBLEMS ON BOTH SIDES EXCLUDE FROM MEASUREMENT
IF PROBLEMS ON RIGHT SIDE ONLY, MEASURE LEFT
IF PROBLEMS ON LEFT SIDE ONLY, MEASURE RIGHT

c) Shoulder Abduction in degrees

Right Arm	1st measurement	
	2nd measurement	
	3rd measurement	
	(4th measurement)	
	(5th measurement)	
Left Arm	1st measurement	
	2nd measurement	
	3rd measurement	
	(4th measurement)	
	(5th measurement)	

HAND GRIP:

IF BP 160/90mm Hg or above, exclude from grip strength. | 1

a) Do you have any swelling, inflammation, or severe pain in your hands or have you injured your hands or had surgery within the last six months?

YES	1
NO	2

(If YES ask b)

b) To which hand has this occurred?

Left	1
Right	2
Both	3

IF BOTH HANDS, EXCLUDE FROM TEST | 1
IF RIGHT HAND ONLY, MEASURE LEFT | 2
IF LEFT HAND ONLY, MEASURE RIGHT | 3

c) Hand grip in Kg

Right Hand	1st measurement	
	2nd measurement	
	3rd measurement	☐☐
	(4th measurement)	
	(5th measurement)	
Left Hand	1st measurement	
	2nd measurement	
	3rd measurement	☐☐
	(4th measurement)	
	(5th measurement)	

SKINFOLDS:

Right Side YES 1
NO 2

a) Biceps in mm
1st measurement
2nd measurement
(3rd measurement)

b) Triceps in mm
1st measurement
2nd measurement
(3rd measurement)

c) Subscapular in mm
1st measurement
2nd measurement
(3rd measurement)

d) Suprailiac in mm
1st measurement
2nd measurement
(3rd measurement)

REACTION TIME:

Trail 1	_____	Trail 11	_____
Trail 2	_____	Trail 12	_____
Trail 3	_____	Trail 13	_____
Trail 4	_____	Trail 14	_____
Trail 5	_____	Trail 15	_____
Trail 6	_____	Trail 16	_____
Trail 7	_____	Trail 17	_____
Trail 8	_____	Trail 18	_____
Trail 9	_____	Trail 19	_____
Trail 10	_____	Trail 20	_____

Mean time for test trails

Standard Deviation

FUNCTIONAL TASKS:

I would like you now to show me how you perform a few everyday tasks.

a) First, are you able to cut your toenails?	YES	1(go to c)
	NO	2(ask b)
b) Are you able to touch your toes?	YES	1
	NO	2(next ?)
c) Would you please show me how you would do that on the foot opposite to your dominant hand.		
1st attempt	Success	1
	Fail	2
2nd attempt	Success	1
	Fail	2
3rd attempt	Success	1
	Fail	2
d) Now can you touch your toes on your other foot with the opposite hand?		
1st attempt	Success	1
	Fail	2
2nd attempt	Success	1
	Fail	2
3rd attempt	Success	1
	Fail	2

Would you please pick up this plug, put it into the socket and then take it out again. You may wear glasses if you need to.

1st attempt	No difficulty	1(next ?)
	With difficulty	2
	Unable	3
2nd attempt	No difficulty	1
	With difficulty	2
	Unable	3

Would you please pick up this key, put it in the lock, turn it around once and then take it out.			
	1st attempt	No difficulty	1
		With difficulty	2
		Unable	3
	2nd attempt	No difficulty	1
		With difficulty	2
		Unable	3 ☐
Would you please sit on this stool, fold your arms in front of you, place your feet flat on the floor slightly apart with your heels just under the stool, then keeping your arms folded I want you to stand up.			
	1st attempt	No difficulty	1 END
		With difficulty	2
		Unable	3
	2nd attempt	No difficulty	1
		With difficulty	2
		Unable	3 ☐
IF SUBJECT HAS DIFFICULTY RISING WITH ARMS FOLDED AT SECOND ATTEMPT ASK...			
Could you try again with your arms hanging freely down by your side, but dont use your arms to help you get up.			
	1st attempt	No difficulty	1 END
		With difficulty	2
		Unable	3
	2nd attempt	No difficulty	1
		With difficulty	2
		Unable	3 ☐

Thank you for your co operation and time.

APPENDIX 7

PHYSICAL APPRAISAL

PROTOCOLS OF TEST PROCEDURES

TEST MEASUREMENT PROTOCOLS:

HEIGHT:

This was taken using a stadiometer positioned on a horizontal floor. The subject was asked to remove his/her shoes and then stand erect with his/her back to the stadiometer and feet together. Height was recorded to the nearest centimetre.

BODY WEIGHT:

This was taken using scales positioned on a horizontal floor. The scales were adjusted to read zero and calibrated with known weights, once a week, covering the range 30 - 120 Kg. The subject was weighed in light clothes and without shoes. Weight was recorded to the nearest kilogramme.

DEMI-SPAN:

The distance was measured between the suprasternal notch at the top of the sternum and the end of the middle finger on the left hand.

Note: The anthropometric measures used standard protocols, which have been used extensively in population surveys and posed no risks to subjects.

BLOOD PRESSURE:

This was taken using the non dominant arm and a manual sphygmomamometer, with the subject seated. The cuff was fitted over the subjects bare arm. The pressure was taken 2 or 3 times with an interval of several minutes between readings to allow blood flow to stabilise after the last reading.

BODY FAT ASSESSMENT:

This was taken on the following (with the use of skin fold calipers);

1. A triceps fat measure - on the posterior aspect of the arm, midway between acromion and olecranon processes, in line with the shaft of the humerus.

2. A biceps fat measure - on the anterior aspect of the arm, midway between acromion and olecranon processes, in line with the shaft of the humerus.

3. A subscapular fat measure - at the level of the inferior angle of scapula taking the measure in line with the ribs.

4. A suprailiac fat measure - one and a half inches above the anterior, superior iliac spine, taking the pinch in line with fibres of external abdominus muscle.

All fat measures were taken on the right side of the body and recorded to the nearest millimetre.

PERFORMANCE MEASURES:

The following general considerations were considered important to all of the following test protocols.

1. Subjects were asked to wear loose comfortable clothing during testing to allow full freedom of movement.

2. They were advised to carry out all manoeuvres in a smooth, controlled manner (within limits which were set by the onset of any discomfort) so that the momentum of the limb did not extend the range.

3. Any non standard attempts by the subjects were not recorded.

4. All tests were performed three times or until two measurements agreed within 10% of the higher value.

5. Measurements were taken on both sides of the body unless some form of damage, disability or injury was reported, in which case the reported side was not measured. If both sides were impaired then the least disabled was measured (if this was possible). A note was taken of any disability/injury.

FLEXIBILITY MEASURES:

(a) Shoulder Abduction: (in 45 degrees of horizontal flexion) Shoulder abduction range is measured as the maximal number of degrees of arc through which the arm moves upwards, in 45 degrees of horizontal flexion, from hanging vertically by the side. The elbow is extended during the manoeuvre. Both movement of the upper arm on the shoulder (gleno-humeral abduction) and the shoulder blade on the collar bone (scapulo-thoracic abduction) contribute. Shoulder abduction is a movement which is required when reaching for objects well above the head, or at the back of the neck.

1. The subjects left side was checked to ascertain if there was any disability.

2. A strap was fitted firmly around the middle of the left upper arm (measured between the acromial process of the collar bone and the olecranon of the elbow) over the clothing if a garment with sleeves was being worn. Ample slack of sleeve was left above the strap. The goniometer was attached to the velcro patch on the strap so that it was facing posteriorly. The plumb line needle was checked to ensure that it was swinging freely when the subjects arms were relaxed by their side.

3. The subject then stood with his/her head and upper and lower back to the edge of a vertical support with which the subject had to keep in contact with whilst standing upright but relaxed. This is to minimise the contribution of lumber curvature to the shoulder movement. The importance of maintaining an erect stance (shoulder level and eyes looking forward) throughout the test manoeuvre was explained to the subject.

4. The goniometer was set to zero when the subjects arm was hanging vertically. The subject was asked to raise their arm 45 degrees to the left of the forward position, and lift it as high overhead as possible bringing the arm in towards the head, without his/her back losing touch with the upright (it was important to check that the support was not impeding arm movement in any way). The manoeuvre was demonstrated and whilst the subject was actually being tested s/he was closely watched to ensure that the correct body position was maintained.

5. When the maximum overhead position of the arm was achieved the greatest steady reading was taken from the goniometer dial, if the movement had been correctly performed. Otherwise the subject was asked to relax and then go back to step three and the explanation was repeated.

6. After a reading was taken the subject was asked to relax and let his/her arms hang down by their sides again. If the goniometer reading was not within two degrees of zero the trail was discounted and another measurement attempted.

7. Steps 3 to 6 were repeated, with intervening rests of a few seconds, until three successful attempts were recorded.

8. The goniometer and the strap were then removed.

9. The process was repeated for the right arm.

(b) Lateral Bending: This parameter is a measurement of the degree of lateral bending in the thoracic and lumber spine.

1. The subject was asked to stand in an upright position against a vertical support, with feet placed together and arms relaxed by their sides.

2. The position of the subjects fingers were located and recorded on the subjects leg.

3. The subject was asked to bend towards the left, keeping their back straight and running their fingers down their leg, for as far as it felt comfortable. The lateral bending position was also performed for the right side. The point the finger tips reached with each movement was recorded and the total distance measured. Particular attention was taken to prevent any hip rotation.

(c) Touching Toes: Test of Hip Flexion: The subject was asked "Are you able to cut your toenails?". If the answer was "yes" then the subject was asked to touch the toes on his/her opposite side using a method of their own choosing but which involved

knee as well as hip flexion. Success/Failure was recorded. Three attempts were allowed for each side.

If the answer was "no" then enquiries were made to discover the cause of the problem. Was the subject unable to touch their toes or was it due to some other reason, such as, poor eyesight or hard toenails?

MUSCLE STRENGTH MEASUREMENT:

(a) Handgrip Strength: Handgrip is important when trying to carry heavy objects or when lifting the body weight e.g. using a handrail to help oneself upstairs. The main muscles used in the handgrip are the finger flexors which run down the forearm. It has not been established whether hand grip provides a representative measure of overall body strength (Tornvall, 1963). Body size and build both affect strength but effects of use on a muscle group are specific so that different groups are able to vary independently.

1. The test procedure was demonstrated to the subject, showing the body position, how the width of grip could be adjusted on the handpiece of the dynameter, and how a grip could be steadily forced by starting with the arm by the side of the body and slowly bringing it up through 45 degrees out in front of the body. During this movement a steady gripping action can be performed.

2. The subject stood erect with their left arm hanging loosely by their side. Holding the dynamometer in their hand the subject was asked to perform the movement as described in step 1. During the gripping action, verbal encouragement was given to the subject e.g. "Go on! Go on!...Relax". The subject rested their hand for two minutes and were encouraged to flex their fingers to relax their hand and restore blood flow to the muscles.

3. The reading was recorded (to the nearest 0.1 Kg).

4. Steps 2 and 3 were repeated until three trails had been successfully completed.

5. The process was repeated for the right hand.

(b) Ability to get out of a chair: Quadriceps Strength: The test was demonstrated by the tester prior to being performed by the subject. The subject was asked to rise, with their feet apart and arms folded, from a stool or chair (approx:420mm in height). The test was performed twice and was graded according to 'unable', 'with difficulty' and 'without difficulty'. 'Difficulty' is defined as in previous test i.e. 'with difficulty' means that the subject could perform the test but with a rocking action, sliding to the front of the chair, or employing other extraneous movements. 'Without difficulty' would mean that the subject could perform the test smoothly according to the demonstrated action. The subject was allowed to attempt the test with arms free to swing if they cannot perform the test successfully with arms folded.

REACTION TIME:

Reaction time is the time taken for a person to respond as quickly as possible to the appearance of a target stimulus. Simple reaction time was measured by means of a portable computer. The time taken for the subject to respond to a single known stimulus was recorded. There are three practice trails and twenty test trails. The mean reaction time in milliseconds (msecs) and the standard deviation was recorded for the test trails.

PULLING OUT AND INSERTING A KEY IN A LOCK AND A PLUG IN A SOCKET:

The tests were demonstrated by the tester prior to being performed by the subject. The equipment was mounted on a horizontal panel and placed on a surface 72cm high in the subject home. If the subject needed spectacles they were allowed to wear them. The subject used their dominant hand to perform the action. Performance was graded according to 'unable', 'performed with difficulty' and 'performed without difficulty'. Two attempts were allowed for each task. For the purpose of the test 'difficulty' is defined as "anything which deviates from the demonstrated action". This is also to include difficulties elderly people may experience in performing the test due to poor eyesight, arthritic fingers, etc..

APPENDIX 8

QUANTITATIVE ATTITUDE STUDY

ATTITUDE STATEMENTS

	STRONGLY DISAGREE	DISAGREE	UNSURE	AGREE	STRONGLY AGREE
1. It is important for people to slow down as they age.					
2. I don't mind getting old.					
3. Older people have the ability to learn new skills.					
4. Retired people have the time to enjoy themselves.					
5. Society undervalues older people.					
6. Retirement is a difficult period of life.					
7. In general, most older people are alike.					
8. I enjoy the company of older people.					
9. Most older people have financial problems.					
10. A loss of independence is an inevitable consequence of ageing.					
11. Older people are as interesting as younger people.					
12. Growing old doesn't necessarily mean growing lonely.					

	STRONGLY DISAGREE	DISAGREE	UNSURE	AGREE	STRONGLY AGREE
13. Retired people could do more to improve their health.					
14. Older people have their memories and do not need anything else to occupy them.					
15. Society should be work orientated.					
16. It is impossible to be as happy in old age as when younger.					
17. Most older people are set in their ways and unable to change.					
18. There are plenty of reasons why older people should not be satisfied with their lives.					
19. Leisure activities take on a new meaning in later life.					
20. The majority of older people are senile.					
21. Older people should maintain active lives.					
22. Life after retirement could be wonderful.					

	STRONGLY DISAGREE	DISAGREE	UNSURE	AGREE	STRONGLY AGREE
23. Society has a responsibility towards elderly people.					
24. Active older people will always be rare.					
25. Ageing means a deterioration in health.					
26. Ageing is not necessarily associated with a loss of independence.					
27. It's sad to get old.					
28. Physical activity can maintain acceptable levels of fitness in older people.					
29. Older people are a burden on society.					
30. Leisure activities are only a means of filling in time for older people.					
31. A part of ageing is to withdraw from society.					
32. There is no reason why older people should not be content with their lives.					

	STRONGLY DISAGREE	DISAGREE	UNSURE	AGREE	STRONGLY AGREE
33. Older people are boring.					
34. Getting old is worse for women than for men.					
35. As people grow old they depend on others more.					
36. Retirement is an exciting time to do the things you never had time for before.					
37. Older people are not capable of being active people.					
38. Only "youthful" images are positive images.					
39. One of the only pleasures older people have is to reminisce.					
40. Mental functioning declines with age.					
41. Life is easier for older people.					
42. I look forward to getting older.					
43. Society should be work orientated.					
44. People should maintain activity levels whatever their age.					

	STRONGLY DISAGREE	DISAGREE	UNSURE	AGREE	STRONGLY AGREE
45. Getting old scares me.					
46. Older people do contribute to society.					
47. Retirement is a time of increased activity and interest.					
48. People have less control over their lives as they grow older.					
49. Older people who attempt to partake in new interests should be discouraged.					
50. Older peoples lives are empty.					
51. A persons variety of interests decreases with age.					
52. I look forward to retirement.					

APPENDIX 9

QUANTITATIVE ATTITUDE STUDY

ATTITUDE QUESTIONNAIRE

	STRONGLY DISAGREE	DISAGREE	UNSURE	AGREE	STRONGLY AGREE
1. It is important for people to slow down as they age.					
2. I don't mind getting old.					
3. Society undervalues older people.					
4. It is impossible to be as happy in old age as when younger.					
5. Most older people are set in their ways and unable to change.					
6. The majority of older people are senile.					
7. Older people should maintain active lives.					
8. Life after retirement could be wonderful.					
9. Active older people will always be rare.					
10. Ageing means a deterioration in health.					
11. It is sad to get old.					
12. Physical activity can maintain acceptable levels of fitness in older people.					

	STRONGLY DISAGREE	DISAGREE	UNSURE	AGREE	STRONGLY AGREE
13. Older people are a burden on society.					
14. Leisure activities are only a means of filling in time for older people.					
15. A part of ageing is to withdraw from society.					
16. Older people are boring.					
17. Getting older is worse for women than for men.					
18. As people grow old they depend on others more.					
19. Retirement is an exciting time to do the things you never had time for before.					
20. Older people are not capable of being active people.					
21. Only "youthful" images are positive images.					
22. One of the only pleasures older people have is to reminisce.					
23. Mental functioning declines with age.					

	STRONGLY DISAGREE	DISAGREE	UNSURE	AGREE	STRONGLY AGREE
24. People should maintain activity levels whatever their age.					
25. Getting old scares me.					
26. People have less control over their lives as they get older.					
27. Older people who partake in new interests should be discouraged.					
28. Older people's lives are empty.					
29. A persons variety of interests decreases with age.					
30. I look forward to retirement.					

APPENDIX 10

QUANTITATIVE ATTITUDE STUDY

QUESTIONNAIRE FRONT SHEET

Thank you for agreeing to take part in this study.

We are interested in how you feel about growing older and we also want to know your opinions of older people in our society.

On the following pages there are a number of statements that have been used when discussing ageing and older people. Read each statement and then tick one box, to the right of the statement, to indicate how you really feel about it.

PLEASE BE HONEST.

There are no right or wrong answers and all your responses are completely confidential. Do not spend too much time on any one statement but give the answer which describes your present feelings best. Please do not confer with others. In addition, we ask that you don't go back and change your answers after you have completed all the statements. It does not matter if your answers for particular statements appear to conflict with each other.

Thank you for your co-operation.

APPENDIX 11

QUALITATIVE ATTITUDES STUDY

INTERVIEW GUIDE

Leisure Activities and Fitness of Elderly Poeple in Liverpool.

ATTITUDES TOWARDS AGEING AND ACTIVITY IN LATER LIFE.

(To be completed by the interviewer)

1. I.D. No. : _____

2. Sex : Male/ Female

First of all, so that we can see how your opinions compare with others, we would like some facts about you.

(To be completed by the respondent)

3. Date of Birth ____/____/____

4. At what age did you complete your full-time education?

14 years or less	1
15, but under 17	2
17, but under 19	3
19, but under 21	4
21 years or more	5

5. What is the highest qualification you have obtained, either while at school or gained after you left school?

6. Employment Position Held :

7. How long have you worked in this field?

8. How long have you been involved with elderly clients?

9. Have you had any training for working with elderly people?

10. Did you particulary seek to work with this age group or was your job choice a function of what was available on the job market at the time?

11. How often are you involved with elderly people?

12. What does this involve?

Now we will turn to your opinions on ageing.

13. To begin, could you describe how you personally feel about growing older.

Prompts: Are you looking forward to getting older or does it scare you? Why?

Do you feel that ageing is worse for women than men?

What factors do you associate with ageing e.g. loneliness, frailty, dependency.

Do you feel that elderly people have to withdraw from society?

Do you think elderly people have as much control over their lives as younger people?

14. Can you think of any positive aspects to retirement and the years that follow?

Prompts: Do you view it as an exciting time.

Do you think people look forward to it? Why?

15. What do you feel to be the negative aspects of retirement and the elderly years.

Prompts: Do you see it as a difficult period of life.

Do you feel that older people's lives are empty.

16. Could we now discuss whether you feel that our society values the elderly members of our population.

Prompts: Do you feel that we view older people as a burden on society? Why?

Do you feel that older people do/could contribute to society?

17. Now what about the elderly members of our community. How do you feel about them?

Prompts: Do you feel that most older people are set in their ways and unable to change?

Do you think that the majority of elderly people are content with their lives? Why?

How do you view the company of elderly people?

Do you think most elderly people have financial problems?

Do you think life is easier/harder for older people?

18. Can we now turn to issues concerning the health of our elderly population? How do you feel about elderly people's ~~are their~~ health.

Prompts: Do you feel any aspects of health suffer as we age?

Do you feel that ageing is necessarily associated with a deterioration in health?

Do you feel that retired people could do more to improve their health?

19. How do you feel about physical abilities and ageing?

Prompts: Do you feel that physical ability has to decline as we age?

Do you feel that nothing can reverse the physical decline we often associate with ageing?

Do you feel that physical activity can maintain acceptable levels of fitness in older people?

20. How about mental abilities and ageing?

Prompts: Do you feel that the majority of older people are senile or is this a myth?

Do you think that mental functioning declines with age? What aspects are you thinking of?

Do you feel that older people have the ability to learn new skills?

21. Lastly, can we discuss your opinion of activity and older people.

Prompts: Do you feel that older people are capable of being 'active'. Do you feel that older people should maintain 'active' lives?

Do you feel older people should maintain activity levels or slow down as they age?

What activities do you feel older people enjoy most?

Do you think the older years of life lack stimulation. Why?

Do you think the number of activities we do decreases with age?

How do feel about the meaning of leisure activities in later life?

Do you think that leisure activities are more than a means of filling in time for older people?

Do you believe that 'active' older people will always be rare?

Do you feel that activity involvement should be encouraged or discouraged in older people?