

Enhancing Wellbeing in an Ageing Society

65 – 84 year old New Zealanders in 2007



**Edited by
Peggy Koopman-Boyden
and
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Preface

The research programme *Enhancing Wellbeing in an Ageing Society* (EWAS), funded by the Foundation for Research, Science and Technology for six years, between 2004 and 2009, has been conducted by staff in the Population Studies Centre at the University of Waikato, Hamilton and the Family Centre Social Policy Research Unit in Lower Hutt, Wellington, and managed through a partnership agreement between the two institutions. The aim of the research is to “*provide the understanding that is essential for policy formulation and the delivery of services for enhancing wellbeing in an ageing New Zealand society.*”

The research programme includes two large-scale, national, random sample surveys of independent and semi-independent New Zealanders between the ages of 40 and 64 years, and 65 and 84 years. The programme also has produced a range of case studies of particular groups, carried out using qualitative methods including focus groups and in-depth interviews (www.ewas.net.nz).

This monograph reports the first results of the survey of 1,680 respondents aged between 65 and 84 years. It focuses on the key determinants of their level of wellbeing – health, education, work history, leisure pursuits, safety, income, amongst other variables. A companion monograph, to be published later in 2009, focuses on the survey of those aged 40-64 years.

The key researchers at the Family Centre have been Charles Waldegrave (Co-Director of the EWAS research programme) and Peter King. At the University of Waikato the researchers have been Jacques Poot (Co-Director of the EWAS research programme 2004-2006), Arunachalam Dharmalingam (2004-2005), Sarah Hillcoat-Nallétamby (2004-2005), Ian Pool (2004-2009), and since 2006, Richard Bedford (Co-Director), Peggy Koopman-Boyden, Suzan van der Pas, and Michael Cameron.

A number of other people have also been involved in the research programme, and we would like to acknowledge their valuable contributions. At the University of Waikato they are: Bill Cochrane (who had oversight of the two surveys through the Computer Assisted Telephone Interviewing facility in the Department of Societies and Culture), Hani Jelle (who supervised the team of interviewers), the interviewers themselves (who spent long hours patiently interviewing the respondents from all round New Zealand), and Katie McLean (who formatted the entire monograph and provided secretarial and administrative support).

At the Family Centre they are Warihi Campbell, Flora Tuhaka, Tangihaere Walker, Taimalieutu Kiwi Tamasese, Tafauimalo Loudeen Parsons (all of whom facilitated the gathering of important stakeholder information for the development of this survey), Elizabeth Rowe (who edited a number of chapters) and Lynn Barlow (who helped with literature searches). It was with great sadness that we learned of the death of Flora Tuhaka on 15th September 2008. Her contribution to the Family Centre and her community has been invaluable.

Richard Bedford, Co-Director, Population Studies Centre, The University of Waikato.
Charles Waldegrave, Co-Director, Family Centre Social Policy Research Unit.

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Chapter 1: Introduction

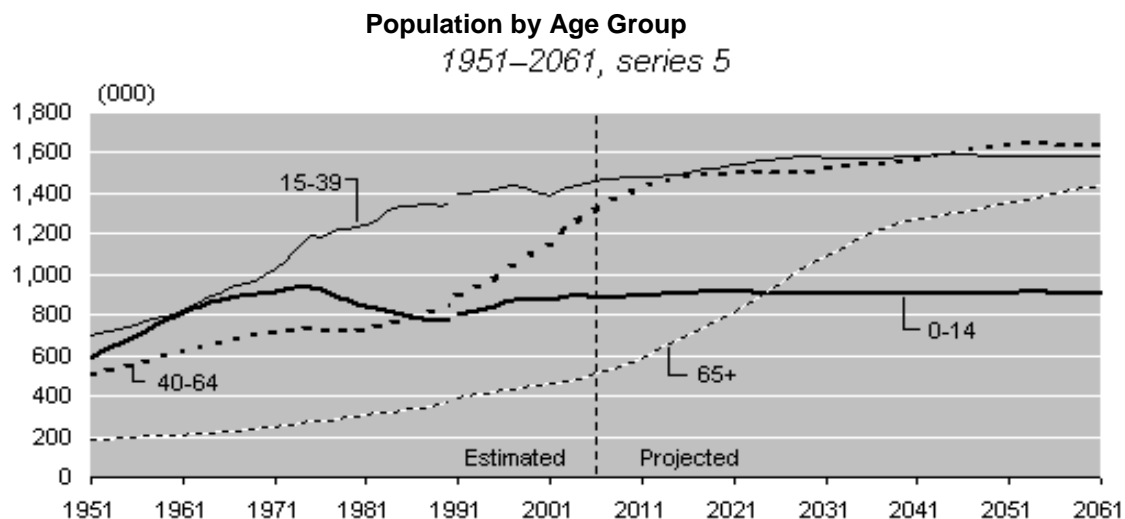
Peggy Koopman-Boyden and Charles Waldegrave

As individuals we are all ageing. Today we are older than yesterday, tomorrow we will have aged yet another day. For centuries, writers, philosophers and medics have lamented and researched ways of slowing the ageing process. As yet there is no cure-all for the individual ageing process. Besides, one could ponder whether it is better to age over one's life time, anticipating that each life stage will bring different challenges, or remain age-less and live in a state of suspension, or no-man's land, as Jonathan Swift's Gulliver discovered was the case for the unfortunate immortal people, the 'struldbrugs'.

While individual ageing has always been a human characteristic, the phenomenon of societal ageing is a more recent one in modern post-industrial states. Until the 19th century, most societies had a relatively steady balance between births and deaths, so that there was a predominance of youth and younger people, rather than middle aged and older people. The 20th and 21st centuries have however brought the new phenomenon of 'ageing societies', where the number of middle-aged and older people is rising, and the median age of the population is climbing. By 2005 the median age of the population in the United Kingdom, France and Canada had climbed to 39, and in countries like Germany and Japan it was higher at 42 and 43 years respectively (United Nations Population Division, 2007). In Australia, it is lower at 37 years. In New Zealand, the median age of the population at the 2006 Census was 35.9 years, compared with 33.0 years in 1996 (Statistics New Zealand, 2006).

Ageing is a critical driver in the demographic changes taking place in New Zealand over the next decades. From 2011, the post-war baby boomers begin to move into the 65+ age group in large numbers. Projections from Statistics New Zealand (middle series) indicate that 100,000 people aged 65+ will be added every 5 years from 2011 to 2036.

Figure 1.1
Population by Age Group



Source: National Population Projections: 2006 (base) – 2061, Statistics New Zealand (2007a)

The largest increase is expected to take place in the decade 2021 to 2031 when an extra 276,000 people are projected to move into this older age group (Statistics New Zealand 2005, 2007a). Such demographic changes are illustrated in Figure 1.1 where the sharp increase in the 40-64 year-olds and the 65+ year-olds contrasts with the modest downturn in the younger age groups (0-14 years and 15-

39 years). The median age of New Zealanders will also rise from 36 years to 46 years in 2051, and the percentage of those aged 65+ increase from 12 percent to 26 percent in 2051.

The projected demographic shift is not simply due to post-war fertility rates. It is also affected by people living longer and remaining healthier than in previous decades. Life expectancy at birth in New Zealand for women is 82 years and for men 78 years. This represents an increase of 7 years for men and 5 years for women since the mid 1980s (Ministry of Social Development, 2008).

This fundamental shift in the demographic structure of New Zealand's population provides new challenges. As with the other post-industrial states, the changes impact substantially on, for example, the provision of healthcare, the shape and scope of welfare, the composition of the labour market and the rights and self determination of older people. The combination of these factors is increasingly seen as one of the main issues of the 21st century that will require considerable changes of expectation and careful planning. Thus the demographic shifts that are resulting in a substantially growing elderly population can be viewed alongside climate change as one of the new century's most pressing issues.

The research programme reported herein recognises this, and sets out to document the findings on the inter-relationship between the individual's adjustment to ageing, and the policy background to it. Specifically, the research shows how people's adjustment to ageing and their wellbeing is dependent on a number of variables, and explores the ways in which policy interventions can assist this adjustment by enhancing wellbeing.

To do this, the social context must be understood.

1. Social Context of Ageing in New Zealand

New Zealand is similar to many other Western countries experiencing 'ageing'. Not only are there more older people than ever in the country's history, but also these older people form a higher proportion of the population. The 2006 Census provided an interesting picture of those aged over 65 years. Of this older population, 55 percent were women and 45 percent men, due largely to the lower mortality rates of women, with the age distribution skewed towards the younger 65 to 74 year-olds (54 percent), the 75 to 84 year olds making up 34 percent, and those 85 years and over 12 percent. The Pakeha/European proportion of the population over 65 years declined from 89.1 percent in 1996 to 87.6 percent in 2006, whereas Māori increased from 3.7 percent to 4.7 percent over the same period. Likewise the Pacific population in this age group grew from 1.3 percent to 2 percent and the Asian population from 1.2 percent to 3.2 percent. A quarter of the older people were born overseas with over half of those (55 percent) coming from the United Kingdom or Ireland, 12 percent from Asia, 10 percent from North-West Europe and 9 percent from the Pacific Islands (Ministry of Social Development, 2007).

Many of these older people are much healthier and more active than their counterparts of previous cohorts. For example, in June 1994 5.9 percent of the older population were employed in paid work, compared with 12.2 percent (58,600) in June 2006. More older men (16.5 percent) were employed than older women (8.7 percent), but most of the current increase in the employment rate of older people is due to older women staying longer in the workforce. The rate of paid employment of women over 65 years has more than doubled since 1986, whereas the increase for older men was only 2 percent over the same period (Statistics New Zealand, 2007c).

Living alone has become an increasing characteristic of New Zealand society, as it is in other Western societies. With increased divorce levels, along with a wider diversity of lifestyles and greater mobility, single person households are a common phenomenon in the total population, and increasingly common among older people. In 2006, of the 65+ age group who lived in private dwellings, 56 per cent lived with a spouse or partner and 31 percent lived alone (Statistics New

Zealand, 2007b). The number of women living without a spouse or partner is increasing much more rapidly than for men as they grew older. This is largely attributable to the greater longevity of women who are therefore more likely to outlive their partners and become widows.

Many older people in New Zealand, with their greater numbers and wider diversity of interests and work force participation, are increasingly challenging many of the traditional stereotypes of 'the elderly'. In the first instance, they often do not want to be seen as 'the elderly'. Their interest in preventive health with its strategies of positive ageing and anti-ageing is clearly challenging leisure and recreational activities, the cosmetic industry, accommodation, and the retail industry in general, as to how they should be catering for older people.

There is however a danger that again this new cohort of active older people will become the new stereotype for older people. Instead their diversity ranges from the stereotypical older person in declining health being frail and dependent with a narrowing circle of friends, to the similarly aged person in excellent health, fiercely independent and enjoying wide social networks and leisure activities.

Many characteristics are culturally bound. Witness the pride and status of being recognised as an 'elder' in many cultures in New Zealand and the deferential status accorded to these older people, whose historical and cultural knowledge is highly valued. The larger numbers of older people from different cultures is another source of diversity in this age-group. Such diversity may exist in other age cohorts, but it is because of the number of years they have lived, that diversity of lifestyle tends to become even more apparent among older people.

2. The Issues around Ageing in New Zealand

The increasing numbers of people living into their older years in New Zealand is the ultimate accolade for medical technology, policies and life styles that have encouraged healthy living among people in their younger years. Young people and the middle aged have been well cared for, enabling many more to progress into old age. However, while society values youth and those who are middle aged (and in the workforce), the issues around ageing are essentially about the value society places on older people and the future sustainability of their lifestyle – their health and income, their participation and their inclusion in society.

The debate about the relative value of the contribution that older people make to society compared with society's ability to meet their needs is on-going. Yet the contribution of older people to society is often under-estimated. They make a substantial contribution through their payment of taxes, their assets, their expenditure in the market place, their voluntary and community work (including childcare) and their cultural continuity. We are also seeing greater involvement of older people in the paid workforce and the stereotypical roles of inactivity and dependence during old age being challenged.

It is possible however that one of the outcomes of the greater number of older people active in the workforce and contributing to society, will be a greater understanding of older people and a lessening of intergenerational misunderstandings, in the same way as the movement of more women into the paid workforce in the 1980s and 90s allowed for policy development which further assisted their participation. Alternatively, as these older people become more politically oriented they may alienate younger generations with their greater numbers and greater political influence.

There are many issues to be debated about the risks and opportunities this changing demography presents. These range from the older person's care, support and social service needs, to the recognition and facilitation of their independence and continued contribution to younger generations. Such debates are often coloured by the higher levels of expectation that today's seniors and their

families have for their self-determination and wellbeing, along with the quality of social services and accommodation. This wider diversity in expectation is affected by widening differences in cultural and financial circumstances.

In this developing context a number of important issues require research, debate and in some cases policy responses. Among them are:

- Older people in employment, their roles and work satisfaction
- Retraining and up-skilling an ageing workforce
- How best to make the transition from work to retirement, or to less work or part-time retirement
- Is paid employment replacing leisure activities among older people, or are they simply more active and doing both?
- How do we ensure that older people have sufficient income to live comfortably?
- How do we ensure that there is adequate housing for older people into the future, given the reducing rates of homeownership?
- The increasing cost of care of older people, given their numbers and increasing age
- Appropriateness of social services (including personal care, home-based care, transport, etc)
- Higher expectations of older people for social services and accommodation, along with wider diversity in expectations. This is affected by widening differences in background, including cultural and financial background
- Social isolation of older people, as their mobility and that of their children's increases
- General community responsiveness to older people, including the role of local authorities
- Recognition of the social and economic contributions older people make
- Respect for the autonomy and self-determination of older people
- Quality versus quantity of life - does longer life mean higher levels of illness?
- Intergenerational differences, including safety issues, abuse and the respect of younger generations
- Intergenerational differences and political influence becoming more obvious as older people become more politically active
- Differing cultural perceptions of the role of older people
- The role of spirituality in the wellbeing of many older people
- Ageing-in-place and policy implications, including for rural areas.

3. Scope and Funding of the Research Programme

This research programme on Enhancing Wellbeing in an Ageing Society (EWAS) has been funded by the New Zealand Foundation for Research Science and Technology (FRST). It began work on 1 February 2004 and has been funded for almost six years - until 30 September 2009. The research programme has been undertaken through a partnership of the Population Studies Centre at the University of Waikato and the Family Centre Social Policy Research Unit in Lower Hutt, Wellington.

The aim of the research is to *“provide the understanding that is essential for policy formulation and the delivery of services for enhancing wellbeing in an ageing New Zealand society”* (FRST contract UOWX0309). The programme's four objectives are to:

1. Effectively expand the current knowledge base of ageing and wellbeing
2. Explore new knowledge of New Zealand's future older population and their expected transitions to older age
3. Explore new knowledge that contributes a deeper understanding of the perspectives and experiences of older people, and their transactions with kin and non-kin

4. Develop knowledge transfer and applications for a range of stakeholders and end-users including service providers and policy makers.

The research programme includes two large scale national random sample surveys of independent and semi-independent New Zealanders¹ between the ages of 65 and 84 years, and between 40 and 64 years. This publication presents the first results of the 65 to 84 year-old survey. The research also involves qualitative methods, including a range of focus groups, in-depth interviews and seven case studies (<http://www.ewas.net.nz>). Stakeholder groups and key end-users have been integrated into the programme, so that their perspectives have been included in the research design of both the survey questionnaire and the qualitative research.

The research findings of the sample survey of New Zealanders aged 65-84 years are reported in this publication. This part of the research was specifically designed to generate new knowledge that:

- (a) contributes to a deeper understanding of how the perceptions and aspirations of the elderly, and their interactions and transactions with culturally diverse communities of kin, friends and neighbours contribute to their wellbeing, and
- (b) aids policy relating to the balance of government, community and familial support for older people (FRST contract UOWX0309).

4. Coverage of the Monograph

The first two chapters provide a general theoretical and methodological background to the research findings, and set the scene for the following chapters, each of which focuses on one of the ten proposed determinants of wellbeing, as set out in the model of wellbeing in Chapter 2.

Chapter 2, Theoretical Background, by Peter King and Charles Waldegrave, describes the theoretical background to the survey that is reported in this monograph and the broad theoretical orientation of the project.

Chapter 3, Methodological Background, by Peggy Koopman-Boyden, sets out the methodology of the 2007 national random sample of 1,680 65-84 year-olds on which the research findings are based.

In Chapters 4 to 13, the research literature and social context of ten key social indicators, is reviewed and the results of the research concerning each indicator and its relationship with objective and subjective factors associated with the wellbeing of older people in New Zealand are presented. For each indicator key relationships are explored that include gender, age, marital status, educational qualifications, etc. Other relationships considered in each of these chapters are briefly described below.

Chapter 4, Health, by Ian Pool, Ben Amey, Michael Cameron and Suzan van der Pas, sets out the relationship between global self-rated health and wellbeing in comparison with previous national surveys, and the relationship of global self-rated health with personal income, adequacy of money to meet everyday needs, and perceptions about personal safety.

Chapter 5, Education, by Peggy Koopman-Boyden and Suzan van der Pas, documents the academic qualifications available to 65-84 year-olds in New Zealand during their schooling years in the 1930s-50s, and the social context during this time period. The schooling and educational qualifications gained by the 65-84 year-olds are then described, along with the relationship of education to wellbeing, place of birth, and technological uptake.

¹ Independent living usually involves living with others or alone, without relying on any outside assistance; semi-independent living usually involves living with others or alone, with some outside assistance.

Chapter 6, Work, Retirement and Wellbeing among Older New Zealanders, by Michael Cameron and Charles Waldegrave, summarises the lifetime work experiences of 65-84 year-olds, and discusses the changing context of work and retirement. It also presents analyses of the associations of work experiences with “satisfaction with work” and with overall wellbeing.

Chapter 7, Income, Assets, Living Standards and Housing among Older New Zealanders, by Charles Waldegrave and Michael Cameron, assesses the levels of income, wealth, living standards, poverty and patterns of housing tenure of older people. It also explores the association of these factors with socio demographic factors, and provides broad research evidence for policy formulation and service provision in these areas.

Chapter 8, Rights and Entitlements, by Peter King, considers older New Zealanders’ expectations concerning support from family, access to adequate health care, financial comfort, residential care and support from the government and government agencies when they need it. Respondents’ expectations are related to a range of demographic variables and also to their subjective wellbeing and their sense of loneliness.

Chapter 9, Leisure and Recreation, by Suzan van der Pas and Peggy Koopman-Boyden, describes the participation in leisure and recreation activities by older people, exploring the association with a number of socio-demographic and personal characteristics. It also examines the association of participation in leisure and recreation activities and ‘satisfaction with leisure and recreation activities’ with overall wellbeing.

Chapter 10, Living Arrangements, by Suzan van der Pas, provides a descriptive overview of the living arrangements of older people, and identifies a number of aspects of the physical environment which may impact on their ability to ‘age in place’. It also examines the association of living arrangements, ‘satisfaction with physical environment’, and overall wellbeing.

Chapter 11, Safety, by Peter King, considers older New Zealanders’ experiences and perceptions of their personal safety in their homes and neighbourhoods. These are related to a range of demographic variables and also to their participation in leisure activities, their subjective wellbeing or general satisfaction with life, and their loneliness.

Chapter 12, Social Connectedness, by Peggy Koopman-Boyden and Suzan van der Pas, assesses the social contacts of older New Zealanders, their level of participation in community organisations, and the relationship with overall wellbeing.

Chapter 13, Culture and Religion, by Charles Waldegrave, explores the associations between older Māori and non-Māori regarding a number of important social indicators as well as cultural activities and expressions. Associations between faith and the religious practice of older people with a range of social indicators, including subjective wellbeing, are also explored.

Chapter 14, Ageing and Wellbeing in New Zealand, by Charles Waldegrave and Peggy Koopman-Boyden, brings together the main findings of the research with respect to the overall wellbeing of the surveyed 65-84 year-olds, and the relationship of age, gender, marital status and the ten domains to their wellbeing (i.e. health, education, work, income, rights, leisure and recreation, living arrangements, safety, social connectedness, culture and religion). The chapter also considers some of the policy implications of these relationships.

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Chapter 2: Theoretical Background

Peter King and Charles Waldegrave

1. Introduction

From its inception, the Enhancing Wellbeing in an Ageing Society research project has been informed by a clear focus upon the social dimensions of ageing and wellbeing. While biological processes do underlie the physical ageing of people's bodies, ageing occurs in a social context, and the biological and social dimensions of human life influence each other. For example, disease, which has clear biological dimensions, impacts negatively upon the social realm in many areas, such as economic activity and schooling. At the same time, characteristics of the social dimension can act to mitigate – or even eliminate – the severity of biologically-based impacts through developments in public health, transport systems and so on. Descriptions and categories of the postulated stages of the life-course – such as 'childhood' or 'teenage' or 'old age' – are social constructs that change over time and vary from culture to culture. This study takes ageing as a social construct alongside its status as a biological given, and consciously focuses firstly on the ways it impacts on older people and their wellbeing, and secondly on the impact of this process on the wider social realm.

This research project has been planned (and funded) to deliver findings capable of informing policies that will enhance the wellbeing of all members of a society which is undergoing structural ageing in a prolonged process that will peak around the year 2050. Acknowledging 'ageing' as a social construct allows the societal and personal issues associated with population ageing to be addressed through social policy. The location of ageing within a wider social context requires the question of wellbeing and its enhancement to be looked at in terms of older people as they age. It also requires consideration of the impact of an ageing society on members of the younger and mid-life generations.

An emphasis on the social dimensions of ageing is also found in many international research projects on ageing. A number of significant and influential long term programmes of research have been established during the last ten to fifteen years in the Northern Hemisphere² which have all, to varying degrees, incorporated multiple dimensions of wellbeing and emphasised the wider socioeconomic matrix within which people develop and age. A detailed review of these studies and a comparison of their similarities and differences with this research is contained in Rowe and Waldegrave (2008). These studies have recognised that the nature of a person's embeddedness within their social matrix, represented by the type, quality and character of their personal and social relationships, are important determinants of their wellbeing in the broadest sense. While none of these studies and research programmes have explicitly identified the same theoretical approach to wellbeing described in this chapter, their broad approaches are not incompatible with it. All have been important sources of inspiration for this project, overall.

For this research, a broad, socially-based approach to understanding societal ageing and the attainment and maintenance of wellbeing is supported by a theoretical framework that locates the bases of wellbeing in the social and economic contexts of people's lives. This framework takes into account people's feelings of satisfaction, their location and functioning in society, and incorporates considerations of social agency and social structure. It also includes the role of policy and service delivery which involve the participation and intervention of the state and other institutions in society.

² Key among these are: Old Age and Autonomy: The Role of service Systems and Intergenerational Solidarity (OASIS); Berlin Ageing Study (BASE); University of Michigan Health and Retirement Study (HRS); Survey of Health, Ageing and Retirement in Europe (SHARE); English Longitudinal Study of Ageing (ELSA); European Study of Adult Well-being (ESAW); Economic and Social Research Council (ESCR) Growing Older Programme; The Longitudinal Ageing Study Amsterdam (LASA) and related study of Living Arrangements and Social Networks of Older Adults (LSN); The Centre for Social Gerontology at Keele University; The Oxford Institute of Ageing (OIA); The Joseph Rowntree Foundation (JRF).

This broad conceptualisation (summarised in Figure 1 at the end of this chapter) is consistent with approaches to wellbeing in the research literature that emphasise its basis in the things that people do and are able to do, rather than simply how they feel about themselves and their lives. Such approaches also recognise that, while wellbeing might be an outcome that is experienced by individual people, it is achieved, experienced and interpreted within particular socio-cultural contexts and by people with different needs and abilities. The increasing diversity of New Zealand requires an approach that is sensitive to the social bases of wellbeing and is capable of capturing differences in these among, at the very least, the four largest broad cultural groupings: Māori, European/Pakeha, Pacific and Asian.³

The underlying view of this study – that wellbeing is inextricably linked to social context – is concisely put by Manderson, (2005a:12): “Wellbeing is not the state of individual bodies but of bodies in society.” And “Wellbeing includes more than physical and mental health: it incorporates a sense of satisfaction, contentment, personal fulfilment and existential calm; much more so than health, it is a social construct. Accordingly, it can be redefined, refined and reinterpreted at any place and time” (Manderson, 2005a:4). The view that wellbeing is inextricably linked to social context results, in part, from a critique of utilitarian and hedonic or desires-based understandings of wellbeing, as will be discussed next.

This chapter will locate the conceptualisation of wellbeing used in this study within the wider literature on wellbeing, with a particular focus on variants of the capabilities approach which is associated primarily with Sen and Nussbaum.⁴ The thrust of this chapter is firstly to explain the study’s orientation in relation to established wellbeing perspectives, and secondly to describe how this has been operationalised in constructing the survey. The latter description will be further developed in Chapter Three, which is concerned with the survey methodology.

2. Wellbeing as a General Concept

The idea of wellbeing is central to this project; but what is wellbeing, and how is this concept operationalised in the study? As with other catchall concepts (such as the concept of social capital), the concept of wellbeing is widely used, but often without being clearly examined and defined. Scholars have responded to this lack of clarity, and there is a considerable critical review literature around the question of the meaning, application and measurement of wellbeing. For example, see: Diener (1999); Diener & Seligman (2004); Gasper (2004); Keys, et al., (2002); Kahneman & Krueger (2006); McGillivray & Noorbaksh (2004); Manderson (2005b); Paim (1995); Qizilbash (1998); Ryan & Deci (2001); Ryff (1989a and b); Sen (1993 and 1999); Sointu (2005); Veenhoven (2004). This chapter will not attempt to duplicate that work, but will draw upon it to inform and clarify the use of the concept of wellbeing in this study, with particular reference to the survey whose results are reported in this monograph. A more extensive and exploratory discussion of these issues is to be found in King (2007).

2.1 Origins and definitions of the concept

The concept of wellbeing is very broad, and is applied to many situations for a variety of purposes (Paim, 1995). The concept is applied to specific domains, such as economic, material, social, and psychological wellbeing, to all the domains impacting upon people. This diversity results from the different reasons there are for using the concept and different approaches to measuring it. The particular measure or measures used in any given context reflect the purpose of the measurement and the disciplinary and theoretical perspectives that inform the measurement.

³ In this regard, the project is informed by work dealing with conceptual issues associated with the wellbeing of Maori people (Kukutai, 2006; Love & Praat, 2004).

⁴ A more detailed discussion is to be found in King (2007).

Veenhoven suggests that, very broadly, the term ‘wellbeing’ “denotes that something is in a good state.” Beyond that, the term does not, in itself, specify *what* is in a good state, nor the criteria for being in a good state (Veenhoven, 2004). As with other ‘catchall’ terms, such as ‘progress’ and ‘welfare’ Veenhoven suggests that the term ‘wellbeing’ needs to be clarified by specifying what the term applies to and what constitutes it (a state of wellbeing).

As far as the first question is concerned (what is wellbeing), the approaches to wellbeing that are discussed in this chapter apply the term to the wellbeing of people, whether through the satisfaction of their preferences or the exercise of their capabilities.⁵ The second question, concerning what it is that constitutes wellbeing, is more contentious. The answers usually fall into two categories that align with one or other of two contrasting approaches: the hedonic and eudaimonic approaches. The hedonic approach focuses upon people’s revealed subjective experience of pleasure or satisfaction, while the eudaimonic approach ranges more broadly to consider either people’s resources, such as income and wealth, or the things that people are able to do with the social, economic and material resources available to them.

Thus the hedonic approach associates wellbeing with subjective happiness and the experience of pleasure (Ryan & Deci, 2001), while the eudaimonic perspective differentiates wellbeing from the satisfaction of desire. It stems from Aristotle’s view that hedonic happiness was a vulgar ideal and that the source of true happiness was to be found in the expression of virtue through doing what is worth doing (Ryan & Deci, 2001). The hedonic view underlies the utilitarian approach to wellbeing in economics and the subjective wellbeing approach in psychology. The eudaimonic approach underlies the capabilities approaches to wellbeing in economics and the psychological wellbeing approaches in psychology.⁶

3. Utilitarianism and Subjective Wellbeing

Utilitarianism, in its classical, Benthamite, form, is based upon the idea that a person’s ‘utility’ is a measure of the happiness or pleasure that they experience through the satisfaction of their preferences, and is the basis of their welfare and/or wellbeing (Sen 1999, Nussbaum 2005). Bentham argued that the purpose of politics should be to bring the greatest happiness to the greatest number of people (Bentham, 1789).

Psychologists and economists have endeavoured to capture this notion of happiness and develop ways to measure it. From the 1950s, a number of psychologists began to shift their professional interest from negative emotional states like depression and anxiety to positive emotions like happiness and wellbeing. Roger’s client centred approach to therapy (1951), Maslow’s notion of self-actualisation (1954, 1962), Jahoda’s concepts of positive mental health (1958) and Erikson’s stages of child development (1963) all illustrate the movement. With this change of orientation, the modern discipline of positive psychology emerged, with its emphasis on positive emotions, positive character traits and positive institutions (Peterson & Park 2003, Seligman et al., 2005). It has sought to bring a balance to the study of pathology in mental health and to create individual and social measures of subjective wellbeing.

Subjective wellbeing includes people’s emotional responses, domain satisfactions and global judgements of life satisfaction (Diener et al., 1999). Psychological research into subjective wellbeing investigates the balance between positive and negative mood (or affect), and an evaluation of life satisfaction as a whole (Keyes et al., 2002; Ryan & Deci 2001). Subjective wellbeing can therefore

⁵ Other work on wellbeing that is being carried out in New Zealand refers to “social wellbeing” (Ministry of Social Development, 2005) but ultimately retains the individual as its object by considering the social determinants of individual wellbeing (Smith, 2004).

⁶ Within psychology, the terms “subjective wellbeing” and “psychological wellbeing” are used to distinguish the two distinct approaches. See Keyes, et al., 2002 for a detailed discussion of these approaches within psychology.

be said to exist when a subject experiences life satisfaction, the presence of a positive mood and the absence of a negative mood (Ryan & Deci 2001). With its emphasis on positive mood, subjective wellbeing has been linked to the hedonic view of wellbeing, and research within the field of hedonic psychology often uses assessments of subjective wellbeing (Ryan & Deci, 2001).

Measures of subjective wellbeing are obtained through self-reports, as people are asked to evaluate their lives as a whole. It is argued that subjective responses, which document people's evaluations and feelings about their lives, constitute an expression of wellbeing. Subjective wellbeing includes people's emotional responses, domain satisfactions and global judgements of life satisfaction (Diener et al., 1999). These provide an important addition to economic measures of well being, because economic growth does not necessarily lead to life satisfaction (Diener & Seligman, 2004).

“As societies grow wealthy, however, differences in well-being are less frequently due to income, and are more frequently due to factors such as social relationships and enjoyment at work” (Diener & Seligman, 2004:1).

The most commonly used question exploring subjective wellbeing is that applied in the World Values Survey:

All things considered, how satisfied are you with your life as a whole these days?

Typically a ten point scale is used for responses. The Satisfaction with Life Scale (SWLS) (Diener et al. 1985), which has five simple questions concerning participants' life satisfaction, each with a five point scale, is also very commonly applied.

However, subjective evaluation has the disadvantage that people's reports of their overall life satisfaction tend to cluster around 70 on a 100 point scale. Declines in satisfaction following a crisis recover in time to the “normal” level (Clark & Gough, 2005:47) (see also Ranzijn & Luszcz, 1999). This is a positive bias that Cummins (2005) argues is necessary for normal functioning. The existence of this positive bias suggests that a hedonic approach should be supplemented by a broader based eudaimonic consideration of social and behavioural factors in order for desires and preferences to be understood in relation to their social context.⁷ On the other hand, as Veenhoven (2004:22-23) argues, subjective measures provide valuable summary evaluations that are useful for social policy purposes, and the biases that might be associated with ‘mood of the moment’, ‘interviewer characteristics’, and positive bias, tend to balance out at the national level.

Many economists use subjective wellbeing data in their analysis of consumer preferences and social welfare. Between 2001 and 2005, more than a hundred economic papers were written analysing subjective wellbeing data (Kahneman & Krueger, 2006: 3). The well known British economist Lord Richard Layard has pointed to the convergence in thinking of some social economists with psychologists who have embraced the science of positive psychology.

“GDP is a hopeless measure of welfare. For since the War that measure has shot up by leaps and bounds, while the happiness of the population has stagnated. To understand how the economy actually affects our well-being, we have to use psychology as well as economics” (Layard, 2003:3).

Many economists, who in the past have cast a skeptical eye over notions of subjective wellbeing, today tend to be more affirming of the place for subjective measures. These measures provide valid and meaningful information, and are useful complements to traditional social analysis (Kahneman &

⁷ In this regard, Westerhof et al. (2001) found that subjective measures based on global evaluations of life concerning life satisfaction, achievements and progress, for example, tend to produce positive evaluations. On the other hand, measures focusing on specific areas or domains, such as health and illness, intrapersonal and interpersonal relationships, employment, socioeconomic conditions, etc. are more likely to produce negative evaluations.

Krueger, 2006). A broad range of factors have been found to correlate with, or be a causal factor in, subjective wellbeing, and the data can be usefully applied in policy making and analysis (van Hoorn, 2007).

Proponents of the subjective wellbeing approach make the valid point that the eudaimonic approach leaves the definition of wellbeing to experts, because it is they who decide on the factors that are supposed to be good for people, whereas the subjective approach allows researchers to learn this from the people (Diener et al., 1998, cited in Ryan & Deci, 2001).

While slightly disingenuous (the subjective approach itself was formulated by experts), this view does have merit, and the need for “stakeholder” contributions to developing and prioritising wellbeing indicators is advanced by some in the field (see, for example, Clark & Gough, 2005). This has, in fact, been a central feature of this project: an extensive process of stakeholder consultation was undertaken to inform the development of survey questionnaires (see Chapter 3 Methodological Background). Additionally, hedonic and eudaimonic approaches have been combined in this study, with the combination of subjective wellbeing questions from the World Values Study with a wide range of objective indicators.

4. Psychological Wellbeing and the Capabilities Approach

Both the psychological wellbeing and capabilities approaches are responses to the subjective focus of subjective wellbeing in psychology and the utilitarian approach in economics. Both share eudaimonic roots, which have led them to develop broader informational bases than are employed (or required) by exclusively hedonic approaches.

4.1 Psychological Wellbeing

Psychological wellbeing is fundamentally determined by the robustness of a person’s engagement with the “existential challenges of life” (Keyes et al., 2002). Ryff has examined the question of psychological wellbeing using a eudaimonic, rather than hedonic, perspective (Ryff, 1989b). Using a lifespan theory of human flourishing (Ryan & Deci, 2001), Ryff developed a multidimensional measure of psychological wellbeing which covered six dimensions: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Ryff, 1989b). These dimensions overlap the ten capabilities⁸ proposed by Nussbaum (2005) in her development of Sen’s capabilities approach.

The eudaimonic perspective differentiates wellbeing from the satisfaction of desire, arguing that subjective happiness is not necessarily synonymous with wellbeing, because the pleasure-producing outcomes that cause subjective happiness do not necessarily promote wellness and wellbeing. This perspective stems, as noted above, from Aristotle’s view that the source of true happiness was to be found in the expression of virtue through doing what is worth doing (Ryan & Deci, 2001). It is also related to the “Aristotelian idea that what makes certain goods central to well-being is the role they play in the developmental pattern of human life lived under favourable circumstances” (Kraut, 2003).

4.2 Capabilities

The essence of Sen’s critique of both desires-based and income/consumption-based approaches to wellbeing is that neither engages the essence of wellbeing (Martins, 2006). For example, in the case of income/consumption-based approaches, which consider access to goods, commodities and the distribution of resources, the focus is upon the means to wellbeing rather than “actual living that people manage to achieve” with the means available to them (Sen, 1999:73). Similarly, in the case of desires-based approaches, utility, as reflected in the satisfaction of desires and preferences, is a malleable “mental metric of pleasure” that masks the ability of people to adjust their satisfaction to changing conditions (Sen, 1999:62-63; and Martins, 2006). In addition, Sen is critical of the

⁸ These are listed and discussed later in this paper.

utilitarian emphasis on the aggregation of preferences, and the masking of “inequalities in the distribution of happiness” (Sen, 1999:62). Finally, Sen is critical of the way the utilitarian approach detaches happiness from rights and freedoms in a way that would allow for “happy slaves or delirious vassals” to fulfil the requirements of hedonic wellbeing (Sen, 1999:62).

Sen’s solution for bridging the gap between the incomes and commodities that provide the basis of wellbeing on the one hand, and the achievement of wellbeing on the other, is to identify the factors that lead to “variations between our real incomes and the advantages – the well-being and freedom – we get out of them” (Sen, 1999:70). He identifies “at least five” sources of variation in the quality of life that can be derived from a given income, leaving open the possibility of others. These sources of variation are objective conditions that can affect the freedom people have to actively achieve the wellbeing and quality of life they desire. The five sources of variation identified by Sen are as follows:

1. *Personal heterogeneities*, differences in personal attributes, such as disability, that affect the use a person is able to make of their income;
2. *Environmental diversities*, variations in physical environmental conditions that result in different needs in areas such as clothing and heating, and exposure to disease;
3. *Variations in social climate*, differences in social conditions that affect a person’s ability to convert income into quality of life, such as public education, the prevalence of crime and violence, public health, and so on;
4. *Differences in relational perspectives*, related to social climate - a given income might be adequate to meet socially determined requirements in one place where, for example, a television is not considered essential, but not in another where a television is essential for normal social functioning,
5. *Distributions within the family*, where the wellbeing of the members of a family is related to the pattern of intra-family income distribution. (see Sen, 1999:70-71). These complexities highlight the informational deficits (Sen, 1999:56) of the utilitarian and consumption based approaches, which fail, in Sen’s view, because they do not take into account such sources of variation in well-being (Sen, 1999:70-71).

In articulating the capabilities approach, Sen moves the focus away from the means by which good living is achieved, to “concentrate on the actual living that people manage to achieve”. Access to commodities or primary goods does not itself constitute wellbeing, but is a means by which a person achieves wellbeing. A person’s ability to convert primary goods into the ability to achieve chosen ends will vary according to their personal characteristics or capabilities. For example, a person with a physical disability that limits their mobility would need to convert more of a given commodity or primary good in order to achieve a mobility related goal than would be the case for a person lacking that disability (Sen, 1999:73-75), such as using more income for a modified car or taxi than others would need to use for public transport, for example.

Sen formulates his capabilities framework as an “evaluative space” in which the objects of value are “functionings” and “capabilities” that represent the range of human acts that can combine to facilitate the achievement of wellbeing⁹. Functionings are “the various things [a person] manages to do or be in leading a life”. These range from the most elementary functions, such as providing for basic physical needs, to such complex functions, such as achieving social integration and self-respect. A person’s capability is a measure of their capacity to combine their functionings to achieve their goals and

⁹ As Sen (1993:32) explains, an evaluative space for a different approach to wellbeing would contain different objects of value. For example the evaluative space for a utilitarian analysis of wellbeing would consist of “individual utilities (defined in the usual terms of pleasures, happiness or desire fulfillment).”

objectives. Any particular combination of functionings is termed a “capability set” (Sen, 1993:31-39).

Sen has ensured the flexibility of his framework by refusing to specify or endorse a list of capabilities as objectively correct (Clark & Gough, 2005:51).¹⁰ This flexibility is a valuable feature of his work because it allows the framework to be adapted for diverse social and cultural contexts through the specification of appropriate functionings and capabilities. The space created by this flexibility has, of course, been occupied by a range of proposed approaches to the task of specifying the constituents of wellbeing – whether these be expressed as capabilities, functionings, values, or needs. Clearly, the application of a capabilities approach to evaluating wellbeing in any particular society must be accompanied by the specification of relevant functionings and capabilities. The question of whether it is possible to have a universal set of these is the topic of ongoing debate (Clark & Gough, 2005, Clark, 2005).

Qizilbash (2002:464) identifies four intellectual positions about the constituents of wellbeing or quality of life: capability views (Sen & Nussbaum); prudential value theories (Griffin & Qizilbash); basic goods (Finnis)¹¹; and basic needs which has many advocates including Doyal and Gough, who have sought to integrate their approach with Sen’s framework (Doyal & Gough, 1991).

Qizilbash (2002) identifies considerable overlap and agreement among these positions, and suggests that at least some of the difference might be because they focus on different evaluative spaces, such as wellbeing in the case of the capability and prudential value approaches, and needs in the case of the basic goods and basic needs approaches. All share common ground in three respects: 1. a central concern with human beings and the quality of their lives; 2. being universalist in that, while taking cultural and individual differences seriously, they are not considered deep enough to preclude the existence of human interests and concerns that are common to all people; and 3. “component pluralism”, the shared assumption that good lives are based upon a number of components that cannot be reduced to a single component., (2002:46). It is this characteristic that underlies the need for the broad informational base that Sen has identified.

Nussbaum (2005:41) has developed a list of ten central human capabilities that she argues are fundamental, universal entitlements necessary for social justice:

1. Life. Human life of normal length; not dying prematurely.
2. Bodily health. Having good health in broad sense.
3. Bodily integrity. Safety and security.
4. Senses, imagination, and thought. Ability to exercise these human attributes in connection with: experiencing and producing works and events of one's own choice, including using one's mind in ways protected by guarantees of freedom of expression, and being able to have pleasurable experiences and avoid non-beneficial pain.
5. Emotions. Broadly being able to have attachments to things and people outside ourselves.
6. Practical reason. Being able to form a conception of the good and to engage in critical reflection about the planning of one's life.
7. Affiliation. Engaging in human and social interaction and relationships. Having the social bases of self-respect, non-humiliation and non-discrimination.
8. Other species. Being able to live with concern for and in relation to animals, plants, and the world of nature.
9. Play. Being able to laugh, to play, to enjoy recreational activities.

¹⁰ Martins (2006) has defended Sen’s refusal to be more prescriptive on the basis that his work is an example of philosophical under-labouring conducted to clarify socio-economic categories and concepts. Describing Sen’s capabilities as causal powers, Martins links Sen’s approach to critical realism due to its emphasis upon the factors underlying the phenomenon of wellbeing, rather than focusing upon the phenomenon itself without reference to underlying mechanisms, as a utilitarian approach might, for example.

¹¹ The contributions of Griffin and Finnis are not further detailed in this chapter, but are discussed in King (2007).

10. Control over one's environment (political and material). Right of political participation, protections of free speech and association. Ability to hold property rights on an equal basis with others. Right to seek employment. Freedom from unwarranted search and seizure.

The content of Nussbaum's list is shaped by her concern to apply an Aristotelian view of the good¹² to the consideration of feminism and development (Qizilbash, 2002:469). To pursue this concern, Nussbaum needs to be able to criticise moral norms that are counter to wellbeing, such as female circumcision. To do so Nussbaum must ensure that her list of fundamental universal entitlements includes items that are denied by particular moral norms. So, for example, the specification of "bodily integrity" provides a moral basis for criticising the practise of female circumcision (Qizilbash, 2002:470-471).¹³

Doyal and Gough (1991) articulate a theory of human need based on the view that human wellbeing is ultimately associated with achieving universal goals such as the avoidance of serious harm, and critical participation in a chosen form of life. They apply the term "needs" in a manner that is consistent with Sen's idea of "capabilities" and differentiate their use of the term from any commodity-based prerequisite for wellbeing, or a "full life" (Gough, 2003:8). The achievement of universal goals is dependent upon the satisfaction of a hierarchy of universal goals, basic needs, and intermediate needs. In this hierarchy, basic needs are higher than, and dependent on, the satisfaction of intermediate needs. Positive societal conditions (similar to the "sources of variation" proposed by Sen) are necessary for the intermediate needs to be satisfied. For example, physical health is a basic need that is one prerequisite for achieving the higher universal goal of avoiding serious harm. The achievement of physical health is, in turn, dependent upon a number of lower intermediate needs being met, such as adequate nutrition, housing, health care, security, etc. (Doyal & Gough, 1991: 52-59 and Gough, 2003:9). The satisfaction of the intermediate needs is, in turn, dependent upon the existence of appropriate wider societal conditions that form the lowest level of the hierarchy.

A 'needs satisfaction' Quality of Life scale known as CASP-19 has been developed to measure wellbeing as older people live longer and healthier lives (Hyde et al., 2003, Netuveli et al., 2006, Blane et al., 2007). It draws on Maslow's notion of higher needs such as self-actualisation, happiness and esteem (Maslow, 1968) to develop four domains: control, autonomy, self-realisation and pleasure (hence CASP). Control refers to the ability to actively intervene in one's environment. Autonomy is defined as being free from the unwanted interference of others. Self-realisation and pleasure capture the domains more likely to be associated with measures of subjective wellbeing like life satisfaction and happiness.

Following Doyal and Gough, the four domains are treated equally and inseparably, rather than hierarchically. CASP-19, which has 19 questions (each with a four point scale) which address both hedonic and eudaimonic aspects. Its domains of control and autonomy are congruent with Sen's capabilities approach. These domains also underlie notions of agency, choice and self-determination that have been at the forefront of discussions within the research team as the research programme has progressed.

The preceding discussion of functionings, capabilities and needs was concerned with what Qizilbash (2002) has termed "value types". These 'refer to values that make for a good life' (Qizilbash, 2002:472), and are sufficiently abstract to embrace individual variation in how they are achieved. For example, a particular value type, such as accomplishment, or enjoyment, is realised through what Qizilbash refers to as a "value token". In the realisation of enjoyment a value token for one person might be the company of others, while for another person it might be solitude. What leads to

¹² See earlier reference to Aristotelian basis of the eudaimonic view.

¹³ The degree of specification in Nussbaum's list and the fact that it is designed to facilitate criticism of moral norms (and the cultural values underlying them) opens Nussbaum to criticism from cultural relativist perspectives. Nonetheless, Nussbaum has attempted to allow for cultural variation by making her list of capabilities open-ended, and at the level of capabilities, rather than functionings, so that "societies can define them more concretely in different ways, and change their definition" (Nussbaum, 2005:42, and see also Qizilbash, 2002:471).

enjoyment for one person might lead to misery for another, but, given the appropriate value token, each person achieves enjoyment. Value types are broadly defined so that they can form a flexible framework that can be applied in diverse settings by the insertion of appropriate value tokens.

The identification of appropriate value tokens is best informed by the views, perceptions and values of the particular people whose wellbeing is being investigated. There is also an argument that the a priori value types should be tested in the same way because, on their own, they are open to criticism for being paternalistic and overlooking historical and cultural differences (Clark, 2005 and Deneulin, 2002), despite the care taken to render them “universal”.

An example of this sort of empirical grounding is provided by Clark (2005 and 2002, cited in Clark & Gough, 2005) who developed and applied a survey based approach to investigate perceptions of wellbeing among the poor in Southern Africa. This was done to build on and evaluate the capability categories of Nussbaum and Sen (Clark & Gough, 2005), and to address the problem of adaptive preferences.¹⁴ The normative ranking of the top thirty aspects of a good life for the survey participants are as follows:

1	Jobs	16	Support of family
2	Housing	17	Relaxation
3	Education	18	Good area to live/live elsewhere
4	Adequate/regular income	19	Nice/good clothes
5	A good family	20	Security/safety
6	Living a religious/Christian life	21	Having/caring for children
7	Good health	22	Respect (especially for others)
8	Enough food	23	Sport(s)
9	Happiness/joy	24	To get married
10	Love (each other)	25	Independence (financial)
11	Good friends	26	Peace (household/community)
12	Education for children	27	Recreation
13	Motor car	28	Communication (between people)
14	Owning a business	29	Acquiring skills/qualifications
15	Understanding (between people)	30	Furniture.

Source: Clark & Gough (2005:60)

In an illustration of both the desirability of engaging stakeholders and the overall robustness of the theory-based frameworks advanced by Sen and Nussbaum, Clark found that the vision of wellbeing that was shared by the poor Southern African participants in the survey was “... not fundamentally at odds with most of the capabilities advocated by scholars like Nussbaum and Sen...”. Over 94 percent of the survey participants ratified most of the capabilities advanced by Nussbaum and Sen (Clark & Gough, 2005:62).

The importance of identifying lay views about wellbeing is further illustrated by Sointu (2005) and Westerhof et al. (2001). Sointu, for example, has identified changes in the discourse of wellbeing over the last two decades in Britain that she associates with changes from “subjects as citizens” to “subjects as consumers”. As a result, discourses of wellbeing, as reflected in two national UK newspapers, have paid increasing attention to lifestyle-related areas of wellbeing that are actively sought by individual agents. During the 18 years of newspaper coverage in her study, the proportion of discussion devoted to national and economic aspects of wellbeing fell markedly as discussion increasingly focused on areas of wellbeing specifically associated with women, health, and children, for example (Sointu, 2005).

In addition to changing over time, lay conceptions of wellbeing vary with age. In their review of the literature on age-related differences in lay conceptions of wellbeing and in their own empirical study

¹⁴ The matching of preferences to what is actually available.

Westerhof, et al. (2001) found that global judgements of life satisfaction were more likely to be positive than judgements based on specific areas of life, such one's health or job. Age related differences were associated with the tendency for older people to make general judgements and global evaluations to a greater extent than younger people, who more often referred to specific evaluations. Overall, they found that older people were "equally or even more satisfied with their life than younger persons" (Westerhof et al., 2001). The researchers attributed these similar outcomes across the ages to the tendency of people to move from specific judgements to general judgements as they grew older. As a result, the increasing causes of dissatisfaction associated with ageing were compensated for by older people's increasing use of general criteria that are more likely to produce positive judgements.

In summary, the literature on wellbeing discussed here has focussed on:

- The debate about whether the basis of the wellbeing of people is the satisfaction of their preferences, the exercise of their capabilities, or a combination of both.
- Two contrasting approaches are the hedonic approach and the eudaimonic approach.
- The hedonic approach focuses on the subjective experiences of pleasure or satisfaction, the presence of a positive mood and the absence of a negative mood. Such an approach includes people's own emotional responses, domain satisfactions and global judgements of life satisfaction, these being measured through self-reports. It arises from the idea that a person's utility is a measure of their happiness or pleasure and is the basis of their welfare and/or wellbeing (utilitarianism). A broad range of factors have been found to correlate with, or be a causal factor in, subjective wellbeing and the data can be usefully applied in policy making and analysis.
- The eudaimonic approach differentiates wellbeing from the satisfaction of desires and focuses on the quality of people's lives. It distinguishes between subjectively felt needs and objectively valid needs, and is related to the Aristotelian idea that certain goods are central to wellbeing because of their contribution to human development. This approach underlies both the psychological and the capabilities approaches to wellbeing.
- Sen's critique of both the desires-based (hedonic) approach and the income/consumption based approach moves the focus away from the means by which good living is achieved to concentrate on the actual living that people manage to achieve. The ability to convert opportunities into chosen ends will vary according to personal capabilities. Thus Sen's capabilities approach to wellbeing suggests that there are "functionings" and "capabilities" which combine to facilitate the achievement of wellbeing.
- The application of the capabilities approach must include the specification of relevant functionings and capabilities. There is debate about whether this can ever be a universal list or can only be specific to a location or group of people.
- The identification of such a list is best informed by the views, perceptions and values of the particular people whose wellbeing is being investigated.

5. Development of the EWAS Conceptual Model and the Survey Instruments

This research considered both the subjective and capability theoretical approaches to wellbeing as being important and developed a framework to assess both. The following ten domains of wellbeing adopted by the New Zealand Ministry of Social Development (2005) in its social wellbeing research provided a useful domain structure for this study:

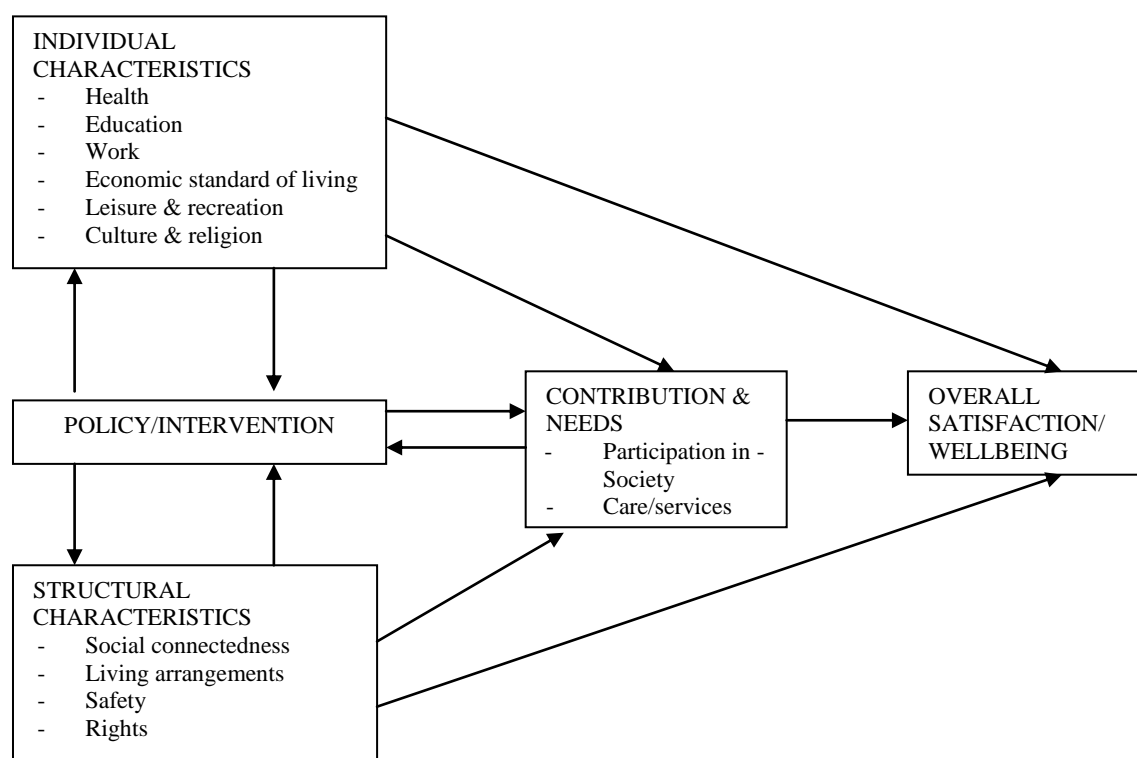
- | | |
|-------------------------------|--------------------------|
| • Health | • Leisure and Recreation |
| • Knowledge and Skills | • Living Arrangements |
| • Paid Work | • Safety |
| • Economic Standard of Living | • Social Connectedness |
| • Civil and Political Rights | • Culture and Religion. |

The ten domains are a further example of stakeholder engagement in the research process as all were identified through public consultation, nine through the work of the Royal Commission on Social Policy (1988), and the tenth (leisure and recreation) through a separate public consultation process (Smith, 2004).¹⁵ Taken together, these domains provide a coverage that is consistent with the areas of capabilities, needs, prudential values and basic goods, and satisfaction with life, that have been discussed in this chapter. In keeping with this study's focus on the capabilities of people that underlie the achievement of wellbeing alongside their subjective feelings of satisfaction, measures of wellbeing include the societal conditions, like housing tenure, income levels and work for example, within which needs are met. These conditions are the source of variations affecting people's exercise of their capabilities in their pursuit of wellbeing.

Figure 2.1 summarises the broad conceptualisation of this study and the relationships between domains of wellbeing, whether measured as structural or individual characteristics, and the achievement of wellbeing through human agency and policy intervention.

Figure 2.1

Conceptual Model of Enhancing Wellbeing in an Ageing Society



The questionnaire for the survey was developed with reference to questionnaires of wider studies of wellbeing and other studies of ageing. The theoretical background here discussed, was reflected in the identification and selection of the domains of wellbeing (or capability areas) and informed by consultation with stakeholders (see Waldegrave, 2006). A more detailed account of the development of the questionnaire content and the stakeholder consultation is provided in Chapter Three.

The areas of focus referred to most consistently during the stakeholder consultations on wellbeing aligned well with areas listed by Nussbaum, Clark and Gough, and other writers, these being: access to services activities and support; health; culture; and family. The emphases in these and other areas

¹⁵ The Ministry of Social Development's approach to social wellbeing recognises the likelihood that wellbeing criteria for Maori and Pacific people might differ in some respects from those for the general population (and from each other), but focuses upon "meta-cultural outcomes such as the ability to practice and pass on cultural traditions between generations" (Smith 2004).

were on living better and living well, indicating a positive orientation towards wellbeing. Stakeholders recommended that information be sought on services, activities and support in order to enhance the quality and safety of neighbourhoods and ensure that older people could feel valued and safe, i.e. that their capabilities could be seen as a contribution. The issues raised around health were not focussed on frailty and sickness but rather on mobility, sight and hearing that would enable ongoing independence and participation in families and communities. Participation in one's culture and family was also addressed primarily around issues of wellbeing, fulfilment and inclusion. In short, stakeholders associated the ability to live well and age positively with the possession of capabilities, with social agency, and the ability of older people to participate in and contribute to everyday life in their homes, families and communities.

6. Conclusion

This chapter has detailed the conceptualisation and operationalisation of wellbeing underlying the EWAS research. The concept of wellbeing has been located within the wider literature on wellbeing covering both hedonic and eudaimonic perspectives, and has argued for the value of a eudaimonic perspective based on the capabilities approach as articulated in particular by Amartya Sen and Martha Nussbaum alongside a subjective perspective based on people's overall satisfaction with their lives.

The review has resulted in a theory driven approach to the questionnaire construction, in which the selection of the domains of wellbeing was justified by theoretically informed assumptions about the capabilities, functionings and needs that contribute to wellbeing, supported by the research literature and consultation with stakeholders. The analyses that follow deal with the ten postulated dimensions of wellbeing, chapter by chapter.

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Chapter 3: Methodological Background

Peggy Koopman-Boyden

In this chapter the procedures for carrying out the 65-84 year old survey and the sample characteristics are presented. In the first section a description is given of the sample and data collection, followed by sections on the response rate, characteristics of the sample, the research instrument, stakeholder consultation, scales and indices, piloting the questionnaire, storage and confidentiality of the information and finally data cleaning and variable construction (including data weighting). Full details on some of the scales and indices are included in Appendix Two.

1. Sample and Data Collection

Under Objectives 2 and 3, the research programme (Contract 8938-SPCL-UOW 2003) funded by the Foundation for Research, Science and Technology was contracted to design two nation-wide surveys of non-institutionalised respondents, with the first of these samples aged 65-84 years, and the second aged 40-64 years. For both samples, the following procedures were used.

A random sample of landline telephone numbers over the whole of New Zealand was provided by Yellow Pages Data Solutions (www.yellowpagesgroup.co.nz) from the electronic white pages, and potential respondents were phoned using Computer Assisted Telephone Interviewing (CATI). The CATI survey was undertaken by The University of Waikato's Department of Societies and Cultures. The CATI interviews of the 65-84 year-olds were conducted over the period July to October 2007.¹⁶

Respondents to the initial phone call were screened for age and residency. Those included in the sample were those aged 65-84 years, and living independently or semi-independently.¹⁷ Those of the appropriate age, but living in a rest home or other institution were excluded.

The phone numbers were called by interviewers trained to administer the questionnaire. The numbers were called at three different times during the day: morning (9.30am – 12.20pm), afternoon (2pm – 4.50pm), and evening (6pm - 8.45pm) Monday to Thursday. A series of screening questions filtered out people not in the 65-84 year age-group, and those of that age-group who did not live in privately owned dwellings. Potential respondents were also asked about their time availability, and a different time for the interview was negotiated where necessary. Each randomly generated telephone number was called up to five times to get an initial contact. In order to randomise the person selected to respond within the household, interviewers asked to speak to the person who was in the eligible age-group and who had the most recent birthday. Consent from the respondents was obtained verbally by the interviewer administering the survey, after the purpose of the survey was explained and the assurance of confidentiality had been given. Those who agreed to participate were also advised that they were able to withdraw at any stage during the survey. The survey did not seek any identification information (names, addresses etc) so that the respondents' identity and location would remain anonymous.¹⁸

2. Response Rate

The response rate is probably the best known of all measures associated with survey based research with, perhaps wrongly, the overall credibility of a survey frequently being judged by this measure. In

¹⁶ For a discussion of the details of the CATI and survey methodology see Cochrane, 2008a.

¹⁷ Independent living usually involves living with others or alone, without relying on any outside assistance; semi-independent living usually involves living with others or alone, with some outside assistance.

¹⁸ For a discussion on the process of administering the survey see Cochrane, 2008a.

general terms the response rate is defined as “the number of complete interviews with reporting units divided by the number of eligible reporting units in the sample” (American Association for Public Opinion Research, 2008: 34). However there are a number of ways in which this seemingly simple formulation can be operationalised.¹⁹

The response rate for the 65-84 year-old survey, 2007, is calculated using Equation 3.1 below.

Equation 3.1

$$RR = \frac{R}{(R + RIS + EP * (REF + NC))}$$

Where:

RR = the response rate, and

R = Number of responses

RIS = Refusals known to be aged 65-84 years

EP = Estimated proportion of refusals, whose eligibility is unknown, who would be eligible

REF = Refusals with eligibility unknown

NC = Non-contact.

The inclusion of the term EP allows for the fact that some of those who refused to participate and whose eligibility could not be ascertained would have in fact been eligible to participate in the survey. This is also true for numbers where no contact could be made. In this case, EP is set equal to the proportion in the 2006 Census of Population and Dwellings of the usually resident population aged 15 or over who were aged between 65-84 years at the time of the Census. Some 3,270,342 persons were aged over 15 years, while 458,481 were aged 65-84 years at the time of the 2006 Census. Hence the proportion EP is approximately 14 percent. Table 3.1 shows the respective values for the variables in Equation 3.1.

Inserting the values from Table 3.1 into Equation 3.1 yields a response rate of 36.4 percent.

This response rate is comparable to the response rates for surveys of the general population of New Zealand (see Baruch, in Cochrane, 2008a:8)²⁰. However, the age of sampled persons has been found to correlate with non-response in many studies, and there is overwhelming evidence that older people are more likely to refuse cooperation (Hertzog & Rodgers, 1983). Considering the non-response problems when interviewing a population of older people, the results are satisfactory (Cochrane, 2008a).

¹⁹ For a fuller discussion of the ways of calculating the response rate, and details on the phone numbers and phone calls made, see Cochrane, 2008a:7-9.

²⁰ Baruch (1990:434) proposes that response rates within 1 standard deviation of the average response rate for the behavioural sciences be considered adequate, with those outside this range requiring additional explanation as to why such a deviation has occurred. In operational terms, this means that a response rate of 60 percent +/- 20 percent be considered normal for most populations and purposes. Taking the minimum response rate of 36 percent for the survey as a whole, and allowing for the ongoing fall in response rates since 1999, it would seem that the project has achieved a response rate consistent with the normal level attained in the literature” (Cochrane, 2008a:8).

Table 3.1
Values of the Variables in Equation 1

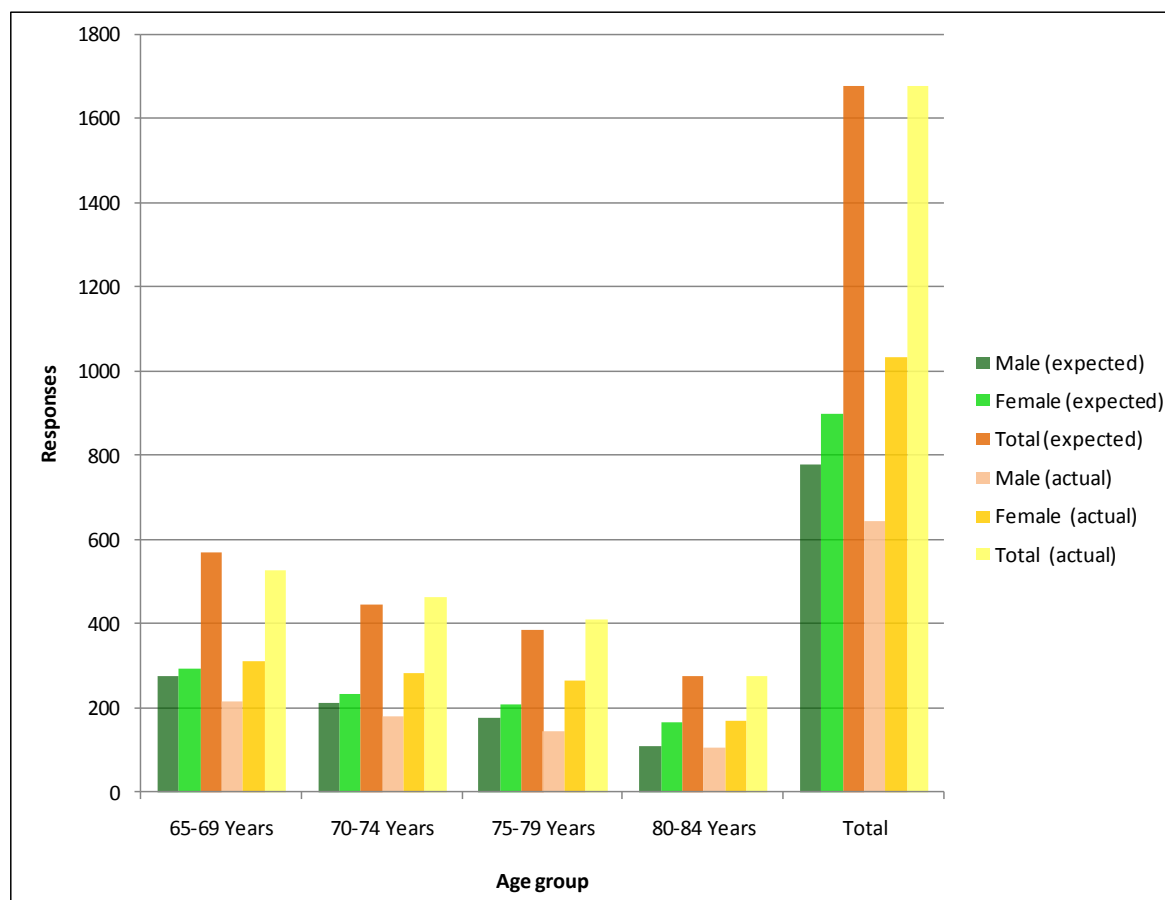
Variable	Description	N
R	Number of responses	1,680
RIS	Scheduled call-back, Terminated early, Refused in sample	1,752
EP	Estimated proportion of refusals, whose eligibility is unknown, who would be eligible	1,402
REF	Refused, Grief, Sickness, Language/Deaf	4,118
NC	Answering machine, Non-working, Busy, No answer	4,302

Source: Cochrane 2008a: 7.

3. Characteristics of the Sample

The expected and actual distribution of respondents by age and gender²¹ is shown in Figure 3.1, with the expected number of respondents being the percentage of persons aged 15 years and over in that age group and gender (derived from the Statistics New Zealand 2007 Estimated Usually Resident Population, multiplied by the total number of survey respondents - 1,680).

Figure 3.1
Expected and Actual Responses by 5 year Age Group and Gender



²¹ The data used in the construction of this figure are available in Appendix 3, Table 2 of Cochrane, 2008a:13.

As can be seen, the number of female respondents is higher, and the number of males lower, than that expected across all age groups and in total. This would suggest a modest reweighting of respondents to reflect the under-representation of males, and is detailed in Section 8.

4. Research Instrument and Consultation

The purpose of the survey was to provide data for the analysis of wellbeing and its causes with reference to the ten domains set out in the Ministry of Social Development's (2006) *Social Report*, as well as for the analysis of life history, cross-sectional and cohort findings. The survey instrument was developed after extensive consultation between the research partners, The University of Waikato and the Family Centre Social Policy Research Unit (FCSPRU) and a considerable number of stakeholders contacted by the FCSPRU.

Several of the questions (such as those in the health module) were drawn from internationally used research instruments. Further questions were developed with reference to scales and indices used in the literature, while others have been tested extensively in surveys administered by research team members on other projects. Many of the questions were discussed with older relatives, friends and colleagues of the research team to check for their utility and acceptability.

4.1 Stakeholder Consultation

A programme of stakeholder consultation was conducted, whereby their comments on the focus of enquiry and research questions fed into the development of the EWAS research instruments, and specifically into the research questionnaire. A wide array of responses were received. The researchers recognise that the survey was constrained by the amount of time older people could be realistically expected to engage in a telephone interview, and have planned focus groups, in-depth interviews and case studies subsequent to the survey to explore the issues in greater depth. Thus "the analysis of the survey results will influence and enrich the question lines of the interview", to be undertaken in the case studies and other qualitative research (Waldegrave, 2006: 22).

A distinguishing feature of the EWAS research programme has been its involvement of stakeholders and end users throughout. The stakeholders include national organisations (e.g. Grey Power, Age Concern New Zealand); cultural organisations and groups (e.g. Māori Women's Welfare League, Te Hoe Nuku Roa Research Group, Ministry of Pacific Island Affairs, Asia Health Support Services); policy and other research organisations (Ministry of Social Development Older People's Policy, Office for Senior Citizens, New Zealand Institute for Research on Ageing); and rural organisations (e.g. Small Farming New Zealand, Rural Women New Zealand, Federated Farmers).²²

The stakeholders received a summary description of the research programmes, and in focus groups, as individuals, or in writing, they were asked three questions:

- Given the scope of this programme of research, what critical areas of focus would provide useful information for your organisation?
- What specific questions in either the survey or the focus group interviews would extract the sort of information your organisation would find useful?
- Please offer any suggestions or advice that you think will enhance this research programme and make it more beneficial to your organisation, other organisations, and the wellbeing of older people in New Zealand.

Full coverage and analysis of the responses from the various groups and individuals is set out in Waldegrave (2006), and a summary of the responses is provided in Table 3.2. The numbers in the table represent the number of stakeholder responses to each issue, where the numeral "1" indicates that only one group in the stakeholder category identified this area, a "2" indicates that more than one

²² See Waldegrave, 2006, for a full list of the stakeholder and organisations consulted.

but not all groups in this category identified this area, and a “3” indicates that every group in the stakeholder category identified this area.

As Table 3.2 shows, the issues referred to most consistently are access to services/activities and support, health, culture and family. The emphasis overall was on living better and living well (Waldegrave, 2006). Stakeholders asked for information on services, activities and support to enhance the quality and value of neighbourhoods, so that older people could feel valued, safe and be seen as contributors. Rather than focusing on a frailty and sickness set of issues, health issues raised were focused on mobility, sight, and hearing that would enable ongoing independence and participation in families and communities. Stakeholders were also interested in focusing primarily on issues of wellbeing, fulfillment and inclusion in participating in their culture and family (Waldegrave, 2006).

Table 3.2
Categorised Stakeholder Responses by Stakeholder Groupings

Categorised Stakeholder Responses by Stakeholder Groupings										
Stakeholders	Issues									
	Access to Services/Activities	Housing	Transport	Education/Employment	Income/Assets	Health	Elder Abuse	Culture	Family	
National NGO's	3	1	2	2	2	2	2	2	2	
Māori Groups	2	2			1	2	2	3	3	
Pacific Island Groups	3	2		3	3	3		3	3	
Asian Groups	3	1	3			3		3	3	
Government and Quasi Government Groups	2	2		2	2	2	2	2	3	
NZ Institute for Research on Ageing ²³	□	□	□	□	□	□	□	□	□	
Rural Groups	2		2	2	1	2			2	
Legend										
3 every group in the stakeholder category identified this area										
2 more than one but not all groups in this category identified this area										
1 only one group in the stakeholder category identified this area.										

Source: Waldegrave C. (2006),21.

5. Scales and Indices

The majority of the questions in the questionnaire for the 65-84 year-olds had been tested extensively in surveys administered by research team members on other projects, while other questions were developed with reference to scales and indices used in the New Zealand Census or in the international literature. These were the Wellbeing Scales (World Value Survey question on Wellbeing and the World Health Organisation Quality of Life indicator), the Health Scale SF-12 and the De Jong Gierveld Loneliness Scale. The Wellbeing and Quality of Life indices are described below, as they are referred to in every chapter of this monograph, and the Health Scale SF-12 and De Jong Gierveld Loneliness Scale are detailed in the chapters in which they appear, and in Appendix Two.

²³ NZ Institute for Research on Ageing is the only group in its category.

5.1 *Wellbeing Scales*

A review of instruments measuring wellbeing revealed that no agreement exists on a number of criteria: the number of questions (single or multi); the level of measurement (general or specific areas of wellbeing); the relative importance of individual domains; the need for both objective and subjective measurement (see Chapter 2: Theoretical Background); or the extent of comparability with other recent indicators of wellbeing (Koopman-Boyden, 2007; Hird, 2003).

On the basis of respondent time availability and international validation, it was decided to measure overall wellbeing, and to choose questions which measured wellbeing at the individual level, with the individual taking into account both their objective and subjective views.

As a way of ensuring that the interview yielded a reliable measure of wellbeing, it was decided to include two measurements of overall wellbeing, each a well used international scale, and each comprising a single question. The two measurements chosen were the wellbeing question from The World Values Survey (WVS), and the World Health Organisation's Quality of Life indicator (WHOQOL), both described below. The WVS question was placed towards the beginning of the questionnaire, and the WHOQOL at the end. Given the length of the questionnaire the possibility of respondent fatigue was a consideration - there were advantages of having the wellbeing question early in the questionnaire in anticipation of respondent dropout during the interview, and there were also advantages of having it after the respondents had been asked questions on specific types of wellbeing (e.g. health, work), so that the concept of wellbeing was outlined for the respondents. The placement of the two measures at different stages of the interview was a means of allowing for both contingencies. The two measurements will be compared and reported in a later monograph.

5.2 *Wellbeing Scale – The World Values Survey (WVS) question on Wellbeing*

The World Values Survey question measuring wellbeing was inserted towards the beginning of the questionnaire. The question was:

“Q 64 All things considered, how satisfied are you with your life as a whole these days?”

The respondents provided a response on a “very satisfied” to “very dissatisfied” continuum, measured on a 5 point scale.

This question forms part of the World Values Survey questionnaire, first used in the 1990-1993 survey of 43 societies (excluding New Zealand), and more latterly in the 1998 and 2005 surveys in 88 countries (including New Zealand). The wellbeing question has been included in each of the surveys (Inglehart, Basanez & Moreno, 1998). In most cases, the data are freely available, and provide a useful time-period comparison with the present study.

The World Values question is similar to that asked as the WHOQOL indicator, but has the added value of comparative analysis.

5.3 *Wellbeing Scale – World Health Organisation Quality of Life indicator (WHOQOL)*

The World Health Organisation Quality of Life indicator, also asked as a single question, was included at the conclusion of the questionnaire, as a way of concluding the interview, and also as a further way of checking the respondent's overall wellbeing. The question was:

“Q 267 Thinking back over the questions I have asked you, can you tell me overall: How would you rate your quality of life?”

Again, the respondents were asked to provide a response on a “very satisfied” to “very dissatisfied” continuum, measured on a 5 point scale.

While these measurements of wellbeing used a single question at the beginning and end of the interview, and specifically measured *overall* wellbeing, a further question was asked about wellbeing

in each of the domains of health, education, work, economic standard of living, entitlements and rights, participation in leisure and recreation activities, physical environment inside and outside the house, personal safety, contact with family, contact with other people, cultural identify and involvement. The question was:

“Q 65 I am going to read you a list of topics to do with your satisfaction with life, or your wellbeing. Could you tell me whether you are satisfied or dissatisfied with each of them?”

Later in the questionnaire within each of ten sections, respondents were asked again about their wellbeing in each domain, using a balance of objective and subjective measures (as advocated in Chapter 2, Theoretical Background,) , and using nationally and internationally comparative scales as much as possible.

Thus, the questionnaire included three levels of wellbeing measurements:

- a single question measuring the general area of wellbeing (asked at the beginning of the questionnaire, and again near the end)
- a single subjective measurement of wellbeing for each of the ten specific domains
- a series of objective and subjective measures in each of the ten specific domains of wellbeing.

6. Piloting the Questionnaire

A pilot survey of the questionnaire was conducted with 200 respondents selected from the telephone sample and interviewed through the CATI system during May and June 2007. This pilot was helpful in assessing the comprehension and format of the questions, as well as the duration of the interview. As a result, several questions were re-worded to improve their clarity and to ask them in a more appropriate style, and the length of the questionnaire was shortened so that it could be completed within 30-40 minutes. This was the time that subsequent participants were told over the telephone that the survey would take to complete. With the pilot survey completed and questionnaire wording finalised, the main survey began in July 2007 and was completed in October 2007 (see Cochrane, 2008a).

7. Storage and Confidentiality of Information

During the survey process, a multilayered backup system was used to minimize the risk of failure of the data storage system. The administrator of the survey manually backed up each day's results on both the administrator's computer and a dedicated server at the University. These backups are encrypted and password protected. On the completion of the survey, the master file for the survey was added to the automated backup system of the University and secured to the same standard as the University's own data.

A copy of the dataset is now stored indefinitely at the Population Studies Centre of the University of Waikato and at the Family Centre Social Policy Research Unit, where the files are locked or password protected and are accessible only to designated research staff and IT systems administration staff. Access to the data will be restricted to researchers associated with the contracted research programme, or under any future contractual agreement. No information that can be used to identify specific respondents was collected during the interview, and the phone number is not recorded with the data relating to that interview.

8. Data Cleaning and Variable Construction

Following data collection, the raw data were cleaned and variables for analysis were constructed from survey responses by a team at the University of Waikato. During data cleaning, the survey responses were extensively cross-checked to identify and where possible re-code clearly inconsistent or invalid responses. Open-ended responses were also typically re-coded into categorical variables.

8.1 Data Weighting

As noted above, the data were collected using a random sample of landline telephone numbers. While this survey method is certainly random, the resulting sample is not necessarily representative of the population of people aged 65-84 years. A simple comparison of the age and gender distribution obtained from the survey and that from the 2007 Estimated Usually Resident Population (EURP) produced by Statistics New Zealand highlights significant differences between the two (see Table 3.3 and Figure 3.1).

Table 3.3

Comparison of the Relative Frequencies from Statistics New Zealand 2007 Estimated Usually Resident Population (EURP) and the 2007 EWAS 65-84 year-olds Survey (%)

Age	EURP			EWAS Survey		
	Male	Female	Total	Male	Female	Total
65-69	17.03	17.96	34.99	12.80	18.57	31.37
70-74	12.56	13.76	26.32	10.71	16.96	27.66
75-79	10.34	12.07	22.41	8.63	15.89	23.52
80-84	6.75	9.53	16.28	6.31	10.12	16.43

Males were under-represented in the realised sample, particularly for the 65-69, 70-74 and 75-79 age groups. Females were over-represented, especially among respondents between the ages of 70 and 79 years, but the differences between the realised sample and the population were smaller than among males. The realised sample was not totally representative of the underlying population, and this was true for both the distribution of age and gender.

To enhance the national representativeness of the realised sample, a decision was therefore made to weight the sample according to age and gender. Each observation was assigned an analytical weight, which was the ratio of the relative frequency of the age/gender of the given observation in the Statistics New Zealand 2007 Estimated Usually Resident Population (EURP) to the relative frequency of the age/gender of the given observation in the 2007 EWAS survey. In this way, observations that were over-represented within the EWAS sample relative to the Estimated Usually Resident Population received less weight, and observations that were under-represented received greater weight in the analysis. This type of weighting procedure is best practice for dealing with disproportionate samples selected using a random procedure, and is described in most statistics or survey methodology texts, such as Rea & Parker (2005: 168-171). Such weighting then allows accurate estimates to be made at the population level.

While such analytical weights can also account for ethnicity, in this case the sample was weighted purely on age and gender, but not ethnicity, for several reasons. First, the ethnicity data from EURP is derived from the Census, and may not be directly comparable to that obtained from the EWAS survey because of definitional differences. The Census had a significant number of people with an ethnicity of “New Zealander” (as well as “European/NZ European”), compared with very few in the EWAS survey. These few survey observations would then receive a very large weighting in order to match with the EURP proportions. Second, in the EWAS survey data, age and gender were complete (that is, had no missing observations), while ethnicity was not. Of the 1680 respondents to the survey, 18 refused to answer, were not asked, or didn’t know their ethnicity. Such missing data would create consequent problems in determining the analytical weights. Thirdly, among the 65-84 year-old age group being surveyed there is relatively little ethnic diversity, i.e. the relatively small numbers of

respondents of Pacific or Asian ethnicity would mean that their results would have to be significantly re-weighted, potentially biasing the resulting analyses. This situation can be expected to change with many different ethnic groups being more numerous in future cohorts of older people.

The sample was predominantly European/NZ European - of those who answered the ethnicity questions, 1,594 were Europeans but only 1,304 were expected in a sample of this size - and is therefore not representative of the ethnic diversity of the New Zealand population aged 65-84 years²⁴.

Application of the weights so derived gives a sample that is representative of the population aged 65-84 years, with respect to age and gender. The results and analyses in Chapter 4 through to Chapter 14 are based on weighted data.

9. Non-Sampling Issues

Before considering non-sampling issues, it is important to note that the current sample is large with respect to analytical cell sizes, compared with most other data on older people from general surveys in which the numbers at old ages are small. Another example of a survey with large analytical cell sizes is the New Zealand Health Survey (Ministry of Health 2008) where the size of the 65-74 year-old sample interviewed in 2006/07 was over 1,300 respondents.

Generally, questions in the EWAS 65-84 year-olds survey were responded to well - there were small numbers of missing values. The exception is certain questions demanding precision, notably personal and household income. These are very difficult questions to ask in surveys and EWAS was certainly no exception. One-third of respondents did not answer questions on personal income, and 38 percent did not answer for household income. In contrast, almost all respondents answered the question on whether or not they felt they had enough money to meet everyday needs, and the distribution of the responses seems reasonable: 42 percent said “not enough/just enough”, 58 percent “enough /more than enough”.

There were some problems with the subjective questions on wellbeing in the different domains, where responses were a simple dichotomy, “satisfied/dissatisfied”. While the level of missing values was much below those for the income questions, almost 20 percent of the respondents did not answer the question about their work situation, perhaps because they felt it was not relevant to retirees, and 10 percent did not respond to whether or not they felt their cultural needs were being met. In the latter case, there are so many nuances that this is probably a question more suited to focus group and other qualitative research methods.

It is clear that respondents had no difficulties providing subjective assessments about their satisfaction/dissatisfaction with components of their everyday environment: fewer than 2 percent failed to respond to the questions on health, their education, economic standard of living, physical environment, personal safety, and contacts with family and in general. More abstract questions relating to rights/entitlements and leisure/recreation, which demanded a degree of conceptualisation and pre-definition before providing a response had higher levels of non-response but they were still low – 3 percent.

The remaining questions on satisfaction with various domains of wellbeing were answered by almost all respondents. This was true also for both the general questions on wellbeing, one early in the survey, the other near the end, about their satisfaction with their overall wellbeing, and their overall quality of life, a similar but not identical concept (see Section 5 Scales and Indices above). More importantly the results were very similar. This is shown in Table 3.4, which assesses whether responses to the second question disagreed with the first question.

²⁴ Cochrane 2008a, Appendix 3: Table 2.

Table 3.4

Difference in Responses to Two Questions - Overall Satisfaction (Question 64) and Quality of Life (Question 267) by Age Group (in %)

Age-group (yrs)	Same response in both questions	Lower response in later question (Q267)	Higher response in later question (Q267)
65-74	69.1	16.3	14.6
75-84	68.9	16.7	14.4
Total	69.0	16.5	14.5

The table shows a high degree of consistency between the two independent assessments of wellbeing made by respondents and significantly there were almost no differences in consistency by age.

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Chapter 4: Health and Wellbeing among Older New Zealanders

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1. Health among the Older People: Meta-issues

Health is seen as one of the major determinants of levels of wellbeing for older people. This link is set out by a Belgian expert on the family and ageing in a paper contributed to a major study of the Economic Commission for Europe (United Nations):

“The relevance of physical and psychological health aspects for an individual’s general well-being is obvious. Simply stated, disease, invalidity and handicaps limit degrees of daily functioning. Less immediate is recognition of the extent to which social adaptations are significantly involved... Linkages between living alone and inadequate diets, for example, can influence health negatively and poor physical health, by limiting mobility, can lead to social isolation, loneliness and depression” (Dooghe, 1994: 13).

Not surprisingly, therefore, health is one of the different “domains” identified by the Ministry of Social Development as a key determinant of “successful ageing”, “positive ageing”, or “wellbeing” among older people (Koopman-Boyden & Pool 2006). Beyond the quantifiable, macro- or population-level indicators of health, there are meso-level aspects (e.g. how a local community handles services and also the immediate environment encountered by the elderly), and micro-level dimensions, i.e. the clinically assessed patterns prevalent among the elderly and the perceptions older persons have about their own health. These may be shaped by “social adaptations” (Dooghe, 1994: 13), notably other wider social-emotional factors, as well as bio-medical factors. Ageing brings with it shifts in the balance of emotions towards “contentment, calm and ease...” (Ross & Mirowsky, 2008: 2399), albeit that there are generational differences that stem from the varying experiences cohorts have earlier in life. But, against this, there are “convergences in sex, race, and educational gaps in happiness with age...” (Yang, 2008).

Perceptions about their health were self-reported by respondents in the 2007 EWAS survey of 65-84 year olds, along with questions on other domains of wellbeing. This line of research, focusing on functionality rather than aetiologies, is not a lesser alternative to bio-medical surveys. Instead, “Evaluation of one’s own health condition... is an additional objective determinant of health status and associated socio-psychological attributes” (Dooghe, 1994). Such self-reported evaluations correlate well with levels of physical health measured by clinical and other procedures.

However, self-reporting is not without problems of interpretation for the analyst. Sargent-Cox, Anstey & Luszcz (2008) show that when making a retrospective self-comparison about their status in a cross-sectional survey, older people on average will say that they felt the same or worse than a year ago. This is hardly surprising and may be fairly realistic – older people are ageing and one would expect them to remain the same or face increased frailty over time (Dooghe, 1994: 13; Sargent-Cox, et al., 2008). A first role for this chapter, then, is to report the survey’s findings on health and its co-variants, noting how New Zealand’s experience compares internationally.

However, health is something far more significant than just one major but discrete aspect of wellbeing. It is arguably the single factor having the widest ramifications for overall wellbeing. More importantly, it is a prime concern in the core policy debates on issues of ageing, health, welfare, and longevity (see various papers in Boston & Davey, (eds): 2006). Furthermore, as the determinant of longevity at older ages, improving health is becoming a driver of demographic ageing itself; “becoming” because, over a long period, since infant and childhood mortality declined, the prime

determinant of population ageing has been the decrease in fertility rates, and thus the percent of the population at childhood and young adult ages (Pool & Cheung, 2004; 2005).

Increasing longevity at older ages has been associated with two trends: (i) a narrowing band of ages at which the overwhelming majority of people die (termed “compression”, people are living longer but most commonly dying over a small number of old ages), and, paralleling this, (ii) a narrowing range for the share of causes from which most people die. In turn, this has been brought about by a huge shift in patterns and levels of morbidity, also probably entailing compression by age and cause (Cheung, 1999, 2001 cited in a seminal paper by Cheung, S L K et al 2005: 243; summarised in Robine, 2008). This is reflected in health expectancies (for New Zealand, see Ministry of Health, 1999a: Chapter 7), and decreases in their reciprocal, “life expectancy with severe disability” (Cai & Lubitz, 2007).

Health questions are the cornerstone for the wellbeing of older people. But they have an even wider significance. Internationally, the questions surrounding the future trajectory for longevity, the issues of compression, form the focal point for some of the great philosophical and biological-actuarial-demographic debates on the future of humanity (Tuljapurkar et al., 2000; Lutz et al., 2008). Are the elderly living longer (beyond the increases in survivorship to reach old age)? If so, are they in good health, or with disabilities and poor health? Because of the immense cost and service implications surrounding health care for the elderly, these theoretical debates are often highly applied, and are constantly being addressed in the fields of population economics and public policy. These applied concerns revolve around income support/savings, service planning and institutional needs.

This is such an important set of policy issues that the New Zealand government is looking into instituting a regular statistical monitoring series, to replace the ad hoc data collections and analyses used until now. The proposal relates to health expectancies, a measure related to the various forms of SF Health Status questionnaires. This is in line with wider WHO initiatives that have seen the establishment of international classifications of functioning to run parallel to the conventional aetiologically-based International Classification of Diseases (Ministry of Health and Statistics New Zealand, 2008).

Driving the service planning issues is a demographic reality. The actual health trends plus the services, institutions and policies that must deal with them, are the inheritors of, and must respond to, these long term inexorable changes in patterns of survivorship, plus the so-called “epidemiologic transition” (Omran, 1982) that drives them. In New Zealand’s case this is complicated by the fact that we have two (Māori and Pākehā), and probably more, different transitions (Pool, 1994). All these factors impinge on the perceptions older people hold about their health; conversely, if researchers like Dooche are correct, then these perceptions are co-variants of, and may even be determinants of, actual health statuses.

For these reasons a series of nested issues must be addressed:

- The lowest-order issue is to assess directly how older people perceive their own health status.
- A second-order task is to ask how this contributes to their perceptions of overall wellbeing and whether or not their health interferes with their daily living – whether or not older people are “contented” (regardless of the cause), and the role of health.
- A third-order question relates to the wider policy issues, particularly as they impinge on health. In the main, however, there can only be an indirect allusion to the more macro-level debates, these being: (i) the fiscal and familial burdens of an ageing population, and the capacities (whether or not the elderly are independent, and what constitute the parameters of dependence/independence), (ii) the effects of burdens and capacities on fiscal, intra-family and inter-family transfers and savings (Mason & Lee 2007; various papers in Clark et al, (eds) 2007), on health, and on other domains of wellbeing, and (iii) institutional and related factors, such as the effects of health care policies, funding

systems and access to health care (Huguet et al, 2008), or of place of residence (Lau & Morse, 2008).

- Also at a third-order level is the demography of ageing itself, to the extent that perceptions of functional health reported here are related to morbidity and to mortality, and the compression of these, and thus to longevity, then this chapter can add to the evidence-base for what is emerging as a driver of population ageing.

2. The Bigger Picture: Longevity, the Epidemiologic Transition, Perceptions about Health and their Implications

It is only now in the 21st Century, and over the last decade or so of the last century, that longevity has owed its increments to improved survivorship at older ages. The trite explanation of ageing and increases in longevity is however to see the survivorship of the older people as the cause, but ageing is primarily a result of declines in fertility. Increased life expectation is mainly due to previous increases in survivorship at younger ages, so that more and more members of each birth cohort reach retirement.

Until recently, as the epidemiologic transition unfolded, the force of mortality had gradually moved through different life-cycle stages: the first radical declines occurred in infancy and childhood, where historically the greatest risk had been felt, but subsequently moved up through the adult ages. Today, with almost all members of a birth cohort likely to reach 65 years of age, the only part of the life cycle where reductions in mortality can take place – and obviously there is a finite limit – is at older ages. This shift in the force of mortality has come through a survivorship momentum effect that has had a major impact on life expectancies, best seen in the cohort life-tables which measure the number of an original cohort surviving at any given age – more and more of the cohort reach older adult ages. Conversely, cohort deterioration has also been reported in New Zealand (and elsewhere) even as recently as the 1990s (Pool & Cheung, 2004; 2005).

For New Zealand, as measured by the decreasing gap between the lower and upper quartiles for life-table age at death, it seems that overall the ranges of age at death are shrinking “compression of mortality” is occurring (see Pool, 1994: Figures 1.1 and 1.2). This contributes to the “rectangularisation” of survival curves, “as deaths continue to concentrate in a narrow range at older ages, the [life-table] survival curve will stay flat [high proportions of the original cohort will survive to old age] before reaching this range, but because of senescent frailty will drop nearly vertically within this age range for ‘natural death’” (Cheung, 1999: 57; Cheung et al, 2005). This has implications not only for longevity itself, but also for the growth and age-structure of the elderly population (Levy, 1998; Tuljapurkar et al., 2000).

These comments are directly relevant for the present exercise for three reasons. Firstly, they outline the bio-medical context in which perceptions about health are formed. The older population of the new millennium passed through their highest risk ages, the perinatal infant and early childhood years, during or before the Second World War, before the bio-medical armoury available through the chemotherapeutic revolution was in everyday use. Thus their health experiences when they were at younger ages were very different from what paediatric medicine confronts today. Nevertheless, and realistically for very good reasons that are easily documented quantitatively, people today have come to expect that survivorship into retirement is a norm, that few people will die prematurely, say at ages below 65 years, and that, at older ages they can assume that they will have a reasonable quality of life, subject to health conditions that are appropriate for their age.

This situation is doubly important for older Māori and Pacific peoples. Their mortality and morbidity experiences in childhood were far more negative than was the case for Pākehā and this has had cohort effects that have carried on into mid-life and old age (Pool 1991, 1994; Pool & Cheung, 2004).

Secondly, the focus, both for conceptualising what might constitute “good health” and “quality of life” as well as for research, has shifted from an interest in the bio-medical and aetiological dimensions of health to functionality, the impacts of health on daily living (Johnstone et al 1998). It is increasingly recognised, for example, that within parameters set by a mix of pharmaceutical, surgical, and medical interventions, perhaps backed-up with home care programmes, older persons are able to continue to thrive with a fair degree of independence outside hospitals and other institutions that service health needs. The research instruments that have been developed to look at perceptions of health status, including the SF-12 scale used here, directly reflect this new focus on functionality (Pool, 1994).

Thirdly, this review links the analysis in this chapter into broader philosophical and biological-actuarial-demographic debates about longevity that ask, “are humans going to live longer, and if so with good health or poor health”, while compression and rectangularisation are the measurement inputs to those debates, and capacities and burdens, fiscal and familial, constitute the implications (Olshansky et al., 1993; Fries, 1980; Manton, 1982).

Similarly, the epidemiologic transition has seen the burden of disease shift dramatically from communicable causes to non-communicable, and, within that category, to fewer and fewer major causes. The underlying causes of sickness and death for the majority of people revolve around one of the cardiovascular or cerebrovascular causes, or one of the cancers, although the immediate cause may be something like pneumonia. This translates into age-specific and aetiological forms of compression for morbidity as well as mortality (Fries, 1980; Robine, 2008).

But, there is still an unanswered question: the older people of today belong to cohorts that, when passing through infancy and childhood, would have been exposed to higher risks of morbidity and mortality than has been true for their successors. This could have two possible contradictory outcomes: that cohorts carry forward with them the negative residual effects of early experiences, much as is true for an individual who has been exposed to rheumatic fever as a child and suffers a hospital admission for ischaemic heart disease in middle age, and thus have poorer health; or, that the healthier survive to old age (Cheung 1999; see also Pool & Cheung, 2004, 2005). If perceptions of being in good health contribute to wellbeing, then the second scenario might explain some of the positive emotional effects observed among older people.

The questions that the SF-12 (or SF-36), address translate across from personal wellbeing into an analysis of factors that relate to the institutional and service contexts of wellbeing in an ageing society. The questions analysed in this chapter throw light on potential need for institutionalisation, although the survey relates only to the non-institutionalised population. It also raises questions about home care. Furthermore there are underlying issues that are beyond the scope of this paper, notably the policies surrounding the way in which health care is delivered.

Finally, there is also the question of expectations the general public and media have about the health care system. These usually manifest themselves in publicised failure or in rather meaningless statistics such as waiting lists. Again, to the extent that people perceive that they have a reasonable health status, this is an indirect indication of outcomes, partly due to their own circumstances, but also because of the favourable effects of any interventions or services they may have experienced, such as a visit to the doctor. This and other health related questions (e.g. smoking) were not asked in the EWAS survey, but have been covered in official surveys. Links between health related behaviours and doctors visits, on the one hand, and the SF-36 scores, on the other, are strong and logical (e.g. Ministry of Health, 1999a and b).

3. Measuring Health and Wellbeing

The data used in this chapter come from the national-level EWAS survey of 2007, the sampling, and other methodological and data quality details of which are described elsewhere (see Chapter 3). A

critical factor for this chapter is that the respondents were drawn from the non-institutionalised elderly population. Institutionalisation levels are surprisingly low at these ages and thus have little bearing on the quality of the survey data to be used below. At the 2006 census only 6% of those at 65+ years were in an institution²⁵. More importantly, the cut-off point for survey eligibility was less than the exact age of 85 years. Thus, this analysis does not cover the group termed “oldest of the old”, those who on average are likely to be the most frail. Against this, for a survey of its genre it has large cell-sizes simply because the sample was restricted to persons aged 65-84 years, whereas most samples covering these issues of social behaviour and/or wellbeing cover a broader spectrum of ages. For example at 65-74 years EWAS had 992 respondents; whereas an official health survey in 1996/97, with a far larger overall sample size but covering all ages, had a lower figure at 65-74 of 885.

3.1 *Health Indicators*

The health data employed here relate to health status and come from (i) a general question, and (ii) an internationally used scale, the SF-12. Both are self-reported, a procedure that, in an era in which there is constant reference to clinical diagnoses of aetiologies, may seem at first to be remarkably un-robust. In fact, survey experience from all over the world shows that these reports are strong predictors of mortality, the ultimate measure of health status (Ware et al., 2007; see also Ministry of Health, 1999a: 148), and are far more useful measures than self-reported events of illness and/or injury²⁶.

The general question asks respondents to assess their own health status on a 5-category scale: excellent, very good, good, fair and poor. This question had been employed previously in New Zealand in official surveys (Ministry of Health, 1999b, 2006, 2008), the first of which provided a useful analysis of its predictive power (Ministry of Health, 1999a: 148-50). As will be shown below, the EWAS survey (N, 65-84 = 1,680) results are close to those from the New Zealand Health Survey (N, all of 65+ years = 1,528).

In New Zealand the SF Health Status questionnaire was first used, at a sub-national level, by the Health and Disability Unit, Midland Regional Health Authority (1997), which validated the instrument for New Zealand conditions. Wheadon, Kokaua, and Sceats note that the SF-36 produced results that: (i) were similar to those seen in directly comparable countries, and (ii) fitted well with the observed health behaviours of populations and sub-populations. For example, Māori and Community Card holders reported poorer status.

A second prior use of the SF-36 was in three official national surveys, 1995-96, 2002-03 and 2006-07, all of which again validated the SF-36 and yielded intuitively reasonable results (for the first see Ministry of Health, 1999a: Chapter 4, and b: 139-41; Ministry of Health, 2006 and 2008). These earlier national surveys provide us with very useful comparisons, although there is one major limitation. The published data for the health survey cover categories 65-74 years and 75+, whereas the EWAS survey categories are for 65-74 and 75-84 years. Therefore, in assessing the validity of the results and in looking at trends, direct comparisons can only be made for age-group 65-74 years.

All the earlier surveys used the longer format (SF-36), while EWAS adopted the shorter SF-12 version in the interests of survey efficiency – health was merely one domain among a number being investigated. The SF-12 questionnaire produces scores that vary only in minor detail from the much longer SF-36 (Ware et al, 2007: 69-71, referring to SF-12 version 2, Appendix C, esp. 224-35 referring to comparisons with the SF-36).

Like all instruments in the SF-family, the SF-12 generates answers to particular items, and can then be scored to produce two scales, a Physical Component Summary (PCS) and a Mental Component Summary (MCS). These scales are scored to have a mean of 50 and a standard deviation of 10. As in

²⁵ Including 1% at ages 65-74, and 6% at ages 75-84.

²⁶ With self-reported aetiological questions there is a high risk of false positives and negatives. Sometimes a trivial acute condition gets reported, whereas a serious chronic one that is incapacitating but temporarily in apparent remission will not be. And there are also errors of categorisation, diagnosis and for definitions.

the case of the official surveys, the PCS showed means just below 50, with standard deviations just above 10, and the MCS had means above 50, and standard deviations below 10. While the items provide reasonably reliable results for samples of approximately the same magnitude as the EWAS survey, the overall PCS and MCS results are more robust when using the SF-12 with fewer items than is true for the SF-36. Here, therefore, the choice has been made to restrict the results to these two robust summary scales.

3.2 Indicator of Wellbeing

The indicator of general wellbeing used in the analyses was the World Values Survey Question (WVS) as previously reported in Chapter 3 Methodological Background.

4. Findings

4.1 Self-Reported Health Status

The overwhelming majority of respondents reported their health status as excellent/very good, or good, and very few rated it as poor/fair. A bare majority of women respondents and of men aged 65-74 years, and 49% for men at 75-84 years reported their health as excellent/very good, as is clear in Table 4.1 There were no significant gender differences. There is a decrease in status by age as is to be expected, but still four-fifths of 65-84 year olds report good or better health (see Table 4.1).

Table 4.1

Global Self-Reported Health of Survey Respondents by Age and Gender (%)

Age Group	Excellent/Very Good		Good		Poor/Fair	
	Male	Female	Male	Female	Male	Female
65-74	56	58	32	31	12	12
75-84	49	51	34	31	17	19

Note: Percentages may not add to 100% due to rounding.

The EWAS survey results fit reasonably well with those from the two large, face to face, official New Zealand sample surveys²⁷, as seen in Table 4.2. Because there are so few Māori and ethnic groups at older ages, a separate score by ethnicity has not been included, but the official surveys point to what could have been expected. Pākehā (European) scored more highly than Māori or Pasifika in the 1996/97 survey (Ministry of Health, 1999a: Table 38), a result which is intuitively reasonable.

Table 4.2

Global Self-Reported Health at 65-84 years, Official Health Surveys of 1996/97 and 2006/07, EWAS 2007 (%)

Survey Data	Excellent/Very Good	Good	Poor/Fair	Total
	Good			
Official 1996/97*	46	34	20	100%
Official 2006/07**	54	32	15	100%
EWAS 2007	57	31	12	100%

Source: * Ministry of Health 1999a: Table 38 **Ministry of Health 2008 (on line).

The EWAS results show a higher self-reported health status, a result that, if it is valid, demonstrates an upturn in improvements in health as measured by this question. If the upward trend in official surveys, 1996-2006, had continued, the 2007 result might have been expected to be 1-2 percentage points lower, say 55% or 56%, rather than the 57% shown by the EWAS survey.

This difference might be attributable to sampling representativeness (see Chapter 3), but not sampling error as the EWAS results come from a very large sample. Equally, the difference could lie in the interview methodology. EWAS was a CATI, while the 1996 and 2006 surveys were face-to-face.

²⁷ And with the Midland regional survey.

Moreover, EWAS excluded the institutionalised elderly who are more likely to be frail. Whether or not this result is an artefact, in part, of methodological factors, is not a very important consideration. Far more important is its broad level of agreement with the results of official surveys. Moreover, the trend is in a general direction that accords with international experience. Therefore, its directionality would seem to be a robust result, even if the exact level is not. As it has major implications, this result will be returned to in the concluding section of the chapter.

Health status seems to be a co-variant, perhaps even a determinant of overall wellbeing as shown in Table 4.3. What is interesting, however, is the fact that even if respondents rate their health status as merely poor/fair, a vast majority, around three-quarters, still see their wellbeing as satisfactory. So, one could argue that health may be a determinant of wellbeing, but that its effects are mediated by some innate recognition that at older age poor/fair health may occur, which modifies rather than negates the perception of overall satisfaction. This hypothesis is supported by the fact that satisfaction increases by age for those people reporting poor/fair health, whereas recognition that health is less than good increases by age. Gender differences in this bi-variant relationship favour men: fewer women than men reporting poor/fair health see their general wellbeing as satisfactory: 64% at 65-74 years, as against 74% for men, and 75% to 78% at 75-84 (data not shown).

Table 4.3

Overall Satisfaction of Survey Respondents with Wellbeing and Global Self-Reported Health (%)

Age-group	Health Rating		
	Excellent/Very Good	Good	Poor/Fair
65-74	93	90	71
75-84	93	89	80

The SF-12 provided the only other specific measurement of health. The importance of the SF-12 as a scale lies in it being a health status measure, and as well it revolves around capacities for daily living. The higher the score, the better the status. Because the SF-12 is a highly truncated version of the SF-36, it is appropriate to break the results down into two broad components: physical and mental, but not into detailed sub-components. There is no combined score; while sub-populations can be compared, components cannot. The data by gender and age are presented in Table 4.4, and provide strong support for the results gained from the global self-rated health question. Like other self-reported health scores, SF-12 scores are skewed upwards, a norm for this questionnaire, even at these ages. Deterioration in status by age occurs, but neither systematically nor severely.

Table 4.4

SF-12, Physical and Mental Components of Survey Respondents by Gender and Age: Means, Minima and Maxima

Age-group	SF Component	Minima		Means		Maxima	
		Male	Female	Male	Female	Male	Female
65-74	Physical	14	14	48	46	65	68
	Mental	19	18	56	55	70	71
75-84	Physical	16	12	46	44	61	65
	Mental	27	16	57	55	69	69

Looked at in detail (data not shown here), because of skewing that affects means, median scores are higher than means, the upper quartile is very close to the median, and inter-quartile ranges are very narrow. However, ranges on all measures are higher for the mental than the physical component scores, a norm in other New Zealand surveys.

Again, the EWAS scores look very robust. They confirm those for the official surveys, which, in turn, fit well with international experience for comparable countries. Because there are so few Māori at older ages, separate scores by ethnicity have not been provided, but the official surveys point to what could have been expected had this factor been analysed (official surveys over-sampled to provide

more robust results). On the SF-36, the sub-components were scored by Pākehā (European), higher than other ethnic groups (Ministry of Health, 1999a: Figure 74), a result that is in accord with other health measures. (e.g., in analyses of the SF-12 (not shown here) where controls are made for responses to the global self-reported health question).

The official health surveys show a systematic improvement over time in self-reported health status as measured by the SF-36, a finding in keeping with the data on longevity and other health status indices (e.g. health expectancies with varying degrees of “good health” disability etc., see Cai & Lubitz, 2007). The EWAS survey results fit well with this pattern, where the official 1996/97 gave results at 65-74 years of 45 for each sex on the physical component and 53 for men and 51 for women on the mental (Ministry of Health, 1999a). EWAS scores were higher (see Table 4), being 48 and 46 for men and women respectively for the physical component, 56 and 55 on the mental.

These results, along with those on global health-status rating, relate to two points of immediate importance for overall wellbeing (recalling that our results do not relate to the oldest of the old). Firstly, that their health status does little to limit wellbeing among the vast majority of older New Zealanders; and secondly, that most older New Zealanders have good health or better. What is important here is that the SF indices measure what is probably the most important mechanism by which wellbeing is achieved: mental and physical functionality appropriate for one's age. Determined by the prevalence of various aetiologies, even ones that are life-threatening if they are not under bio-medical control, or as evaluated by the use of pharmaceutical and other props and control measures, many older people might be seen to be in “ill-health”. Yet, despite all this, most of the same people view themselves as able to maintain a life-style which gives them a feeling of wellbeing about their capacity to meet the challenges of daily living.

5. Co-Variants of Self Reported Health Status

The global rating score used in official surveys suggests causal links to socio-economic and other factors, and thus it is important to look at co-variants in the EWAS survey, especially those that relate to other aspects of wellbeing. Table 5 presents data on personal income profiles for health status ratings: excellent/very good, good and poor/fair. Data on household income are not presented here, but the results were very close to those for personal incomes.

The personal income (in dollars) question, as in most general surveys of this type, had fewer responses than other questions that required less personal exposure. The response rate was 68 percent. For that reason data are presented in Table 4.5 for the missing values, for respondents who did not reply.

Table 4.5
Global Self-Reported Health Status by Personal Income (\$000s) or Missing Values by Age-Group (%)

Age-group (years)	Health Status	Income (\$000's)				Missing values
		<\$15	\$15-20	\$20-30	\$30+	
65-74	Excellent/Very Good	49	50	66	60	56
	Good	43	32	26	31	30
	Poor/Fair	8*	18	8*	9*	14
	Total	100%	100%	100%	100%	100%
75-84	Excellent/Very Good	35	51	50	64	47
	Good	50	30	33	22	33
	Poor/Fair	15*	19	17	15*	20
	Total	100%	100%	100%	100%	100%

Note: * N <20

The data show that, in terms of rating health status, the failure to respond to the income question makes little or no difference to responses to the health questions, as the profiles are very close to the overall figure (see Table 4.1).

This tri-variant analysis (age, health status, income) raises issues not evident from data in the earlier bi-variant tables (age, health status). There are fairly systematic relationships between income and status – the higher the income the better the self-reported health status – but some qualifications are necessary. Similarly, age shows up as a more important factor than was seen in the earlier analysis, but again with some qualifications. In this regard, it is important to reiterate that the issue is co-variance, not causality. For example, a low income and dependence on benefits would be most common among long-term sickness/accident beneficiaries, whose condition would have minimised their chances of earning higher incomes and saving for retirement. This would mean that their daily living in retirement is more likely to be impaired and would lead to their reporting poorer health status.

It is difficult to interpret the data on the highest income earners. At 65-74 years they represent 32% of those reporting their income, with 25% in the next highest category, 29% in the group below that, and 14% in the lowest category. At 75-84 the order is different, with 19% (highest), 27% (next), 43% (below that), and 12% (lowest). Clearly at older ages there is greater dependence on benefits alone and thus a lower median income. The fact that fewer of the highest income earners at 65-74 years report excellent or very good health may be more a factor of expectations than of reality: 91% of them report good health or better, slightly below the figure for the next highest income earners (92%). At the older age-group, the proportions reporting excellent or very good health, and good health or better are well above the levels for the next income category.

Given the missing values for the quantitative income question, the issue of economic wellbeing and health should also be addressed by turning to subjective assessments of socio-economic status, neither of which suffered from high levels of non-response. Two questions were used, one was a 2-category scale asking whether respondents were satisfied/dissatisfied with their economic standard of living. Results from it are referred to in the text below but not tabulated. The other question provided a more detailed but still subjective assessment of whether or not they had enough money to meet their everyday needs.

This was also better calibrated as it was scored on a 3-way scale: (i) not or just enough, (ii) enough, (iii) more than enough. Greater reliance can be given to the later question, and thus its results are presented here (Table 4.6).

The 2-category economic standard of living question does throw some light on socio-economic wellbeing and health. A high degree of satisfaction was recorded, 88% at 65-74 years, and 93% at 75-84. Among those who were satisfied with their standard of living, fair or poor health was reported by only 10% of those aged 65-74 years, and 17% at 75-84 years; fair or poor health was self-rated by 28% of both age-groups, among those who were dissatisfied.

The more finely calibrated subjective question on financial wellbeing (Table 4.6) is situated, in terms of difficulty for respondents, somewhere between the more abstract standard of living question and the more taxing one on actual income. The results provide a reasonably robust assessment of the way health is related to the ability to cope financially, which along with health, must be the other most important issue for retired people on fixed incomes.

Table 4.6

Global Self-Reported Health Status by Adequacy of Money to meet Everyday Needs by Age-Group (%)

Age-group	Health Status	Money to meet Everyday Needs		
		Not/Just Enough	Enough	More than Enough
65-74	Excellent/Very Good	49	62	65
	Good			
	Good	34	30	27
	Poor/Fair	17	8	8*
	Total	100%	100%	100%
75-84	Excellent/Very Good	43	53	63
	Good			
	Good	36	31	25*
	Poor/Fair	21	16	13*
	Total	100%	100%	100%

Note: * N <20

These results confirm the quantitative data on income, showing that income-related health ratings are compounded by age, especially for the propensity to report an excellent/very good status. The figure at 75-84 years for “more than enough” is slightly lower than that at 65-74, a finding in keeping with the general results that the two disposable income-related tables show. The quantitative one (Table 4.5) has a result for those with an income of \$30,000+ at 75-84 years, which does not fit with the systematic trends shown in the other data cells in Table 4.5 or with the results in the subjective assessment (Table 4.6).

The net result is that we can argue that older people with less apparent disposable income report poorer health status. But, we cannot point to causality, merely to co-variance.

Turning away from economic/financial co-variants, two further factors affecting the immediate environment of an older person’s social-emotional wellbeing were selected for analysis. These were their perceptions of personal safety and their level of satisfaction over contacts with family members. Table 4.7 presents data on health status and perceptions about personal safety.

Table 4.7

Global Self-Reported Health Status by Perceptions about Personal Safety

Age-group	Health Status	Perceptions about Personal Safety	
		Dissatisfied (%)	Satisfied (%)
65-74	Excellent/Very Good	47*	57
	Good	18**	31
	Poor/Fair	35*	11
	Total	100%	100%
75-84	Excellent/Very Good	24**	51
	Good	50*	32
	Poor/Fair	27**	18
	Total	100%	100%

Note: * N <20 ** N <5

Most respondents (97%) were satisfied with their personal safety, and there was no variance by age. This in itself is an important finding. But, as a result, cell sizes for dissatisfied were very small. Nevertheless, there was a tendency for the dissatisfied to report poorer health, and for this to increase with age.

Finally, we reviewed the degree to which the SF-12 Mental Component Summary was affected by the degree of satisfaction older people felt with contacts with family. Such contact can be seen as a proxy for a social-emotional determinant of mental health status. Most respondents (96%) were satisfied, so

there was little margin for variance. The results are not produced here as there were virtually no differences in the means by age or sex (cf Table 4.4).

To summarise, these results show that, overall, respondents were satisfied with their health. For a minority of respondents their rating of health status did co-vary with socio-economic factors. To a far lesser degree there may be variance according to the way people perceive their immediate environment, but not enough to make any sort of robust conclusion.

6. Conclusion

This chapter shows that older New Zealanders have a reasonably good quality of life as measured by self-reported health status. The experiences of New Zealanders reported by the EWAS survey thereby replicate what has been seen overseas and in earlier New Zealand studies, instilling confidence in the results. Of course, it cannot be ascertained from the data what are the pharmaceutical and other props that allow older people to maintain this status, but, whatever their clinical and other bio-medical situation, for the vast majority of older people health status does not appear to greatly interfere with their daily living. To add to this, the EWAS data show a significant improvement in the three self-reported health status indicators by comparison with earlier surveys, an apparent continuation of trends reported over time for official surveys. This is possibly the most important finding in this chapter, and has very significant policy implications, grounded in the nested set of research questions outlined at the beginning of this chapter.

The lowest-order issue, as to how the elderly perceive their own health status, can be discussed very summarily. As is true internationally, most older New Zealanders self-reported their health status as good or better. Their actual incomes, or their perceptions about their capacities to meet everyday costs, do seem to co-vary with their health status: the better off, whether in dollar terms or subjectively, report higher status.

A second-order task was to ask how this contributes to older New Zealanders' perceptions of overall wellbeing and whether or not their health interferes with their daily living. The research issue here was whether or not the elderly, on average, have a satisfactory level of wellbeing (regardless of the cause), and the role of health as a factor in this. Again, the results show that good or better health status plays a positive role in generally shaping favourable perceptions about wellbeing.

The third-order question related to the wider policy issues raised earlier, particularly as these impinge on health or are affected by health. A number of points are relevant here.

Firstly, the EWAS data confirm that a general improvement in perceptions of health status, seen in official surveys, is taking place. This supports the general hypothesis that compression of morbidity is occurring. This finding has significant implications for families and fiscally, as it infers that health may not be quite the burden that some fiscal pessimists suggest. However, there is a sting to the tail, in that the apparent links between reported health status and financial factors suggest that economic security and wellbeing play an important role. Security in this regard will come directly from income transfers within families. Mason & Lee (2007) have stressed the importance of intra- and inter-family transfers that make up the major part of support (two-thirds) for the elderly (even in highly developed countries with well-developed pension regimes), or from superannuation and savings. This means that transfers will have to be sufficient to provide this sense of security and wellbeing. In part, of course, free, or cheap, and universal access to health care, as the Canadian model shows (Huguet et al., 2008) will be a component of the transfers and will play an important role in reinforcing positive perceptions about health status.

Secondly, the wider issue of the demography of ageing itself can be returned to, regarding the extent that perceptions of functional health reported here are related to morbidity and to mortality, and the results of the compression of these, and thus to longevity, have added to the evidence-base for what is

emerging as a driver of population ageing. The improvements in global rating of health status and in the two components of the SF-12 recorded here reinforce arguments positing the compression of morbidity. This has an even wider implication. Longevity is being extended, an indisputable fact that shows up in New Zealand life-tables, in the numbers of older people benefiting from longer life and also having an improved health status. They are living longer, in reasonably good health, and in a way that contributes significantly to their overall wellbeing.

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Chapter 5: Education - The Educational Background of Today's 65-84 year-olds and Wellbeing

Peggy Koopman-Boyden and Suzan van der Pas

1. Introduction

Education has traditionally been considered 'what you did at school'. As a result, the level of an individual's education, or that of a society, has traditionally been measured by the length of schooling, or the highest qualification, gained in the formal school system - often acquired before or about the age of 15 years²⁸.

Today, the concept of education includes not only formal education and training, but also the learning gained through the life-long experiences of daily life. For example, it has become increasingly well recognised that the experiences of young children can fundamentally influence their ability to learn. Adults acquire knowledge and skills through their on-the-job experiences and non-work, recreation and leisure activities. In the last few decades adults have been encouraged to return "to school" during their mid-life years to retrain or upskill. Continued learning through one's midlife and into one's older years ensures a level of alertness and community involvement that can enhance an individual's wellbeing and contribute to society's prosperity. Such learning, knowledge and experience also adds to "social capital" by helping to provide the continuation of many of society's norms and values.

The present older generation, including the 65-84 year-olds involved in this research, is unlikely to have experienced life-long education, given the prevailing educational philosophy during their adult years which largely focused on younger people. Even during their school years, many in this age-group had little formal education by today's standards, for formal education was not always easily accessible or free, despite the 1877 Education Act (as explained later in the text). Research findings about the direct relationship between education and wellbeing for the adult population as a whole is therefore not necessarily applicable to today's 65-84 year-olds. The lapse in time between the 'schooling years' and the present for older people also increases the likely effect of other factors on the wellbeing of older people, including education as an intervening variable.

The purpose of this chapter is to document the academic qualifications available to 65-84 year-olds in New Zealand during their school years, along with the social context during this time – the 1930s to 1950s. The chapter then documents the actual education gained by the 65-84 year-olds, and its variation by age, gender and place of birth. The relationship of educational attainment with computer use is also explored. Finally, the chapter considers the relationship between education and wellbeing of 65-84 year-old New Zealanders.

2. The Connection between Education and Wellbeing

2.1 Literature Relating to Education and Relationship to Wellbeing

Educational wellbeing in New Zealand has been described in successive editions of the Ministry of Social Development's Social Reports (2001-2008). The Report measures the levels of knowledge and skills at particular points in the life cycle through the following indicators:

- participation in early childhood education
- school leavers with higher qualifications

²⁸ The national school leaving age was raised to 16 years in 1993.

- participation in tertiary education and
- the educational attainment of the adult population.

The higher the measure, the greater the level of educational wellbeing. The “desired outcome statement” for knowledge and skills is that: “Everybody has the knowledge and skills needed to participate fully in society. Lifelong learning and education are valued and supported” (2008, p. 8). The Report notes: “Knowledge and skills enhance people’s ability to meet their basic needs, widen the range of options open to them in every sphere of life, and enable them to influence the direction their lives take. The skills people possess can also enhance their sense of self-worth, security and belonging. The indicators are relevant to current and future social wellbeing” (2008, p 8). However, the Social Reports do not include data on the educational attainment of those over 65, or the rates of participation in tertiary education specific to those over 65.

The EWAS research has confirmed the link found in many other studies between education and income levels among the older New Zealand population (see Chapter 7). International research shows that people who are better educated and of higher income live longer and have a higher quality of life than people in lower socio-economic status groups, i.e. there is a well known connection between education and Quality of Life, here called “wellbeing” (Cutler & Lleras-Muney, 2008). Furthermore research indicates that the positive impact of education on wellbeing is a trend increasing in magnitude (Callister, 2006; Meara, Richards & Cutler, 2008).

In a study of how education influences subjective quality of life, education was seen to have an indirect influence on wellbeing. Using two representative national samples of United States households in 1990 and 1995, Ross & van Willigen (1997) found that the well educated have lower levels of emotional distress (including depression, anxiety and anger) and physical distress (including aches and pains and malaise), but they do not have lower levels of dissatisfaction with their quality of life. According to the researchers, education reduces distress largely by way of paid work, non-alienated work, and economic resources, which are themselves associated with high personal control.

Several large scale overseas studies have demonstrated the correlation between education levels and wellbeing among older people. For example, the project Old Age and Autonomy: The Role of service Systems and Intergenerational Solidarity (OASIS) has analysed “the intersecting role of the family and the welfare state on autonomy and quality of life in old age” using data collected in Norway, England, Germany, Spain and Israel between February 2000 and January 2003. Reports summarising the research state that “there were clear age, country and gender differences in quality of life. Health, education and income were universally important to the subjective quality of life of people, regardless of their age.” Similarly, the University of Michigan Health and Retirement Study (HRS) two-yearly surveys of more than 22,000 Americans over the age of 50, found that adult educational attainment and higher household income were strong predictors of all variables of wellbeing in a positive direction.

In a comparative study that investigated the association between education and wellbeing of older people (65 plus), Huguët, Kaplan & Feeny (2008) considered the relationship of education (income and several other SES variables) to “health-related quality of life” (HRQL) among older adults in Canada and the United States. The study showed a positive relationship between educational attainment and health-related quality of life, in the United States, but not for Canada (2008, p. 807).²⁹

Other recently reported United States research with a very large sample showed a clear connection between the level of education of older people and the ability to cope with underlying impairment (Cutler, Landrum & Steward, 2006). Given that impairment in one’s older years (or disability) has an influence on wellbeing, such research is of considerable importance. The researchers studied the ability of older people to cope with specific activities of daily living (ADL) and instrumental activities

²⁹ Data from the Joint Canada/United States survey of Health 2002-2003, with a 65+ sub-sample of 755 Canadians and 1,151 Americans.

of daily living (IADL) tasks and showed that the better educated were better able to cope with underlying disability than the less educated (ibid).³⁰ The differences were large in that the ability to cope with disease varies by up to 8 percentage points across education groups. The research also showed that the better educated are more likely to use assistive technologies than the less educated, and were more likely to receive paid help than help from close relatives.

However research has also shown that coping strategies were not associated with education (or income) (Mathieson, Kronenfeld & Keith, 2002; Norburn et al., 1995).³¹ These studies noted that while an estimated 75% of older people living in the community coped with their loss of functioning by changing their behavior, and one-third made adaptations in their environment, including home modifications, these strategies were not related to educational attainment.

The literature, noted above, generally supports a positive association between education and wellbeing among older people, despite the fact that such an association is not replicated in every study. The longitudinal, large scale and cross national research programmes consistently show a relationship between both education and income to wellbeing and quality of life. Some studies have also found health to be similarly related.

3. Education and Social Background of the 2007 cohort of 65-84 year-olds during the 1930s to the 1950s

3.1 Academic Qualifications Available in 1930s to 1950s

In considering the relationship between education and wellbeing among New Zealand's current older population, it is important to understand the scope of educational provision during their primary and secondary school-age years. New Zealand has had a free, national and compulsory system of primary education from 7-13 years since 1877, free and compulsory to 14 years in 1901, and free secondary education to 15 years for those who passed a Proficiency examination since 1914. Free secondary education to 15 years for all children was provided after the Thomas Report of 1944. University level education had begun with the establishment of Otago University in 1869, and was available in the four main cities before the turn of the century.

3.1.1 Primary and Secondary Education

The 2007 cohort of 65-84 year-olds were of primary and secondary school age during the 1930s, 1940s and 1950s, and would have experienced a series of nation-wide changes in the education system. Those attending in the 1930s gained very different qualifications from those educated in the 1950s, for the variety of qualifications available as well as access to education varied widely within this 20 year cohort. The educational changes during this time period put in place a structure and level of qualification that has remained largely unchanged until the beginning of the 21st century. A number of themes characterise these changes and their influence on the education of the students of this period, including: the move towards free secondary education; ensuring access to schooling; and the influence of the social context.

- The move towards free secondary education: In the early part of this period (ie the 1930s and early 1940s) those aged 7 to 14, who remained in primary school, were entitled to a free and compulsory education. Those who passed the primary school Proficiency Examination at Standard 6, were entitled to a free secondary education to the age of 15. Free secondary education at all levels was introduced in 1944, which meant that among the surveyed 2007 age-group of 65-84 year-olds, the younger cohorts were able to benefit from the wider availability of free schooling.

³⁰ Data from the United States National Health Interview Disability Supplement (NHIS-D) of 1994/1995 survey in person of 24,791 respondents aged 65+ living in the community.

³¹ Data for both references from the United States National Survey of Self-Care and Aging, 1991.

- Ensuring access to schooling: Access to education opportunities for students in the 1930s/1950s was constrained not only by the lack of universal free provision, but also by physical access. With a small, largely rural and well spread out population the provision of primary and secondary schools continued to be supplemented by the Correspondence School (established in 1922), the state provision of a school transport service (first established in the Piopio area in 1924), and the introduction of the Country Library Service (1938).
- The 1944 Thomas Report recommended a more egalitarian education system, and did so by making secondary education compulsory to the end of Form 4 (to 14 years), abolishing the University of New Zealand Matriculation (1943), and replacing it with School Certificate (1946) and University Entrance (1944) – a set of qualifications which endured for 50 years until the establishment of the National Qualifications Framework in 2002. The Thomas Report also, significantly, introduced a common core curriculum which included both practical and academic subjects, thereby catering for a wide diversity of abilities, interests and backgrounds, and which weakened the differences between the academic and vocational approaches.
- The influence of the social context: The educational opportunities of many New Zealand students were restricted by the Depression and World War II. Many children in the 1930s and 40s had their education interrupted when both girls and boys were expected to assist with farm-work, housework or the family business, or, for the boys, they had reached the age of conscription. The social context of a Depression and a World War imposed huge economic limitations on families, including opportunities for employment and education. Gender roles were both stereotyped by these conditions (including the lesser uptake of education by girls) and broadened (in the wider roles expected of them on the home front, during the War – the “emancipation of war”), while many boys had their education thwarted by the responsibilities of wartime service or agricultural work.
- As the demand for a better educated workforce increased, the market value of qualifications changed dramatically from the 1930s to the 1950s. Whereas the Proficiency examination had originally been seen as an indication of a good primary school education, as an entrance qualification to a free secondary education or as an employment credential, by the late 1930s this largely school leaving function began to collapse. In its place, the majority of employers demanded qualifications that needed a longer period of education: the fourth form Public Service Entrance or the fifth form Matriculation qualification. In turn the Public Service Entrance (1912-1944) lost its market value and was superseded by the introduction of “old” School Certificate (1934-1945) and “new” School Certificate (1946-2001), both at the higher fifth form level.

3.1.2 *Formal Primary and Secondary School Qualifications available to 65-84 year-olds in New Zealand in their Schooling Years*

Table 5.1 provides a list of the formal qualifications provided by New Zealand state primary and secondary schools, 1871-2008. Technical and vocational courses and qualifications are not included, as these often involved on-the-job training and/or short courses.

Table 5.1 lists the main “preparatory” qualifications of Proficiency, School Certificate, University Entrance, and Scholarship, as well as the preparatory examination for the Civil Service (or Public Service). In all cases, these examinations served as “entry” qualifications to further study or a vocation.

Table 5.1

Formal Qualifications provided by New Zealand State Primary and Secondary Schools 1871-2008

Qualification	Start Year	End Year	Awarded end of: Year / Level	
University of NZ Scholarship (pre 1944)	1871	1943	12	Form 6
Proficiency	1878	1937	8	Std 6
Junior Civil Service Examination	1888	1912	10	Form 4
University of NZ Matriculation	1888	1943	11	Form 5
Public Service Entrance Examination	1912	1944	10	Form 4
'Old' School Certificate	1934	1945	11	Form 5
University Entrance	1944	2003	12	Form 6
University (of NZ) Entrance Scholarship (post 1944)	1944	1990	13	Form 7
'New' School Certificate/Certificate of Attainment	1946	2002	11	Form 5
University Bursary	1966	2004	13	Form 7
6 th Form Certificate	1969	2005	12	Form 6
NCEA Level 1	2002	continuing	11	Form 5
NCEA Level 2	2002	continuing	12	Form 6
NCEA Level 3	2002	continuing	13	Form 7

Alongside these examinations there were also qualifications which recognised the attendance of students who had not, in general, gained a higher qualification by examination in that year (e.g. 5th Form Leaving Certificate). These are listed separately in Table 5.2.

Table 5.2

Formal Attendance Certificates provided by New Zealand State Primary and Secondary Schools 1871-2008

Certificate	Start Year	End Year	Awarded end of: Year / Level	
4 th Form Intermediate Certificate	1914	1938	10	Form 4
5 th Form Lower Leaving Certificate	1914	1934	11	Form 5
6 th Form Higher Leaving Certificate	1914	2002	12	Form 6
Endorsed School Certificate	1954	2002	12	Form 6
Higher School Certificate	1961	2002	13	Form 7

3.1.3 University and Technical Tertiary Education

While the majority of New Zealand's 65-84 year-olds of 2007 were likely to have had primary and secondary education only, higher qualifications at a university or technical level were available. University education was well established by the 1930s, with four universities established in the main cities (Otago, Canterbury, Victoria and Auckland), and agricultural colleges established at Lincoln, Canterbury (1878) and at Massey, Palmerston North (1927). The first technical institute was not established as a separate institution until 1960 at Petone, as the Central Technical College (Central Institute of Technology, from 1961).

3.2 Social Context and Academic Qualifications available to 5 year cohorts of 65-84 year olds during their "school years" - Their Formative Years (5-15 years).

It is possible to compose a picture of the type of education available to the 2007 cohort of 65-84 year-olds when they were in school and the social context of their school years. Because education was largely free and compulsory from 5–15 years of age during this period, emphasis will be placed on education during those years. The time periods during the 1930s, 1940s and 1950s when the 65-84 year-olds of 2007 were of school age (5-15 years) is shown in Table 5.3, in the 5 year cohorts of 65-69 years, 70-74, 75-79 and 80-84 years.

Table 5.3

*Time Period when 65-84 year-olds were of School Age: 5-15 years**

Age	Time Period			
Birth year	1923-27	1928-32	1933-37	1938-42
5 years	1928-32	1933-37	1938-42	1943-47
10 years	1933-37	1938-42	1943-47	1948-52
15 years	1938-42	1943-47	1948-52	1953-57
Age in 2007	84-80yrs	79-75yrs	74-70yrs	69-65yrs
& weighted %	(16.3%)	(22.4%)	(26.3%)	(35%)

*interviewed in 2007

From Table 5.3, the four 5-year age cohorts can be characterised as:

- Those educated during the pre-Depression and early World War II years (the 80-84 year-olds in 2007 and who were of school age (5-15 years) between 1928 and 1942): They were largely educated during the 1930s, marked by the restrictions of the worldwide Depression and the beginning of World War II. Their school qualifications could include: Proficiency (the last cohort who sat this examination); Public Service Entrance Examination; “old” School Certificate (the first cohort to sit this); and University of New Zealand Matriculation.
- Those educated during the Depression and War years (the 75-79 year-olds in 2007 and who were of school age (5-15 years) between 1933-1947): This cohort spanned the Depression and World War II, and the introduction of the Welfare State policies. They were the first to have both free primary and secondary education, and some of the newly introduced education changes, such as the “common core curriculum”. Their school qualifications could include: Public Service Entrance Examination; “old” School Certificate; University Entrance (the first cohort to sit this); University of NZ Entrance Scholarship (post 1944) (the first cohort to sit this).
- Those educated during the World War II years and the years of the Welfare State establishment (the 70-74 year-olds in 2007 and who were of school age (5-15 years) between 1938-1952): During the War, the continued implementation of the new education (and other welfare) policies, and the beginning of good economic times. Their school qualifications could include: Public Service Entrance Examination; “old” School Certificate (the last cohort to sit this); “new” School Certificate (the first cohort to sit this); University Entrance; University of NZ Entrance Scholarship.
- Those educated during the Welfare State consolidation and economic boom of the 50s (the 65-69 year-olds in 2007 and who were of school age (5-15 years) between 1943-1957): During this period, the economy boomed, social norms were in considerable change, unemployment reached an all time low, and the population expanded rapidly. The 1950s saw a period of stability and prosperity. The changes already made in education, especially those arising from the 1944 Thomas Report, allowed for a greater uptake of educational opportunities by both men and women, so that the 65-69 year-olds in 2007 who were at school during this period were fully able to take advantage of some of the welfare state provisions. Their school qualifications could include: “new” School Certificate; University Entrance; University Entrance Scholarship.

The experience of a 65 year-old and an 84 year-old in living through, and being educated, during this time was a very different one, given the large educational and social changes of the decades.

4. Method

4.1 *Indicators of Education*

Three questions were asked in the 64-85 year-old questionnaire directly relating to education. They were:

- Year when first left school
- Highest educational qualification
- Year of completion of highest qualification.

A further question was asked about computer use for email and access to the internet.

With respect to the question regarding “Highest educational qualification”, the responses of the respondents were not pre-coded, but were recorded in full, as neither the current Census coding of the “highest educational qualification” nor any other recognised coding of this variable would be appropriate to this older cohort, who had gained their education and qualifications at least 50 years ago. Only by examining the individual responses to this question could a coding schedule be developed, which was consistent with the provision of education and the qualifications of the time.³²

4.2 *Indicator of Level of Wellbeing*

The indicator of general wellbeing used in the analyses was the World Values Survey question (WVS) as previously reported in Chapter 3 Methodological Background.

The analyses included frequency distributions where the differences between categorical variables were examined using chi-square tests. Weighted data were used.

5. Findings

5.1 *Introduction*

The following discussion considers a number of relationships between the age at which the older respondents left school and their current age, gender and education level, as well as the level of education or highest qualification they attained and their current age, birth country and their computer usage. These findings are presented because of the importance of the relationship and/or because of the detail they provide regarding the education this cohort undertook.

5.2 *Determinants of Educational Level*

5.2.1 *Age when Left School by Current Age (in 5 year groups).*

The length of schooling undertaken by the 65-84 year age-group differed according to availability of appropriate schooling, access, gender and other variables within the social context. The length of education of respondents in each of the four age-groups is set out in Tables 5.4 and 5.5, and shows that the younger cohort of 65-84 year-olds had a significantly³³ longer education than the older group. A clear drop-out in school attendance begins at the age of 14 for the 80-84 year-olds (13.4%) but declines to 9.0% for the 65-69 year-olds. At ages 15 and 16 all four age cohorts experienced a drop-out of around 25%, but there is a noticeable difference in the percentage of 80-84 year olds who have left school by the age of 17 (87.9% compared with around 81-82% of the other age-groups, see Table 5.5). The 80-84 year-olds would have been 15-16 years old in 1942-43, during the Second World War, and their energies were needed elsewhere.

³² Advice on the timing, nomenclature and level of qualifications was provided by Associate Professors G. Lee and L. Moss, educational historians at The University of Waikato, and a 4, 7 and 16 category coding schedule was devised.

³³ Chi-square = 59.90, $p < .001$

Table 5.4
Age when Left School by Current Age (%)

Age Left School	Age Category				Total
	65-69	70-74	75-79	80-84	
Up to 12 yrs	1.4	1.9	2.5	4.2	2.2
13 yrs	3.0	2.2	4.0	9.2	4.0
14	9.0	9.9	13.6	13.4	10.9
15	21.4	28.2	20.6	21.8	23.0
16	25.9	20.3	20.1	24.7	22.9
17	22.1	18.8	21.5	14.6	19.9
18	11.1	11.8	11.6	7.5	10.9
19 years and older	6.1	6.9	6.1	4.6	6.2

$p < .001$

Table 5.5
Age when Left School by Current Age (Cumulative %)

Age Left School	Age Category				Total
	65-69	70-74	75-79	80-84	
Up to 12 yrs	1.4	1.9	2.5	4.2	2.2
13 yrs	4.4	4.1	6.5	13.4	6.2
14	13.4	14	20.1	26.8	17.1
15	34.8	42.2	40.7	48.6	40.1
16	60.7	62.5	60.8	73.3	63
17	82.8	81.3	82.3	87.9	82.9
18	93.9	93.1	93.9	95.4	93.8
19 years and older	100	100	100	100	100

$p < .001$

5.2.2. Age when Left School by Gender

As Table 5.6 shows, there were no significant differences between the ages when boys and girls left school. At each age, approximately the same percentage of boys and girls completed their education.

Cumulatively, in the mid 1930s to the late 50s, around 41% of New Zealand's boys and girls had an education to the age of 15 years and then left school, while 65% had an education to the age of 16, and 83% of the boys and 88% of the girls had an education to the age of 17 years.

Table 5.6
Age Left School by Gender (% and Cumulative %)

Age Left School	Gender (%)		Gender (Cumulative %)	
	Male	Female	Male	Female
Up to 12	2.0	2.8	2.0	2.8
13	4.6	3.5	6.6	6.3
14	12.3	10.5	18.9	16.8
15	23.0	24.6	41.9	41.4
16	23.3	23.9	65.2	65.3
17	15.1	22.8	83.3	88.1
18	12.8	9.8	96.1	97.9
19	3.9	2.1	100	100
	100%	100%		

ns

This lack of gender difference had already been noticed considerably earlier in New Zealand's educational history with regards to the achievements of boys. In the 1914 Matriculation Examination

pass rates, there was no significant difference between successful boys and girls – over 1,953 papers taken by the boys scored an average mark of 51.8; while over 1,006 papers by the girls scored an average mark of 52.7. It should be noted however, that the number of boys sitting the exam was almost twice the number of girls (McGeorge, 1987).

5.2.3 Highest Qualification by Current Age (in 5 year groups).

The youngest cohort within the 65-84 year age-group could be expected to attain a higher qualification, given the greater provision of education during the 1950s than the late 1930s, and changing attitudes to the importance of education over the decades. Table 5.7 demonstrates the spread of qualifications among the different age groups, and shows the younger cohort of 65-84 year-olds has higher qualifications than the older group. The difference is however not significant.

Table 5.7

Level of Education by Current Age (%)

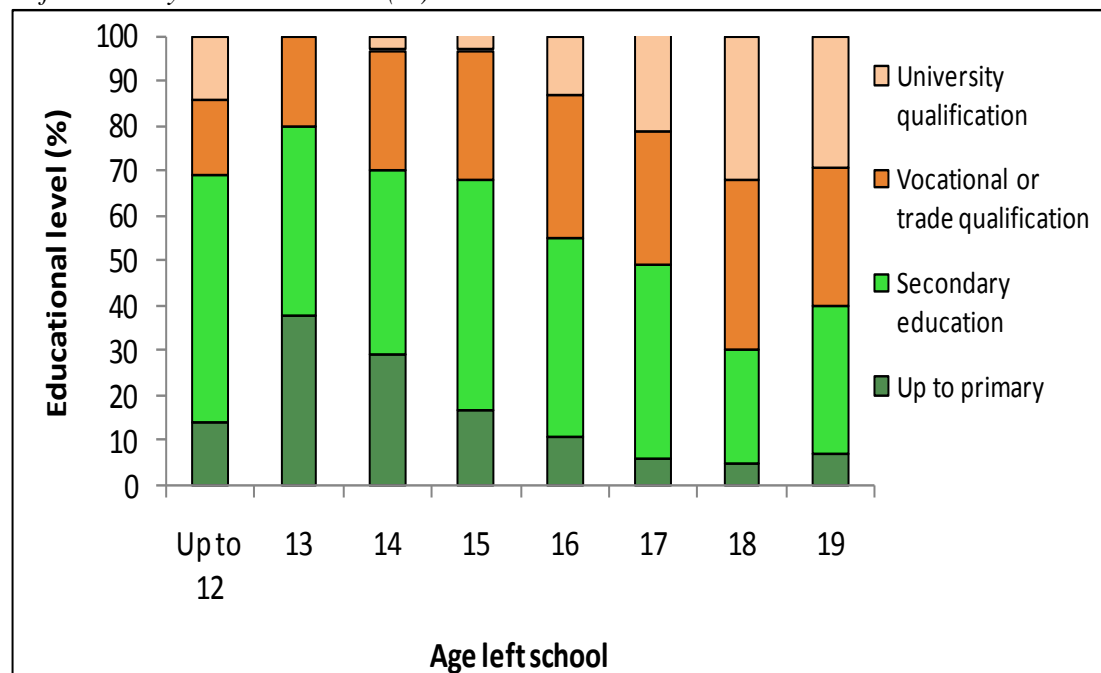
Level of Education	Age Category			
	65-69	70-74	75-79	80-84
Up to primary education	10.2	12.1	14.9	18.5
Secondary education	44.5	42.2	42.9	38.6
Vocational or trade education	29.7	31.6	28.3	29.6
University qualification	15.5	14.1	14.0	13.3
	100%	100%	100%	100%

5.2.4 Age Left School by Education Level

Figure 5.1 shows the level of education that those leaving at various ages went on to acquire. The attainment of a higher qualification is significantly associated with longer schooling³⁴. Many of those who left largely between the ages of 16-19 years, for example, went on to advanced vocational education.

Figure 5.1

Age Left School by Education Level (%)



$p < .001$

³⁴ Chi-square = 209.60, $p < .001$

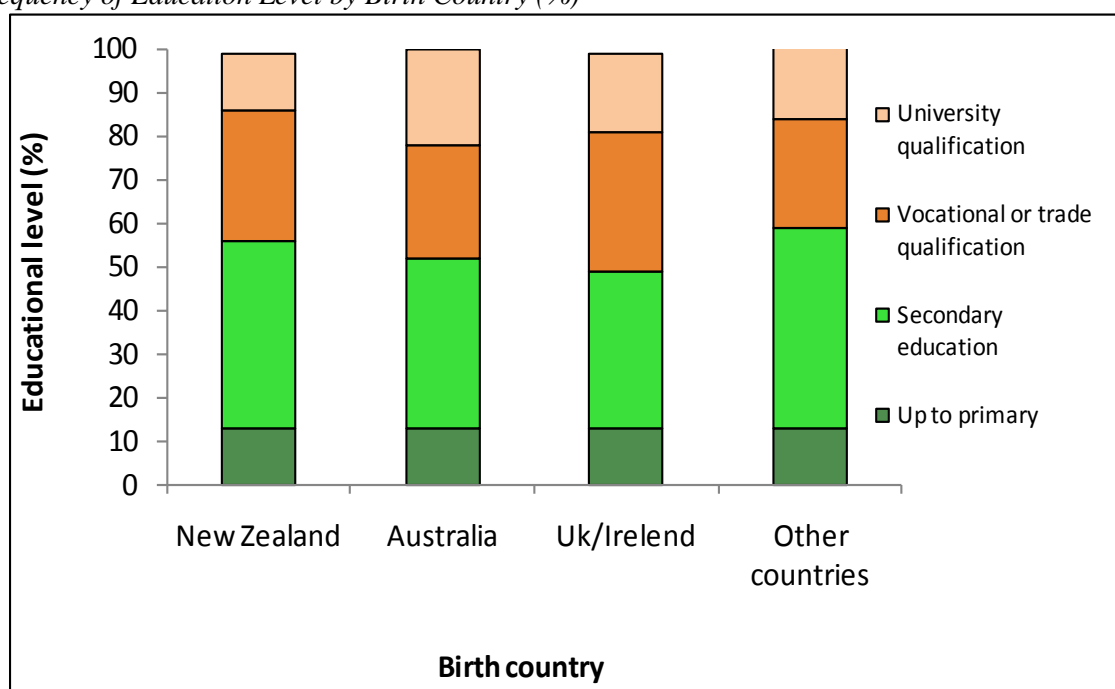
However, as expected, for those who left school prior to 16 years, most had lower qualifications. Nevertheless, it is noteworthy that some of those who had left school at (or before) the age of 12 subsequently gained higher qualifications, including tertiary qualifications. The attainment of a tertiary qualification, subsequent to only a primary education, is also possible through the *ad eundem* admission to university as an adult, and was also available to returning soldiers from World War II.

5.2.5. Education Level by Birth country

Figure 5.2 shows the education level of the respondents by their country of birth. Respondents have been grouped into four categories: New Zealand (comprising 76% of respondents), Australia (1.5%), UK/Ireland (12.7%) and other countries (9.8%). The qualifications among the four categories were not significantly different, despite various migration policies over the years encouraging migrants of higher qualifications and expertise.

Figure 5.2

Frequency of Education Level by Birth Country (%)



ns

5.2.6. Relationship of Education with Other Variables

As reported elsewhere in this report, there was a significant relationship between education and other variables. The relationship between education level and personal income was significant³⁵, as was education level (or highest qualification) and household income³⁶. However, the relationship between education level and self-rated health was non-significant.

5.3 Computer Usage by Education Level

The researchers were also interested in the extent to which a person's level of educational attainment allowed them to further their education and learning in the widest sense. It was decided to use "computer usage" as an indicator of this. The respondents were therefore asked the question "Do you currently use a computer to access email and/or the internet?" The results indicate that those with a higher level of education are significantly more likely to use computers.

In total 51.2 % of the respondents used a computer to access email and/or the internet. The findings show a systematic relationship between educational level and computer use – the higher the

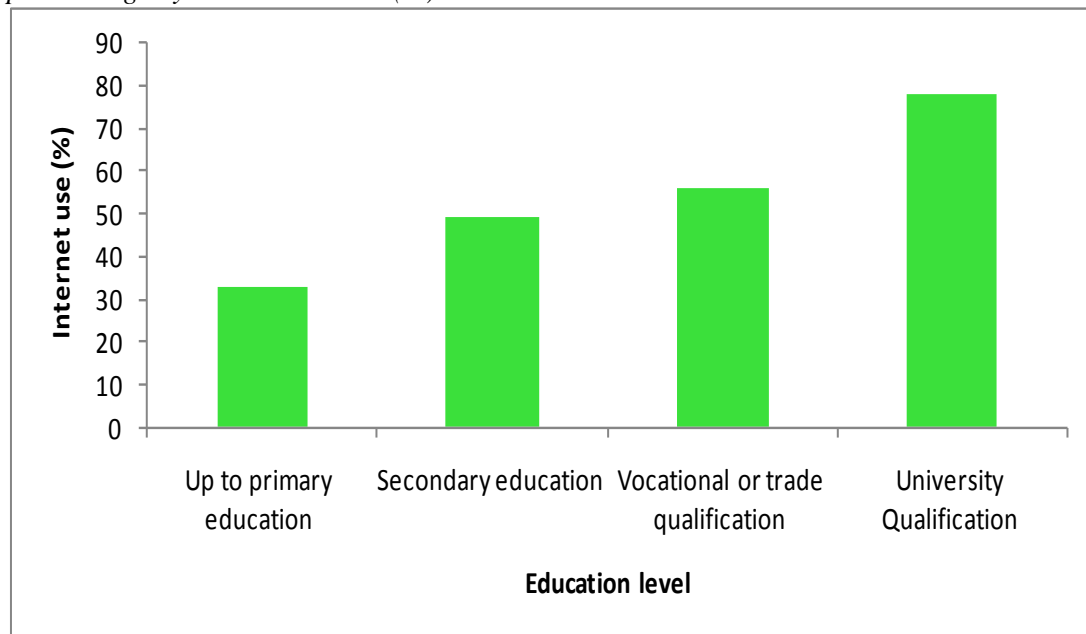
³⁵ Chi-square = 152.60, $p < .001$

³⁶ Chi-square = 97.31, $p < .001$

educational level the more a computer is used³⁷. Of the university educated respondents, 77.7% used a computer, while only 33.3 % of those with a primary education did so (see Figure 5.3).

Figure 5.3

Computer Usage by Education Level (%)



$p < .001$

Moreover, both gender³⁸ and age³⁹ were an important factor (see Table 5.8). Older men with a university education have the highest computer use, with a steady increase from 35% for those with primary education only, to 81.5% at university level. For older women this increase is less steady, and there is a gap between those with up to vocational/trade education and university education. This suggests that, unlike men, they may not have used computers so much in any paid full or part-time work that they had undertaken.

Table 5.8

Computer Usage by Education Level according to Gender and Age (%)

		Educational level			
		Up to primary	Secondary	Vocational/Trade	University
Gender					
-	Male	35.0	48.7	63.3	81.5
-	Female	31.9	48.8	49.1	71.3
Age					
-	65-69	42.6	60.9	64.7	84.1
-	70-74	35.4	49.7	58.7	89.1
-	75-79	28.0	39.6	49.5	55.3
-	80-84	23.3	30.3	41.4	74.2

$p < .001$

The findings show that the two age groups 65-69 and 70-74 year olds are alike in having a steady increase in their computer use with the increase in educational level. The increase of computer use

³⁷ Chi-square = 89.25, $p < .001$

³⁸ Chi-square = 60.13, $p < .001$ (male); Chi-square = 29.41 $p < .001$ (female)

³⁹ Chi-square = 26.15, $p < .001$ (65-69); Chi-square = 35.81, $p < .001$ (70-74); Chi-square = 9.82, $p < .05$ (75-79); Chi-square = 23.72, $p < .001$ (80-84)

with education for 75-79 and 80-84 year olds seems to lessen, possibly because computer use for many of them would not have been available in their work place.

In all cases, it is clear that those who have a tertiary education (which for this cohort largely means a university education) have a far higher use of email and the internet, thereby maintaining and opening wider social and educational horizons for them, and allowing them further means of communicating with their family and friends.

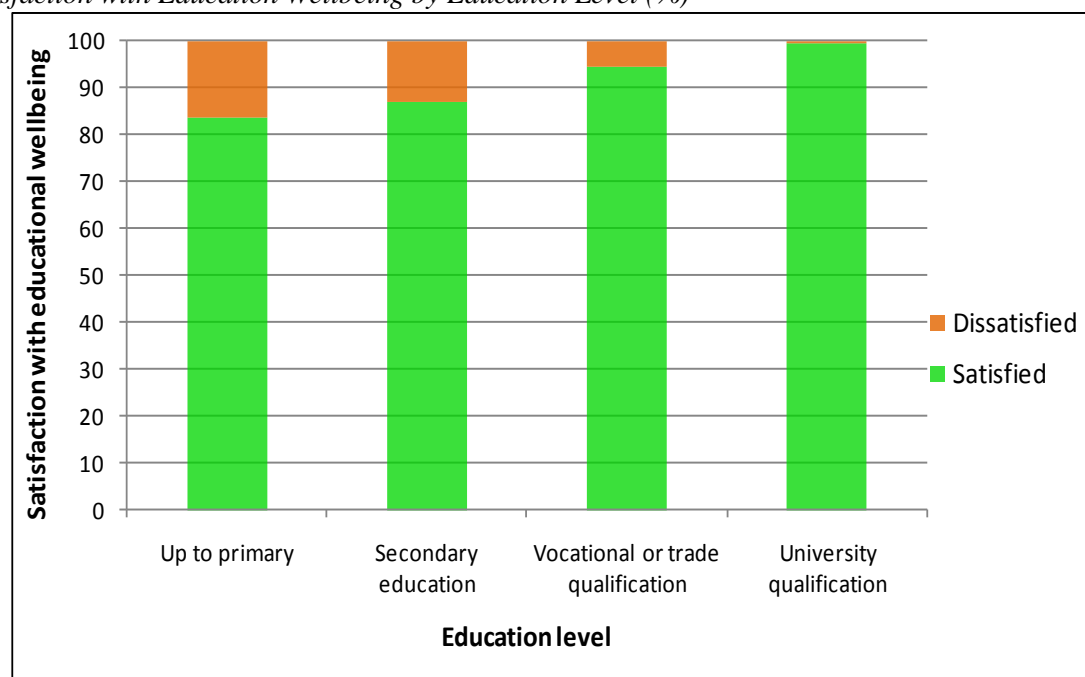
5.4 Relationship between Education and Wellbeing

The significance levels were tested between age when left school, level of education; and year of completion of highest qualification with the level of overall wellbeing. None of these were found to be significant.

However, using the indicator “satisfaction with education wellbeing” the levels of significance are positive, with respect to education level⁴⁰ (or level of highest qualification) (see Figure 5.4), and with age when left school⁴¹ (see Figure 5.5). Thus the higher or longer the schooling, the higher the level of satisfaction of respondents with their level of education wellbeing.

Figure 5.4

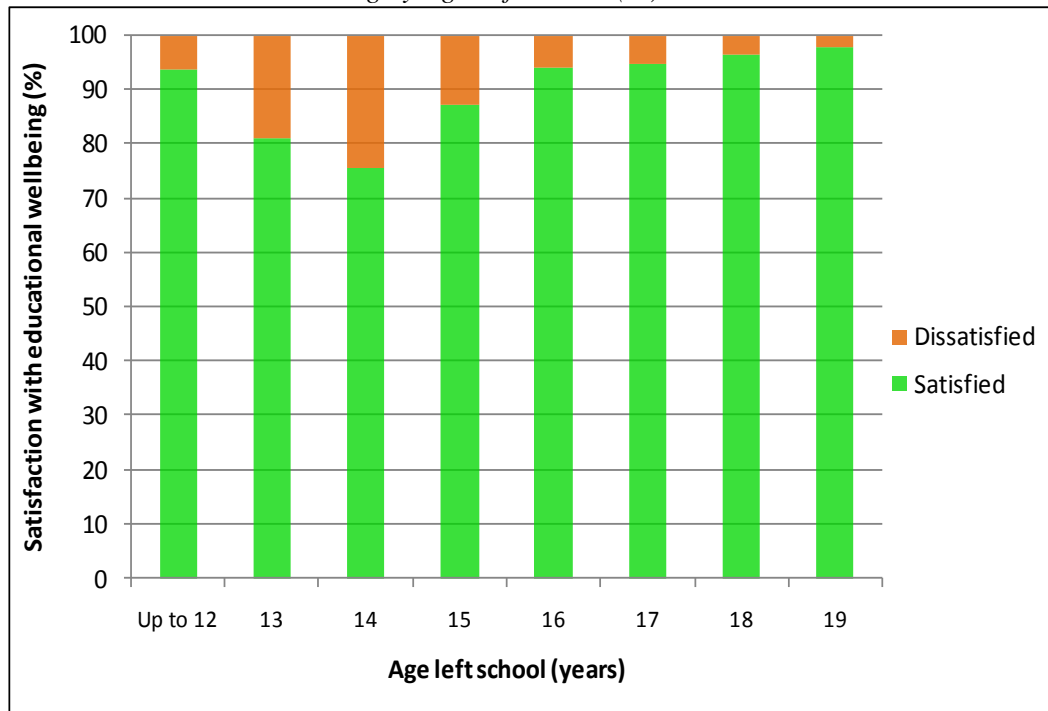
Satisfaction with Education Wellbeing by Education Level (%)



40 Chi-square = 49.25, $p < .001$

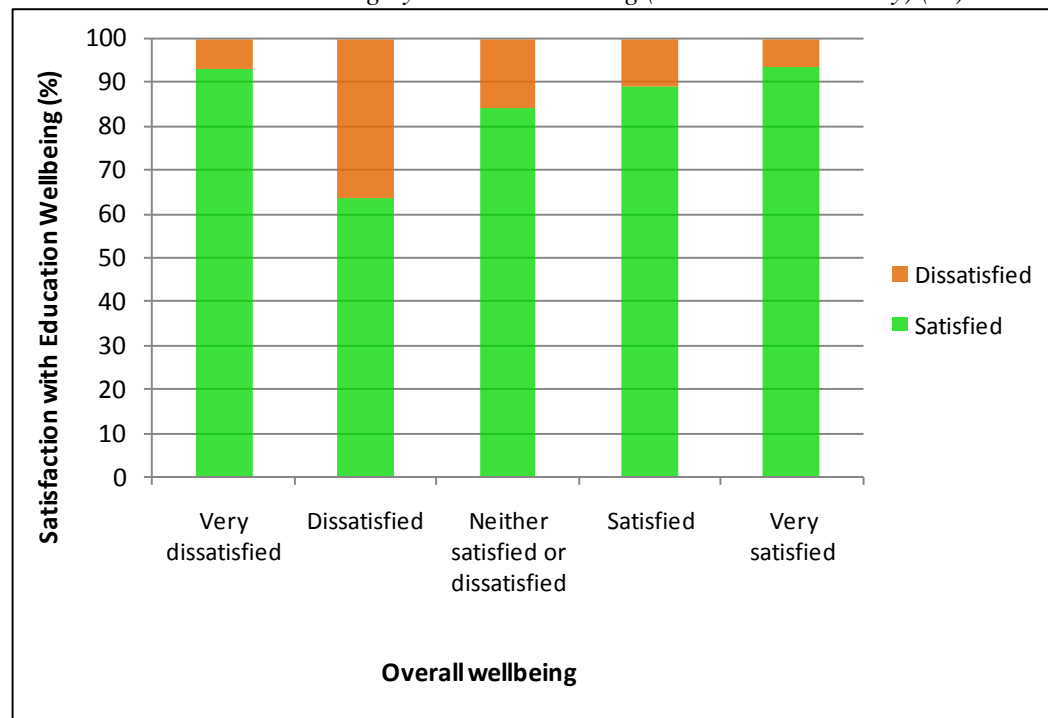
41 Chi-square = 74.29, $p < .001$

Figure 5.5
Satisfaction with Education Wellbeing by Age Left School (%)



There was also a significant relationship between respondents' satisfaction with their education wellbeing and their overall wellbeing, as shown by the indicator from the World Values Survey ⁴² (see Figure 5.6).

Figure 5.6
Satisfaction with Education Wellbeing by Overall Wellbeing (World Values Survey) (%)



⁴² Chi-square = 45.45, p<.001

5. Conclusion

There is not a great diversity in education levels within the 20 year cohort of 65-84 year-olds. While those in the oldest cohort were not compelled to attend school beyond the age of 14, and their education beyond 15 was not free, those in the 65-69 year cohort had available to them a compulsory education to 15 years and free secondary schooling of whatever length, along with a tertiary education with relatively easy financial access. It is possible therefore that the 65-69 year cohort has greater similarities with the oldest 5 year cohort within the Mid-Life 40-64 year-old survey (the associated and next survey following this one in the EWAS research programme), ie the 60-64 year-olds, for that cohort also benefited greatly from the more liberal access and availability of education during the 1950s and 1960s. A careful comparison will be undertaken on this.

Significant associations were found between the age category of older people and the years they spent at school, with the younger cohort staying longer, probably for the reasons noted above. A positive association was found between the age participants left school and their educational qualifications, and computer usage was positively associated with higher educational attainment.

Possibly the most important results in this chapter are also the non-significance of level of education (and other indicators of education) with overall wellbeing, which may be explained by the fact that education is quite often found as an intervening variable leading towards overall wellbeing (e.g. income). A significant association was found between the respondents' satisfaction with education wellbeing and their overall wellbeing. Both of these indicators were subjective indicators, and show how subjective measures can yield different outcomes than those with objective measures.

There is a considerable time difference between the age at which members of this cohort of 65-84 year-olds gained their formal education and the year in which overall wellbeing was measured (in many cases the difference between the 1930s and 2007). It therefore makes sense that these older respondents might not be specifically concerned about historic variables, such as their level of education, age when left school, and date when left school. These objective variables were found NOT to be significantly related to overall wellbeing.

The objective variables were however, significantly related to the more specific education wellbeing. Thus the higher the satisfaction the respondents had with individual education variables, the higher their level of education wellbeing. Satisfaction with education wellbeing was in turn related to overall wellbeing. In brief, while the respondents did not relate objective levels of their education to their overall wellbeing (level of education, age when left school), in being satisfied with their specific education wellbeing, they were also satisfied with their overall wellbeing. Thus, educational attainment and age when left school, in this study, can be viewed as an intervening variable that contributes to overall wellbeing.

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Chapter 6: Work, Retirement and Wellbeing among Older New Zealanders

Michael P. Cameron and Charles Waldegrave

1. Introduction

Work, both paid and unpaid, is a key part of the lives of New Zealanders. Paid employment provides much of the resources that are used to generate a standard of living, and, as Ministry of Social Development (MSD) notes in the Social Report, New Zealand's prosperity reflects the efforts of generations of past New Zealanders (Ministry of Social Development, 2007). Much of that prosperity was generated, and is still being generated, by those currently over the age of 65. As such, work in later life is recognised as a key element in the New Zealand Positive Ageing Strategy, with employment forming one of the ten goals of the Strategy (Dalziel, 2001). Work has also been an important consideration in many international studies of wellbeing (see for example the European Study on Ageing Well (ESAW), Droogeleever Fortuijn et al., 2003), and the association between wellbeing and retirement has also been investigated (see for example Warr et al., 2004).

In New Zealand, MSD identifies paid work as having an important role in social wellbeing because it:

“...provides people with incomes to meet their basic needs and to contribute to their material comfort, and gives them options for how to live their lives. Paid work is also important for the social contact and sense of self-worth or satisfaction it can give people...” (Ministry of Social Development, 2008: 44).

The New Zealand workforce is ageing and labour force participation among older New Zealanders is projected to rise between now and 2021 (Statistics New Zealand, 2008), so an understanding of the relationships between work and wellbeing among older New Zealanders is clearly important.

This chapter summarises the lifetime work experiences of New Zealanders aged 65 to 84 years, and presents analyses of their associations with “satisfaction with work” and with overall wellbeing, using data from the EWAS project. Section 2 presents a brief review of the international and New Zealand literature linking work and wellbeing among the elderly, while Section 3 briefly discusses the changing context of work and retirement experienced by New Zealanders currently aged 65 to 84 years. Sections 4 to 6 present the data and method, the findings and discussion, and the conclusion.

2. Work, Retirement and Wellbeing

In social psychology, work has clearly been established as a determinant of life satisfaction (see for example Jahoda, 1982), and employment status has also been shown to affect wellbeing. For instance, the unemployed may have significantly lower life satisfaction (Murphy and Athanasou, 1999; Warr et al., 1988). In the United States, these relationships between work and wellbeing appear to hold true not only for people in prime working age, but also among older people. Furthermore, having a job after the age of retirement has been associated with greater life satisfaction in Iowa (Aquino et al., 1996), and California (Kim & Feldman, 2000). On the other hand, research in North Carolina has shown high wellbeing for older people not in employment (Reitzes et al., 1996).

Satisfaction with work may therefore be an important dimension of overall wellbeing. For instance, although Warr et al. (2004) argue that work status itself is not important for life satisfaction, they suggest that satisfaction with the role (whether retired or employed) is important. Where the work status role is forced rather than voluntary, they found that life satisfaction is lower. Supporting this, Palmore et al. (1985) showed that early retirement had negative psychological effects. In contrast,

early retirees have been found to report higher levels of life satisfaction (Herzog et al., 1991). Further, the European longitudinal study, the Survey of Health, Ageing and Retirement in Europe (SHARE), found that poor quality of work among older people in 2004 was significantly associated with intended early retirement, and that intended early retirement, and reduced well-being, were independently associated with the intention to retire from work (Siegrist et al., 2006).

The numbers of people 65 years or over who continue to work in the labour market varies considerably according to a number of factors. The SHARE study found that men had higher rates of labour market participation and retirement than women, which they assumed was largely because many women who identified as 'homemaker' had not participated in the official labour market (Brugiavini et al., 2005). In their study of ten European countries (not including the UK), less than 1 in 10 men aged over 65 in all the countries except Switzerland reported themselves as working, while the figures for women were half of that. By contrast the US longitudinal Health and Retirement Study (HRS) found that through the 1990s 70 percent of men and 60 percent of women actively participated in the labour force during their 50s, largely on a full-time basis, but by 65 years their participation reduced by half (Hodes & Suzman, 2007). The UK longitudinal study, English Longitudinal Study of Ageing (ELSA), demonstrated results between these two major studies. For people over the state pension age in 2006, they found that 9.5 percent of men and 12.3 percent of women were active in full-time or part-time paid employment (Banks & Tetlow, 2008).

All three studies noted the increase in part-time work by those 65 and over. In Europe, participation in part-time work increased for both men and women, but more for women than men (Brugiavini et al., 2005). In the US, more than half the working women at 65 and over were employed part-time, and by 70 years the majority of paid work was part-time for both genders (Hodes & Suzman, 2007). In the UK, for every two older men in full-time work, there were three in part-time work. The numbers of older women in part-time work were more than twice those in full-time work (Banks & Tetlow, 2008).

Many factors have been found to influence the individual's decision to retire. These may include financial conditions (including the availability and relative value of old age pensions), health service provision, and individual factors such as good health and income, that allow the individual to work productively for longer (Rix, 2004; Samorodov, 1999). Additionally, the decision to retire is often a joint decision for couples (see for example Blau and Riphahn, 1999; Jimenez-Martin et al., 1999), and education appears to be an important factor that keeps the more highly-skilled in work for longer (Blöndal & Scarpetta, 1998). The Equal Employment Opportunity Trust (EEOT, 2006) identified finance and health as the main factors that working people in New Zealand thought would affect their decision to retire. Other factors included:

- Job satisfaction, interest, enjoyment
- Other interesting and challenging opportunities
- Partner's employment circumstances
- Ability mentally and physically to still do the job
- Redundancy
- Contribution to the workplace still valued
- Wanting to spend more time with family
- Job opportunities, and
- Need for mental stimulation/keep active (Equal Employment Opportunity Trust, 2006: 8).

On the other hand, retired people themselves identified health as the most important factor that determined their retirement decision, with other reasons including redundancy, lack of job opportunities, employer attitudes to older workers, and moving town (EEOT, 2006). The ideal transition from work to retirement was found to be similar between retirees and the currently working, with part-time work before full retirement, and working more flexible hours before full retirement being the most preferred transitions to retirement for both groups (EEOT, 2006). This contrasted with

the actual transitions to retirement experienced by retired workers, where over 45 percent had moved directly from full-time paid work into full retirement. These results are similar to those across OECD countries in general (OECD, 1995). However, Dixon (2008) found much higher rates of ‘phased’ transition to retirement in New Zealand using longitudinal data from 1999 to 2007, with only 23.5 percent of workers moving directly from full-time employment to full retirement. Women were more likely than men to experience a phased retirement.

The ELSA research showed that financial incentives through private pensions influenced men, but not women, to retire. Pre-existing health conditions were not found to influence retirement from full-time work, but the onset of a new condition did. They also found interesting couple complementarities whereby, for both women and men, if one partner was in work then the other was more likely to remain in work. The data also showed that men (but not women) were more likely to leave full-time work if their partner retired (Banks & Tetlow, 2008).

3. The Changing Context of Work and Retirement in New Zealand

A consideration of the changing social context of work and retirement in New Zealand is important where there is a likelihood that satisfaction with work and work roles and their association with overall wellbeing may be related to social norms concerning work and retirement. The older New Zealanders surveyed for this research were born between the early 1920s and the early 1940s, and would have entered the workforce from the mid 1930s. By 2007, most of them would have left the workforce. Their working life occurred during a period of significant change in both the social norms around work and retirement, and the policy environment. Societal changes included increasing the labour force participation of women, supported by decreases in fertility and policies such as subsidised childcare and the outlawing of gender discrimination. These, along with increasingly family-friendly employment practices, have contributed to increased labour force participation by women in most developed countries (OECD, 2006).

The nature of work and the employer-employee relationship have also changed significantly. When older workers entered the workforce, they joined a workplace environment where there was an implicit agreement between employer and worker – the worker remained loyal to the employer, and the employer provided security of employment. Under these conditions, people worked for only a few organisations across their career and responsibility for career development was left in the hands of the employer (Sullivan, 1999). By the time the older New Zealanders surveyed in the EWAS project exited the workforce, the nature of careers had significantly changed. Reward had shifted from loyalty-based to skills-based, and career management had become the responsibility of the worker themselves (Sullivan, 1999). To some extent, these changes were forced as a result of the increased pace of technological change, and the employer’s need for their employees’ skills to keep pace with change. Furthermore, gradual de-unionisation reduced an important disincentive for employers to use redundancy. The economic restructuring of the 1980s and 1990s resulted in significantly increased unemployment, particularly among those aged over 50, who often became the targets of redundancy (McGregor, 2005).

There have also been many significant policy changes over the period since 1940, many of which were designed to reduce the disincentives for older people to continue in paid work. Pensions and national superannuation have been restructured several times, and the provision of private superannuation schemes has significantly declined. There have also been several recent changes that are likely to affect the work and retirement decisions of older people. These include the Human Rights Act 1993 that prevented age discrimination, the increase of the age of eligibility for New Zealand Superannuation from 60 to 65 years (phased in between 1992 and 2001), the removal (in 1998) of surcharges from extra income earned while receiving national superannuation (surcharges had been introduced in 1985, along with the removal of tax incentives for superannuation savings), and the abolition of compulsory retirement from both the public and private sectors (in February 1999). Few

of those surveyed in this project will have been significantly affected by the more recent introduction of the KiwiSaver savings scheme (in 2007).

These changes reduced some of the incentives for retirement (or disincentives for continued work) among older workers. According to the most recent Census of Population and Dwellings, there were a substantial number of people aged 65 to 84 still in the labour force, and reflecting a significant increase in labour force participation between 2001 and 2006 (see Table 6.1). This is consistent with the trend in most OECD countries, where following a period of significant decline since the 1950s,⁴³ labour force participation among those aged of 65 has begun to rise in recent years (Hofäcker & Pollnerová, 2006).

Table 6.1

Labour Force Participation among New Zealand Population aged over 65

	2001		2006	
	Labour Force (000s)	Participation Rate (%)	Labour Force (000s)	Participation Rate (%)
Male	33.5	17.5	51.5	23.9
Female	17.3	7.0	31.0	11.6
Total	50.7	11.6	82.5	17.1

Source: Census of Population and Dwellings, Statistics New Zealand.

Despite the reduced incentives for retirement in developed countries, some studies have shown that older workers in employment may face significant discriminatory attitudes and stereotyping (e.g. see Smith, 2001; EEOT, 2006). Once outside the workforce, many believe themselves to lack appropriate skills or education level for continued employment (Rix, 2004; Samorodov, 1999). These effects result in many older workers becoming discouraged, and in combination with ill health or job loss, reinforce retirement at the socially accepted retirement age (65 in New Zealand).

4. Data and Method

The data used as indicators for work in the EWAS survey were derived from questions about three phases of the working lives of respondents: (i) their first main job; (ii) their main job during midlife; and (iii) their most recent main job. Data were also collected about significant absences from the workforce (of more than six months duration), retirement, and main work since retirement. Retirement as a question was not directly asked of respondents to the EWAS survey. Instead, retirement status can be inferred from their responses to the questions on their main job at midlife (of which one valid response was “fully retired”), and their most recent main job (again, where “fully retired” was a valid response). Given that over 64 percent of respondents indicated that they were fully retired as their most recent main job (see below), this is unlikely to pose a significant problem for the analysis of these data.

Given the significant changes in the social context of work, the observed differences between the four five-year age cohorts within the sample (65-69 years, 70-74 years, 75-79 years, and 80-84 years) are of particular interest, as are the differences between male and female. Additionally, some variables were analysed in relation to education, marital status and the respondents’ number of children.

A subjective measure of satisfaction with work was the dichotomous response (satisfied/not satisfied) to a question of whether the respondent was satisfied with work, similar to that used for the other

⁴³ For instance in New Zealand, labour force participation among older people decreased from 14.3 percent in 1951 to 11.0 percent in 1971 (Department of Labour, 1977).

dimensions of wellbeing in this study. There were no objective measures of work satisfaction included in the survey. However, following Warr et al. (2004), personal preference for current work status role could be indicated by chosen or enforced early retirement. Accordingly, a comparison was made between those who retired voluntarily with those who were forced to retire through reasons of poor health, disablement or injury, forced retirement or redundancy.

The tables and figures below summarise these results. They do not include non-responses, don't knows, or refusals, so that frequency totals may not be the same between different tables. The data have been re-weighted to make the results more representative of the New Zealand population aged 65 to 84, as noted in the Method chapter. Therefore, only relative frequencies are reported in the tables and figures.

5. Findings

5.1 Older New Zealanders' Lifetime Experience in the Workforce

There was very little difference in the employment status of the respondents in their first main job, with no statistically significant differences between age cohorts, gender, or both (data not shown).⁴⁴ Of the older New Zealanders surveyed, the first main job for nearly everyone was in full-time paid work (over 95 percent), with fewer than 2 percent in part-time paid work and about 1.6 percent in full-time unpaid family or farm businesses.

However, there were significant differences in terms of the age at which they started their first main job (data not shown). Across the whole sample, the median age for starting the first main job was 16.2 years, and was marginally lower for men (16.1 years) than for women (16.3 years), and older cohorts began their first main job at a slightly younger median age.⁴⁵

There were significant differences in employment status during midlife by gender (see Table 6.2), but no significant differences by age cohort.⁴⁶ As expected, women were significantly more likely to be homemakers or in part-time paid work during midlife, and less likely to be in full-time paid work. Women were also more likely to be in voluntary work as their main job during midlife, although the overall incidence of voluntary work was low, at less than 0.5 percent of the sample.

Table 6.2

Employment Status of Main Job during Midlife by Gender (%)

	Male	Female	Total
Fully retired	0.1	0.3	0.5%
Full-time paid work	40.5	30.4	70.9%
Part-time paid work	0.5	9.2	9.7%
Homemaker	0.2	9.1	9.3%
Voluntary work	0.1	0.4	0.5%
Full-time unpaid family/farm business	5.1	0.3	8.2%
Part-time unpaid family/farm business	0.2	0.7	0.9%

Using the eight occupational groups in the Australian and New Zealand Standard Classification of Occupations (Trewin & Pink, 2006), differences emerged between respondents' first main job and their job during midlife. Just over half began work in a professional role (26.7 percent) or as a clerical or administrative worker (26.5 percent), while 17.8 percent began as technicians or trades workers and 14.1 percent as labourers. However, by midlife managers had increased from 2.7 to 16.3 percent of those employed, and labourers and technicians and trade workers had reduced to 12.9 and 10.2 percent respectively.

⁴⁴ F-test statistics have p-values of 0.5545 for age cohorts, 0.0155 for gender, and 0.1549 for age and gender combined.

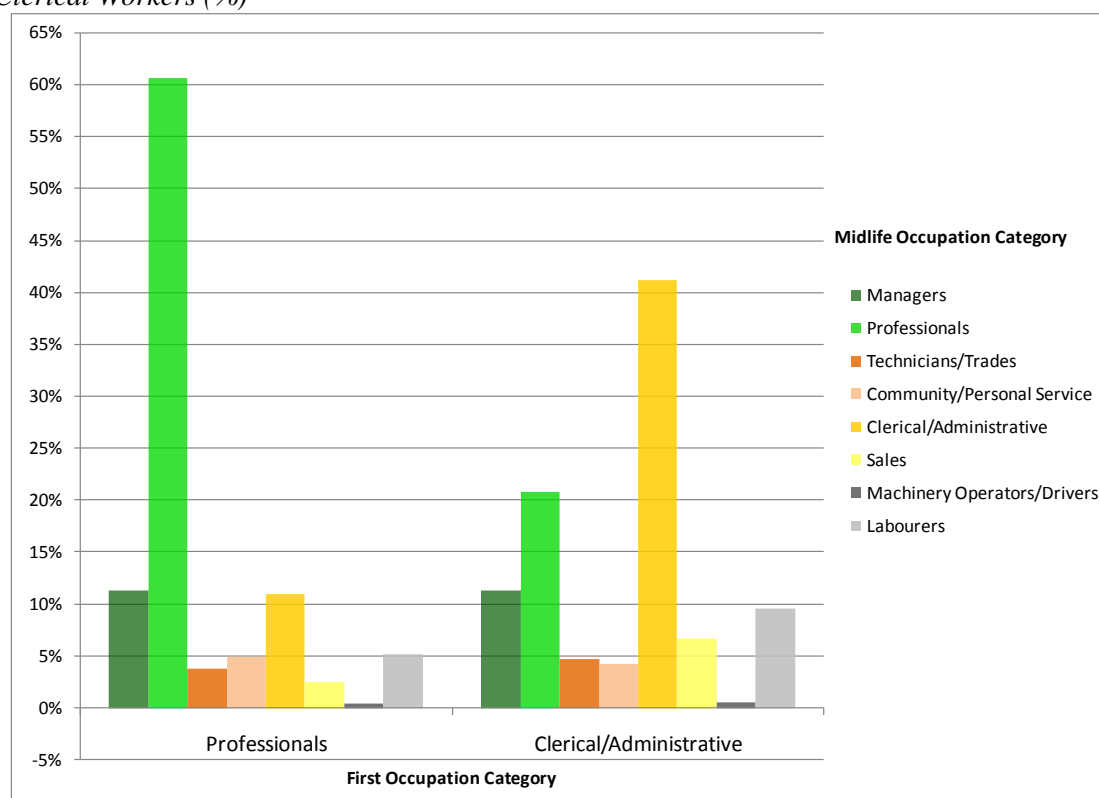
⁴⁵ F-test statistics have p-values of 0.0118 for age cohorts, 0.0040 for gender, and 0.0071 for age and gender combined.

⁴⁶ F-test statistics have p-values of 0.1294 for age cohorts, <0.0001 for gender, and <0.0001 for age and gender combined.

Nevertheless, as Figure 6.1 demonstrates, there was considerable stability in the occupational categories between first job and midlife job, i.e. during the 1950s and 1960s. For instance, of those whose first occupation was professional, over 60 percent were also a professional during midlife, and of those whose first occupation was clerical or administrative, over 40 percent were also clerical or administrative workers during midlife. The small extent of transitions between occupational categories probably reflects a period of greater economic stability without the influence of global markets and mobility as New Zealand now experiences, as well as the expectations of loyalty and secure job tenure within the employer-employee relationship.

Figure 6.1

Transitions from First Occupation to Main Midlife Occupation for Professionals and Administrative or Clerical Workers (%)



When it came to those who were either still in paid work or recently in a job, there were significant differences in employment status between men and women in terms of their most recent main job,⁴⁷ as well as significant differences by age cohort, as shown in Table 6.3. Significantly more women than men were fully retired, and significantly more men were in full-time paid work, with similar proportions in part-time paid work. Significantly more women were involved in voluntary work, a point to be returned to later in the chapter.

Just 312 older participants (of the sample of 1,680) stated they were either currently working or recently had a job, and identified the type of job they had. For this group of respondents, there was also considerable stability in the occupational categories between their midlife job and most recent or current job. Compared with midlife occupations, the percentage of managers among the currently or recently working dropped (to 9.7 percent), as did technicians and trade workers (to 7.6 percent). Professionals (25.8 percent) and clerical and administrative workers (16.6 percent) maintained their

⁴⁷ A minor difficulty in interpreting these results should be noted. It is not entirely clear how the respondents interpreted the question, i.e. whether they answered in terms of the current work status, or whether they answered in terms of their work status at some earlier time.

relative positions. Interestingly though, all the other categories increased their proportion of those in work, apart from machinery operators and drivers (4.4 percent).

Table 6.3

Employment Status of Current or Most Recent Main Job by Gender and Age (%)

	Male 65-69	Male 70-74	Male 75-79	Male 80-84	Female 65-69	Female 70-74	Female 75-79	Female 80-84	Total
Fully retired	8.1	7.9	7.7	0.5	11.1	9.4	8.8	6.4	64.3
Full-time paid work	4.5	1.7	1.1	1.0	1.9	1.4	1.0	1.0	13.4
Part-time paid work	3.0	1.7	0.5	0.4	3.3	1.4	0.9	0.6	11.9
Homemaker	0.0	0.0	0.0	0.0	0.6	0.4	0.6	0.5	2.0
Voluntary work	0.1	0.2	0.3	0.1	0.8	0.6	0.6	0.8	3.5
FT unpaid family/farm business	0.7	1.0	0.2	0.2	0.4	0.5	0.1	0.1	3.2
PT unpaid family/farm business	0.5	0.1	0.4	0.0	0.2	0.2	0.0	0.1	1.4
Other	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3
Total	17.1%	12.6%	10.2%	6.7%	18.2%	13.8%	12.1%	9.4%	100%

Note: FT means Full-time and PT means Part-time.

5.2 Older New Zealanders' Lifetime Experience outside the Workforce

Over 29 percent of respondents had experienced one or more periods of longer than one year outside the workforce (see Table 6.4). There were significant differences both by age and gender in the number of such periods outside the workforce.⁴⁸ Younger cohorts were more likely to have experienced two or more extended periods outside the workforce, for both men and women.

Table 6.4

Periods of Longer than One Year spent outside the Workforce (%)

	Male 65-69	Male 70-74	Male 75-79	Male 80-84	Female 65-69	Female 70-74	Female 75-79	Female 80-84	Total
Never	15.1	11.7	9.9	6.4	8.4	7.0	6.8	5.8	71.0%
One time	1.9	1.0	0.6	0.4	6.6	5.6	4.4	2.5	22.9%
Two or more times	0.5	0.4	0.1	0.1	2.6	1.1	0.8	0.5	6.1%
Total	17.4%	13.1%	10.6%	6.9%	17.6%	13.7%	11.9%	8.8%	100%

⁴⁸ F-test statistics have p-values of 0.0055 for age cohorts, <0.0001 for gender, and <0.0001 for age and gender combined.

Overall, women (but not men) were more likely to have experienced two or more periods outside the workforce. Neither of these results is particularly surprising. The younger cohorts are more likely to have experienced the economic restructuring of the 1980s and 1990s and the accompanying period of high unemployment and discouragement of workers, while many of the women would have experienced significant periods outside the workforce due to family responsibilities. There were no significant differences in the number of times spent outside the workforce by marital status or by ever-married status, while the number of children was significantly related to more periods outside the workforce for women but not for men (data not shown).

Table 6.5

*Reasons for Periods of Longer than One Year spent outside the Workforce (%)*⁴⁹

	Male 65-69	Male 70-74	Male 75-79	Male 80-84	Female 65-69	Female 70-74	Female 75-79	Female 80-84	All
Family responsibilities	2.3	1.9	0.0	1.4	49.9	46.7	42.4	37.7	25.3
Poor health	5.7	2.4	3.1	2.9	7.4	1.6	1.4	1.8	3.7
Injury or disablement	5.1	2.6	2.4	0.0	1.5	2.7	0.7	1.2	2.2
Retirement (forced or voluntary)	1.1	2.5	1.5	1.7	0.8	1.1	0.8	0.0	1.2
Overseas trip	0.0	1.7	0.0	0.0	1.6	1.7	0.7	0.0	0.8
Redundancy	1.9	1.3	0.0	0.0	0.4	0.0	0.0	0.0	0.5
Studying	0.0	0.0	0.7	3.1	0.0	0.3	0.0	0.0	0.3
Military service	0.6	0.0	0.0	0.7	0.0	0.0	0.0	1.5	0.3
No suitable jobs available	0.0	0.0	0.0	0.0	0.8	0.4	0.0	0.0	0.2
Other	0.0	0.0	0.0	0.0	0.4	2.8	0.0	1.2	0.6

The reasons cited by respondents for periods longer than one year spent outside the workforce were many and varied (see Table 6.5), with a few significant differences by age or gender. The most cited reasons were family responsibilities (25.3%), poor health (3.7%), and injury or disablement (2.2%). Women were significantly more likely to give family responsibilities as a reason,⁵⁰ but that was the only significant difference by gender, with men no more likely to cite poor health or injury and disablement.⁵¹ Redundancy was only cited by 0.5 percent of respondents, mostly male, being lower than expected given the economic restructuring experienced in the 1980s and 1990s. This may suggest that, rather than inducing an extended period outside the workforce, redundancy may have been a trigger for retirement, or those made redundant were able to quickly find alternative employment.

Younger cohorts cited a larger number of reasons for retirement, but none of these differences were significant. Family responsibilities were significantly related to the number of children, and those who had never been married were significantly less likely to cite family responsibilities as a reason for

⁴⁹ Note that proportions in this table are not relative frequencies and as such do not sum to 100 percent, as respondents could give more than one reason for time spent outside the workforce.

⁵⁰ $p < 0.0001$.

⁵¹ $p = 0.8024$ for health, and $p = 0.0578$ for injury or disablement.

being outside the workforce (data not shown). An overseas trip as a significant period outside the workforce was significantly associated with higher levels of education, although this relationship was significant for women but not for men. This may be because the range of jobs available for women in these cohorts was limited, and a period overseas was a way of using their education and extending their experience (such as working in short-term teaching or nursing jobs in the U.K.), while men with education may have been more constrained to stay home and find a secure job.

5.3 Retirement Experience of Older New Zealanders

Among the 65-84 year olds who indicated they were fully retired, the median age at retirement was 61.1 years. The median retirement age by gender and age cohort is presented in Table 6.6, and was significantly higher for those in younger age cohorts (median retirement age of 63.1 years for those aged 65-69 compared to 60.0 years for those aged 80-84), and significantly lower for women (60.2 years) than for men (62.3 years). These results were most probably influenced by the changing age of eligibility for national superannuation, which was gradually raised from 60 to 65 years over the decade from 1992 to 2002, as well as the elimination of compulsory retirement at age 65. There were no significant differences in retirement age by education suggesting that, in contrast with some of the international literature, better educated workers in New Zealand may not spend longer in the workforce (data not shown).

Table 6.6

Median Age at Retirement (years)

Age Cohort	65-69	70-74	75-79	80-84	All years
Men	63.6	62.7	60.0	60.8	62.3
Women	62.0	60.2	59.6	59.6	60.2
All	63.1	61.2	59.8	60.0	61.1

The main reasons for retirement were many and varied (refer Table 6.7), with the most cited reasons being wanted to do other things (27.5%), reached official retirement age (26.3%), poor health (13.1%), family responsibilities (8.0%), and employer forced retirement/redundancy (6.1%).⁵²

Table 6.7

Reasons for Retirement (%)

Reason	Percentage (%)
Wanted to do other things	27.5
Reached official retirement age	26.3
Poor health	13.1
Family responsibilities	8.0
Employer forced retirement/redundancy	6.1
Don't need to work	4.6
Employer closed/contract ended/no jobs available	4.6
Disablement or injury	2.9
Spouse retired/convinced them to retire	2.3
Moved/migrated	1.3
Lacked skills to continue	0.7
Workload too much/stress	0.6
Started studying	0.2
Other	1.9

Men were significantly more likely to retire because they reached the official retirement age, or because of poor health (data not shown). Reaching official retirement age was more likely to be a

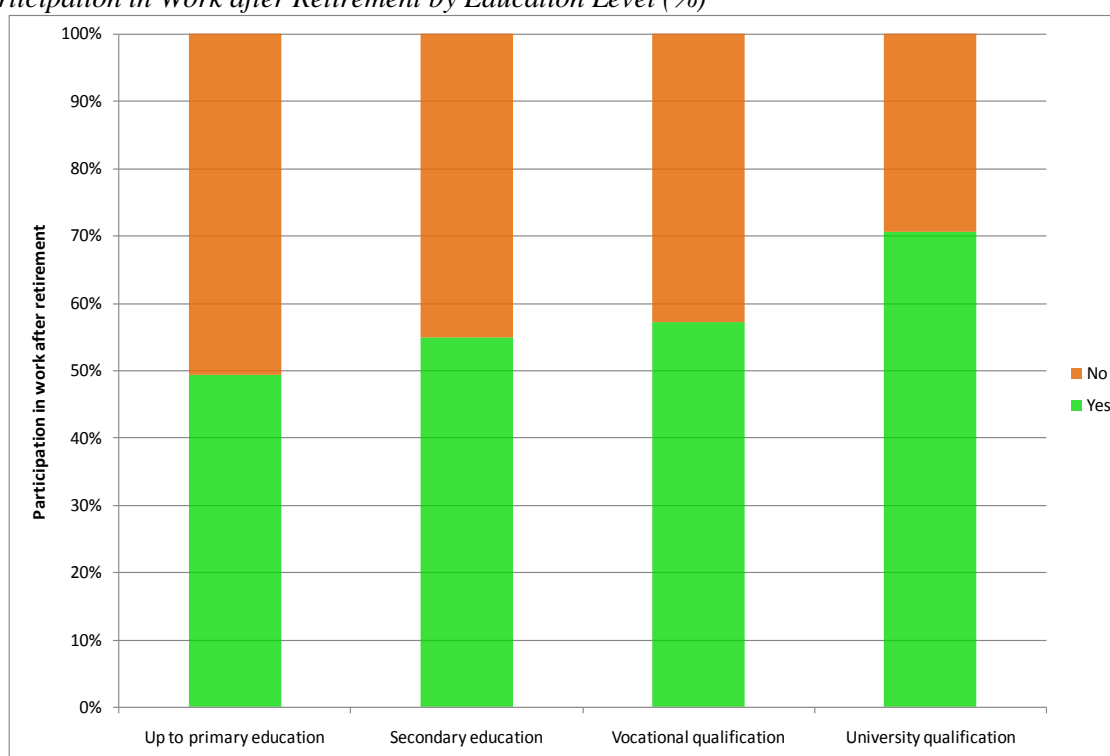
⁵² Respondents could only give one response to this question, so it should be interpreted as the 'main reason' for retirement, and is only a lower-bound estimate of the proportion of people having that as one of the many reasons they retired.

reason for retirement for people in the older cohorts than those in the younger cohorts (data not shown), consistent with the relatively recent removal of the official retirement age and changes to national superannuation noted above. The 6.1 percent who cited that they retired due to redundancy or forced retirement by their employer supports the earlier contention that redundancy is a trigger for retirement among older workers, rather than inducing a period of time outside the workforce (with the older worker eventually returning to the workforce). Only 2.3 percent of respondents cited that they retired because their spouse had retired, although this low result may be due to retirement decisions being prompted by other factors as well (only the main reason for retirement was asked).

5.4 Work Experience of Older New Zealanders after Retirement

Of those surveyed, 55.5 percent indicated that they had undertaken some form of work since their retirement. Types of work cited by respondents could be categorised into the following eight categories: (i) voluntary, community or church work (ii) caring for children or older people (iii) teaching (iv) consultancy work or research (v) company director, trustee, councillor, or Justice of the Peace (vi) self employment (vii) formal paid employment (viii) other. There were no significant differences in continuing work after retirement by gender, and only moderately significant differences between age cohorts,⁵³ with respondents aged 80-84 having the lowest incidence of work since retirement, and those aged 70-74 having the highest incidence. Age at retirement was not significantly associated with work after retirement (data not shown). However, education was significantly associated with work after retirement,⁵⁴ as shown in Figure 6.2. Given the results presented earlier it appears that, while education may not affect the retirement age, it may affect the continued participation of older people in work-related activities after retirement.

Figure 6.2
Participation in Work after Retirement by Education Level (%)



By contrast, participation in voluntary work (excluding other forms of work after retirement) was not significantly associated with education, but was associated with both gender and age cohort (data not shown).⁵⁵ Women were significantly more likely to be involved in voluntary work than men, and

⁵³ $p=0.0257$.

⁵⁴ $p=0.0004$.

⁵⁵ F-test statistics have p-values of <0.0001 for age cohorts, 0.0003 for gender, and <0.0001 for age and gender combined.

younger age cohorts were significantly more likely to be involved than older cohorts. It is unclear whether this result is a cohort effect (i.e. suggesting that voluntary work is increasing among those entering retirement age) or an age effect (i.e. suggesting that the “younger old” engage in more voluntary work). This will be followed up in the analysis of the sample of 40-64 year-olds in the EWAS research.

5.5 Satisfaction with Work

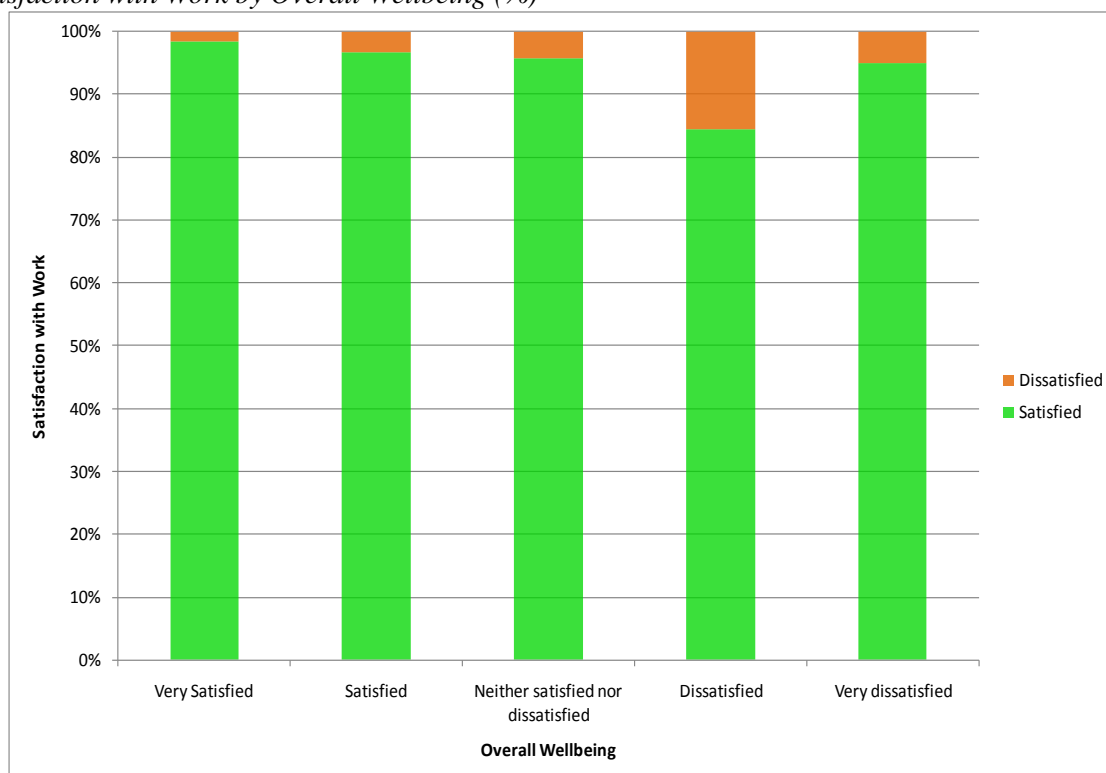
Overall levels of satisfaction with work were high, with 97.2 percent of respondents reporting they were satisfied with work (and 2.8 percent reporting they were dissatisfied with work). There was no difference in satisfaction with work by gender, or different age cohorts (data not shown).⁵⁶ Satisfaction with work was also not significantly association with education (data not shown).

Reported satisfaction with work was also not associated with any of the past work experiences of older people, whether there were main work status during midlife, most recent main job, or whether the respondent had worked since retirement.⁵⁷ This is a similar to past studies that have found that work satisfaction is related to current work status and the characteristics of the job, and not past work history.

5.6 Work and Overall Wellbeing

Satisfaction with work and overall wellbeing have a very close association, as demonstrated by Figure 6.3, those with higher satisfaction with work have demonstrably higher overall wellbeing.

Figure 6.3
Satisfaction with Work by Overall Wellbeing (%)



As with satisfaction with work, overall wellbeing was not associated with many of the past work experiences of older people, whether main work status during midlife, most recent main job, or whether the respondent had worked since retirement (data not shown). However, overall wellbeing

⁵⁶ F-test statistics have p-values of 0.2128 for age cohorts, 0.8328 for gender, and 0.2776 for age and gender combined.

⁵⁷ p=0.1233 for main midlife work status, p=0.2408 for most recent work status, and p=0.6681 for work after retirement.

was significantly negatively associated with the number of periods of at least one year spent outside the workforce (refer Figure 6.4), although this association was true only of men and not women.⁵⁸

Figure 6.4

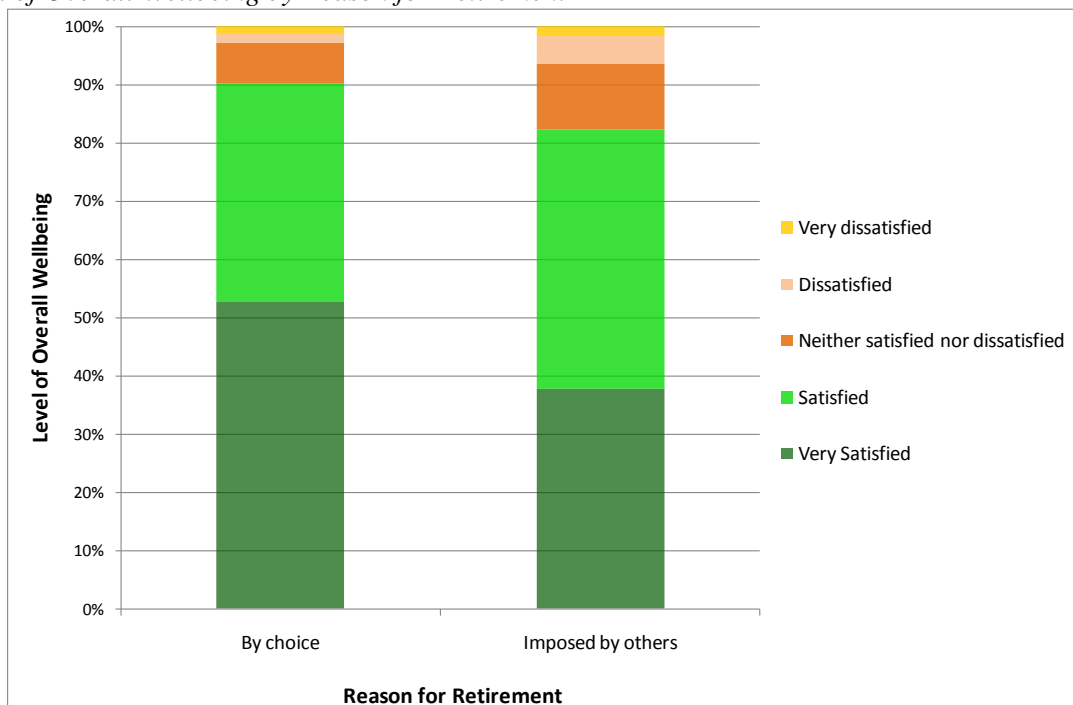
Level of Overall Wellbeing by Number of Periods spent Outside the Workforce



Finally, overall wellbeing is significantly associated with forced retirement, as shown in Figure 6.5.⁵⁹

Figure 6.5

Level of Overall Wellbeing by Reason for Retirement



⁵⁸ $p=0.0413$ overall, $p<0.0001$ for men, and $p=0.2221$ for women.

⁵⁹ $p<0.0001$

When older people retire by choice, 2.9 percent described themselves as either very dissatisfied or dissatisfied compared with 6.4 percent of those who retired due to poor health, disablement or injury, employer forced retirement or redundancy, or there being no jobs available. Of those who retired by choice, 90.1 percent described themselves as either very satisfied or satisfied, compared with 82.2 percent of others. This finding is consistent with the literature that those who have more control over their current work status have higher life satisfaction (Warr et al., 2004).

6. Conclusion

This analysis of work and wellbeing among New Zealanders aged 65 to 84 has confirmed many of the lifetime experiences of older people, both in and out of the workforce. Of the older New Zealanders surveyed the first main job for nearly all was in full-time paid work, beginning at the median age of 16.2 years. Women were significantly more likely to be homemakers or in part-time paid work during midlife, and less likely to be in full-time paid work. In terms of their most recent job, significantly more men were in full-time paid work, with similar proportions of each gender in part-time paid work. The range of occupations from respondents' first job through to their midlife occupation and on to their current or most recent occupation showed considerable stability. Younger age cohorts and women were more likely to have experienced two or more extended periods outside the workforce. The most cited reasons for these periods outside the workforce were family responsibilities (mostly by women), poor health, and injury or disablement.

The median retirement age was significantly higher for those in older age cohorts, and significantly lower for women than for men, but in contrast with international literature, there were no significant differences in retirement age by education. However, education was significantly associated with work after retirement, suggesting that while education may not affect the age of retirement, it does affect the continued participation of older people in work-related activities after retirement. Women were found to be significantly more likely to be involved in voluntary work, both as their last main job and after retirement. Younger cohorts also participated in more voluntary work, although whether this is a cohort effect or an age effect is unclear given the cross-sectional nature of this study.

Self-reported satisfaction with work was found to be unrelated to the lifetime work experiences and absences from the workforce measured in this survey. However, self-reported satisfaction with work was found to be significantly associated with overall wellbeing. This suggests that a way of encouraging further overall wellbeing would be to generate satisfaction with work amongst those who have already retired.

Finally, two important associations with overall wellbeing were identified in this chapter. Firstly, the number of periods of more than one year spent outside the workforce was negatively associated with overall wellbeing, but only for men. That is, men with fewer long periods outside the workforce had significantly higher overall wellbeing. Spending time outside the workforce was not related to satisfaction with work, but may have an effect through lower economic standard of living in later life, or may be related to poor health and therefore have an effect through the health dimension of overall wellbeing. The dynamics of this effect should be investigated further, and in particular why it is only significant for men.

Secondly, retirement by choice was associated with higher levels of overall wellbeing. This confirms some findings in the international literature, where higher levels of well-being are found among those who want to be in their current work role. Again, retirement by choice was not significantly associated with satisfaction with work, so further investigation is needed to determine the mechanism by which work roles and the control over them affect overall wellbeing.

7. References

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Chapter 7: Income, Assets, Living Standards and Housing

Charles Waldegrave and Michael P. Cameron

1. Introduction

Older people in New Zealand are generally considered to have an adequate standard of living when compared with those living in other like countries. This is largely because of a universal pension policy, a history of homeownership and a reasonably accessible, though by no means perfect, health service. The New Zealand Superannuation scheme (a national pension) is universal, indexed to movements of average wages and at 50 percent of median household income is above the OECD poverty line. It is the right of New Zealand citizens and permanent residents (certain residential criteria apply) on becoming 65 years of age, and is gender neutral in the sense that work history and the level of income and contributions do not apply as in most other countries. Until recently New Zealand has had a high level of post-war homeownership which has allowed most older people to live in mortgage free houses.

It is of considerable interest to policy makers, and of great concern to older people and their families, that they have sufficient economic resources to maintain a reasonable standard of living. One of the purposes of this chapter is to assess the levels of income and wealth, enquire into living standards and observe the patterns of housing tenure with a view to understanding how different members of the elderly community in New Zealand are living, and how satisfied they are. A second purpose is to investigate the association of income, wealth, living standards and housing with the socio-demographic factors of gender, age, marital status, wellbeing, education, health, location and household type. This analysis thereby provides broad research evidence for subsequent policy formulation and service provision.

2. Socio-Economic Status, Living Standards and Wellbeing among Older People

Living standards among older people have long been of interest to policy makers and researchers, particularly with the on-going commitment to providing the old age pension. One of New Zealand's most substantial reports 'Living Standards of Older New Zealanders' (Fergusson et al., 2001), noted that most older people lived quite well and had relatively few material restrictions and difficulties. Around 5 percent of the sample experienced quite marked material hardship and a further 5 to 10 percent had some difficulties. The authors identified nine factors that predicted the variation in living standards: net annual income, savings and investments, accommodation costs, economic life events and stresses, age group, Māori ethnicity, Pacific ethnicity, educational achievement, and socio-economic status (SES). In particular, they concluded:

"The research shows that the person most at risk of poor living standards was characterised by a mix of low income, no savings, high accommodation costs, a history of economic stress, being younger (aged from 65–69 years), being of Māori or Pacific ethnicity, and having held a low-status occupation (Fergusson et al, 2001: 5)."

While the issues of culture and ethnicity are the subject of a separate chapter of this volume, the other issues noted in this earlier research are addressed in this chapter.

Socio-economic status (variously defined and measured) is consistently associated with other socio-demographic variables, and this is certainly true of older people. For instance, Burholt & Windle (2006) report significant associations between income terciles (low, medium and high) and gender, age, household composition, marital status and educational level for the United Kingdom. Women were over-represented in the low income tercile and men in the high income group. The younger age groups (eg 65 to 69 years) were more likely to be on higher incomes than the older age bands. Couple households were substantially better off than single households, and married people fared better than single, divorced/separated or widowed people. Those with an A-level standard of education were also more likely to be represented in the high income tercile, while those with lower educational attainment were more likely to be in the low income tercile. Across the six countries in the European Study of Adult Wellbeing (ESAW) project⁶⁰, significant relationships were also found between income and gender, age group, living alone, marital status, educational level, and rural location (Lamura et al., 2003).

The Health and Retirement Study (HRS) study in the United States found that married couples had higher incomes and greater wealth than those who were not married. Net worth was significantly lower for people who divorced or were widowed, although it impacted more on women than on men (Weir et al., 2002; Wilmoth & Koso, 2002). Remarriage appeared to offset the negative economic impact of dissolution. The English Longitudinal Study of Ageing (ELSA) study produced similar results showing that single people were more likely to be in income poverty than couples, but that women who were divorced, separated or widowed were at the highest risk of income poverty (Emmerson and Muriel, 2008). An OECD study across nine countries (Casey & Yamada, 2002) found that income fell with older age, but the researchers considered older people were not substantially less well off because few had work related expenses and housing costs were lower. However, older single women fared less well in all nine countries and widowhood reduced wellbeing.

Socio-economic status and health also show a close relationship. A re-analysis of the data from the original Fergusson et al. (2001) New Zealand survey found that there was a higher prevalence of frailty among older people who lived on low incomes and low wealth, and who had less secure housing, mobility constraints and less frequent social contact (Barrett et al., 2006), affirming the findings of previous research (Woods et al., 2005) that health status is imbedded in socio-economic status. The concurrent associations of SES with health and wellbeing are well established in the international literature on ageing (Hodes and Suzman, 2007; Banks et al., 2003; Emmerson & Muriel, 2008; Knesebeck et al., 2007) (see Chapter 4, Health).

The relationships between socio-economic status, living standards, and wellbeing (each broadly defined) are also well-established in the international literature, both for the general population and for older people specifically. In a synthesis of findings from 286 empirical studies, Pinquart and Sorensen (2000) found socio-economic status, social network and competence to be positively associated with subjective wellbeing. Income has been shown to be significantly related to reported wellbeing and quality of life, with low income in retirement strongly associated with lower reported wellbeing (Emmerson and Muriel, 2008). In the Survey of Health, Ageing and Retirement Study (SHARE), data across 10 European countries showed that income, net worth and car ownership were consistently associated with high quality of life. For example, in eight of the ten countries, among those over 65 years,

⁶⁰ ESAW – European Study of Adult Wellbeing. The six countries were Austria, Italy, Luxembourg, the Netherlands, Sweden, and the United Kingdom.

high net worth was found to be significantly associated with quality of life, with the association strongest in Germany and weakest in Switzerland (Knesebeck et al., 2007). In a Danish study low income was found to be correlated with poorer functional capability, lower physical activity and poorer psychological wellbeing among older people Arendt (2005).

3. Poverty, Housing Tenure and Crowding among Older People

3.1 Poverty

Over the last two decades in New Zealand, older people have experienced considerably less poverty in proportion to the total population, than other age groups (Waldegrave et al., 2003, Ministry of Social Development, 2008). Households with children were by far the largest group below the poverty threshold of 60 percent of median household disposable income after accounting for housing costs, registering proportionately two to three times as many as the older population. This can be largely explained firstly, by the generous level (by other country's standards) and universal coverage of NZ Superannuation (NZS – New Zealand's Pension for older people). Secondly, New Zealand has high rates of homeownership among older people. At the 2006 Census 76.2 percent of New Zealanders 65 years and over, owned or partly owned their dwelling (Ministry of Social Development ,2007). Having paid a mortgage for most of their adult life, many of these older people live in mortgage free homes.

The current numbers of older people in poverty in New Zealand are set out in the results section of this chapter where official data is compared with the results of this study for three different poverty thresholds. Essentially, New Zealand has a unique profile, in that the universal NZS is paid above the 50 percent of median poverty line that OECD sets but below the 60 percent line that the European Union sets. As a result there are very few in deep poverty, but many older people who live around the higher poverty thresholds, either just above or below them.

Although most OECD countries assess the incidence and depth of poverty among older people, there remains some debate on the extent of the problem. For instance, Disney and Whitehouse (2002), as part of the Luxembourg Income Study, surveyed a dozen international comparative studies of poverty and income distribution among older people, and concluded that the incomes of older people are typically around 80 percent of the incomes of the general population. As with other studies, they noted that single women pensioners were worse off than couples, especially if they lived alone. Younger pensioners generally had higher incomes than older pensioners, and that although there remained pockets of poverty among older people, older people tended to be proportionately or under-proportionately represented among the poor.

In contrast, Lyberaki & Tinios (2005), applying SHARE data, calculated poverty lines at 50 percent and 60 percent of median household income, and revealed higher figures than were expected. At the more stringent 50 percent threshold, Sweden (11 percent) had the lowest incidence of poverty, and Italy and Spain (23 percent) the highest. When these lines were adjusted for comparison with the European Community Household Panel (ECHP) study, they were substantially higher for most countries, raising the question that poverty levels may be under-estimated in the ECHP data on social exclusion published by Eurostat.

There has also been debate about how effective objective measures, by themselves, are in assessing the levels of poverty and whether a combination of objective and subjective

measures would be more useful (Stephens et al., 1995, Waldegrave et al., 1996). In a study of the 'determinants of the quality of life amongst older people in deprived neighbourhoods', Smith et al., (2004) found that subjective variables like 'feeling isolated from society' or 'satisfaction with accommodation' correlated significantly with quality of life measures, whereas socio-demographic and objective life condition variables correlated less strongly, probably because the sample involved respondents with low incomes, limited formal education and high levels of deprivation. A further study (Scharf et al., 2007) highlighted the value of qualitative studies capturing more effectively the experiences of older people from disadvantaged groups in order to develop deprivation indicators for better measuring older people's poverty.

3.2 Housing Tenure

Housing tenure is an important component of the living standards of older people. As noted above, New Zealand has high levels of home ownership. Smith and Kington (1997) found home ownership to be positively correlated with better functioning ability in old age. Kohli et al. (2005), in their analysis of the SHARE database, noted that home ownership was associated with larger and better homes, and because mortgage payments usually decrease over time, it contributed to economic and emotional security. In the ELSA study, 55 percent owned their home mortgage free, another 25 percent were paying off a mortgage and 20 percent were renting (Janevic et al., 2003). Older seniors rather than the younger ones were more likely to own their homes outright. More women than men under 70 years lived in freehold houses, but over 70 years, more men than women owned their own home. More retired women rented their accommodation than men.

In a large British study of the association of quality of life in old age with socio-economic position, Breeze et al. (2004) found that among respondents who lived independently, owner-occupiers were less likely to have poor quality of life. Housing tenure over most of one's adult life was found to be associated with quality of life, as was housing in old age. Moving 'down' in tenure in later years, after most of one's adult life had involved owner occupation, carried significantly greater chances of three out of five bad quality of life outcomes, while upward movement to ownership, by contrast, reduced the chances of two of the bad quality of life outcomes.

3.3 Crowding

Household crowding is a significant problem in some communities, but it appears that it is not such an issue for older people. For instance, Kohli et al. (2005) found that, for the older population, the number of rooms per person increases across all countries and across all age groups. They concluded this was probably primarily because of the effect of children leaving home and partners becoming widowed. They noted the increase was lower for men than for women. The study indicated that crowding was not a general problem among older people, but there were problems of 'undersupply' among younger elderly in southern European countries.

In the ELSA study, it was found that most respondents lived in a household of one (25 percent) or two (59 percent) people. The researchers applied an 'accommodation density indicator' that divided the number of rooms by the total number of people in the household, and concluded there was no overcrowding among their respondents (Janevic et al., 2003). They noted that in their study, density of accommodation decreases with age. For those aged 75 years or over, women more than men lived in low density accommodation, probably explained by the fact that women live longer than men.

4. Data and Method

The data used as indicators of the ‘economic standard of living’ dimension of wellbeing in the EWAS survey included: current personal and household income, and their sources, total assets and type of assets owned, subjective measures of living standards, housing tenure, and crowding

In addition to income and wealth as objective measures of the standard of living of respondents, the two most internationally used relative poverty measures were applied to the data. These were the firstly the threshold applied by the OECD to compare countries which is 50 percent of the median, equivalent, after tax, household income, and secondly the European Union Social Inclusion indicators and the United Kingdom use the higher level of 60 percent of the median, equivalent, disposable, household income. The UK, along with New Zealand, also applies two further thresholds. The first is the 60 percent threshold after housing costs have been paid, and the second is a constant value threshold benchmarked to the 1998 median but adding the cost of living for each year thereafter. This latter threshold is the most commonly used poverty line in New Zealand and is updated in the annual Ministry of Social Development’s Social Report.

To apply these measures, each respondent’s total household income was first equivalised. Equivalisation is a procedure to adjust household incomes such that they are comparable between households of different size and composition. The revised Jensen Index was used, as it is the most commonly used method to equivalise incomes in New Zealand (Jensen, 1988).

For a subjective measure of the adequacy of the respondents’ income, respondents were asked to identify the adequacy of their current income with the question: “How well does your personal or household’s total income meet your everyday needs?” with the response that they had “not enough money”, “just enough money”, “enough money”, or “more than enough money”.

It is also important to consider how the inadequacy of income might impact on older people. For instance, what compromises are older people most likely to make when their income is inadequate to meet their needs? To address this, respondents were asked: “In the last 12 months, have there been times when you have gone without any of the following things?” with respect to eight categories of expenditure: essential food items, essential clothing home heating, visiting their dentist, new glasses, hearing aid, insurances, and rates. Each of these categories of expenditure might be seen as important for the lifestyle and wellbeing of older people. A further subjective measure of living standards and wellbeing was the dichotomous response (satisfied/not satisfied) to a question of whether the respondent was satisfied with their economic standard of living, similar to that used for other dimensions of wellbeing in this study.

Housing tenure data was collected across nine categories: owned by the respondent or their spouse, with a mortgage, owned by the respondent or their spouse, without a mortgage, owned by a family trust, owned by another family member, owned by the respondent and other family members, rented house, rented unit/house in a retirement village, boarding and other. In some analyses, cell sizes were increased by collapsing these categories further into: owners (which included all the ownership categories above, plus tenure in a retirement village), renters and other (which included boarders and others).

Household crowding was evaluated using the Canadian National Occupancy Standard (CNOS) crowding measure (Canadian Ministry of Housing Corporation, 1991), a measure widely used in New Zealand, Australia, and elsewhere (Statistics New Zealand, 1998). This measure is based on comparing the numbers of people living in a house with the numbers of bedrooms. Under such measures, a household is classified as crowded if it does not have enough bedrooms for its occupants based upon set criteria for the sharing of bedrooms, which include:

- There should be no more than two people per bedroom
- Parents or couples share a bedroom
- Children under five years, either of the same or of the opposite sex, may reasonably share a bedroom
- Children under 18 years of the same sex may reasonably share a bedroom
- A child aged 5-17 years should not share a bedroom with one under five of the opposite sex
- Single adults 18 years and over and any unpaired children require a separate bedroom.

An index of crowding was calculated by dividing the required number of bedrooms by the actual number available. However, the data collected by the EWAS survey were not in sufficient detail for this measure to be accurately calculated. In particular, (i) there were no data on partnership relationships among adults other than the respondent and their spouse in the household; (ii) the gender of other household members was not collected; and (iii) the age of other household members was not always recorded. This was overcome by creating two measures under different sets of assumptions. The first measure assumed that (i) all adults were paired couples; (ii) all people of unreported age were aged 18 years or over; and (iii) all those aged under 18 were of the same gender (so could be paired together). This measure would result in a lower-bound estimate of household crowding. The second measure assumed that (i) all adults were singles; (ii) all people of unreported age were aged 5-17 years; and (iii) all those aged under 18 were of the opposite gender (so could not be paired together). This measure would result in an upper-bound estimate of household crowding. The 'true' measure of household crowding using CNOS would thus lie somewhere between these two measures.

In this chapter we are particularly interested in observed differences between the four five-year age cohorts in the sample (65-69 years, 70-74 years, 75-79 years, and 80-84 years), and gender differences. Additionally, some variables were analysed in relation to education, marital status, and health status (measured using the two standard SF-12 measures of physical and mental health described in Chapter 4, Health).

The tables and figures below summarise these results. They do not include non-responses, don't knows, or refusals, and as a result, frequency totals may not be the same between different tables. The data have been re-weighted to make the results more representative of the New Zealand population aged 65 to 84, as noted in the Methods chapter. Therefore only relative frequencies are reported in the tables.

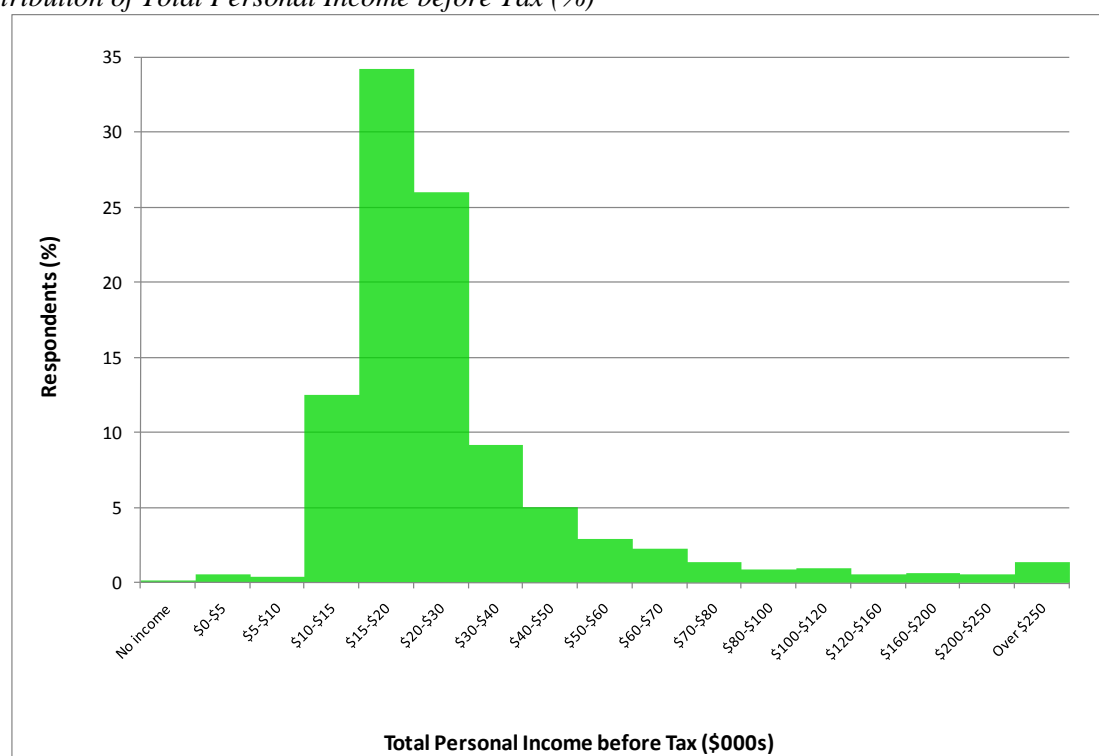
5. Findings

5.1 Income

There was a 68 percent response rate (n=1146) in the EWAS survey to a question concerning total personal income before tax. The distribution, as shown in Figure 7.1, is significantly

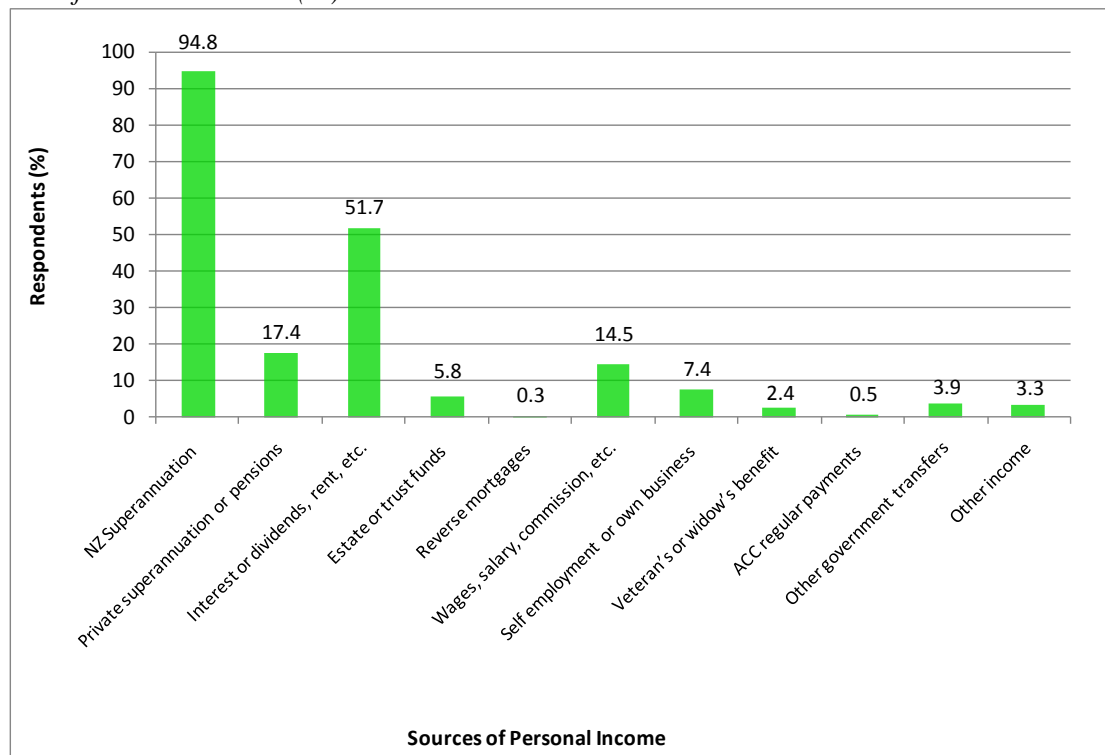
right-skewed. The median personal income before tax was \$22,000, with a mean of \$43,685. The median income is relatively low, being less than \$10,000 above the universally paid New Zealand superannuation for those 65 years and above, which for individuals ranged between \$13,296 if they lived with a partner to \$17,506 if they were single and living alone. The figure demonstrates the clustering of 73 percent of before tax personal incomes between \$10,000 and \$30,000. Nearly half (48 percent) of respondents had incomes, before tax, of \$20,000 or less, suggesting that many older people have little income other than New Zealand Superannuation.

Figure 7.1
Distribution of Total Personal Income before Tax (%)



As Figure 7.2 shows, 94.8 percent of respondents were recipients of New Zealand Superannuation, which is a universal government transfer for all New Zealand citizens and permanent residents (certain residential criteria apply) who are 65 years or older.

Figure 7.2
Sources of Personal Income (%)

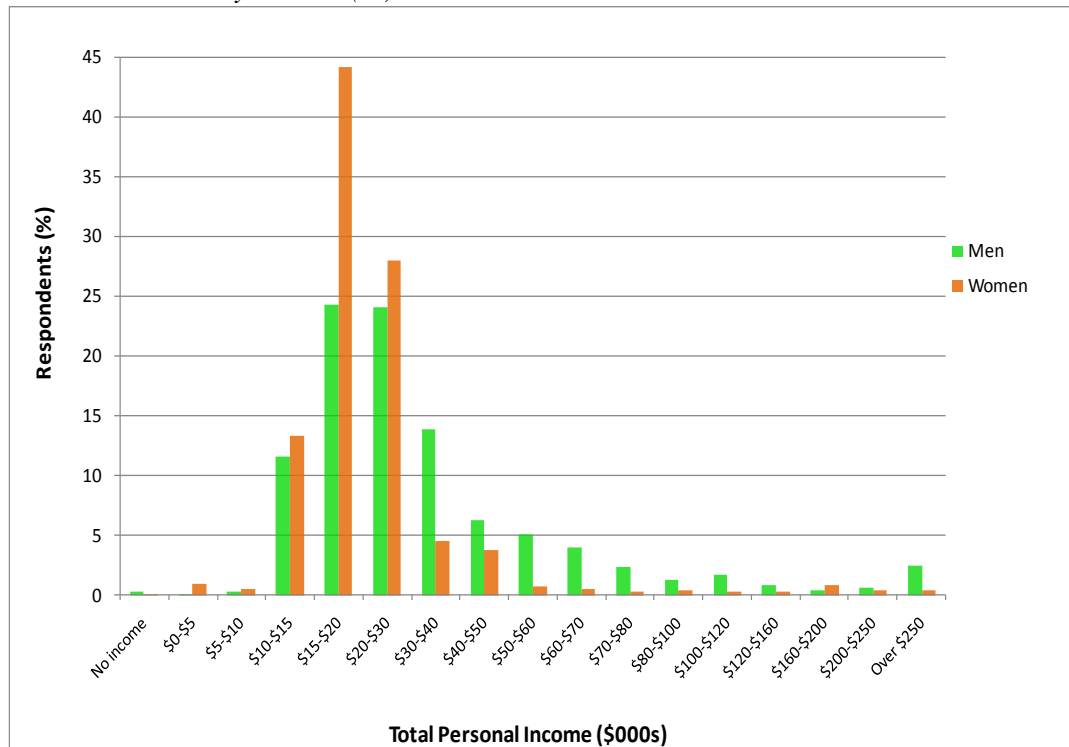


For those who received income from other sources, the most common source was interest, dividends or rent (51.7 percent). One in seven respondents were employed for wages, salary or commission, and one in six received some form of private superannuation, pension or annuity.

There were significant differences in total personal income between women and men, with the median income for women being \$19,000 (mean \$32,442), which was 71 percent of the median for men of \$26,593 (mean \$55,089).⁶¹ Figure 7.3 demonstrates the greater proportion of men with personal incomes above \$30,000, when compared with women, and the greater concentration of women with much lower personal incomes.

⁶¹ F-test statistic had a p-value of <0.0001.

Figure 7.3
Total Personal Income by Gender (%)



There were also highly significant differences in income by age, by education level, and by marital status, as shown in Table 7.1.⁶² Median personal income was highest among the youngest cohort, and lowest among the oldest cohort, which has median income some \$6,300 lower than the youngest cohort. The progression in mean incomes was not as uniform, but still showed the lowest income amongst the oldest cohort.

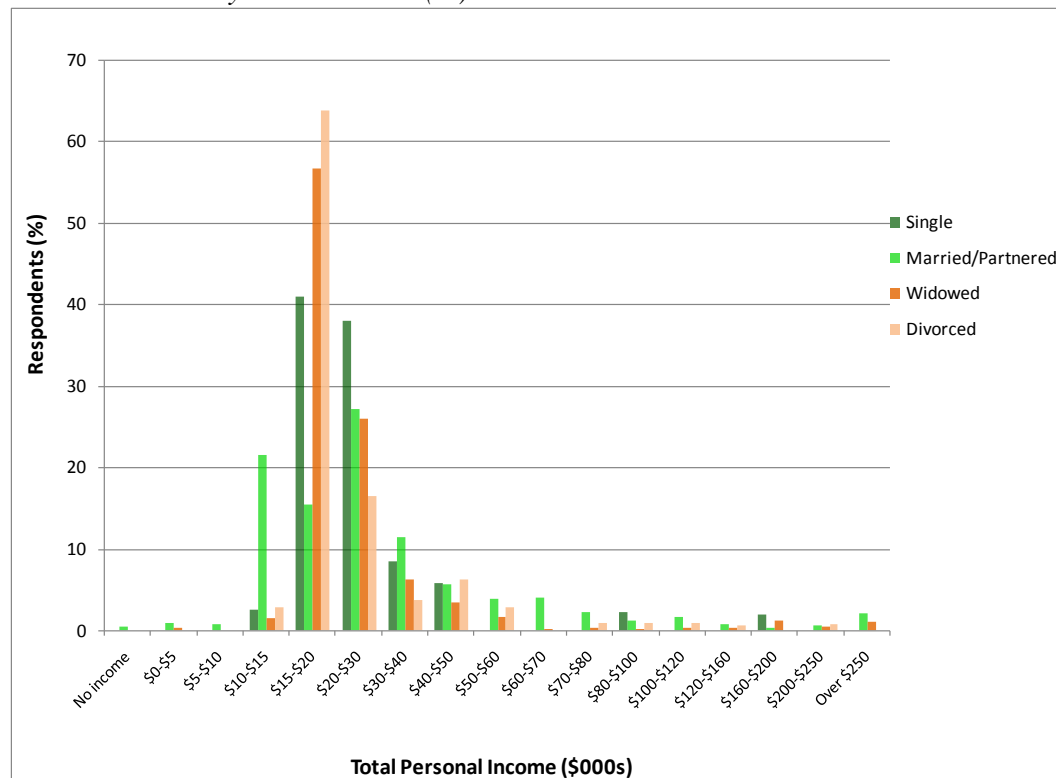
Table 7.1
Average Total Personal Income by Age, Marital Status and Education Level

	Median Income	Mean Income
Age Cohort		
65-69	\$26,000	\$49,218
70-74	\$20,300	\$37,016
75-79	\$20,000	\$45,904
80-84	\$19,700	\$39,134
Education Level		
Up to primary education	\$18,000	\$25,710
Secondary education	\$20,000	\$40,028
Vocational or trades	\$25,000	\$59,669
University education	\$35,000	\$46,535
Marital Status		
Single	\$22,000	\$28,830
Married/Partnered	\$26,592	\$52,659
Widowed	\$19,506	\$36,331
Divorced	\$18,000	\$26,763

⁶² F-test statistic had p-values of <0.0001 for age, <0.0001 for education level, and <0.0001 for marital status.

Median and mean personal incomes were highest for those who were married or living with a partnership, and lowest among those who were divorced. Singles had higher median income, but lower mean income than those who were widowed, caused by a few widowed people with very high incomes, as demonstrated by the distributions of income shown in Figure 7.4.

Figure 7.4
Total Personal Income by Marital Status (%)



Income was also found to be significantly related to household type⁶³ (data not shown), similar to the relationship with marital status in that couples had significantly higher personal income than respondents in other household types. However, no relationship was found with rural/urban location or measures of health (data not shown).

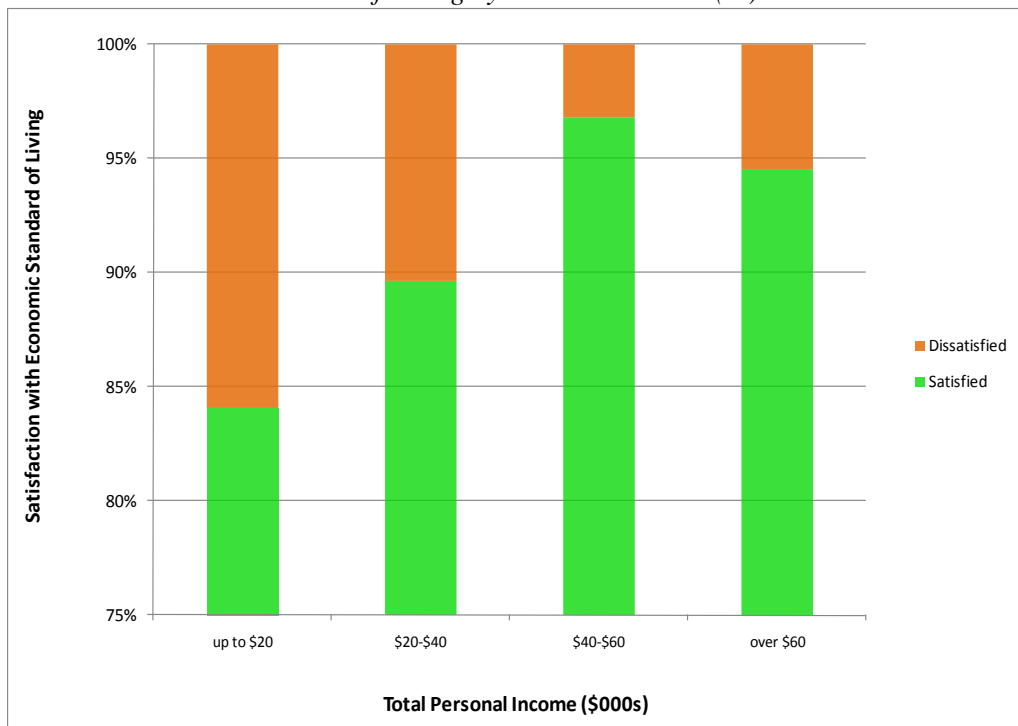
5.2 Wellbeing

With the distribution of income collapsed into four categories, a significant positive relationship between personal income and satisfaction with economic standard of living becomes clear, as shown in Figure 7.5.⁶⁴

⁶³ F-test statistic had a p-value of <0.0001.

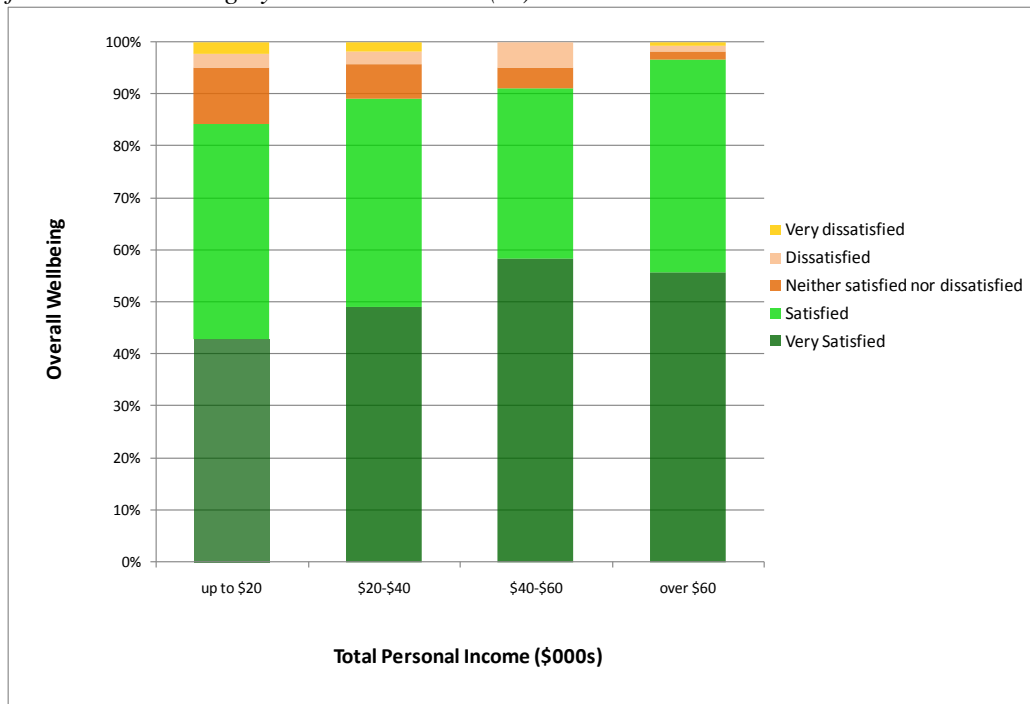
⁶⁴ F-test statistic had a p-value of 0.0012.

Figure 7.5
Satisfaction with Economic Standard of Living by Personal Income (%)



However, the relationship with overall wellbeing is much weaker, but still noticeable, as shown in Figure 7.6.⁶⁵ While the income bracket between \$40,000 and \$60,000 has the highest proportion of respondents who were ‘very satisfied’, the combination of ‘satisfied’ and ‘very satisfied’ clearly relates positively to personal income.

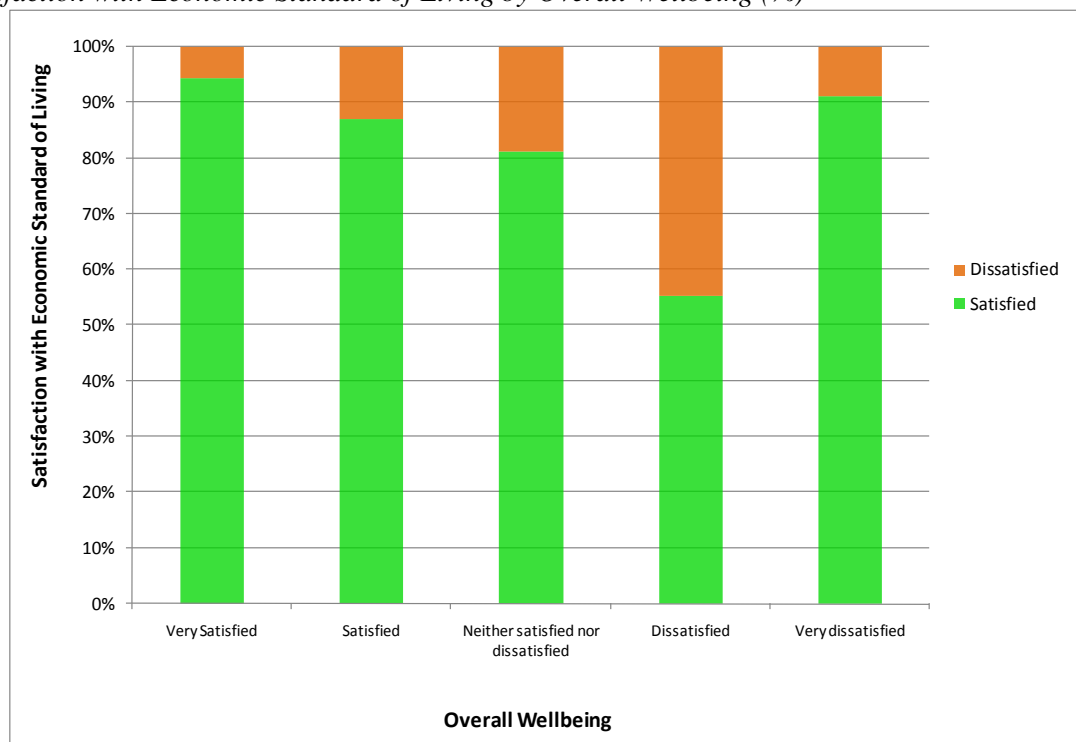
Figure 7.6
Level of Overall Wellbeing by Personal Income (%)



⁶⁵ F-test statistic had a p-value of 0.0208.

‘Satisfaction with economic standard of living’ and with overall wellbeing have a very close association, as demonstrated by Figure 7.7⁶⁶, in that those with higher satisfaction with their economic standard of living have demonstrably higher overall wellbeing. This relationship is important for further analysis of the various economic indicators and policy implications associated with wellbeing among older New Zealanders.

Figure 7.7
Satisfaction with Economic Standard of Living by Overall Wellbeing (%)

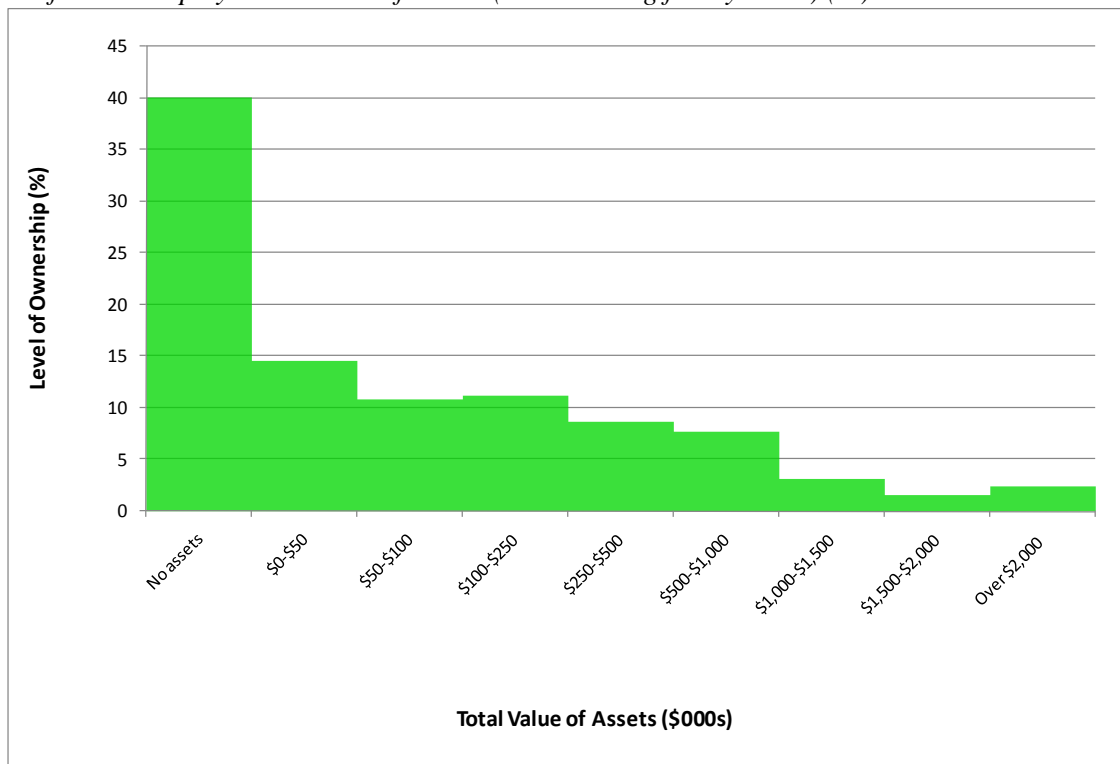


5.3 Assets

There was a 75 percent response rate (n=1261) in the EWAS survey to a question concerning the total value of household assets not including the value of the family home. The resulting distribution is displayed in Figure 7.8. Just over 40 percent of respondents had no assets at all other than a family home (if they had one), and a further 25.3 percent possessed assets worth \$100,000 or less. Fewer than 15 percent had assets worth \$500,000 or more.

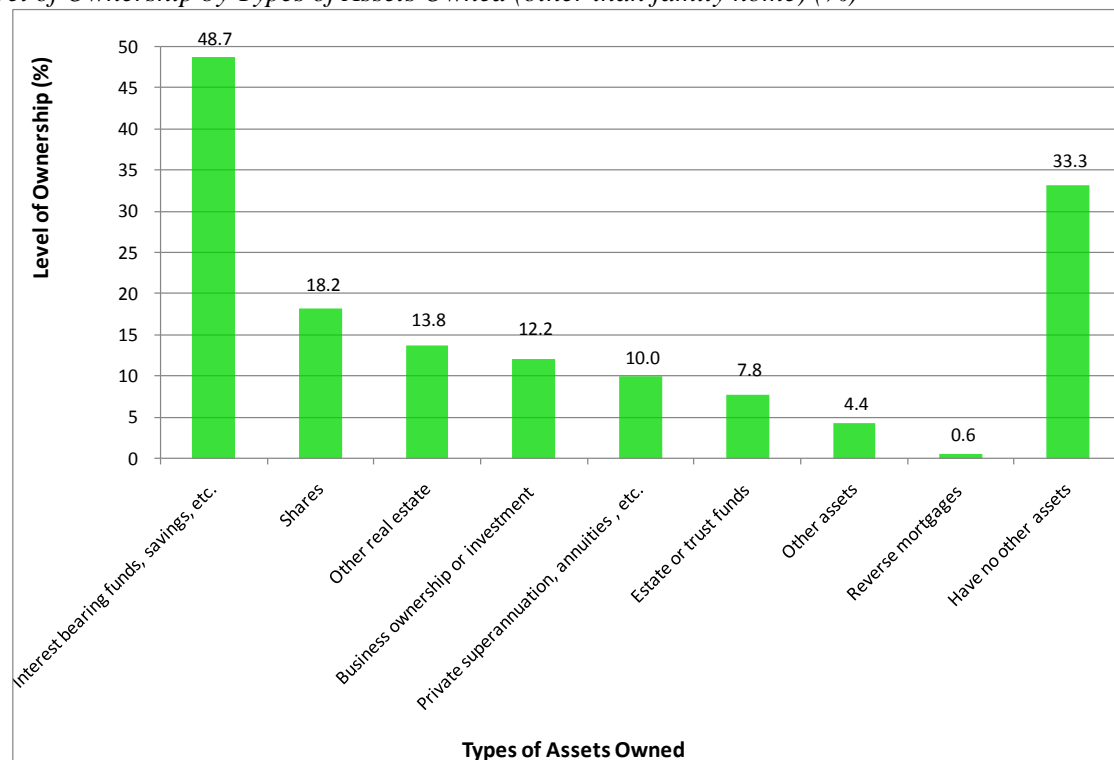
⁶⁶ F-test statistic had a p-value of <0.0001.

Figure 7.8:
Level of Ownership by Total Value of Assets (not including family home) (%)



The most common asset held by respondents to support them in their older years were interest bearing funds, savings, cheque accounts or cash (48.7 percent), as Figure 7.9 shows.

Figure 7.9
Level of Ownership by Types of Assets Owned (other than family home) (%)



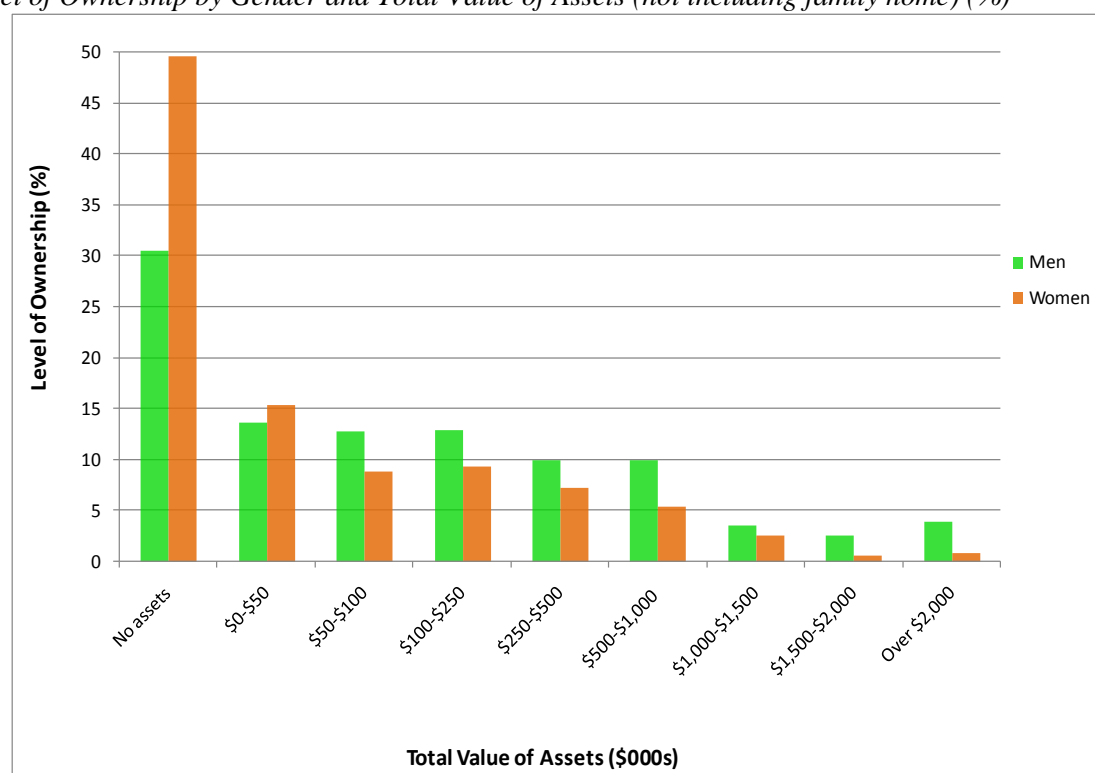
Other commonly held assets included shares (18.2 percent) and property other than the home (13.8 percent). 33.3 percent responded that they had no assets (compared with 40 percent on the previous question relating to total assets). However, it should be noted that the response rate to this question (97 percent) was significantly higher than to the value of total assets question, so this probably represents a more valid estimate of the number of older New Zealanders with no assets other than the family home.

As with personal income, men had significantly more total assets in value than women.⁶⁷ As Figure 7.10 illustrates, 49.6 percent of women had no assets (not including the family home) compared with 30.6 percent of men, while 26.2 percent of women had assets of \$100,000 or more, compared with 43.0 percent of men. The relationship between total assets and age was much weaker than that between personal income and age.⁶⁸ As shown in Figure 7.11, the younger cohorts had more wealth, with the 65 to 69 age group being the wealthiest and the 80 to 84 age group the least wealthy. This may be the result of gradual dissaving occurring as the older cohorts aged, or the result of lower wealth accumulation and savings during the working life among the older cohorts.

There was a significant association between asset wealth and current marital status, just as there was for personal income.⁶⁹ While 40.0 percent of single, 47.6 percent of widowed, and 57.9 percent of divorced or separated people had no assets beyond the family home, just 33.4 percent of married or partnered respondents possessed no assets (data not shown).

Figure 7.10

Level of Ownership by Gender and Total Value of Assets (not including family home) (%)



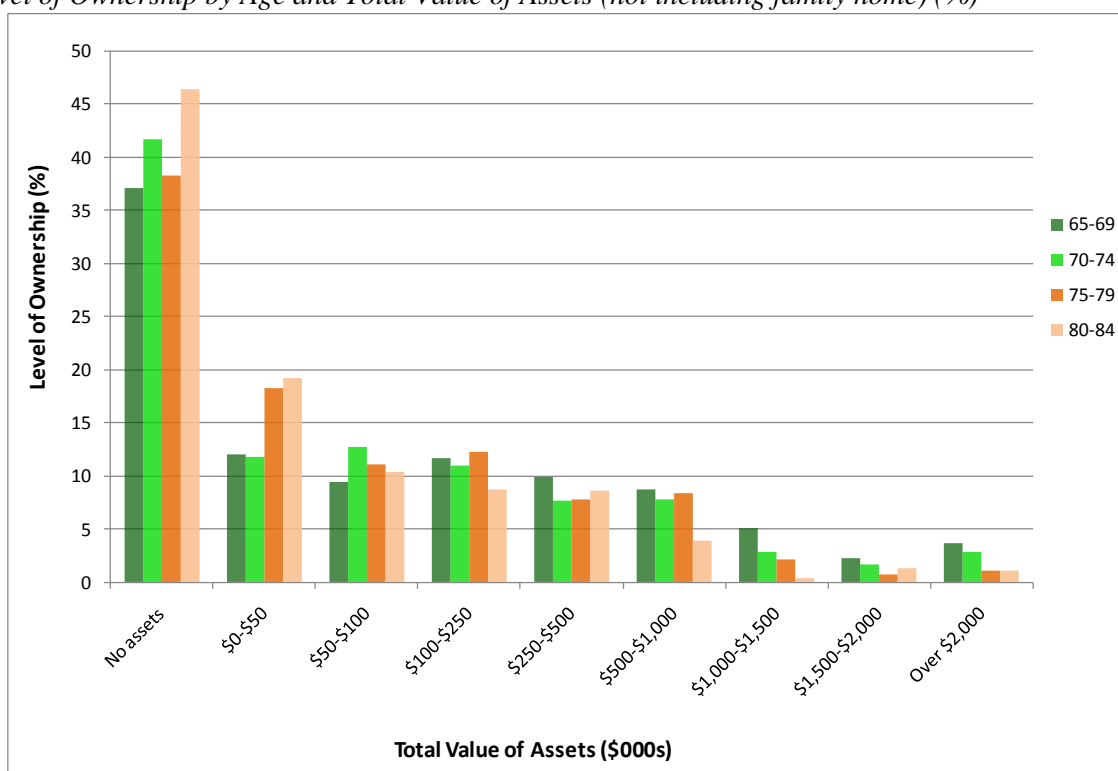
⁶⁷ F-test statistic had a p-value of <0.0001.

⁶⁸ F-test statistic had a p-value of 0.0194.

⁶⁹ F-test statistic had a p-value of <0.0001.

Figure 7.11

Level of Ownership by Age and Total Value of Assets (not including family home) (%)



As with personal income, asset wealth demonstrated a positive and significant association with educational attainment.⁷⁰ While 58.6 percent of those with no higher than primary school education possessed no assets beyond the family home, only 20.7 percent of those with university-level qualifications possessed no assets (data not shown). Total assets were also significantly positively associated with physical⁷¹ but not mental health, and with location. Those with higher physical health had more assets, and those in rural areas possessed a greater value of assets, probably because of the large farming assets in rural areas.

Likewise, as for personal income, there was a significant positive relationship between personal total assets other than the family home and satisfaction with economic standard of living, as shown in Figure 7.12.⁷² Of those with no assets other than the family home, just 80.7 percent were satisfied with their economic standard of living, compared with 97.1 percent of those with \$100,000 or more. All of those with more than \$2 million in assets other than the family home were satisfied with their economic standard of living. However, there was no statistically significant relationship between total assets and overall wellbeing (data not shown).⁷³

⁷⁰ F-test statistic had a p-value of <0.0001.

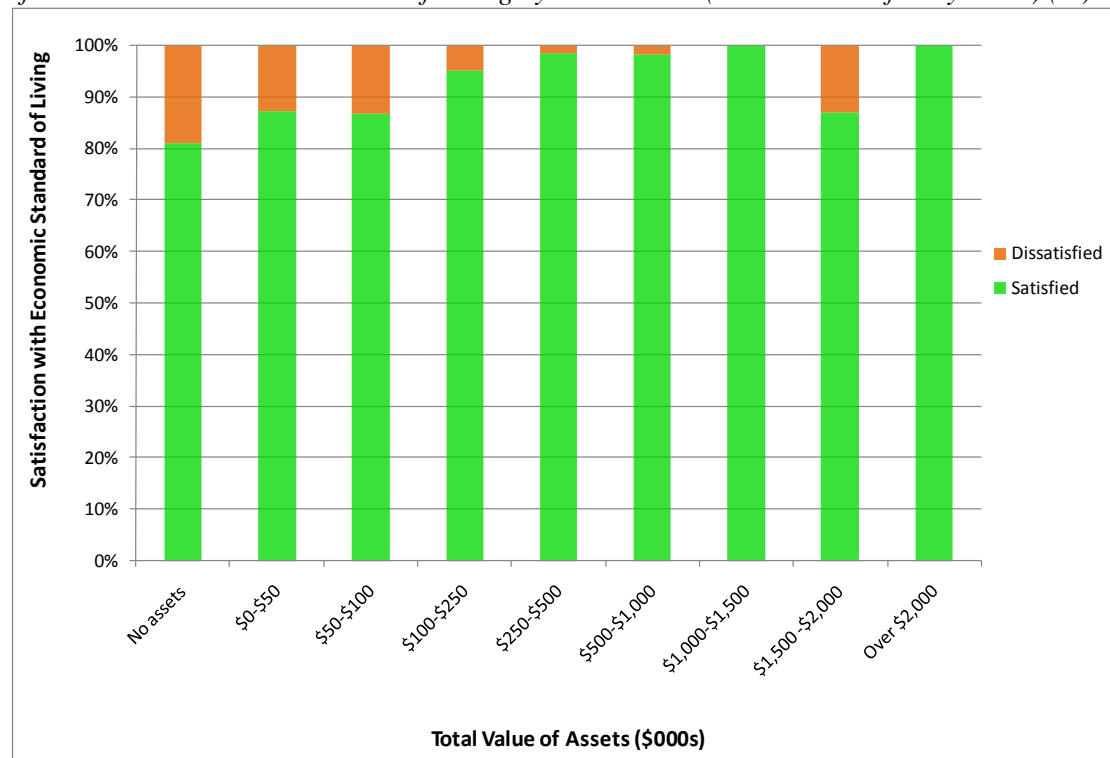
⁷¹ F-test statistic had a p-value of <0.01

⁷² F-test statistic had a p-value of <0.0001.

⁷³ F-test statistic had a p-value of 0.3345.

Figure 7.12

Satisfaction with Economic Standard of Living by Total Assets (other than the family home) (%)



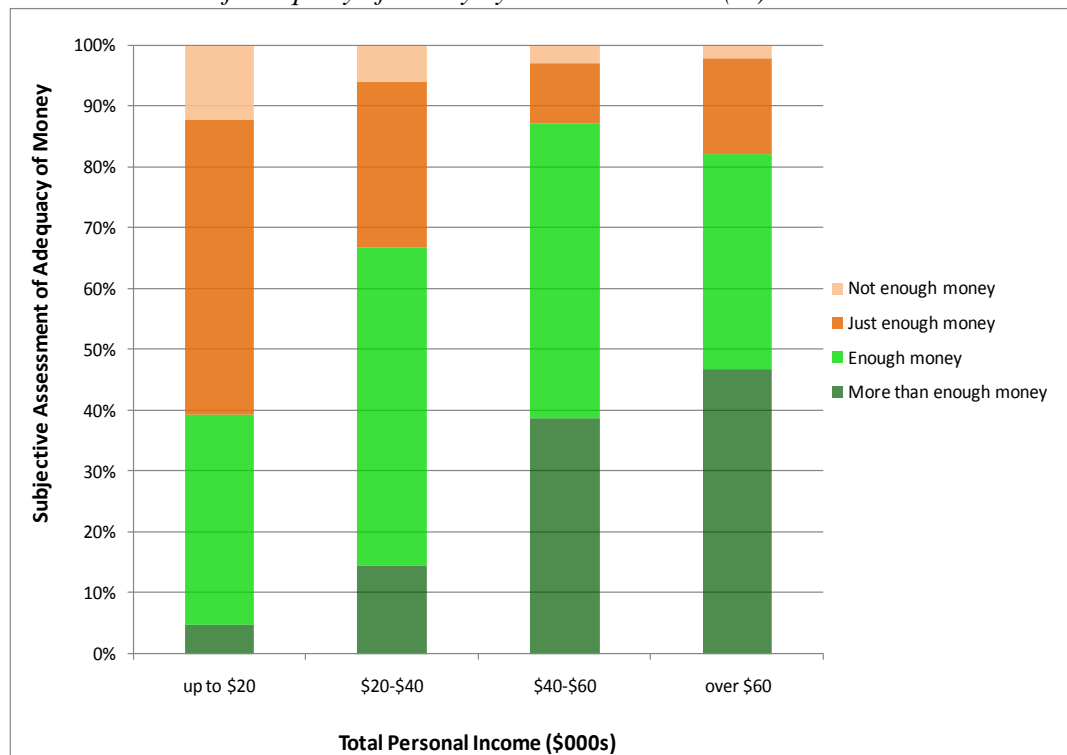
5.4 *Living Standards and Poverty*

Respondents were asked how well their total income met their everyday needs for accommodation, food, clothing and other necessities. Over 43 percent considered they had ‘enough money’ and a further 14.8 percent said they had ‘more than enough money’. However, 34.3 percent said they had ‘just enough money’, and 7.8 percent stated that they had ‘not enough money’. There was a significant relationship between this subjective assessment of adequate income and actual personal income.⁷⁴ As Figure 13 shows, just 39.3 percent of those with less than \$20,000 of personal income stated they had enough or more than enough money, compared to 87.2 percent of those with personal income between \$40,000 and \$60,000, and 82.3 percent of those with personal income over \$60,000. More people in the lowest income bracket (12.2 percent) stated they had not enough money, compared with just 2.0 percent of those in the highest income bracket.

⁷⁴ F-test statistic had a p-value of <0.0001.

Figure 7.13

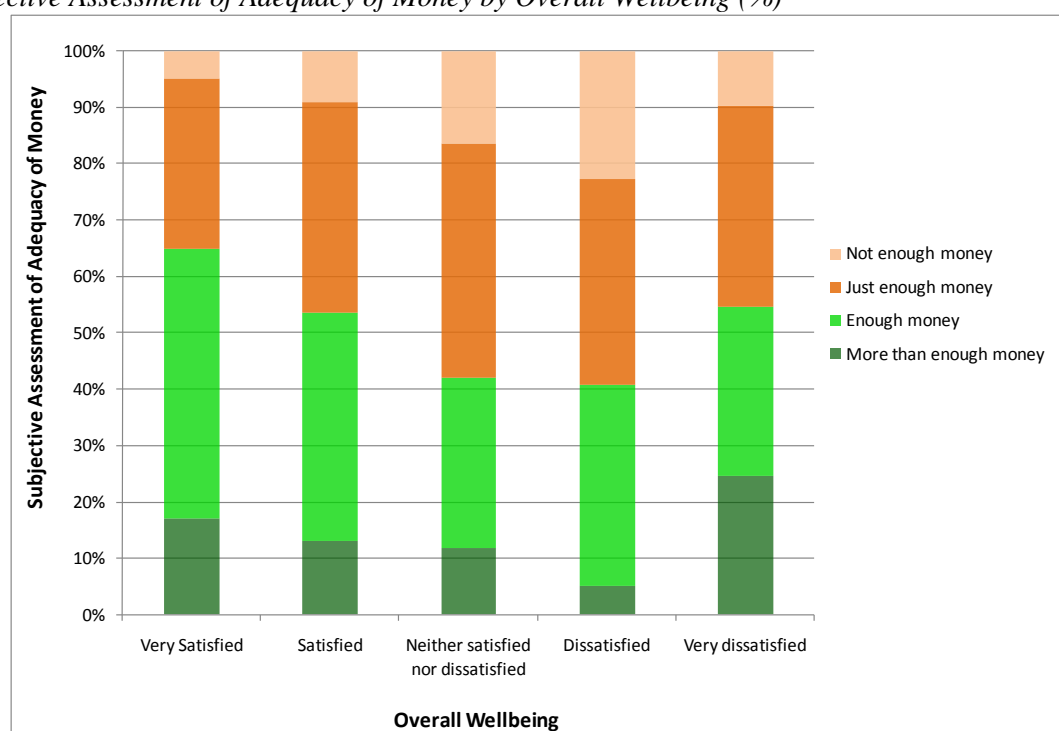
Subjective Assessment of Adequacy of Money by Personal Income (%)



There were also significant positive relationships between the subjective assessment of adequate income and both satisfaction with economic standard of living, and with overall subjective wellbeing.⁷⁵ Of those stating they had enough or more than enough money, 97.6 percent were satisfied with their economic standard of living, compared with just 57.2 percent of those who stated they had not enough money (data not shown). Figure 7.14 illustrates the close relationship between subjective assessment of the adequacy of money and overall wellbeing.

⁷⁵ F-test statistics had p-values of <0.0001 for satisfaction with economic standard of living, and <0.0001 for overall wellbeing.

Figure 7.14
Subjective Assessment of Adequacy of Money by Overall Wellbeing (%)



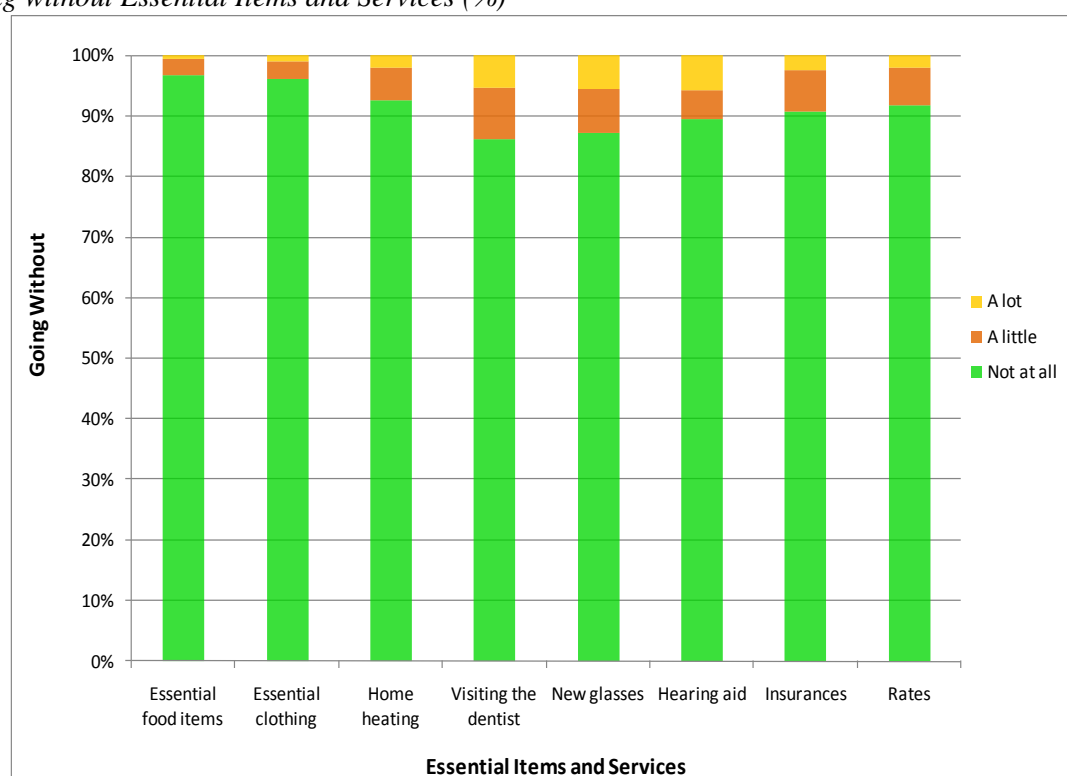
When asked if over the last 12 months there had been times when they had gone without essential items or services, most people stated ‘not at all’, as Figure 7.15 shows. Nevertheless, items or services that were considered to be less essential, like visiting a dentist (13.9 percent), buying new glasses (12.9 percent) or a hearing aid (10.5 percent) tended to be foregone more frequently. This suggests that a poor standard of living might also be reflected in poorer health. Essential items like food (3.4 percent) and clothing (4.0 percent) on the other hand, were foregone less.

Interestingly, the combined scores of the eight indicators of ‘going without essential items and services’ were negatively associated⁷⁶ with age. The 65 to 69 year old group recorded more items and services foregone than their seniors in age. This could suggest a lower expectation level as age increases. Going without these items and services also correlated negatively with overall wellbeing⁷⁷, as one would expect. The greater the numbers of items foregone, the lower the level of wellbeing. No significant relationship was found between these scores and gender or marital status.

⁷⁶ F-test statistic had a p-value of <0.05.

⁷⁷ F-test statistic had a p-value of <0.01.

Figure 7.15
Going without Essential Items and Services (%)



The standard relative poverty measures, noted in the Data and Method section of this chapter (i.e. the OECD 50 percent and European Union 60 percent of median, equivalent, disposable, household income), were applied to the 738 respondents who answered both income and housing cost questions. The number of people 65 years and over in these households was 1,051. A third measure was also applied, which was the constant value threshold benchmarked to the 1998 median with the addition of the cost of living each year since. As noted earlier, this is the threshold used in New Zealand's Social Report each year and is the commonly used measure of poverty in New Zealand.

At the time of the EWAS survey, the universal superannuation payment was 52 percent of the median, equivalent, household, disposable income, which meant all but a very few (i.e. those who did not meet New Zealand's residential criteria) were above that benchmark. New Zealand Superannuation is indexed to the average wage, not median income. For most of the 1990 decade, when the country's growth rate was low, NZS was above 60 percent of median, equivalent, household, disposable income. Since 1998, when growth rates began to pick up and the median climbed, it has become a smaller proportion of median income. Nevertheless, at the OECD 50 percent threshold, New Zealand leads all countries as having the lowest rate over 65 years in poverty (Forster & Mira d'Ercole, 2005).

It is a different story at the EU 60 percent threshold, however. At this threshold, almost half (49.5 percent) the households in the EWAS sample were below the line. This can be compared with the Ministry of Social Development's official figure of 37 percent for all people 65 years and above (Perry, 2008). As the median has risen in real terms since 1998 and the consequent proportional value of NZS has declined with it, New Zealand has one of the highest poverty rates at the 60 percent threshold within OECD countries (Table 4.1 in Eurostat 2007), despite having the lowest rate at the 50 percent threshold. As Perry notes,

that, “In 2001, 2004 and 2007, NZS rates were above a 50% threshold but below a 60% threshold, and many older New Zealanders rely on NZS plus only a little more for their income (2008, p.114).”

The clustering of older people’s incomes close to the 60 percent poverty threshold provides a particular problem for measuring poverty with this age cohort, because a small change in the median can move large numbers below or above the threshold. Perry says, the large variation in reported poverty rates over the years for those 65 years and older can give a misleading impression that significant changes in material wellbeing are taking place, when, in reality, they are not (ibid, p.104).

The third measure applied to the EWAS data was the constant value threshold benchmarked to the 1998 median with the addition of the cost of living each subsequent year. This is the threshold used in New Zealand’s Ministry of Social Development Social Report and is the commonly used measure in the country. It is also applied officially in the UK. It is a relative measure, in the sense that it adopts 60 percent of median, equivalent, disposable, household income after housing costs, but it is also a fixed measure to a particular year, (in this case 1998), with the cost of living added annually, in order to maintain the real value of the poverty threshold regardless of the movement of the median. Using this measure, the EWAS data showed 12.2 percent of its sample below the 60 percent threshold, which is a little above the Ministry of Social Development’s official figure of 8 percent for all people 65 years and above (Perry, 2008).

A summary of these three measures and their comparison with the Ministry of Social Development results is set out below in Table 7.2. It is important to note that the population for this EWAS study comprised a national random sample of people between the ages of 65 and 84 years who lived either independently or semi-independently, whereas the Ministry of Social Development calculations apply the Household Economic Survey figures, also a national random sample, but for all those 65 years and above.

Table 7.2
Numbers below Poverty Thresholds in Two Studies (%)

Poverty Threshold	EWAS (65-84 independent and semi-independent)	MSD (population 65 years and over)
50% of median	<1 ⁷⁸	<1
60% of median	49.5	38.0
60% constant value used in Social Report	12.2	8.0

The data show that at the higher EU 60 percent threshold, the incomes for older New Zealanders are depressed when compared with other OECD countries on this relative poverty measure. However, at the lower OECD 50 percent threshold, practically no one is below the line, which provides a result better than for any other country. Arguably, the more realistic measure is the commonly used 60 percent constant value one which indicates modest poverty levels and little depth in those levels. The higher numbers below the threshold in the EWAS sample, when compared with the Ministry of Social Development results, may indicate that the EWAS sample had more poorer households or that those responding to telephone interviewing were more likely to answer questions about their income if their income

⁷⁸ < = less than

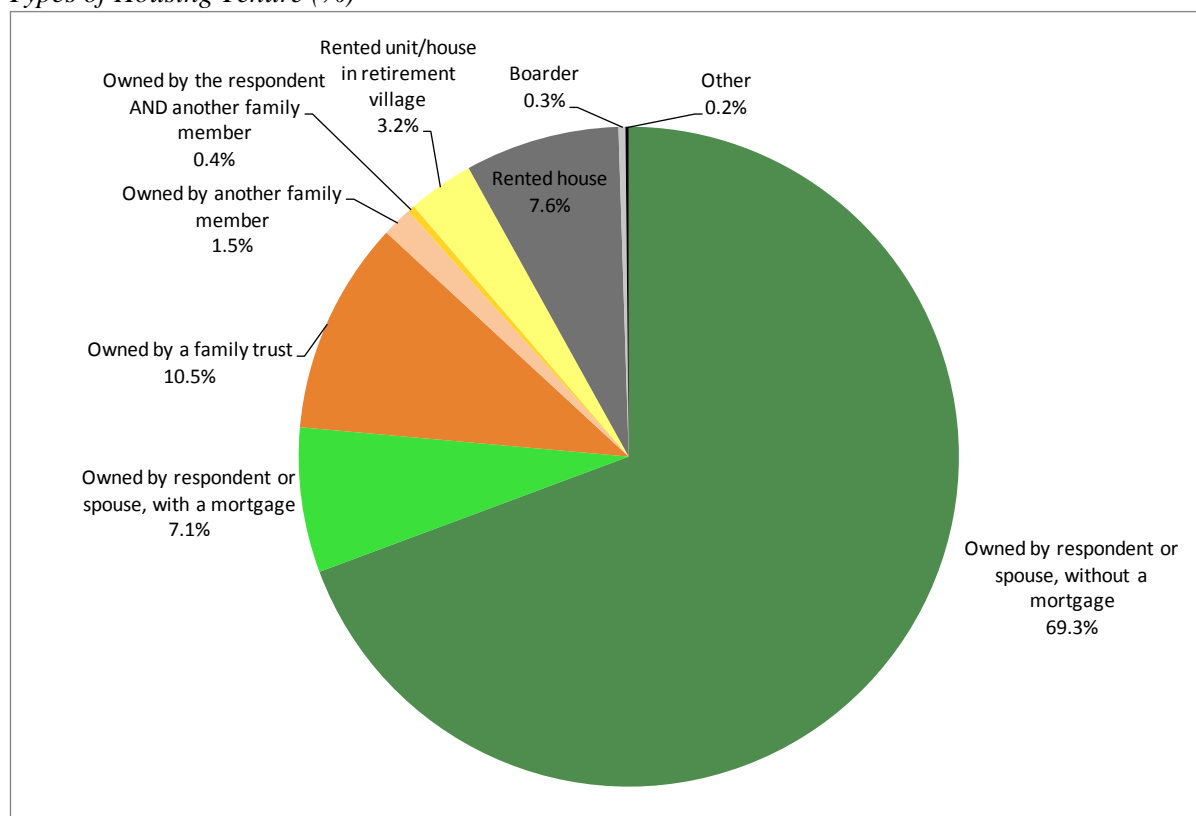
comprised of NZS only or NZS and a little more, because it was easier to calculate and as a universal payment, not embarrassing to name.

5.5 Housing

Home ownership was very high among respondents, with mortgaged and freehold houses being over 76 percent of all tenure, as illustrated in Figure 7.16.

Figure 7.16

Types of Housing Tenure (%)



Over 90 percent of such houses were mortgage free. If family trusts, retirement villages and homes owned by other family member are added, together they make up nearly 92 percent of tenure. The high levels of various forms of ownership probably reflect, not only the higher rate among older people, but also that this sample was restricted to persons under 85 years who lived independently or semi-independently. No significant relationships were found in this research between housing tenure (collapsed into owners, renters, and others) and gender, education, or urban/rural location.⁷⁹ A moderately significant relationship was found with age, where older cohorts were more likely to be owners.⁸⁰

Housing tenure was significantly related to marital status, as shown in Figure 7.17.⁸¹ Around 96.0 percent of married or partnered people owned their own home, either by themselves, with other family members, or through a family trust, whereas 89.9 percent of widowed people, 79.9 percent of single people, and 77.7 percent of divorced and separated people did. Housing tenure was also significantly related to the total value of assets other than the family

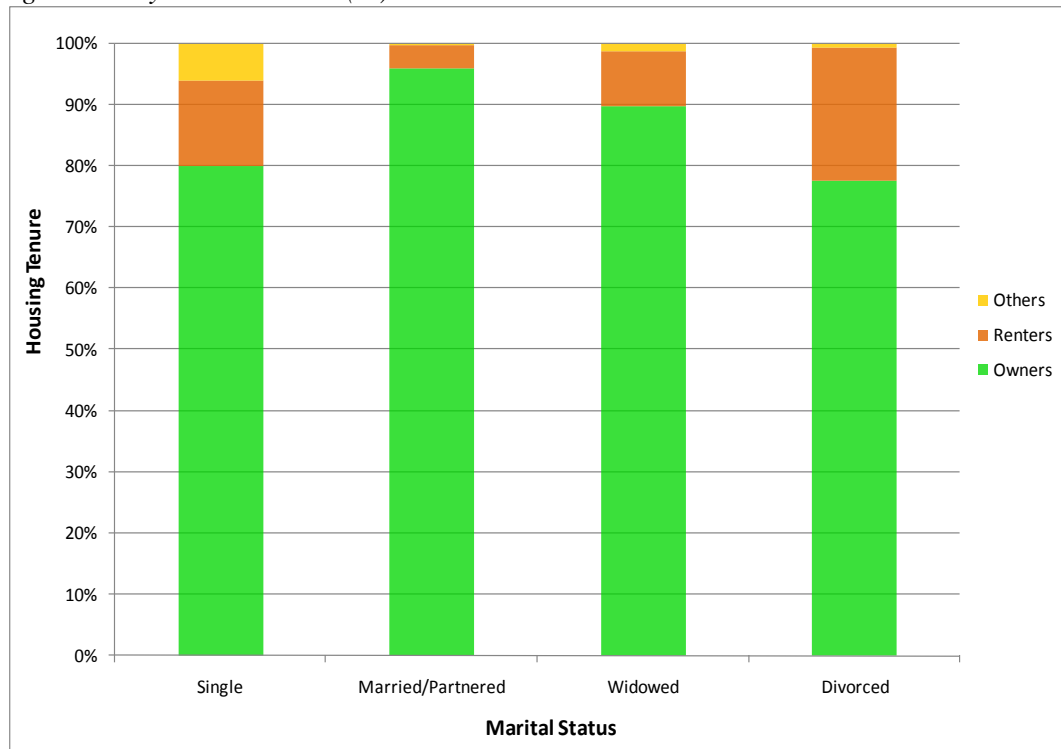
⁷⁹ F-test statistics had p-values of 0.1276 for gender, 0.3670 for education, and 0.3330 for urban/rural location.

⁸⁰ F-test statistic had a p-value of 0.0160.

⁸¹ F-test statistic had a p-value of <0.0001.

home.⁸² Among owners, 37.3 percent had no other assets, compared with 70.0 percent of renters, and 81.4 percent of others (data not shown).

Figure 7.17
Housing Tenure by Marital Status (%)



As with income and assets, there was a significant positive relationship between housing tenure and satisfaction with economic standard of living.⁸³ Satisfaction with economic standard of living was highest among owners (91.4 percent), than among renters (66.1 percent) or others (82.4 percent) (data not shown). However, the relationship between housing tenure and overall wellbeing was much weaker, although still noticeable, as demonstrated in Figure 7.18.⁸⁴ The proportion of respondents who were very satisfied overall was highest among owners (49.7 percent), and lower among renters (35.3 percent) and others (33.9 percent).

Housing tenure was also significantly related to physical health⁸⁵. Owners demonstrated higher physical health scores than other forms of tenure. There was however, no significant relationship found between tenure and mental health.

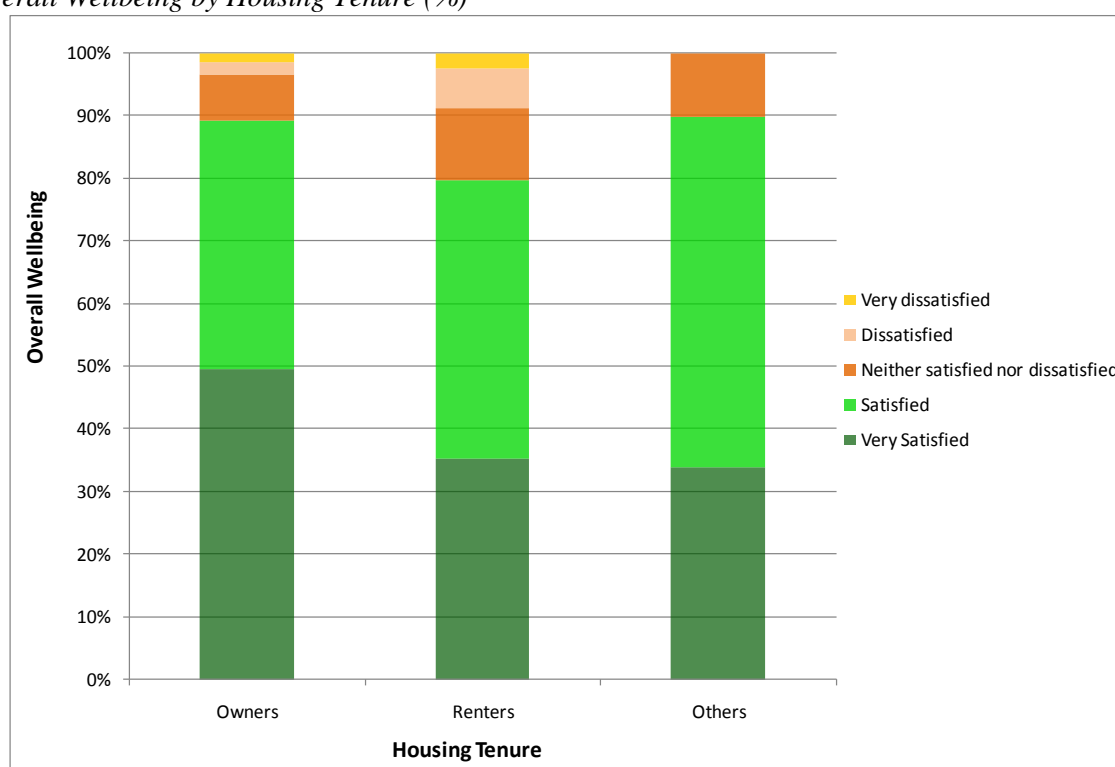
⁸² F-test statistic had a p-value of <0.0001.

⁸³ F-test statistic had a p-value of <0.0001.

⁸⁴ F-test statistic had a p-value of 0.0129.

⁸⁵ F-test statistic had a p-value of <0.0001

Figure 7.18
Overall Wellbeing by Housing Tenure (%)



Finally, levels of crowding, as measured by the Canadian National Occupancy Standard crowding measure, were very low within this population. The higher and lower bounds for the levels of crowding were 1.6 percent and 0.4 percent respectively. These very low results probably reflect the fact that around 89 percent of households in the survey were single or couple only households.

6. Conclusion

The results of this research are broadly congruent with those of the international studies noted at the beginning of this chapter. Personal income and wealth (excluding the family home) were both significantly associated with gender, age, and education. Men had more income and wealth than women, the younger cohorts had more income and wealth than older cohorts, and the more educated had more income and wealth than the less educated. Income was also significantly associated with marital status, with income highest for those married or living in a partnership. They were also the least likely to report having no assets other than the family home.

Overall wellbeing appeared to be closely associated with the older people's satisfaction with their economic standard of living, and satisfaction with economic standard of living was closely associated with income, wealth, subjective assessments of living standards, and housing tenure. The relationship between overall wellbeing and these indicators was less strong, with the exception of their assessment of adequate income.

Subjective assessments of living standards were generally in line with the results of the objective indicators, income and wealth. The subjective indicator 'adequacy of money' was

also significantly related to actual personal income. Respondents had gone without very few essential items or services, but those that were most often foregone were visiting the dentist, new glasses, and hearing aids. This suggests that poor standard of living might also be reflected in poorer health. This result was further supported by the significant relationship observed between asset ownership and physical health.

The poverty measures show that the older people tended to cluster between the standard internationally accepted 50 and 60 percent of median, household income thresholds, which led to the unique result of displaying the lowest numbers in poverty of any OECD country on the lower threshold and among the highest on the upper threshold. The more commonly used (in New Zealand) constant value threshold (60 percent of median household income with the addition of the cost of living each subsequent year) indicated modest poverty levels (8 percent) and little depth (ie above 50 percent of median income) in those levels.

Housing tenure was overwhelmingly dominated by home ownership, which was significantly associated with age and marital status. Older cohorts were moderately more likely to be owners than younger cohorts, and couples were much more likely to be owners than singles, widowed, or divorced people. The very low levels of household crowding were similar to the results in the international studies of this age group.

Overall, the results were largely in line with expectations, demonstrating much the same trends as the New Zealand and international studies. The close association between the various objective and subjective indicators and overall wellbeing suggests that the economic standard of living (broadly defined i.e. income, assets, living standards and housing) is a significant contributor to the wellbeing of older New Zealanders.

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Chapter 8: Rights and Entitlements

Peter King

1. Introduction

Current debates about the sustainability of the New Zealand Superannuation scheme, and the adequacy of rest home and other elder care and medical facilities, highlight the importance of the nature and availability of rights and entitlements for older people – and, of course, for the general population. The involvement of the state in the protection and provision of such rights and entitlements is a feature of the modern welfare state and its role in managing and mitigating the risk associated with later life (Hudson, 1995, Kemp & Denton, 2003).

In New Zealand, the State has acknowledged the importance of rights and entitlements for the general population through their inclusion of “rights” as a dimension of social wellbeing in the annual Social Report of the Ministry of Social Development (e.g. Ministry of Social Development, 2008). In that Social Report, rights are measured with reference to participation in civil and political affairs without being subject to discrimination and abuses of power. These rights are considered fundamental for the organisation and functioning of society “in a way that enables all people to develop to their full potential” (Ministry of Social Development, 2008). The Social Report uses four indicators of rights and entitlements: voter turnout; the representation of women in government; perceived discrimination; and perceived corruption. The focus of these is upon political participation, in the broadest sense, rather than the more service and support focus adopted for this study.

Another State sponsored initiative is the Positive Ageing Strategy (Dalziel, 2001). This strategy has with more focus on older people and more in common with the approach used in this study. For example, the ten goals and associated key actions of the Positive Ageing Strategy overlap with the areas of rights and entitlements discussed in this chapter. This is particularly the case with the Positive Ageing Strategy goals associated with income, health, housing, and ageing in place.

In this study the question of rights and entitlements is addressed from the point of view of people’s expectations of what they can expect in their old age in terms of the availability of five sources of support: financial security, adequate health care if needed, residential care if needed, support from family when needed and support from the government and government agencies when needed). In the capabilities approach to wellbeing, it is associated with the dimension of rights and entitlements.

This chapter presents preliminary findings based on the analysis of responses of 65-84 year-olds to the five rights and entitlements-related sets of questions and any relationships these rights and entitlements have with the following seven variables⁸⁶: age, gender, marital/partnership status, living arrangements, personal income, subjective wellbeing or general satisfaction with life, and loneliness.

2. Theoretical Background

An entitlement is a guarantee of access to some thing or benefit, based on the existence of a right, or by agreement through law. Given the existence of a right to something, a person in possession of such a right has an entitlement to receive or experience the benefit (or otherwise) of that thing, and a corresponding expectation that they should be able to receive or experience it. In a modern welfare state such as New Zealand, the State has a central role in the protection and provision of rights and entitlements and in managing and mitigating the risk associated with later life (Hudson, 1995, Kemp & Denton 2003).

⁸⁶No significant relationships were found between rural/urban location and any of the five sets of rights and entitlements, so the location variable is not discussed further in this chapter.

This study addresses the question of rights and entitlements from the point of view of people's expectations of what they can expect in their old age in terms of the availability of five sources of support: financial security; adequate health care if needed; residential care if needed; support from family when needed; and support from the government and government agencies when needed. The five sources of support align with Sen's notion of instrumental freedoms "that contribute, directly or indirectly, to the overall freedom that people have to live the way they would like to live" (Sen, 1999:38). Sen proposes a non-exhaustive list of five types of instrumental freedoms: political freedoms; economic facilities; social opportunities; transparency guarantees; and protective security (Ibid.). Of these, economic facilities and protective security align most clearly with the five areas of rights and entitlements included in this study and considered in this chapter.

By framing the question in terms of 'rights and entitlements' rather than in terms of 'needs', for example, attention is focused on human agency, empowerment and autonomy rather than the less active connotations often associated with being in need (Geiringer & Palmer, 2000, Waldron, 2000:123). In a broader relational sense, the question of rights and entitlements presupposes the existence of rights-bearers, on the one hand, and, on the other hand, those with moral or legal obligations to ensure those rights are protected and entitlements provided (Geiringer & Palmer, 2007:15, Waldron, 2000). In the case of this study the rights-bearers are older people, while the anticipated protectors and providers are family and the state.

3. Method

3.1 Data

In this study, rights and entitlements were measured using five questions covering what respondents could expect in their old age in terms of the availability of five sources of support if needed: financial security; adequate health care; residential care; support from family; and support from the government and government agencies. Responses were in the form of 'Yes', 'No', and 'Don't know'.

The 'don't know' response has a different connotation for this dimension of wellbeing than for others – such as income, age, gender, for example – and this is reflected in the analysis that follows. 'Don't know' responses to questions about household income, housing costs, or even date of birth, indicate lack of knowledge about existing conditions and facts. Such responses are not very useful analytically except that someone does not know something that they might reasonably be expected to know. On the other hand, people not knowing whether they will be financially secure, have access to health care or residential care, or have support from family or the government, conveys important information about their confidence in the adequacy and stability of important social institutions and services.

The focus of these questions was on people's expectations of these rights and entitlements being available if needed, and did not ask whether or not the five sets of rights and entitlements were actually being accessed by, or available to, the respondents at or before the time of the survey. Nor did the questions ask about the importance of each potential set of rights and entitlements to the respondents. Consequently, the data only reveal whether or not respondents expected the selected rights and entitlements to be available if or when they were needed.

3.2 Analysis

The five dimensions of rights and entitlements with respect to their sources of support are examined for their overall frequencies and for bivariate relationships with the variables: age; gender; marital/partnership status; household type; personal income; overall subjective wellbeing; and loneliness. Statistical tests used and their levels of significance are shown as either footnotes or table notes.

As detailed in Chapter Three, sampling weights have been calculated and applied to adjust for gender and age, and all tables and analyses in this chapter use weighted data.

4. Findings

4.1 Overall frequencies

Table 8.1 presents the frequencies of responses to the five rights and entitlements which show that people are much more confident of the abilities of their families to provide them with support than they are of receiving support from the government with the expectation of the other forms of support (health care, finance, residential care) being intermediary. As Table 8.1 shows, nearly 92 percent of those who responded expect support from their families when they need it. Fewer than four percent did not know. All the other forms of support, except support from the government, recorded more than 70 percent.

Table 8.1

Expectations of Support from or Access to various Rights and Entitlements (%)

	Support from family	Access to health care	Financially comfortable	Access to residential care	Support from Government
Yes	91.7	79.0	75.4	72.6	52.7
No	4.5	9.9	10.9	5.2	13.6
Do not know	3.7	11.1	13.7	22.2	33.7
N=	1,637	1,632	1,631	1,602	1,619
Total	100%	100%	100%	100%	100%

With respect to the specific forms of rights and entitlements, health care and financial security show a more than 70 percent positive response, with support from the government being barely more than half (52.7%). Health and financial security had similar patterns of negative and don't know responses. Expectations of access to residential care showed a much greater degree of uncertainty with just above five percent having no expectation of this and just over 22 percent being uncertain. Only a little over half of respondents had a clear expectation of support from the government or government agencies, more than one third did not know, and almost 14 percent did not expect it.

To some extent, the responses regarding support from the government are inconsistent with the other entitlements, because the provision of health care and residential care for older people is largely the responsibility of the government and government agencies. Responses to the question about support from the government are therefore best understood as reflecting an underlying scepticism about the constancy and reliability of the State in comparison to family, for example. The clear difference between expectations of support from family and from other sources contrasts with findings of a British qualitative study (Sin, 2006) that found equal expectations of support from the state and family among both white British and Asian-Indian British participants.

4.2 Age

For finance⁸⁷, healthcare⁸⁸, residential care⁸⁹, and government⁹⁰, the expectation that access would be available among the surveyed older people was positively related to age. The expectation that it would not be available was inversely related to age, but not knowing whether it would be available was steady across the age groups. Those in the 80 to 84 age group were 3.6 times more likely than those under 80 to expect to be financially comfortable, 2.4 times more likely to expect adequate access to health care, 1.9 times more likely to expect access to residential care, and 2.5 times more likely to expect to receive support from government. While the expectation of support from their family was slightly higher for those aged 80 to 84 than for those aged 65 to 69, the expectation of the age groups in between fluctuated with no clear trend or significant relationship.

⁸⁷Chi-square (6) = 31.407, $p < .001$ Cramer's V = .098, $p < .001$

⁸⁸Chi-square (6) = 23.206, $p < .001$ Cramer's V = .084, $p < .001$

⁸⁹Chi-square (6) = 13.150, $p < .05$ Cramer's V = .064, $p < .05$

⁹⁰Chi-square (6) = 25.194, $p < .001$ Cramer's V = .088, $p < .001$

The higher expectations of the older age groups for support might well reflect the greater likelihood that they were actually receiving or accessing various types of support than was the case for the “younger old”.

4.3 *Gender*

Expectations of support were not significantly different for men and women, except for expectation of support from the government⁹¹, where women were more likely than men to expect support, but they were also more likely than men to say they did not know.

4.4 *Marital/Partnership Status*

The 34 marital/partnership status categories contained in the database were collapsed to four categories: never married or in a relationship; in a relationship including those living apart; widowed and no longer in a relationship; no longer in a relationship but not widowed.

Expectations of support for finance⁹², healthcare⁹³ and family⁹⁴ were significantly related to marital/partnership status. For each of these three areas of support, those who were never married or in a relationship and those who were no longer in a relationship but not widowed were less likely to expect the support to be available than those who were in a relationship or widowed.

4.5 *Living Arrangements*

Living arrangements were defined in terms of eight categories of household composition: couple only; couple with other persons; couple with children; couple with children and other persons; one parent with children; one parent with children and other persons; multiperson households of related people; and single person households. The only significant relationship identified was that between respondents living in couple only and single person households and their expectation of receiving support from family⁹⁵, with 93.8 percent of respondents from couple only households expecting support and 88.5 percent of those living as single persons.

While respondents living in couple only and single person households had had the same average number of children (2.9), only six percent of the respondents in couple only households had not had any children compared to 12 percent of single person households. This raised the possibility that the lower expectation of receiving support from family expressed by those living alone was related to their higher rate of childlessness. However, when those households whose respondents had no children were excluded from the analysis, there was still a significant difference⁹⁶ between the two types of household, with single person household respondents still less likely to expect support from family and more likely to either not expect it or not know whether it would be available if needed. This result suggests that perceptions of the availability of support from family are better for those living with a partner than for those living alone, regardless of whether or not they have children from whom support might be potentially available.

4.6 *Personal Income from All Sources*

Data on annual personal income before tax from all sources were obtained for about 68 percent of respondents. Personal income was significantly related to the expectation of being financially comfortable only⁹⁷. No significant relationships were found between level of personal income and the expectation of support from any of the other sources. Not surprisingly, income level was positively associated with respondents' expectations that they would be financially comfortable and negatively associated with their either not thinking it would be available, or not knowing.

⁹¹Chi-square (2) = 16.042, $p < .001$ Cramer's V = .100, $p < .001$

⁹²Chi-square (6) = 36.191, $p < .001$ Cramer's V = .105, $p < .001$

⁹³Chi-square (6) = 22.672, $p < .001$ Cramer's V = .083, $p < .001$

⁹⁴Chi-square (6) = 75.018, $p < .001$ Cramer's V = .152, $p < .001$

⁹⁵Chi-square (2) = 12.561, $p < .010$ Cramer's V = .093, $p < .010$

⁹⁶Chi-square (2) = 16.589, $p < .001$ Cramer's V = .108, $p < .001$

⁹⁷Chi-square (8) = 40.177, $p < .001$ Cramer's V = .133, $p < .001$

4.7 *Subjective Wellbeing or General Satisfaction with Life*

Respondents' general satisfaction with life was measured on a five point scale ranging from "very satisfied" to "very dissatisfied". The total numbers of valid responses in the very dissatisfied and dissatisfied categories were very small (<30 and <40, respectively), so the two categories were collapsed. General satisfaction with life was significantly and positively related to the expectation that support would be available from finance, health care, residential care and family⁹⁸ but not for government and government agencies.

Respondent's expectations of support were positively associated with their satisfaction with their rights and entitlements for each of the five sources of support.⁹⁹ Unsurprisingly, respondents' satisfaction with their rights and entitlements was also positively associated with the subjective overall wellbeing or general satisfaction with life.¹⁰⁰

4.8 *Loneliness*

Loneliness has been linked to poor social integration (Mullins et al., 1988; Wenger et al 1996; de Jong Gierveld & van Tilburg, 1999) and is recognised as a dimension of social exclusion (Scharf & Smith, 2004).

Loneliness was measured using the de Jong Gierveld Loneliness Scale (de Jong Gierveld and van Tilburg 2006). This measures overall loneliness on a seven point scale with four point subscales that measure emotional loneliness and social loneliness, respectively. Higher scale numbers indicate higher levels of loneliness (see Appendix Two).

Table 8.2 shows the odds that those with the lowest loneliness scores will expect a particular right or entitlement to be available compared to those with the highest loneliness scores expecting them to be available.¹⁰¹ (For example, under expectations of financial security, those respondents with the lowest social loneliness scores were 3.3 times more likely to expect to be financially secure than those respondents with the highest social loneliness scores). In each case, the odds ratio for social loneliness is greater than that for emotional loneliness. While the differences are not great for financial security and healthcare, they are noticeably larger for residential care and support from family.

Overall loneliness, emotional loneliness and social loneliness were inversely related to the expectation of support from all sources except for the case of emotional loneliness and the expectation of support from government, for which there was no significant difference according to the level of loneliness. Thus, the lonelier a person was the less likely they were to expect a particular right or entitlement to be available (with the already noted exception of emotional loneliness and support from government). The strength of the difference between the least lonely and the loneliest was uniformly greater for social loneliness than for emotional loneliness.

⁹⁸Finance: Chi-square (6) = 55.025, $p < .001$ Cramer's V = .130, $p < .001$; Health care: Chi-square (6) = 28.364, $p < .001$ Cramer's V = .093, $p < .001$; Residential care: Chi-square (6) = 22.131, $p = .001$ Cramer's V = .083, $p = .001$; Family support: Chi-square (6) = 68.329, $p < .001$ Cramer's V = .145, $p < .001$.

⁹⁹ Finance: Chi-square (2) = 883.337, $p < .001$ Cramer's V = .232, $p < .001$; health care: Chi-square (2) = 98.287, $p < .001$ Cramer's V = .252, $p < .001$; residential: Chi-square (2) = 34.959, $p < .001$ Cramer's V = .151, $p < .001$; family: Chi-square (2) = 19.975, $p < .001$ Cramer's V = .114, $p < .001$; government: Chi-square (2) = 159.731, $p < .001$ Cramer's V = .322, $p < .001$.

¹⁰⁰ Chi-square (4) = 59.920, $p < .001$ Cramer's V = .184, $p < .001$

¹⁰¹Odds have been calculated on the basis of Yes responses divided by combined No and Don't know responses.

Table 8.2

Likelihood of the Least Lonely and the Most Lonely 65-84 year-olds expecting particular Rights and Entitlements to be available by Loneliness type

Rights & Entitlement	Loneliness type	Likelihood (odds ratio)
Financial security	Overall loneliness	11.2
	Emotional loneliness	3.1
	Social loneliness	3.3
Healthcare	Overall loneliness	5.1
	Emotional loneliness	2.9
	Social loneliness	3.1
Residential care	Overall loneliness	3.5
	Emotional loneliness	1.4
	Social loneliness	2.9
Support from family	Overall loneliness	15.9
	Emotional loneliness	8.5
	Social loneliness	11.8
Support from government	Overall loneliness	2.1
	Emotional loneliness	1.3
	Social loneliness	1.7

5. Conclusion

This preliminary analysis of expectations of the availability of certain rights and entitlements from the survey of New Zealand residents aged 65 to 84 has found that they mostly expect support to be available from their family, at nearly 92 percent of valid responses. This was followed by the expectation of having access to healthcare (79 percent), to being financially comfortable (75.4 percent), to having access to residential care (72.6 percent). The expectation of having support from the government was by far the lowest (52.7 percent). The lower expectations of support from the government than the expectations of other forms of government supported entitlements, such as healthcare and residential care, appear contradictory. However, this might reflect a generalised lack of confidence in “the government” in a general sense (in contrast to the family), that coexists with a greater confidence in particular instances of government service provision.

Age was significantly related to expectations of availability of access to all types of support (financial security, healthcare, residential care, and support from the government) except support from the family. The higher expectations among those in the older age groups might well reflect the greater likelihood that they were actually receiving or accessing those types of support than was the case for the “younger old”.

Expectations of support were not significantly different for men and women except that women were more likely than men to expect support to be available from the government, but also more likely than men to say that they did not know.

Those who were never married or in a relationship and those who were no longer in a relationship but not widowed were less likely than those who were in a relationship or widowed to expect to be financially secure, have access to healthcare, and support from family.

With respect to living arrangements, perceptions of the availability of support from family were better for those living with a partner than for those living alone, regardless of whether or not they had children.

Personal income level was positively associated with respondents' expectations that they would be "financially comfortable" and negatively associated with either their thinking it would not be available, or not knowing.

General satisfaction with life was significantly and positively related to the expectation that support would be available for all sources (i.e. family, health care, residential care, financial security) except for support from the government and government agencies.

Emotional loneliness, social loneliness and overall loneliness were inversely related to the expectation of support from all sources except that there was no significant difference between the level of emotional loneliness and the expectation of support from the government. The strength of the different expectations of support between the least lonely and the loneliest was uniformly greater for social loneliness than for emotional loneliness.

Overall, lower expectations of entitlement availability are associated with lower assessments of older people's subjective wellbeing and a lower general satisfaction with life, along with the extent of the participants' connections to other people through marriage or partnership status, living arrangements and degree of loneliness. The finding that the socially lonely are more likely than the emotionally lonely to either not expect, or not know whether to expect, these rights and entitlements to be available has significance for the social integration, inclusion and exclusion of older people and the development of policies and practices to enhance this.

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Chapter 9: Leisure and Recreation Activities and Wellbeing among Older New Zealanders

Suzan van der Pas and Peggy Koopman-Boyden

1. Introduction

As people grow older their participation in leisure and recreation activities changes because of life cycle transitions such as retirement from paid work and the “empty nest” experienced by parents as children grow up and leave home. In later years such participation can also be expected to change further because of declining physical and mental capacity. Leisure time has been defined “as a time when people can do what they want to do, away from work and other commitments” (Ministry of Social Development, 2008: 86). Recreation can often involve a physical activity or sport. Leisure and recreation as the Ministry of Social Development describe them in their Social Reports are a means to:

- provide people with a sense of identity and personal autonomy
- add meaning to individual and community life
- encourage personal growth and self-expression (2008: 86).

In a review of leisure participation in New Zealand over the 20th Century, Walker, Donn, & Laidler (2005) concluded that New Zealanders have a relatively high level of participation in both sport and cultural activities. Sport in particular has been seen as central to New Zealand’s culture and is invested with values seen as critical to building character (Stothart, 1974). Other more sedate or indoor activities have been viewed as building family values.

In the last decade the connection between leisure participation and wellbeing has begun to be established through successive editions of the Ministry of Social Development’s Social Reports (2001-2007). Using both objective and subjective indicators, MSD has endeavoured to establish the extent to which “everybody is satisfied with their participation in leisure and recreation activities. They have sufficient time to do what they want to do and can access an adequate range of opportunities for leisure and recreation” (2008: 86). The Ministry of Social Development suggests that the higher the measure of participation in either physical or cultural and arts activities, the greater the level of wellbeing.

Although there have been population studies on the participation in leisure and recreation activities in New Zealand (e.g. the New Zealand Health Survey, 2006/07 (Ministry of Health, 2008) and the Cultural Experiences Survey 2002 (Statistics New Zealand, 2002)), which clearly show a number of determinants of participation, they have not specifically looked at the extent to which these activities influence the wellbeing of older adults.

The aim of this chapter is to further our understanding of older adults’ leisure and recreation by describing their level of involvement in leisure and recreation activities, identifying the associations of participation in leisure and recreation with a number of socio-demographic and personal characteristics, and examining the extent to which these activities influence the wellbeing of older adults.

2. Theoretical and Empirical Background

Over the past few decades the relationship between leisure activities and wellbeing in later life has been studied extensively (Abrams, 1978; Havighurst, 1961). Early gerontology researchers’ maintained activity was positively related to the wellbeing of older people (Havighurst, Neugarten &

Tobin, 1964), and one of the founding theories of ageing was built on this idea. Entitled “activity theory”, successful ageing was seen as benefiting from continued or enhanced physical and mental activity in older years. The theory was developed as an opposing view to the “disengagement theory” previously developed by Cumming and Henry (1961), and which suggested that growing older was associated with varying stages of disengagement from society, both in the interests of the individual and of society in general.

Research in this area has now gone beyond these theories, and has established empirically the relationship between physical/mental activities and wellbeing as a positive one. It is now endeavouring to refine that relationship more definitively, along with the activities themselves.

Leisure and recreation are subsets of human activity, and recent research effort (e.g. Van der Meer, 2008; Ball, Corr, Knight, & Lowis, 2007) has begun to categorise them according to various criteria. Such criteria might be the purpose of such activities, the level of social/physical involvement required, the type of benefit to the participant, the cost, and the level of social support or involvement aligned with such activities. Such categorisations can be a simple description of activities in these various categories; others can be multi-dimensional, in that they take into account the role of the participants, and the impact of the leisure activity on other people and the environment.

As an example of multi-dimensional categorisations, Bukov, Maas & Lampart (2002) note that differences in leisure participation involve ideas of *selection* (Baltes & Baltes, 1990) and/or *accumulation* (Bukov et al., 2002). Selection of activities by a participant might concentrate on those activities that are the most interesting and satisfying for them, with the selection process being influenced by the age, gender and health of the participant. Selection is also influenced by differential possession of resources – the more acquired resources an individual possesses, the more likely they are to participate in leisure and recreation. Accumulation of activities might involve the older adults building up a wide array of activities over the years and being variously involved in each. Indeed the model of undertaking accumulation and selection simultaneously is seen in the process of participating in more demanding social activities at the same time as being more likely to take part in less demanding ones.

It is obvious from the theoretical stance taken in this set of theories that the accumulation and selection of resources is important to the form of leisure participation that people are involved in their older years. Such resources as social skills, knowledge and competencies accumulated from earlier years can be of great importance to the leisure and recreation activities and quality of life in older age. The current research has investigated the ways in which older New Zealanders’ involvement in leisure and recreation varies according to the socio-demographic and personal resources acquired by them (education, personal income, living arrangements, and health), and whether the process of selection as they age tends towards less demanding activities.

New Zealand research on leisure and recreation has yet to move much beyond describing the level of involvement. Little has been undertaken at the theoretical level, with the exception of the work of Grant, who since the late 1990s has been considering the “ageing-activity relationship at both the individual and societal level.” As an extension of the idea of heterogeneity in older years, Grant has suggested that the knowledge, beliefs and attitudes that older people have about the importance of physical activity in later life do not necessarily mean that they will lead an active life (Grant, 2008). The choice older people have in their leisure and recreation activities “reflects how the cultural and social context, in which they live, influences lifestyle choice” (Grant, 2008:826).

Recent New Zealand research on leisure and recreation using three nation-wide surveys of Health, Cultural Experiences and Quality of Life, has shown that the level of participation in physical activity was higher among men than women, and declined with age, being highest among those under 35 years, and lowest for those over 65 years (Ministry of Social Development, 2008:90). The level of participation in cultural and arts activities was only slightly higher among women than men (95% and

92% respectively), and was greatest among those aged 15-24 (98% participation), and lowest among those aged 65+ (81%) (Ministry of Social Development, 2008: 92-93). However, among older respondents the level was still high. While three-quarters of all New Zealanders (73%) were satisfied overall with their leisure time, people 65 years and over reported the highest levels of overall satisfaction (90 percent) (Ministry of Social Development, 2008:88).

3. The Social Context of Leisure and Recreation Activities over the Life Course

The impact of the cultural and social context on the level of participation of older people in leisure and recreation is an increasing theme in the research, although little has been written about their historical or social background. The leisure and recreation pursuits undertaken in one's earlier years are more likely to be continued in one's older years – "older people tend to continue participating in activities with which they are familiar for security as well as reassurance" (Nimrod & Kleiber, 2007).

The following is a brief coverage of the social and schooling context in which the 2007 cohort of 65-84 year-olds experienced leisure and recreation, recognising the importance of "*biographical* ageing" along with "*biological* ageing", where older people may or may not incorporate leisure and recreation activities into their life in relation to their previous experiences.

3.1 Social Background

The young adult years of the 65-84 year-old respondents in the current survey (when they were aged between 10-25 years) were 1933-1967, a period covering the Great Depression, the Second World War, and the relative prosperity of the post-war period. In New Zealand, this was a hugely diverse period economically and socially, and a subsequent range in the leisure and recreation pursuits of the respondents in their later life can be expected.

Leisure and recreational pursuits have often been taken to include activities which are largely physical. Today's 65-84 year-olds include many who were growing up in a period when exercising *for the sake of it* was considered to be unnatural, particularly for women. Furthermore, the professional advice once given to people as they got older was to *take it easy*. The combination of these two forms of socialisation could be the basis for many older people today (especially women) being uncomfortable with a high level of physical activity, and certainly not comfortable with those activities which they have not been involved in before (Grant, 2008).

In its consideration of the historical shaping of recreation and sport, the Ministerial Taskforce on Sport, Fitness and Leisure (2001) especially alludes to the societal restrictions placed on recreation and sport participation. For example, throughout this time, access to leisure and recreation was limited by gender – women did not play snooker or the national sport of rugby; men did not regard flower gardening or embroidery as appropriate leisure time activities. Instead the leisure and recreation activities of men were heavily physical and mostly sport-oriented, taking advantage of the facilities established by the nationally organised sports associations of rugby football, rowing, athletics or alpine climbing. Women were more likely to participate in home-based and informal leisure and recreation activities such as handicrafts, flower arranging or knitting.

Leisure and recreation activities with few gender or physical access difficulties included music, reading (local libraries were in abundance), church attendance, card playing, handicrafts, and activities in the local community hall (dancing, table tennis, cards). Swimming was also a prominent recreational activity in New Zealand with easy access to beaches, lakes and rivers (Stothart, 1974). Both men and women were involved heavily in "do-it-yourself" pursuits, many of these being an extension of their work role and became "hobbies". Many of these activities were also relatively inexpensive, so that entire communities were able to be involved, rather than the individualistic pursuits of a few.

3.2 *The Influence of the School*

Schools have always been influential in shaping the values and attitudes of children and young people, and in developing the foundation of life-long interests and activities. The extent to which New Zealand schools have included recreational activities in the curriculum has varied enormously over the past century, including during the 1930s to 1950s, the period when the 2007 cohort of 65-84 year-olds were in primary or secondary school.

During the 1930s and 40s, few of the leisure and recreational activities offered by today's schools were available. Instead, physical activities dominated leisure and recreation pursuits, and physical activities in the 1930s was undertaken through "physical drill [which] was done (in primary schools, if at all) by all classes at once during the mid-morning break" (Grant, 1992). Drill was also a recognised part of the secondary school curriculum, at least for boys, who were required (by the 1901 Physical Drill in Public and Native Schools Act) to take part in regimented physical training with an emphasis on military "drill". Students were involved in rugby, cricket and basketball in primary and secondary schools, and inter-school sports competitions, cups and shields were popular (Stothart, 1996). Swimming was taught in schools where facilities allowed, but it was not until the 1940s that swimming lessons became established (Stothart, 1974:33).

Other activities such as handcraft and cultural activities were largely the domain of females, with classes in sewing and handcraft. Art work, also seen as a largely feminine pursuit, was often restricted to painting.

During the 1940s greater recognition was given to the place of physical education and sport within the school curriculum, the latter in particular being a controversial move. The implementation of the 1937 Physical Welfare and Recreation Act and the recommendations of the 1943 Thomas Report meant that physical education became a 'core' compulsory subject up to Year 11, and there was a greater awareness of the need for physical fitness and the advantages of outdoor activities. Thus, while teachers had been "expected and encouraged to take their classes into the open air" since 1929 (Stothart, 1993:5), the 1940s also saw the beginning of outdoor education programmes. The first programme "probably began when 100 intermediate school children and 13 adults camped two miles below the Tiritia Dam, just out of Palmerston North" (Stothart, 1974: 44). Such camps had an emphasis on outdoor activities, nature study, geography, woodcraft and leadership.

Many older New Zealanders will remember the "Games Series" booklets published during the 1950s, which contained coaching hints, teaching skills, group practices and rules for a number of sports (rugby, hockey, softball, cricket, swimming, basketball). These developed skills more systematically in these sports during schooling years (Stothart, 1974: 42), which could also be carried on into adult sports and coaching.

In summary, the school curriculum of the 1930s to the 1950s introduced children to at least a narrow range of activities which could form the basis of leisure and recreational activities in adulthood and in later life.

4. **Data and Method**

The data were collected as part of the Enhancing Wellbeing in an Ageing Society research programme. The sample included 1,680 New Zealand respondents (46.7% men and 53.3% women) aged between 65-84 years, who were interviewed using computer assisted telephone interviewing (see Chapter 3, Methodological Background, for further details).

4.1 *Leisure Activities*

Participation in leisure activities was measured by asking respondents whether they participated in nine different activities in the month before the interview, with a response of either 'No' or 'Yes'. The specified leisure activities were: being a spectator at a sports event; going to an entertainment or arts

event (such as concert, theatre, museum or cinema); going to a restaurant or café; going to the pub or bar; going to a TAB (betting shop, particularly for horse racing and other sports) or casino; attending a family event; attending a social occasion (such as a barbeque); going to the library; and participating in an outdoor activity (such as cycling, walking or gardening).

4.2 *Wellbeing*

A subjective measure of satisfaction with leisure and recreation activities was obtained through the dichotomous response (satisfied/ dissatisfied) to a question of whether the respondent was satisfied with the participation in leisure and recreation activities. These were similar to the other dimensions of wellbeing in this study. The overall wellbeing of the respondents was measured by asking: “How satisfied are you with your life as a whole these days?” The response categories ranged from 1 ‘very dissatisfied’ to 5 ‘very satisfied’. The average overall wellbeing was 4.3 (SD = .85) (see Chapter 3, Methodological Background, for a discussion of the Wellbeing Scale – the World Values Survey).

4.3 *Other Measures*

To measure the socio-demographic and personal characteristics, the following variables were examined: age, gender, educational level, income, living arrangements, and health. Four age categories were distinguished: ages 65 to 69 years, 70 to 74, 75 to 79, and 80 to 84. Respondents were asked their highest completed educational qualification. The responses were recoded into four categories: up to primary education, secondary education, vocational or trade qualification, and university qualification (for further explanation see Chapter 5 Education). Income level was based on the ‘total personal income before tax’ (in income bands) and was divided into five categories: up to \$15,000, \$15,001-20,000, \$20,001-30,000, \$30,001-40,000, and \$40,000 or more. ‘Living arrangements’ was a composite variable of partner status and household composition. Within this variable five categories were distinguished, namely: (1) respondents living with their partner (or spouse) (and others); respondents living alone (in a one-person household) and: (2) never-married; (3) divorced or separated, (4) widowed. Finally, there was a category of (5) respondents living with others, related and/or unrelated (without a partner). Health was measured by asking respondents to assess, on a five point scale, their own health status. Three categories of self-rated health were distinguished: ‘poor/fair’, ‘good’, and ‘very good/excellent’.

4.4 *Procedure*

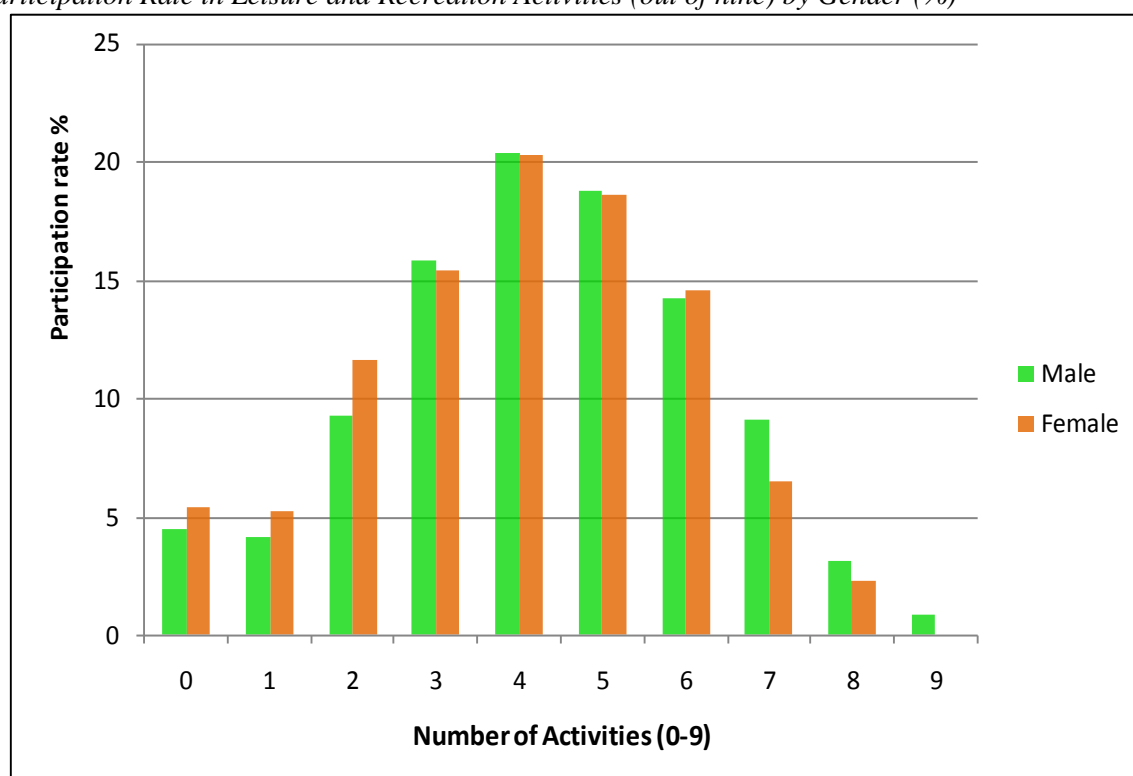
In the descriptive analyses, bivariate associations were investigated between gender, age, educational and income level, living arrangements, and health on the one hand and participation in leisure and recreation activities on the other hand. The analyses of the participation of leisure and recreation activities were based on a summary measure of the number of activities (out of nine) that respondents participated in, and the frequency of participation for the individual activities. The analyses included frequency distributions where the differences between categorical variables were examined using chi-square tests. The analyses are presented separately for both genders, because leisure and recreation activities may be different for men and women. The association between the socio-demographic variables and participation rate in leisure and recreation activities was examined through an analysis of variance. Lastly, bivariate associations were investigated between participation in leisure activities, satisfaction with participation, and overall wellbeing. The data has been weighted to make the results representative of the New Zealand population aged 65 to 84, as noted in the Methods chapter.

5. **Findings**

5.1 *Participation in Leisure and Recreation Activities*

The average number of leisure and recreation activities that older people participated in was 4.1 (SD = 1.9) (Figure 9.1). 5% of the respondents did not participate in any leisure or recreational activity at all and another 5% of the respondents participated in only one leisure and recreational activity. Men were slightly more actively involved in at least one leisure and recreation activity than were women (95.5% and 94.6% respectively, $t_{(1678)} = 2.6, p < .01$).

Figure 9.1
Participation Rate in Leisure and Recreation Activities (out of nine) by Gender (%)



Information on the different types of recreation and leisure activities in which respondents were involved is provided in Table 9.1. Older people were most likely to participate in outdoor activities. Going to a restaurant/café or attending a family event also ranked highly, but fewer people gambled, went to watch a sports event or went to the pub or a bar.

The prevalence of men in a number of leisure activities was not observed for all types, although they were more likely to have been involved in an outdoor activity, attended a social event or have gone to a pub or bar, a sporting event or the Totalizator Agency Board (TAB) or casino; women were more likely to visit a library, and go to a concert, the theatre, a museum or a cinema.

Table 9.1
Participation in Different Types of Leisure and Recreation Activities by Gender (%)

	Males	Females	
Entertainment/arts event	42.3 ¹⁰²	52.2	***
Family event	60.7	61.3	
Library	47.1	55.1	***
Outdoor activity	83.5	78.8	*
Pub/bar	37.4	17.6	***
Restaurant/café	77.1	77.0	
Social occasion	40.1	31.6	***
Spectator sport event	29.1	22.4	**
TAB/casino	10.2	5.4	***

* $p < .05$, ** $p < .01$, *** $p < .001$

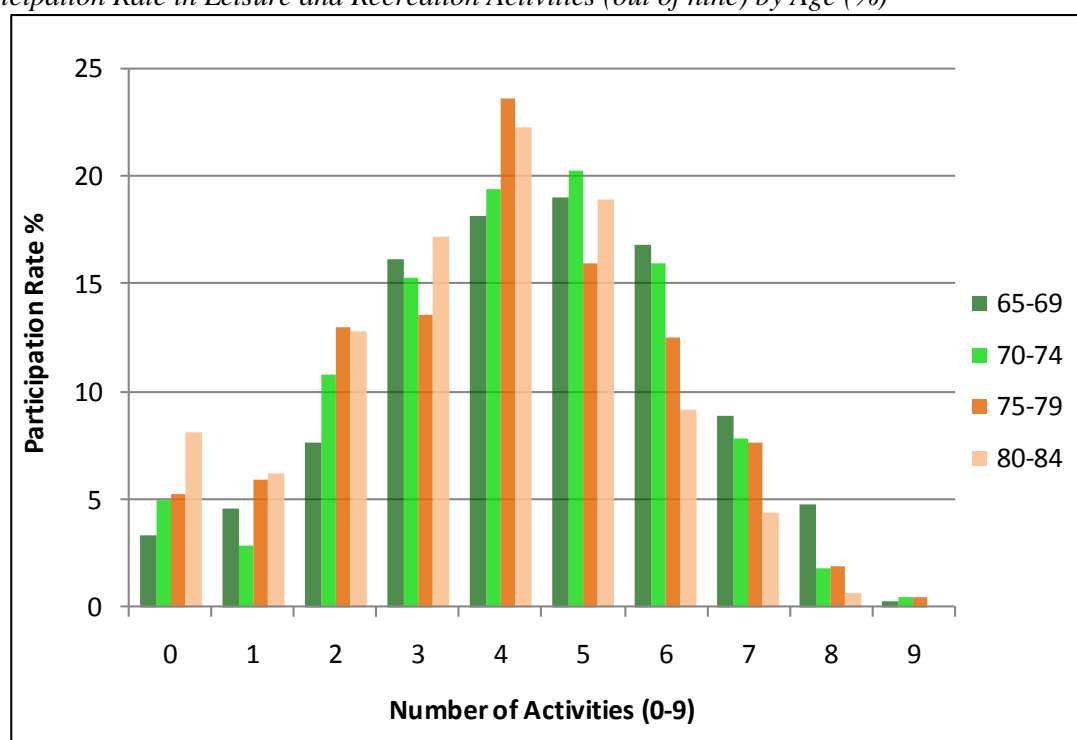
Figure 9.2 shows to what extent the number of activities differs between age categories. Although a larger number of the 65-74 years olds were still in paid employment in comparison to the 75-84 years

¹⁰² Male respondents who participated in an entertainment/arts event, as a % of total male respondents.

olds (data not shown), it is this former category of older people who most often participated in an above average number of leisure and recreational activities¹⁰³.

Figure 9.2

Participation Rate in Leisure and Recreation Activities (out of nine) by Age (%)



Those 80-84 participated in the smallest number of leisure activities. Although generation effects could not be controlled for, the results suggest that younger generations might be more used to a diverse activity pattern than older generations. Alternatively, participating in a smaller number of activities might also be caused by a decrease in health.

Table 9.2 shows respondents were less likely to participate in leisure activities involving physical activity as they grow older, such as watching a sports event, where spectators may need to stand for long periods of time, or participating in outdoor activities.

Table 9.2

Participation in Different Types of Leisure and Recreation Activities by Age (%)

	65-69	70-74	75-79	80-84
Entertainment/arts event	51.4 ¹⁰⁴	45.2	46.7	44.5
Family event	63.4	65.4	56.5	55.1 **
Library	49.0	51.6	54.7	51.8
Outdoor activity	85.7	82.4	81.6	68.0 ***
Pub/bar	31.5	27.8	24.0	19.0 ***
Restaurant/café	79.9	77.1	73.6	75.4
Social occasion	43.0	36.0	29.1	27.2 ***
Spectator sports event	28.6	27.6	26.2	14.7 ***
TAB/casino	8.7	7.9	5.9	7.4

* $p < .05$, ** $p < .01$, *** $p < .001$

¹⁰³ 65-69 year: $M = 4.4$, 70-74 years: $M = 4.2$, 75-79 years: $M = 4.0$, 80-84 years: $M = 3.6$, $F_{(3,1675)} = 12.2$, $p < .001$

¹⁰⁴ Respondents aged 65-69 years old who participated in an entertainment/arts event, as a % of all 65-69 year-olds.

This might reflect a decrease in health, particularly after the age of 80 years. The results also show that as respondents age they participated less in family events and social occasions. Again this may reflect a decline in health. However, it may also indicate that older people become more selective in their social contacts as they age (Fung, Carstensen, & Lang, 2002), and only those relationships are maintained that are seen as important and rewarding (Carstensen, 1992).

5.2 *Determinants of Participation in Leisure and Recreation Activities*

To examine the influence of socio-economic and personal resources on the participation in leisure and recreation activities, the education and income level, living arrangements, and health of older people were examined.

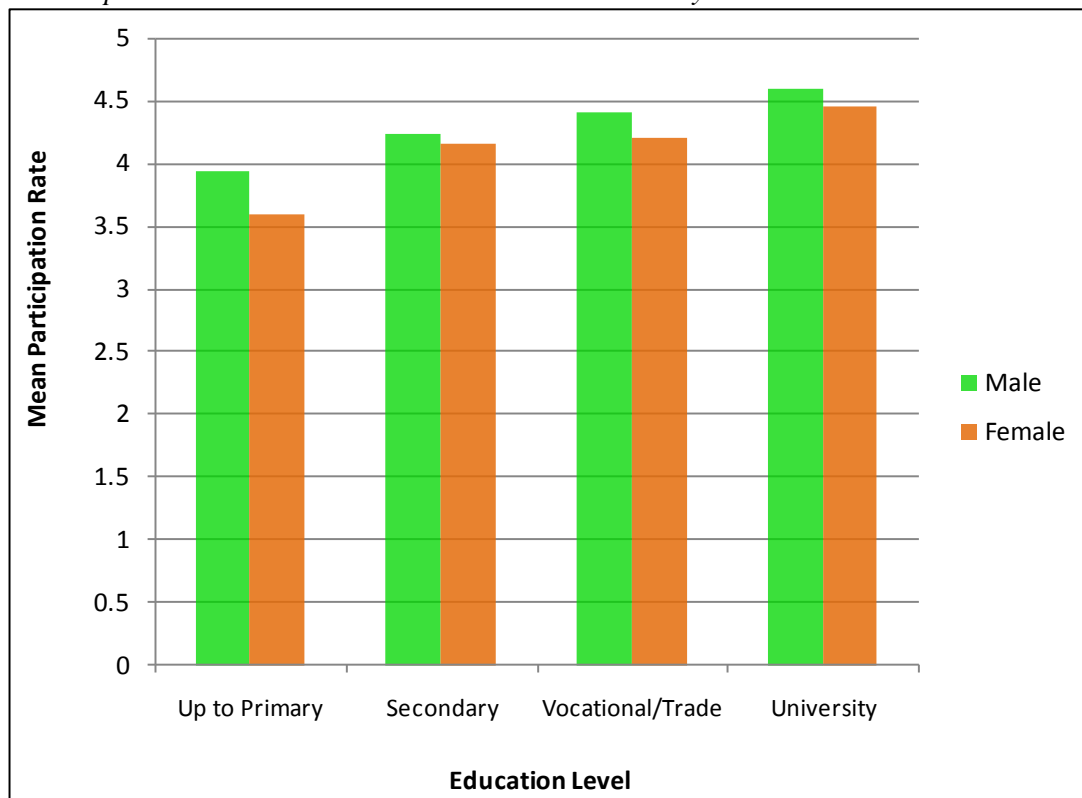
5.2.1 *Education Level*

Respondents with higher education levels were more active than those with lower educational levels (see Figure 9.3)¹⁰⁵. Moreover, within each educational level category, men had a higher participation rate in leisure and recreational activities compared to women¹⁰⁶. As described earlier, participation in leisure and recreation activities is historically gender specific. The results may reflect the division between men and women regarding particularly physical activities.

With respect to different types of leisure and recreation activities, higher educated respondents participated more in entertainment/arts activities, going to the library, going to a restaurant/café or attending a social occasion than lower educated respondents (results not shown). Going to the Totalizator Agency Board (TAB) or casino was an activity more often taken part in by lower educated respondents than higher educated respondents.

Figure 9.3

Mean Participation Rate in Leisure and Recreation Activities by Education Level and Gender



5.2.2 *Personal Income Level*

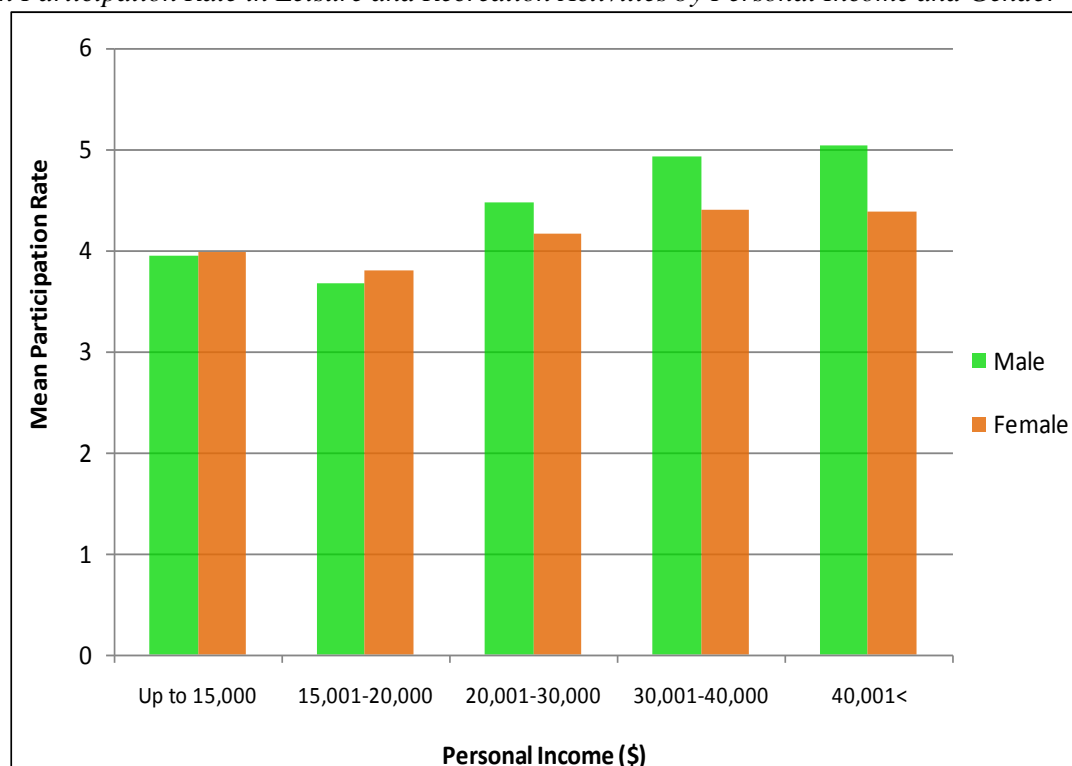
¹⁰⁵ $F_{(3,1488)} = 6.1, p < .001$

¹⁰⁶ $F_{(7,1583)} = 3.7, p < .001$

The results for personal income show that the average participation rate in leisure and recreation activities was the highest for respondents who had a higher personal income (Figure 9.4)¹⁰⁷. Moreover, as income increases, men had a higher average participation rate in leisure and recreation activities than women.

Figure 9.4

Mean Participation Rate in Leisure and Recreation Activities by Personal Income and Gender



The level of income seemed to be of particular importance for leisure activities such as going to an entertainment/arts event or participating in outdoor activities, but also visiting a restaurant/café, pub/bar, or attending a social occasion (results not shown).

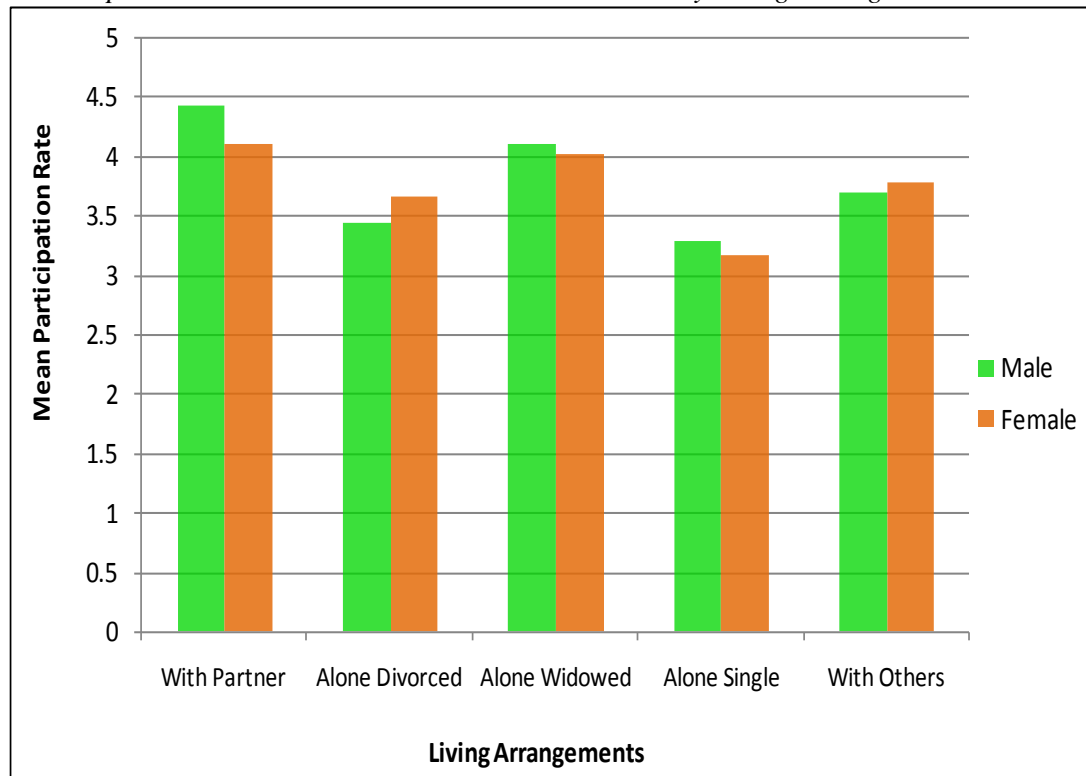
5.2.3 Living Arrangements

Consistent differences according to living arrangements were found in the participation of older people in leisure and recreation activities¹⁰⁸. Older people who lived with a partner had the highest average participation rates in leisure and recreation of all groups (Figure 9.5). Moreover, they participated more in entertainment/arts activities, attending a family event, visiting a restaurant/café, or being a spectator at a sports event than those who lived alone or in a household with others (results not shown). This finding might be explained by the nature of the activities. For example, leisure activities such as going to a restaurant or attending a family event often take place on a couple-companionate basis. Another possible explanation might be that older people living together as a couple tend to have the highest income (see Chapter 7), and financial resources are usually necessary for restaurant and transport expenses. This finding seems to be supported by the differences that were found in living arrangements with respect to the different types of leisure and recreation activities.

¹⁰⁷ $F_{(9,1205)} = 7.9, p < .001$

¹⁰⁸ $F_{(4,1673)} = 8.4, p < .001$

Figure 9.5
Mean Participation Rate in Leisure and Recreation Activities by Living Arrangements and Gender



Of all the respondent groups, men who were living with a partner had the highest average participation rate in leisure and recreation activities¹⁰⁹. The presence of a partner seems to be a greater resource for men than women in that, among men, the participation rates of widowed are significantly lower than they are for those with a partner. Among women, such differences between those with a partner and the widowed were not found.

5.2.4 Health

Figure 9.6 shows that older people who had a higher self-rated health had a higher average participation rate in leisure and recreation activities than those who had a lower self-rated health¹¹⁰. Interestingly, men who rated their health as fair/poor had a higher average participation rate in leisure and recreation activities than their female counterparts.

¹⁰⁹ $F_{(9,1783)} = 4.8, p < .001$

¹¹⁰ $F_{(5,1702)} = 15.1, p < .001$. An analysis of variance between the participation rate in leisure and recreation activities and the SF12 (PCS and MCS) (see Chapter 4) gave the same results ($F_{(19,1682)} = 8.2, p < .001$, and $F_{(19,1682)} = 2.3, p < .001$, respectively).

Figure 9.6

Mean Participation Rate in Leisure and Recreation Activities by Health and Gender

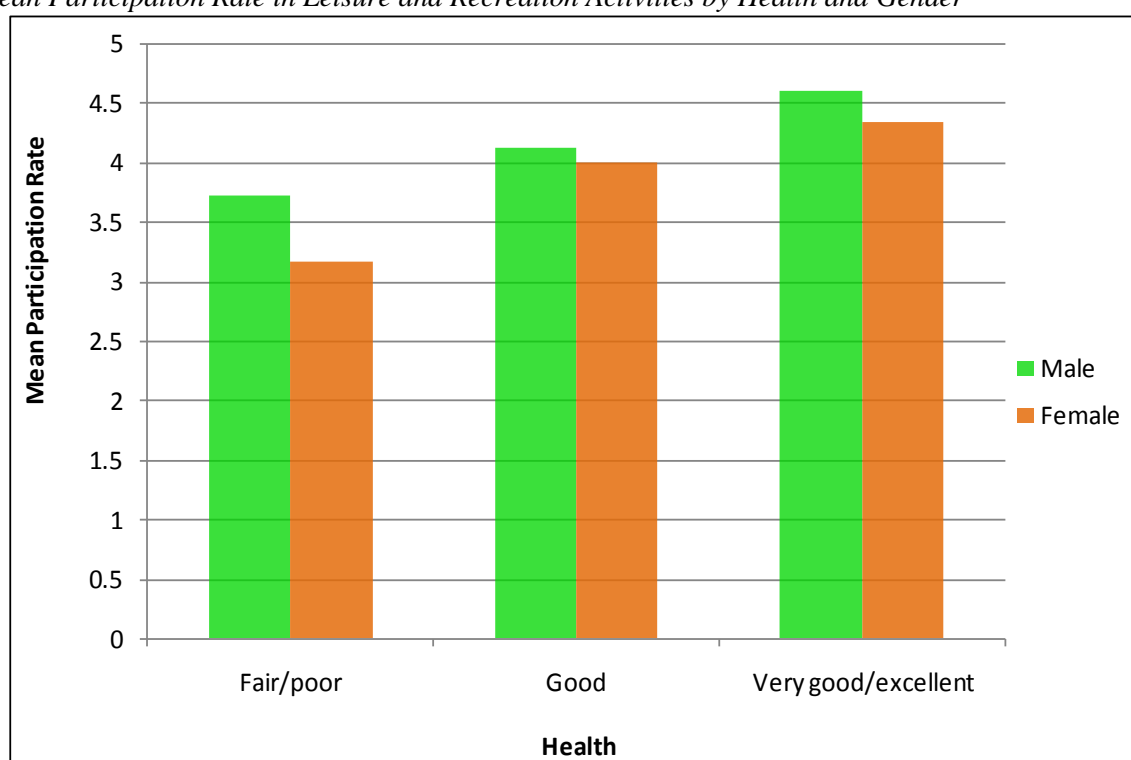


Table 9.3 shows that older people who rated their health as fair/poor less often participated in activities that required more physical activity such as involvement in outdoor activities, being a spectator at a sports event, or going to an entertainment/arts event, restaurant or pub/bar. In contrast, little difference was found in their participation in family or social events, TAB/casino or going to a library. These are activities which are more passive and can be participated in using less physical activity.

Table 9.3

Participation in Different Types of Leisure and Recreation Activities by Health (%)

	Fair/Poor	Good	Very good/ Excellent	
Entertainment/arts event	35.2 ¹¹¹	46.7	53.3	***
Family event	59.8	59.8	63.9	
Library	43.5	51.5	54.2	*
Outdoor activity	66.1	80.2	88.7	***
Pub/bar	17.8	27.5	30.0	***
Restaurant/café	69.6	77.3	81.4	***
Social occasion	30.4	34.1	39.3	*
Spectator sports event	17.0	25.7	29.0	***
TAB/casino	7.0	7.7	8.1	

* $p < .05$, ** $p < .01$, *** $p < .001$

5.3 Satisfaction with Participation in Leisure and Recreation Activities

Overall levels of satisfaction with participation in leisure and recreation activities were high, with 92.8% of respondents reporting that they were satisfied with their participation in leisure and recreation activities (and 7.2% reporting they were dissatisfied with their participation in leisure and recreation activities).

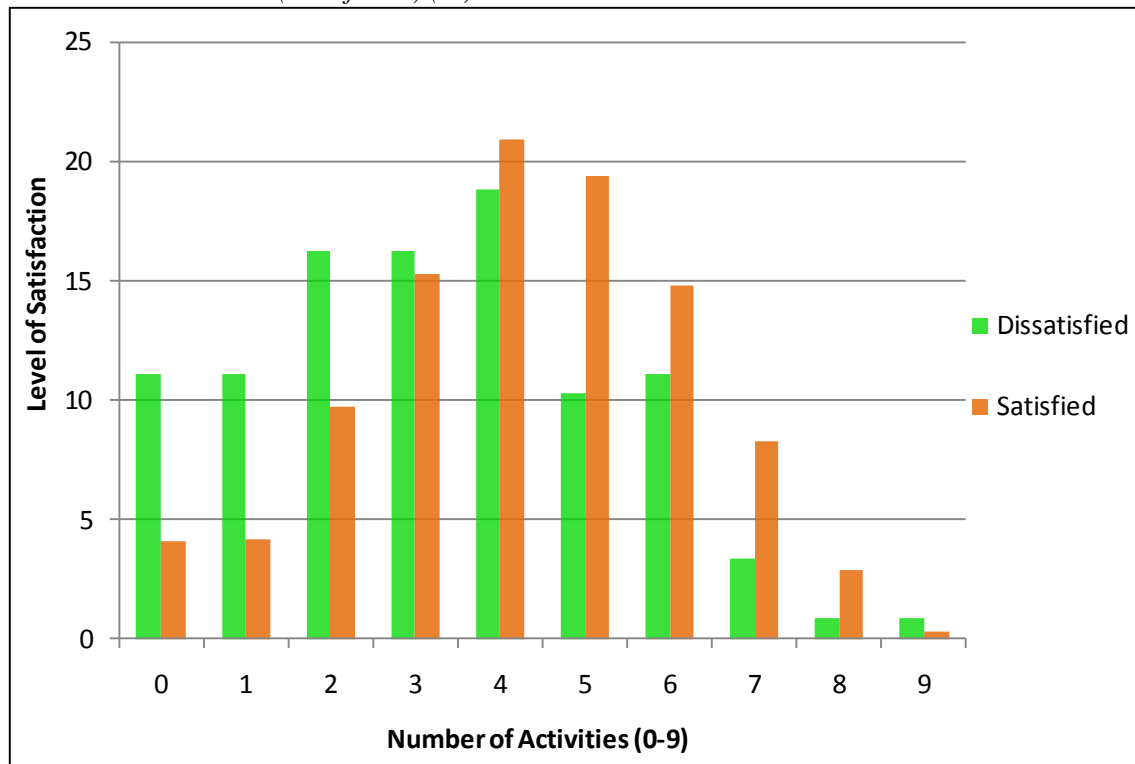
¹¹¹ Respondents with a fair/poor self-rated health who participated in an entertainment/arts event, as a % of all respondents with a fair/poor self-rated health.

recreation activities). There was no difference in satisfaction with participation in leisure and recreation activities between genders, or between different age categories (results not shown).

Reported satisfaction with participation in leisure and recreation activities was significantly associated with the participation rate in leisure and recreation activities¹¹². Those who participated in more than four activities were more satisfied than dissatisfied with their participation in leisure and recreation activities (see Figure 9.7). Older people who participated in no activities at all or only one or two activities were more often dissatisfied than satisfied.

Figure 9.7

Satisfaction with Participation in Leisure and Recreation Activities by Participation Rate in Leisure and Recreation Activities (out of nine) (%)



5.4 Participation in Leisure and Recreation Activities, Satisfaction with Participation, and Overall Wellbeing

The research was interested in the association between participation in leisure and recreation activities, satisfaction with the level of that participation, and the level of wellbeing among respondents. Firstly, the participation rate in leisure and recreation activities was significantly related to overall wellbeing. Older people who participated in a larger number of leisure and recreation activities had a higher overall wellbeing (see Figure 9.8)¹¹³.

Secondly, satisfaction with such leisure and recreation activities and overall wellbeing also had a very close association (Figure 9.9). Those with higher satisfaction with their participation in leisure and recreation activities had demonstrably higher overall wellbeing¹¹⁴.

¹¹² $\chi^2 = 38.7, p < .001$

¹¹³ $\chi^2 = 76.5, p < .001$, 5-point scale was collapsed to 3-point scale: dissatisfied, neither dissatisfied/satisfied, satisfied

¹¹⁴ $\chi^2 = 118.6, p < .001$

Figure 9.8
Overall Wellbeing by Participation Rate in Leisure and Recreation Activities (out of nine) (%)

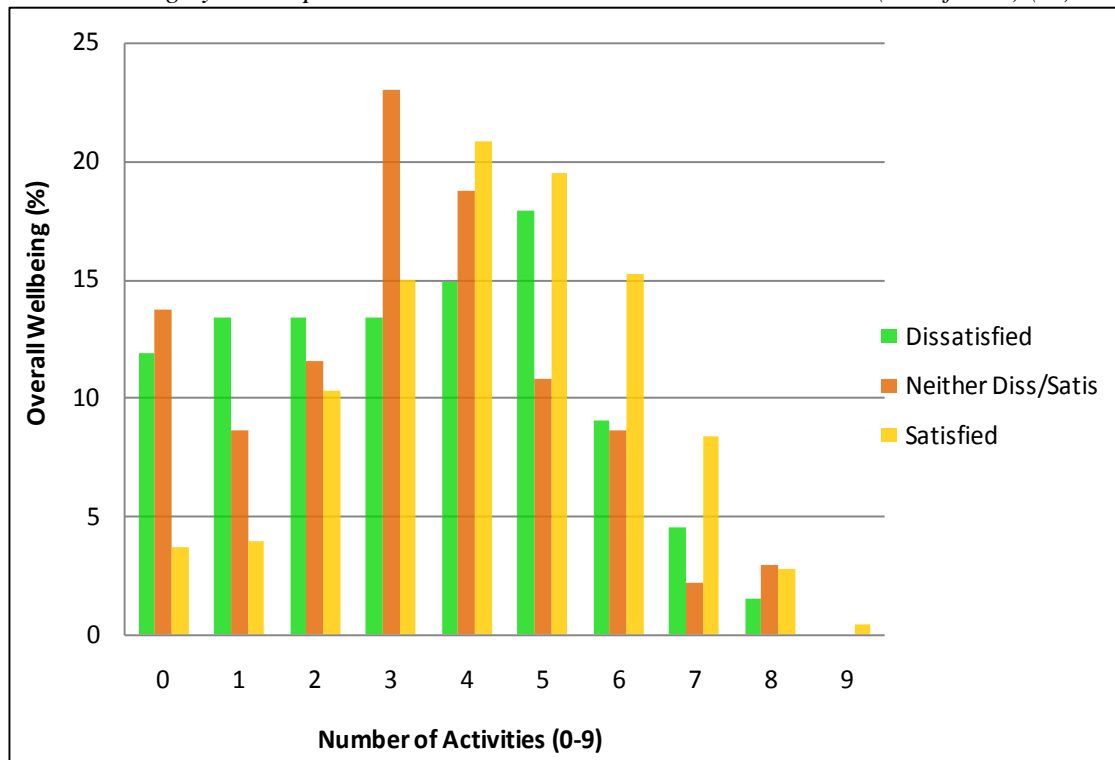
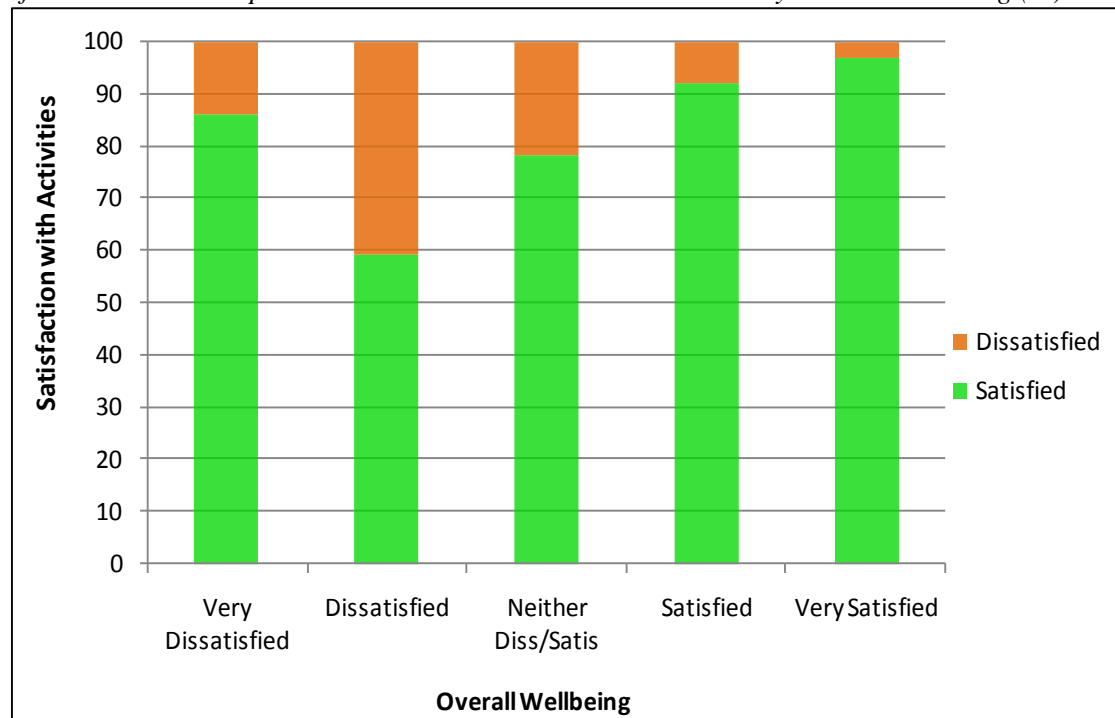


Figure 9.9
Satisfaction with Participation in Leisure and Recreation Activities by Overall Wellbeing (%)



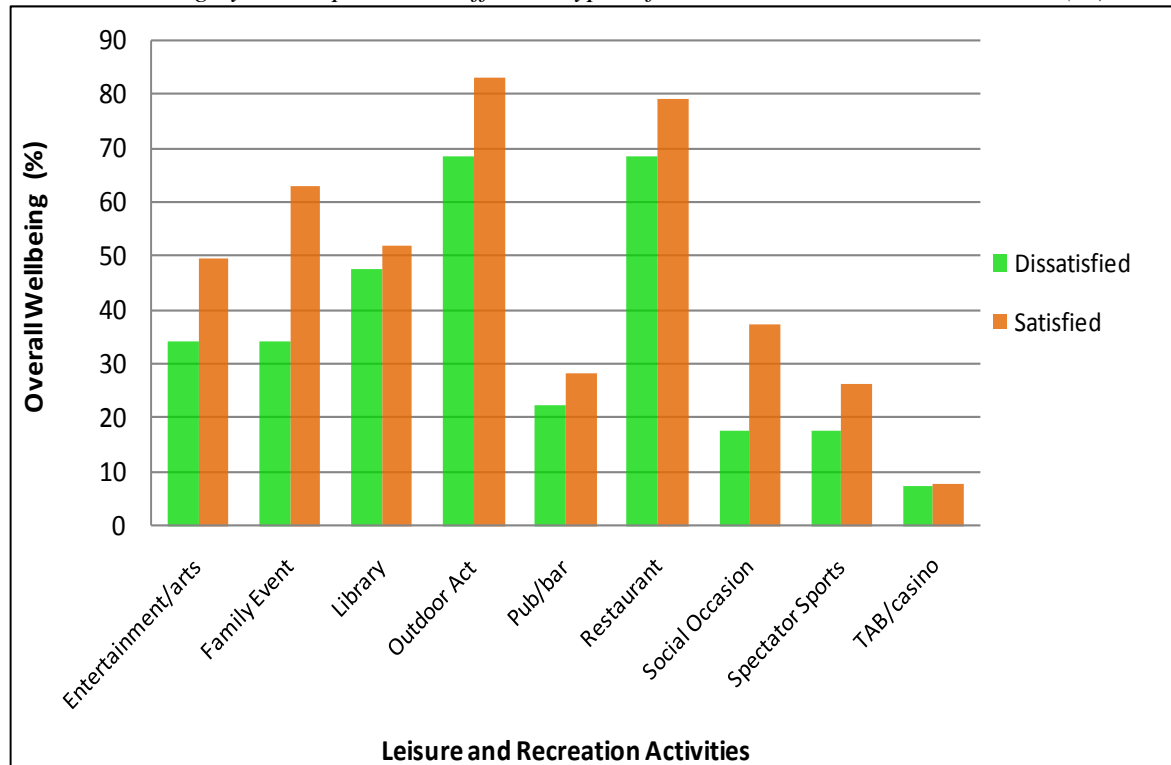
Thirdly, the research was interested to find any connection between participation levels in the various types of leisure and recreation with overall wellbeing. The results from Figure 9.10 show that older people who participated in each of the different leisure and recreation activities were more satisfied

than dissatisfied with their overall wellbeing¹¹⁵. It is not possible to establish causality: low participation could be because of the respondents' dissatisfaction with participation; alternatively dissatisfaction could be because of low participation where greater access was not possible.

Moreover, the largest difference between those who were the satisfied or dissatisfied was observed for family events and social occasions. Of those who took part in a family event, 63% were satisfied compared to 34% dissatisfied, and those who attended a social occasion, 38% were satisfied compared to 18% dissatisfied. This result might indicate that the social integration linked to the involvement in such activities is an important aspect of overall wellbeing.

Figure 9.10

Overall Wellbeing by Participation in Different Types of Leisure and Recreation Activities (%)



6. Conclusion

The aim of this chapter was to provide a descriptive overview of older adults' participation in leisure and recreation activities, and examine the extent to which these activities influence the wellbeing of older adults.

It is clear that older people in New Zealand continue their interest in leisure and recreation into their later years. Their interests focus on outdoor activities and on social activities, being largely visits to restaurant/café and family events. Although it was not possible to investigate how people alter their activity patterns as they grow older, because the study was cross-sectional, the diversity of activities in old age seems to decrease. The interest tends to remain at the same level until their early 80s, and then begins to decline, although participation in cultural events, going to the library and dining in restaurants and cafes remains about the same. Such events do not require a high level of energy and tend to maintain social networks. It would also appear that there is a decline in the more formal leisure

¹¹⁵ 5-point scale was collapsed to 3-point scale: dissatisfied, neither dissatisfied/satisfied, satisfied. Results of 'neither dissatisfied/satisfied' not shown. All activities were significantly associated with overall wellbeing ($p < .001$) except going to a library, being a spectator at a sports event, and going to a TAB or casino.

activities in comparison with informal pursuits (note the declining interest in going to sporting events as compared with restaurant entertainment).

With this in mind, it would appear that older people have become part of New Zealand's "café culture", be it for a family celebration or at the end of a morning's group walk, when in their younger days they would have been more used to preparing a meal for the family themselves. On a policy level, restaurateurs would probably do well to consider any special requirements for this older clientele.

It is however also possible that the decline in leisure and recreation activities is due to a generation effect with younger generations more used to combining larger number of leisure activities.

Gender differences in participation in leisure and recreation activities are particularly noteworthy. These findings are in line with recent national surveys on leisure and recreation (Ministry of Social Development, 2008: 90). What the study has also been able to show is that when a number of socio-economic and personal resources are taken into account older men still participate in a larger number of activities than older women. A possible explanation might be that historically in New Zealand the access to physical and mostly sport-oriented activities have been more male oriented, while home-based and informal leisure activities have been more female oriented. In this respect it has also been suggested that men are more likely than women to retain their levels of physical activity into older age (Lim & Taylor, 2005). Future research may want to take a closer look at the gender differences in leisure and recreation activities of older adults.

It is also clear that older people who live with a spouse/partner participate the most in leisure activities, especially the men. Men with a partner have the highest rate of participation of any group; single women living alone have the lowest, a situation which highlights the importance of having a companion to support an older person's leisure and recreational interest. Organisations for older people and those interested in encouraging them into leisure activities might more diligently seek out those who live alone.

Finally, two important associations with wellbeing were identified in this chapter. First, the participation rate in leisure and recreation activities was positively associated with both the satisfaction with participation in activities and overall wellbeing. This confirms findings in international literature, where higher levels of well-being are found for those who participate in a larger number of activities (Silverstein & Parker, 2002). The dynamics of this effect should be investigated further, in particular, whether certain types of activities are accumulated. Second, the types of leisure and recreation activities older people participate in make a positive contribution to their wellbeing. The fact that the activities are undertaken in a social environment is important, suggesting that it is the social relationship that is as vital as the activity. Further investigation is needed to determine the mechanism by which the selection of specific activities affects overall wellbeing.

7. References

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Chapter 10: Living Arrangements, Ageing in Place and Wellbeing among Older New Zealanders

Suzan van der Pas

1. Introduction

Living arrangements change over the life course, as relationships are formed and reformed. The composition of these relationships change, as do their importance. Living arrangements, and the relationships available within the household in particular, are crucial for older people's social situation, the social support arrangements available to them, and the realised level of wellbeing (De Jong Gierveld, De Valk, & Blommesteijn, 2001). Ageing tends to be associated with relationship losses, and these losses, particularly the loss of a partner, have an immediate impact on living arrangements.

Alongside the changes that take place in the living arrangements of older people, OECD countries have increasingly become committed to reducing the number of people living in institutions (OECD 2003). Institutional care has been criticised for isolating older people from their social networks, and is considered to be more costly than continued living in the home and community. Over a decade ago, the OECD stated that people should be able to continue living in their own place of residence in their later years (1994), and there is now a widespread policy of 'ageing in place' where people are encouraged to remain in their homes and communities (Pastalan, 1990). This focus on 'ageing in place' is also found in the *New Zealand Positive Ageing Strategy* where ageing in place is defined as the ability of people to "make choices in later life about where to live, and receive the support to do so" (Dalziel, 2001).

Up until now, the living arrangements of older New Zealanders, has predominantly been discussed indirectly in the context of housing, and revolves more around the type of dwelling older people are living in (Davey et al., 2004; Howden-Chapman, Signal & Crane, 1999; Statistics New Zealand, 2006), and residential choice and attachment to place (Davey; 2006; Joseph & Chalmers, 1995; Keeling, 1999). The extent to which household composition and preferences regarding the social and physical environment (both inside and outside the house) influence ageing in place has received less attention. Moreover, these studies have not specifically looked at the extent to which household composition and preferences about social and physical environment influence the wellbeing of older adults.

The aim of this chapter is to examine the living arrangements of older New Zealanders, that is, the composition of the household in which older people live. The discussion focuses on the differences between men and women, taking their marital status into account. It also considers the differences among older people of different ages within the 65-84 year age group. A second aim of this chapter is to identify a number of aspects of the social and physical environment (inside and outside the house) which may impact on older people's ability to 'age in place'. Finally, the chapter will examine the relationship between living arrangements, ageing in place and wellbeing.

2. Living Arrangements and Wellbeing

Events such as health decline and death of a spouse, which form part of the ageing process, either cause an immediate change in living arrangements or a reconsideration of their appropriateness (Lawton, 1982). This might result in older people altering the physical arrangements of the living environment, that is, changing the household composition, or moving to a new environment.

International research shows that there are large differences in living arrangements between men and women and among age groups. The most remarkable change in the living arrangements of older people has been the consistent rise in one-person households in developed countries (United Nations, 2005). Most importantly, the gender differences result from the fact that women die later than men (Gjonca et al., 2005). Moreover, married women are in general some years younger than their spouses, resulting in a higher likelihood of surviving their spouses. As a result, women are more likely to live in a one-person household in older age than men. However, an increase in divorce and separation has also led to a rise in the number of people, predominantly women, living in one-person and one-parent households.

The differences between age groups result from processes such as children leaving the parental home, physical impairment and death (Mutchler & Burr, 1991). The differences in age groups may also result from cohort-specific changes in demographic processes. For example, the postponement of childbearing and an extended stay in the parental home which has occurred over the last decades will result in an increase in the proportion of people in older age living with children (Fokkema & Liebroer, 2008). In turn, the increase in life expectancy may result in more people living a greater part of their life as a couple or in one-person households, depending on the differential in gender longevity.

Another change that has taken place in developed countries is the decreasing proportion of older people living together with kin in a multigenerational household (De Jong Gierveld et al, 2001). Studies show that a significant proportion of older people prefer not to live with their children (Davey et al., 2004), but wish to continue living independently either as a couple or alone as long as possible (Callahan, 1992; Davey, 2006; Keeling, 1999). In this respect, older people want a good relationship with their children, but they prefer 'intimacy at a distance' (Cherlin & Furstenberg, 1986).

The living arrangements or household composition for the population as a whole in New Zealand has changed in several ways over the past decades. These changes largely reflect similar developments in other Western countries. Couples with children are still the largest single category of family (Families Commission, 2008). At the same time, a number of other family forms have become more common, and the average size of families today is smaller than those of previous generations.

Overall, for New Zealand families, there has been a decrease in the rate of marriage, an increase in divorce rate and an increase in the number of marriages which are remarriages (Families Commission, 2008). Moreover, there has been a dramatic decrease in the fertility rate resulting in a reduction in the average size of families (Family Commission, 2008). People who are now 65 years or over, formed their families during a period when family form was quite homogeneous compared to those that form their families today.

Older people differ in their living arrangements from the general population. The majority of people aged 65+ live in one of two broad living arrangement types: partner in a couple without children household (most of whom will have had children who have left the parental home); and, a one-person household (Table 10.1) (Statistics New Zealand, 2008).

Table 10.1
Household Composition among People 65 years and older, Census 2006 (%)

	Male	Female	Total
Couple without children	63.9	42.4	48.3
Two parent family	8.4	7.1	7.2
One parent family	2.6	6.3	4.8
Multi-person household	3.2	3.0	3.1
One person household	18.5	36.9	29.7
Non private dwelling ¹¹⁶	3.4	4.3	6.9

Source: Statistics New Zealand, 2008.

Living arrangements of older people in New Zealand vary significantly by age and sex within the 65+ age group (Statistics New Zealand, 2008). In 2006, about two-thirds of men aged 65-74 were partners in a 'couple without children'. By age 84, men were still predominantly living as a partner in a 'couple without children'. However, around only half of women aged 65-74 were partners in a 'couple without children', and by age 84, 'one-person households' were the dominant living arrangement type for women. Older men are much less likely than women to live in a one-person household, as they are much less likely to be widowed than women.

Previous studies have shown that living arrangements influence the wellbeing of older people and their family. Some studies have shown that the household provides a crucial context where household members benefit from varied levels of social integration as well as support, promoting good health outcomes (Hughes & Waite, 2002). However, other studies find that relations between household members can also be less positive, and may involve unpleasant interactions and can therefore be damaging to individuals' wellbeing (Rook, 1984).

Waite and Hughes (1999) found that people living in other household types than those living as a couple or with children had disadvantages on a range of health measures. Older people living in the most demanding and least supportive households had poorer functioning. Mui & Burnette (1994) found that older people who lived alone experienced more loneliness and social isolation than those living in shared households.

Findings on the relationship between older people living in shared households and wellbeing are however inconsistent. Lowenstein & Katz (2005) examined the relationships between living arrangements and life satisfaction of two generations of migrants, adult children and their older parents, and found that life satisfaction was higher when the two generations lived separately rather than in shared households. Moreover, both an Italian and a Dutch study found an association between feelings of loneliness and living alone (De Jong Gierveld & van Tilburg, 1999). Older people living with a partner were less lonely than other older people, especially those living alone. Furthermore, those who were living with children (without a partner) were less lonely in Italy but lonelier in the Netherlands, corresponding with differences in value orientations.

3. Ageing in Place and Wellbeing

The concept 'ageing in place' has numerous meanings (Pastalan, 1990). It generally represents a policy ideal of the ability of older people to remain in their current setting as they age (Cutchin, 2003). However, successful ageing in place also implies maintenance of independence, and particularly a continued competence and control over one's environment (Lawton, 1982).

Previous studies have shown that there is a relationship between place and wellbeing (Lawton, 1983; Oswald et al., 2007). For example, Oswald et al., (2007) work on the relationship between objective

¹¹⁶ Accommodation including hospitals and retirement homes.

and perceived housing and wellbeing revealed that older people who perceive their home as meaningful, and who think that others are not responsible for their housing situation, have greater wellbeing, in all five European countries¹¹⁷. Therefore, older people who feel in control of their environment are more able to adjust to the process of ageing, which in turn enhances their wellbeing.

In a review of ageing in place in New Zealand, Schofield et al (2006) confirm that the interaction between location and personal characteristics such as gender and health affect people's ability to age in place. Moreover, the authors differentiate between three main components of ageing in place: choice, location, and support (2006). Choice relates to the decisions that older people make in the context of personal and environmental factors. Location is the home, which provides a sense of identity and connection to the community. Lastly, support for older people who continue to live at home may be either informal or formal. These components combine to facilitate the increasing diversity of the ageing population, and define ageing in place as care and support in the place of the older person's choice.

Older New Zealanders have a strong attachment to their homes, driven by both comfort and practicality (Davey, 2006; Wiles et al, 2009). A study of older people's experiences in a rural location in New Zealand showed that the strong attachment that older people had to their town and the unavailability of alternative housing were influential motivators for people to remain in a community (Joseph & Chalmers, 1995; Chalmers & Joseph, 1998). Similarly, in another New Zealand study on older people's experiences of home and community, Keeling (1999) suggests that ageing in place entails more than the ability to stay in one's own home. It also involves being able to make independent decisions regarding change and adaptation to changing needs.

Government and service providers have, within New Zealand and internationally, embraced ageing in place because of its potential to more effectively meet the care and support needs of an ageing population. A recent New Zealand pilot scheme, Assessment of Services Promoting Independence and Recovery Services (ASPIRE), evaluated three ageing in place support services (Ministry of Health, 2006)¹¹⁸. The research found that all three services reduced the risk of mortality and risk of entry into residential care compared with usual services.

Finally, in a recent qualitative New Zealand study on older people and their attachment to place, Wiles et al., (2009) conclude that attachment to place is developed through the relationship between a number of physical and social features such as location, convenience of the house, proximity to family and involvement in neighbourhood activities. It is this continuously changing balance between the social-emotional and practical aspects of living in a certain place which influences the wellbeing of older people.

4. Data and Method

The data were collected as part of the Enhancing Wellbeing in an Ageing Society research programme. The sample included 1,680 New Zealand respondents (46.7% men and 53.3% women) aged between 65-84 years, who were interviewed using computer assisted telephone interviewing (refer to Chapter 3, Methodological Background, for further details). Note that the sample excluded institutionalised 65-84 year-olds.

¹¹⁷ Germany, the UK, Sweden, Hungary, and Latvia.

¹¹⁸ The three ageing-in-place programmes were:

- the Coordination of Services for the Elderly (COSE), Christchurch
- the Promoting Independence Programme (PIP), Lower Hutt
- Community FIRST (Flexible Integrated Restorative Support Team), Hamilton.

4.1 Living Arrangements

The living arrangements of the respondents were categorised in two ways. Firstly, a composite variable was constructed based on partner status and household composition. Five categories were distinguished, namely: (1) respondents living with their partner (or spouse) (and others); respondents living alone (in a one-person household) and: (2) never-married; (3) divorced or separated, (4) widowed. As was suggested above, there might be important differences in wellbeing among the never married, divorced or separated, and widowed persons. Finally, there was a category of (5) respondents living with others, related and/or unrelated (without a partner).

A second categorisation of living arrangements was limited to respondents living in a shared household with others (including a partner). Six categories were distinguished, namely: (1) couple with one or more children; (2) couple with one or more children and others; (3) couple with others; (4) parent with one or more children; (5) parent with one or more children and others; and (6) household with related and/or unrelated persons.

4.2 Ageing in place

Factors which may impact on ageing in place were examined through the level of urbanisation, moving in the previous five years, satisfaction with house size, factors impacting on continued living in their own home and whether respondents had difficulties accessing amenities. The level of urbanisation was divided into four categories: urban areas, outskirts of a city, small town, and rural area. Respondents were asked to assess which factors which would enable them to continue to live in their own homes as they grew older. A question was also asked whether getting to the shops or public transport was difficult for the respondents, with a response of either 'no' or 'yes' or 'someone else takes me'. The response categories 'yes' and 'someone else takes me' were combined.

4.3 Satisfaction with Physical Environment and Overall Wellbeing

A subjective measure of satisfaction with physical environment was used, with the dichotomous response (satisfied/dissatisfied) to a question as to whether the respondent was satisfied with the physical environment inside and outside the house, similar to the other dimensions of wellbeing in this study. The overall wellbeing of the respondents was measured by asking: "How satisfied are you with your life as a whole these days?" The response categories ranged from 1 'very dissatisfied' to 5 'very satisfied'. The average overall wellbeing was 4.3 (SD = .85) (see Chapter 3, Methodological Background, for a discussion of the Wellbeing Scale – the World Values Survey).

4.4 Other Measures

Socio-demographic variables included gender, age, educational and income level, and health. Four age categories were distinguished: ages 65 to 69 years, 70 to 74, 75 to 79, and 80 to 84. Respondents were asked their highest completed educational qualification. The responses were recoded into four categories: up to primary education, secondary education, vocational or trade qualification, and university qualification (for further explanation see Chapter 5 Education). Income level was based on the 'total personal income before tax' (in income bands) and was divided into five categories: up to \$15,000, \$15,001-20,000, \$20,001-30,000, \$30,001-40,000, and \$40,001 or more. Finally, health was measured by asking respondents to assess, on a five point scale, their own health status. Three categories of self-rated health were distinguished: 'poor/fair', 'good', and 'very good/excellent'.

4.5 Procedure

In the descriptive analyses, bivariate associations were investigated between gender, age, level of urbanisation, educational level, and health on the one hand and living arrangements on the other hand. The analyses include frequency distributions where the differences between categorical variables were examined using chi-square tests. The association between the socio-demographic variables and social and physical environment was also examined. Lastly, bivariate associations were investigated between living arrangements, satisfaction with physical environment, and overall wellbeing. The data has been weighted to make the results representative of the New Zealand population aged 65 to 84, as noted in the Methods chapter.

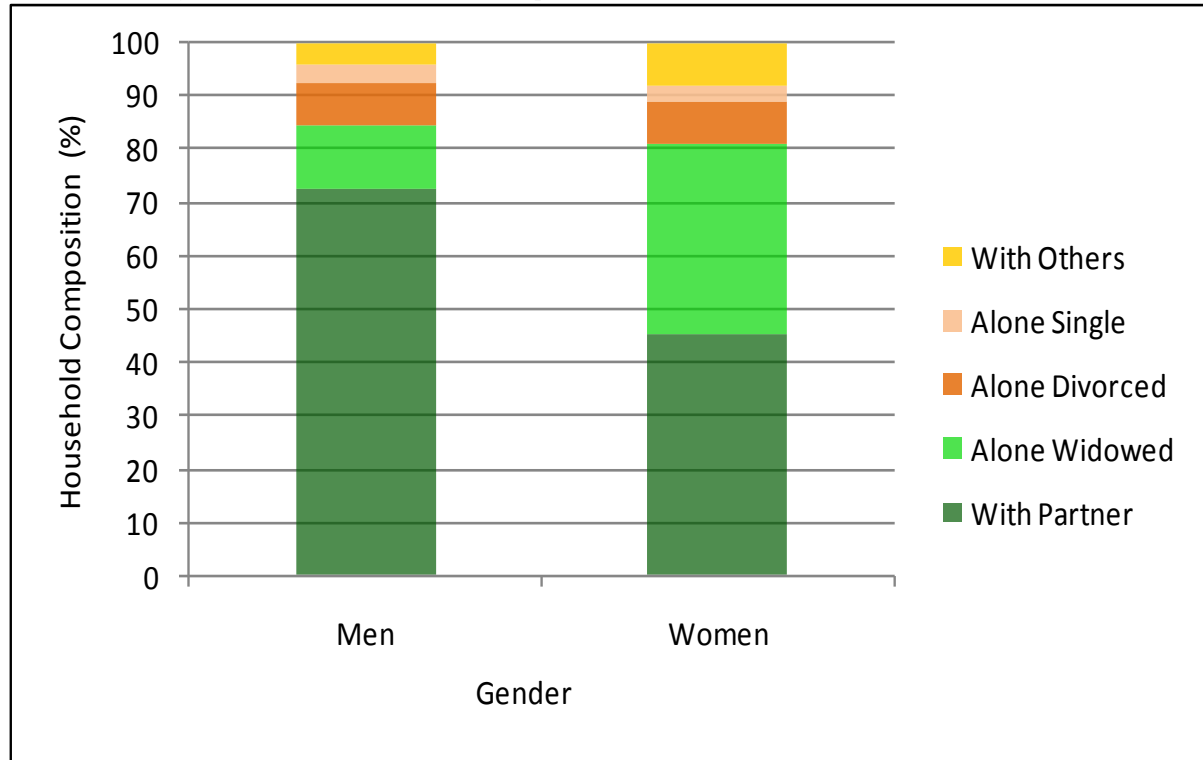
5. Findings

5.1 Living Arrangements According to Partner Status

Overall, among the sample of 65-84 year olds, the largest proportion lived with a partner (and others) (56%)¹¹⁹, followed by 38% who lived alone¹²⁰, and 6% who lived in a household with others (without a partner). There is a significant gender difference in living arrangements among older people, with men more often living with a partner compared to women (Figure 10.1)¹²¹. In contrast, women more often lived alone compared to men. These women were predominantly widowed. Other living arrangement types did not show major gender differences.

Figure 10.1

Older Adults by Gender and Household Composition (%)



Figures 10.2 and 10.3 show the distribution of men and women in different age categories across living arrangements. Figure 10.2 shows that more than 70% of men under the age of 75 years lived with a partner¹²².

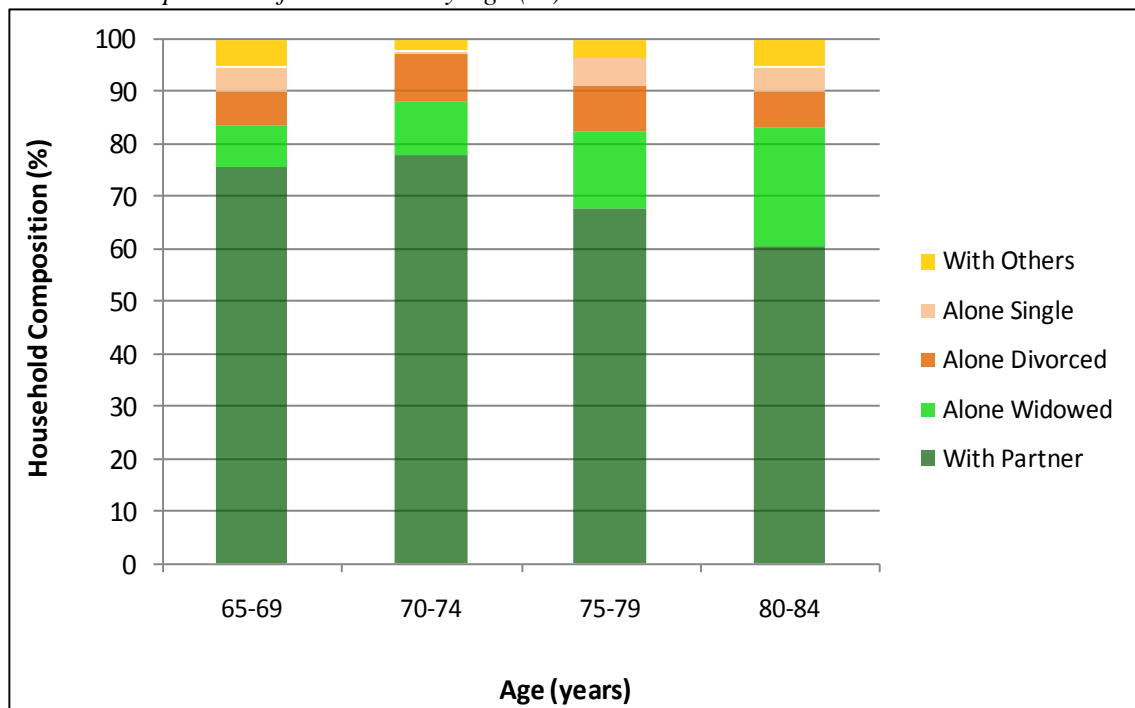
¹¹⁹ 50.5% lived with a partner only; and, 5.6% lived with a partner and others.

¹²⁰ Widowed, divorced or separated, or single

¹²¹ $\chi^2 = 161.0, p < .001$

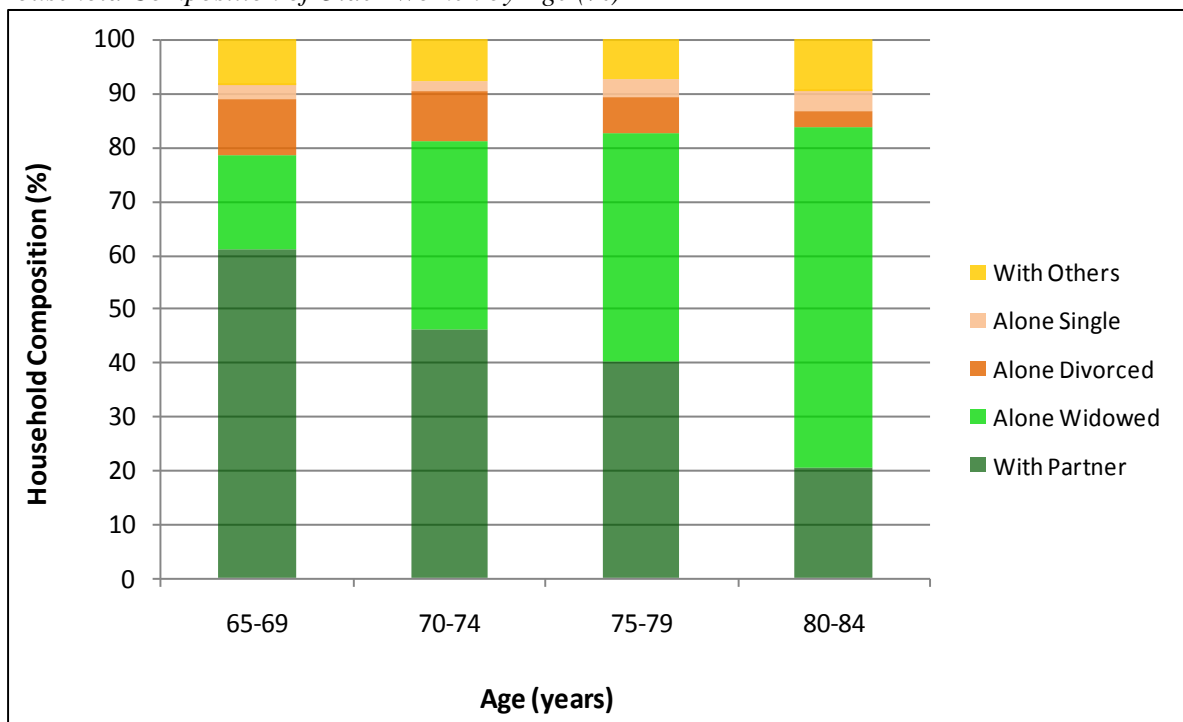
¹²² $\chi^2 = 33.6, p < .001$

Figure 10.2
Household Composition of Older Men by Age (%)



After the age of 75 years the proportion of men living with a partner decreased, but of the men between 80 and 84 years more than half still lived with a partner. The proportion of older men living in a one-person household was quite stable, around a little under twenty percent until the age of 74, but increased to almost 35 percent among the oldest age group.

Figure 10.3
Household Composition of Older Women by Age (%)



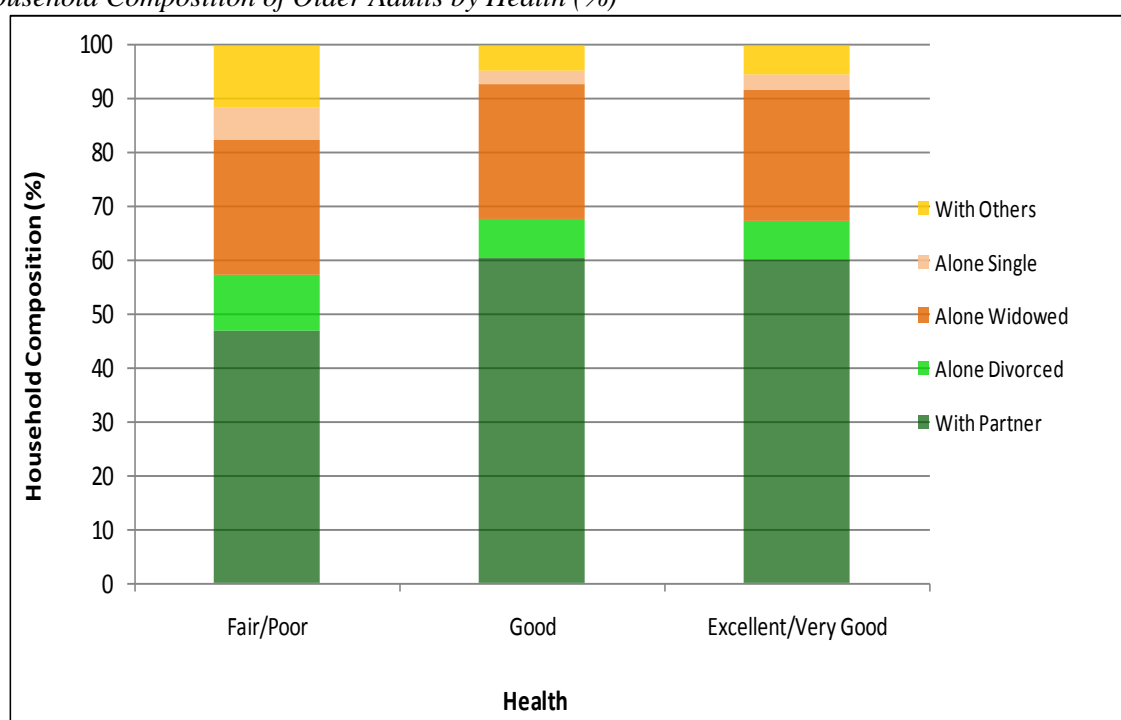
A comparison of Figures 10.2 and 10.3 shows that the age structure of living arrangements among women differs substantially from that among men. The reasons for this are probably due to the higher mortality among men, and the older age of men at marriage. Both enhance the chance that wives outlive their husbands. As a result, the proportion of women who lived with a partner decreased much faster by age than among men (from 61% for the 65 to 69 age category to 21% for the 80 to 84 age group)¹²³. The proportion living on their own increased much faster among women than among men (from 31% to 70%).

Education and income level were significantly associated with household composition. Older people with a university qualification were more likely to be single and living alone or living with a partner than lower educational levels¹²⁴. Those with only primary education were more likely to be widowed and living alone.

The results of personal income show that respondents with a personal income of \$30,001 or more were more likely to live with a partner compared to those with a personal income of \$15,001-30,000 (results not shown)¹²⁵. In contrast, those with a personal income of \$15,001-20,000 were predominantly living alone or with others.

Figure 10.4 shows that older people with fair or poor self-rated health were more likely to be single and living alone or living with others¹²⁶. Those with self-rated health which was very good or excellent were more likely to be living with a partner.

Figure 10.4
Household Composition of Older Adults by Health (%)



Hughes & Waite (2002) suggest that the reasons for this are probably because households with partners generally have more economic resources, monitor their health more and have more social support than other households. Looking at the differences between genders, a significant association was found between living arrangements and health for men but not for women (data not shown). The

¹²³ $\chi^2 = 112.9, p < .001$

¹²⁴ $\chi^2 = 33.9, p < .001$

¹²⁵ $\chi^2 = 278.0, p < .001$

¹²⁶ $\chi^2 = 28.8, p < .001$

results for men match the results for the total sample suggesting that the effects of living arrangements mirror the effect of marriage¹²⁷.

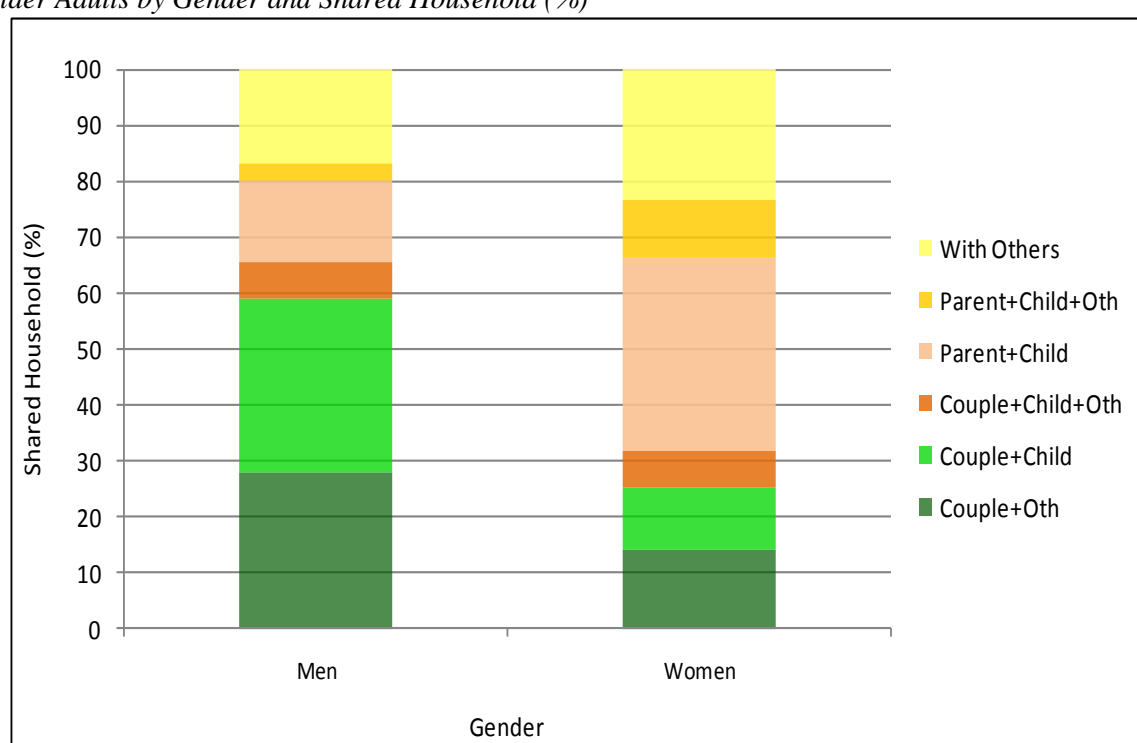
5.2 Shared Households

In total, 11.8% of the 65-84 year old respondents lived in a shared household (including the partner)¹²⁸. Of the respondents living in a shared household, most were living with a child (59%)¹²⁹. A smaller number of respondents were living with other people than children, 20% were couples living with others, and 20% were respondents living in a household with related and/or unrelated people¹³⁰.

Figure 10.5 shows that of those who were living in a shared household, the living arrangements of the women differs substantially from that of men¹³¹. Men more often lived in a shared household as a couple compared to women. In contrast, women more often lived in a shared household without a partner.

Figure: 10.5

Older Adults by Gender and Shared Household (%)



Living in a shared household was significantly associated with education and income level. Respondents with a university qualification were more likely to live as a couple with others than lower educational levels (results not shown)¹³². Higher educated people were also more likely to live with others, related and unrelated, than lower educated people. In contrast lower educated were more likely to live with their children (and others) than higher educated, except for those with a university qualification living as a parent with children.

¹²⁷ There is a significant association between marital status and self-rated health for men ($\chi^2=18.3, p < .01$) but not for women. Married men were more likely to report an excellent/very good self-rated health than divorced, widowed or single men.

¹²⁸ 5.6% lived with a partner and others; and, 6.2% lived as a single person with others.

¹²⁹ Parent + child; Couple + child; Parent + child + others; Couple + child + others

¹³⁰ Of this last group, 13.2% were related people only; 5.9% were unrelated people only; and 1.3% were related and unrelated people.

¹³¹ $\chi^2=26.3, p < .001$

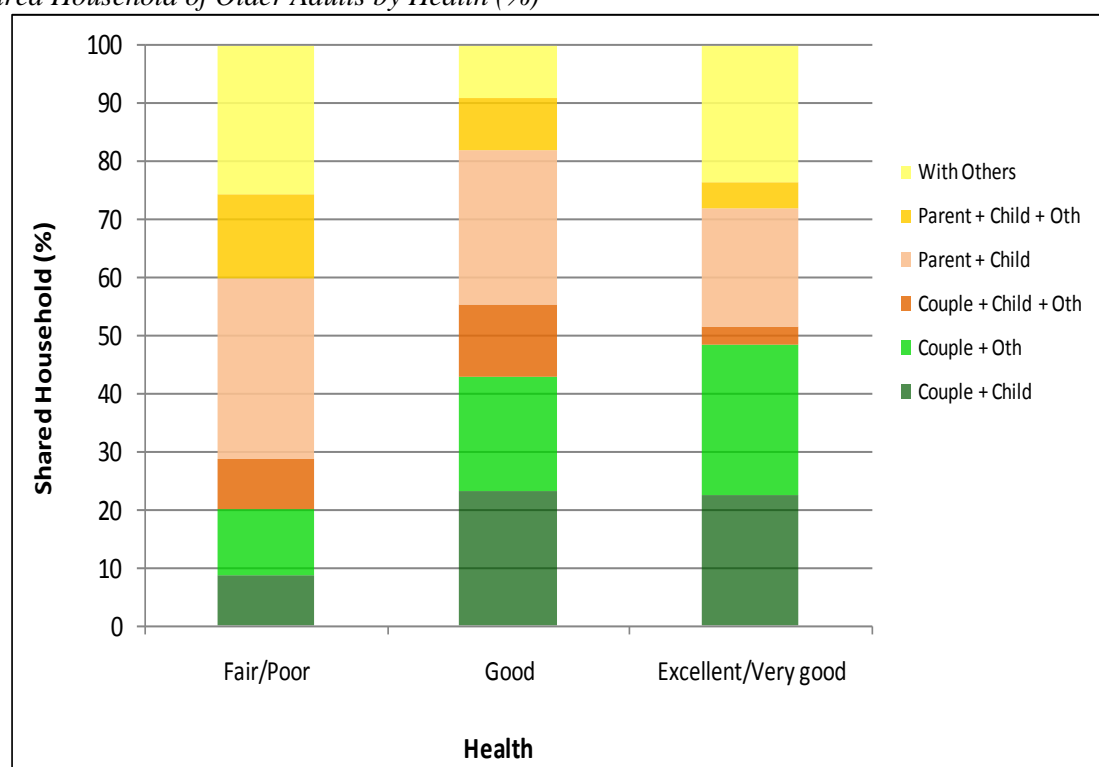
¹³² $\chi^2=26.1, p < .05$

Respondents with a higher income were more likely to live as a couple with children and/or others than those with a lower income (results not shown)¹³³. Moreover, respondents with a lower income were more likely to live as a parent with children (and others) than those with a higher income. This suggests that the motives for co-residence between parents and adult children may be different for those who have a low income compared to those with a high income.

Figure 10.6 shows that respondents who had a fair or poor self-rated health were more likely to live as a parent with children (and others) or to live with others, related and unrelated¹³⁴. It is not possible to disentangle the causality of whether older people are living with others due to poor health or that poor health results from living with others.

Figure: 10.6

Shared Household of Older Adults by Health (%)



5.3 Factors that Impact Ageing in Place

To identify a number of aspects which may impact on older people's ability to age in place, the association between level of urbanisation, moving in the last five years, satisfaction with house size, factors impacting on continued living in one's own home, whether respondents had difficulties accessing amenities, and social-demographic variables were examined.

5.3.1 Level of Urbanisation

The majority of 65-84 year-olds live in urban areas (57%), followed by small towns (18%), rural areas (13%), and the outskirts of a city (12%). There was no significant association between level of urbanisation and living arrangements. However, level of urbanisation was significantly associated with age, gender, education and income level and health. Men were more likely than women to live in an urban area or rural area while women were more likely than men to live in the outskirts of a city or in a small town¹³⁵ (results not shown).

¹³³ $\chi^2 = 48.5, p < .001$

¹³⁴ $\chi^2 = 19.5, p < .05$

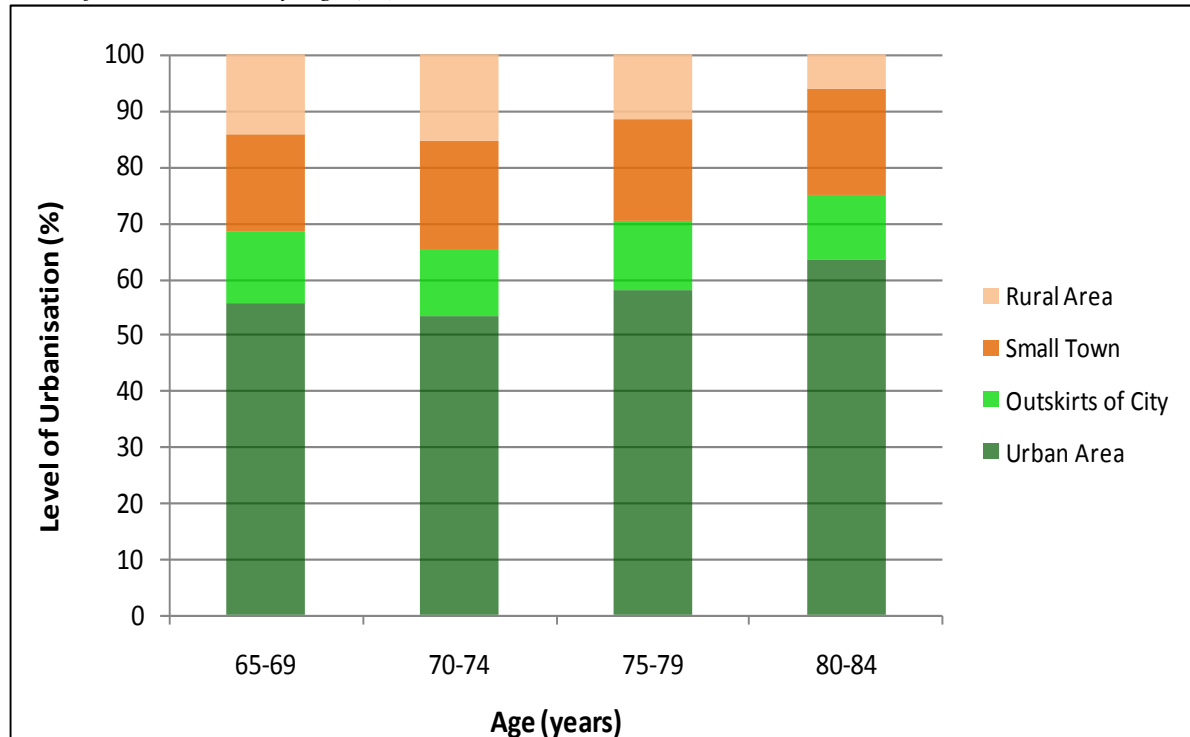
¹³⁵ $\chi^2 = 10.5, p < .05$

Figure 10.7 shows that around 15% of the 65-74 year old people lived in a rural area¹³⁶. After the age of 75 years the proportion of people living in a rural area decreased to 6% for those between 80 and 84 years. The proportion of people living in an urban area increased with age, from 56% for those between 65 to 69 years, to 64% for those between 80 to 84 years.

It should be noted that the sample excluded institutionalised 65-84 year-olds. Given the urban locality of the majority of older persons' institutions, the overall percentage of 65-84 year-olds who live in urban areas is therefore likely to be higher than the figure given here.

Figure 10.7

Level of Urbanisation by Age (%)



A significant association was also found between the level of urbanisation and the education and income level. Higher educated older people were more likely to live in an urban area compared to lower educated older people¹³⁷ (results not shown). In comparison, older people with a lower education level were more likely to live in the outskirts of a city or in a small town compared to those with a higher education level.

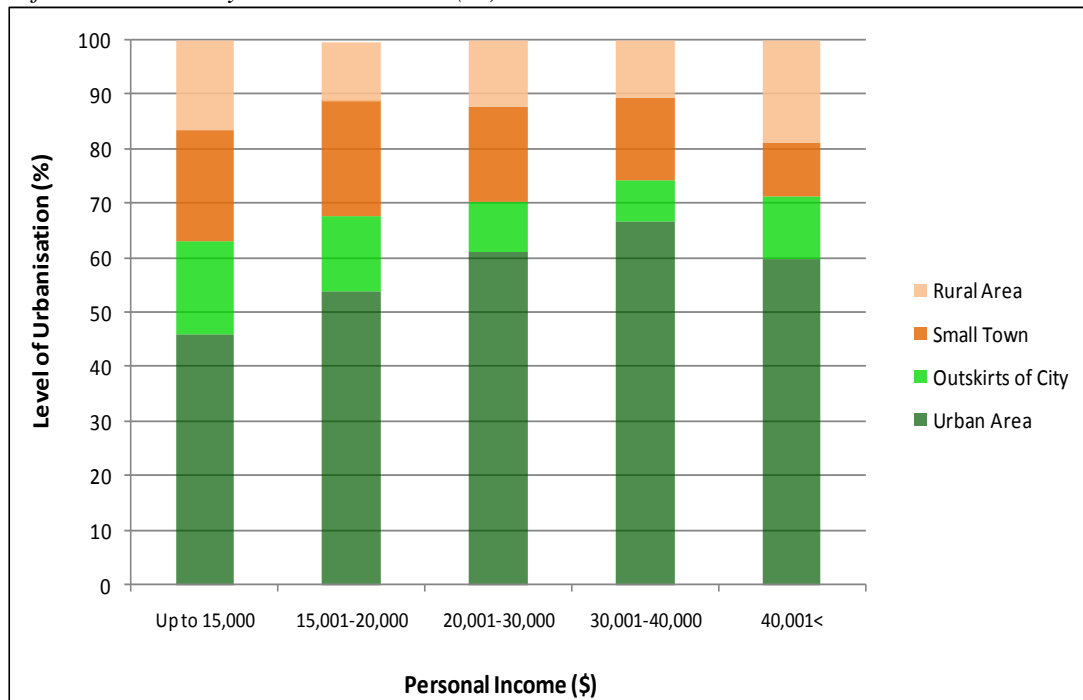
The results for personal income level show that older people with a higher personal income are more likely to live in an urban area compared to those with a lower personal income (Figure 10.8)¹³⁸. Moreover, those with a personal income of \$20,000 or less were more likely to live in the outskirts of a city or a small town in comparison to those with a personal income of more than \$20,001.

¹³⁶ $\chi^2 = 17.6, p < .05$

¹³⁷ $\chi^2 = 26.3, p < .01$

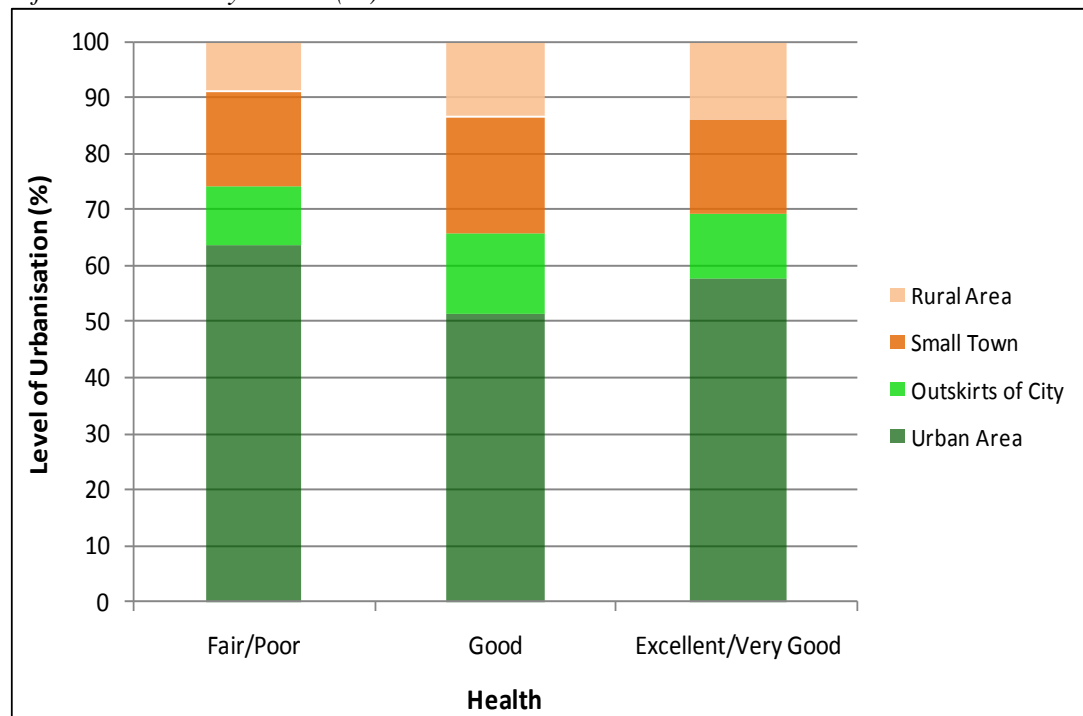
¹³⁸ $\chi^2 = 33.1, p < .001$

Figure 10.8
Level of Urbanisation by Personal Income (%)



Finally, a significant association was found between level of urbanisation and health (Figure 10.9)¹³⁹.

Figure 10.9
Level of Urbanisation by Health (%)



¹³⁹ $\chi^2 = 13.8, p < .05$

Older people who had a higher self-rated health were more likely to live in a rural area than those who had a lower self-rated health. Older people who rated their health as fair/poor were more likely to live in an urban area than those with a higher self-rated health.

5.3.2 Moving in the Previous Five Years

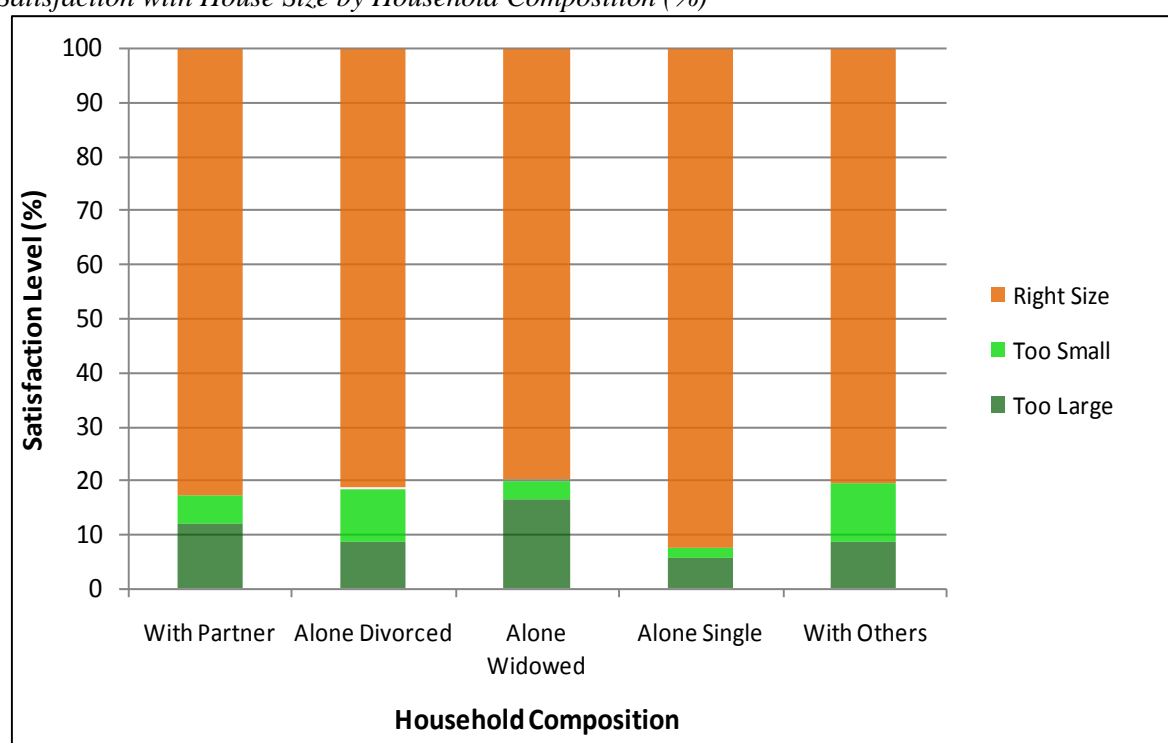
Most of the respondents have been living in the same area over the previous five years (81.9%). There was no difference in the proportion that moved in the previous five years between genders, age categories, living arrangements, income level or health (results not shown). However, moving in the previous five years was significantly associated with education level (results not shown)¹⁴⁰. Those who had a university qualification moved more often over the past five years compared to those with a lower education level.

5.3.3 Satisfaction with House Size

Older people were generally very satisfied with the size of their current home. 82% reported that their home was the 'right size', 12.3% reported that it was 'too large' and only a small proportion found their home to be 'too small' (5.7%). There was no difference in satisfaction with the size of the home between genders, age categories, education and income level and health (results not shown). However, there was a significant association between satisfaction with house size and living arrangements (Figure 10.10)¹⁴¹. Older people who were single and living alone were the most satisfied with the size of their house. Older people who were divorced and living alone and those living with others were more likely to find their homes to be too small in comparison to other household composition types.

Figure 10.10

Satisfaction with House Size by Household Composition (%)



5.3.4 Continued Living in Own Home

The most important factor that older people reported that would enable them to continue to live in their own home as they grow older was having good health either themselves or their spouse (81.2%) (Table 10.2). Men found health to be more important than women. More than half of the respondents stated that having family and friends living close by was important (59.3%), which suggests that

¹⁴⁰ $\chi^2 = 9.9, p < .05$

¹⁴¹ $\chi^2 = 23.9, p < .01$

social networks play an important role in their sense of belonging and identification with place. Interestingly, women found having family and friends living close by more important than men. Associated with a sense of place, more than half of men and women considered that a desirable neighbourhood and easy access to transport were also essential factors to their continuing to live in their own home. Only a very small proportion of older people did not intend to stay in their own home (2.4%).

Table 10.2
Factors Impacting Continued Living in Own Home by Gender (%)

	Males	Females
Good health	83.2	79.4 *
Family/friends close by	56.6	61.6 *
Desirable neighbourhood	56.0	52.6
Easy access to transport	52.5	52.7
Reasonable rent/maintenance costs	48.6	44.9
Do not intend to stay in house	2.7	2.2

* $p < .05$

In general, the factors were consistently stated across each age band. Age differences were not found between the factors that older people reported which would enable them to continue to live in their own home, except for having a reasonable rent or maintenance costs (Table 10.3). For the younger age categories it was more important to have reasonable housing costs compared to the older age categories.

Table 10.3
Factors Impacting Continued Living in Own Home by Age (%)

	65-69	70-74	75-79	80-84
Good health	81.9	80.8	81.5	79.9
Family/friend close by	59.0	57.4	60.1	61.9
Desirable neighborhood	55.0	53.5	54.9	55.1
Easy access to transport	51.9	51.0	55.7	52.3
Reasonable rent/maintenance costs	51.1	46.5	45.5	38.6 **
Do not intent to stay in house	2.6	3.2	2.7	0.4

* $p < .05$, ** $p < .01$

Respondents who were widowed and living alone and those living with a partner were more likely to report good health as being important to enable them to continue to live in their own home than other household composition types (results not shown)¹⁴². Interestingly, respondents living with others were the least likely to find having good health important.

Significant associations were also found between education and income level of older people and a number of the factors impacting continued living in their own home (results not shown). Respondents with up to primary school education level were most likely to find having family and friends close by important to enable them to continue to live in their own home¹⁴³. With respect to income level, those with a personal income of \$30,000 or less were more likely to find a reasonable rent or maintenance costs important to be able to continue living at home compared to those with a higher personal income¹⁴⁴. Respondents with a personal income of \$40,000 or more were more likely to find health important to be able to stay living at home compared to those a personal income of less than \$40,000.

¹⁴² $\chi^2 = 15.8, p < .01$

¹⁴³ $\chi^2 = 9.0, p < .05$

¹⁴⁴ $\chi^2 = 14.9, p < .01$

Finally, respondents who had a poor or fair self-rated health were less likely to report having a good health as important to continue living at home compared to those who had an excellent or very good self-rated health (results not shown)¹⁴⁵.

5.3.5 Access to Amenities

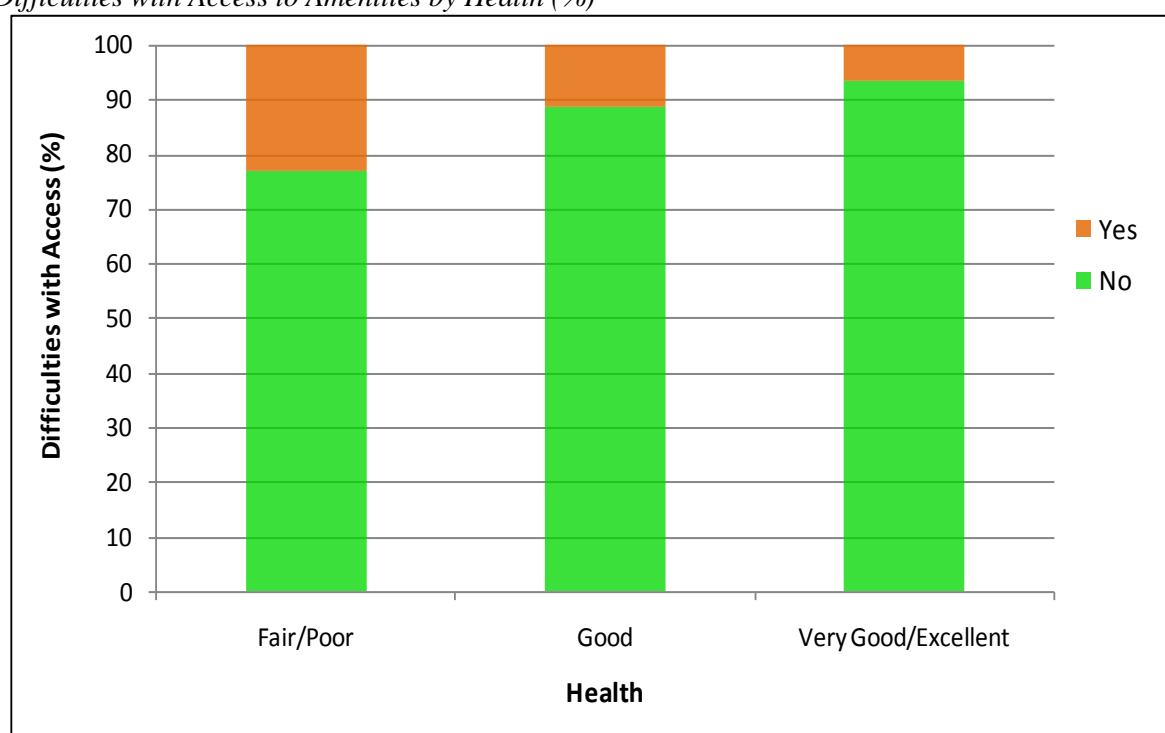
The respondents were also asked if they experienced difficulty getting to amenities such as shops or public transport. 11.1% of them reported that they had difficulty getting to amenities. Having difficulty getting to the shops or public transport was significantly associated with gender, age and health. Women (13.1%) had more difficulty getting to amenities than men (9.6%)¹⁴⁶. Of the respondents who were older, those who were 80-84 years old had the most difficulties getting to amenities (16.1%); while 8.9% of the 65-69 year-olds had difficulties; 11.2% of the 70-74 years, and 12.2% of the 75-79 years¹⁴⁷.

Respondents who were single and living alone or were living with others experienced more difficulties with amenities than other household composition types (results not shown)¹⁴⁸. Older people with a partner were least likely to have difficulties getting to amenities.

Respondents with up to primary education had more difficulties getting to amenities compared to those with a university qualification¹⁴⁹. Further, respondents with a personal income level of \$20,000 or less had more difficulties getting to amenities, in comparison to those with a personal income level of \$20,001 or more¹⁵⁰. Finally, respondents who had a fair or poor self-rated health had more difficulties with amenities than those who had a very good or excellent health (Figure 10.11)¹⁵¹.

Figure 10.11

Difficulties with Access to Amenities by Health (%)



¹⁴⁵ $\chi^2 = 36.3, p < .001$

¹⁴⁶ $\chi^2 = 4.9, p < .05$

¹⁴⁷ $\chi^2 = 9.4, p < .05$

¹⁴⁸ $\chi^2 = 28.3, p < .001$

¹⁴⁹ $\chi^2 = 8.3, p < .05$

¹⁵⁰ $\chi^2 = 14.3, p < .01$

¹⁵¹ $\chi^2 = 51.7, p < .001$

In sum, older people who had a lower educational and income level, who were living alone and had a lower self-rated health had the most difficulties accessing amenities.

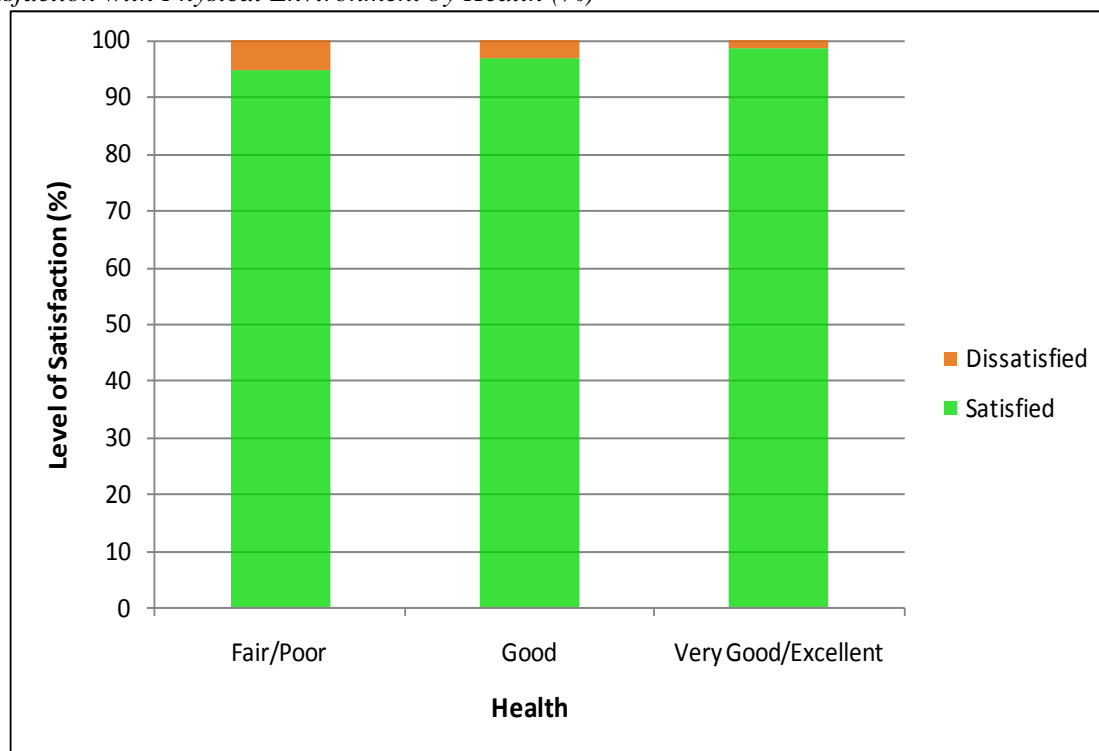
5.4 Satisfaction with Physical Environment and Overall Wellbeing

Overall levels of satisfaction with the physical environment were high, with 97% of respondents reporting that they were satisfied with the physical environment inside and outside the house (and 3% reporting they were dissatisfied with their physical environment). There was no difference in satisfaction with the physical environment between genders, age categories, living arrangements, education and income level.

Figure 10.12 shows that the reported satisfaction with the physical environment was significantly associated with health¹⁵². Older people who rated their health as very good or excellent had higher satisfaction with their physical environment than those who rated their health as fair or poor.

Figure 10.12

Satisfaction with Physical Environment by Health (%)



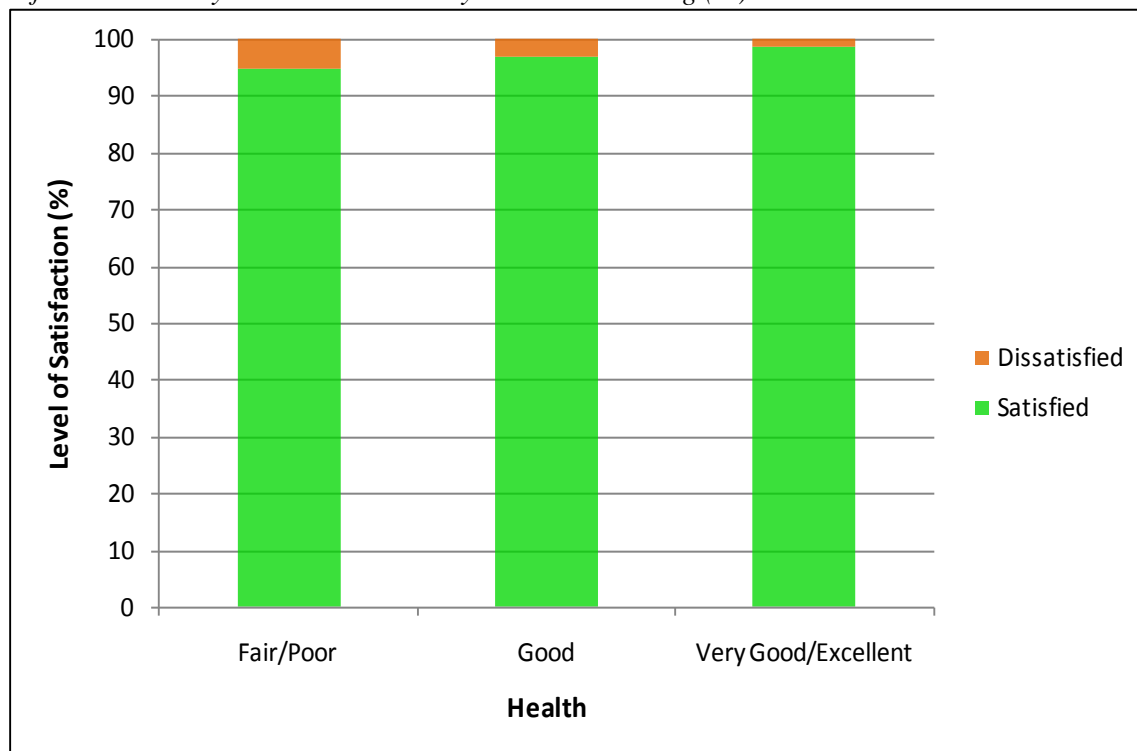
Satisfaction with the physical environment inside and outside the home and overall wellbeing were closely associated (Figure 10.13). Those with higher satisfaction with their physical environment had demonstrably higher overall wellbeing.¹⁵³

¹⁵² $\chi^2 = 13.7, p < .001$

¹⁵³ $\chi^2 = 64.7, p < .001$

Figure 10.13

Satisfaction with Physical Environment by Overall Wellbeing (%)



5.5 Living Arrangements, Ageing in Place, and Overall Wellbeing

A significant association was found between overall wellbeing and the living arrangements of older people (results not shown)¹⁵⁴. As was expected, older people living with a partner have a higher overall wellbeing compared to those who were living alone or in a household with others. Within the category of people living alone, older people who were single had a lower overall wellbeing than widows, widowers and those divorced or separated. Interestingly, no association was found between living in a shared household and overall wellbeing. The differences found between those in one-person households and other types of living arrangements, in contrast to those living with their partners, therefore, correspond to the idea that the cohesive functions in nuclear family and partnership bonds in particular act as mediating structures.

Looking at the relationship between overall wellbeing and factors which may impact on ageing in place, the results show no significant association between overall wellbeing and the level of urbanisation, moving in the previous five years or any of the factors impacting on continued living in one's own home, except good health¹⁵⁵. Respondents who reported health as important to enable them to continue living in their own home were more satisfied with their overall wellbeing than those who did not report health as being important.

A significant association was also found between overall wellbeing and difficulties accessing amenities (results not shown)¹⁵⁶. Respondents who reported having difficulty accessing amenities were more dissatisfied with their overall wellbeing than those who did not report difficulties accessing amenities.

¹⁵⁴ $\chi^2 = 54.6, p < .001$

¹⁵⁵ $\chi^2 = 29.3, p < .001$

¹⁵⁶ $\chi^2 = 52.1, p < .001$

Finally, overall wellbeing was significantly associated with satisfaction with household size. Respondents who found their home to be the right size or too large were more satisfied with their overall wellbeing than those who found their home to be too small (results not shown)¹⁵⁷.

6. Conclusion

The aim of this chapter was to provide a descriptive overview of older people's living arrangements, identify a number of aspects of the social and physical environment which may impact on older people's ability to age in place, and examine the extent to which living arrangements, and ageing in place influence the wellbeing of older people.

Not surprisingly, the living arrangements of older people change as they age. Living with a partner becomes less common, albeit at later ages, and much more pronounced among women than among men. Mainly as a result of differential mortality between men and women, women are much more likely than men to live in a one-person household in old age.

Although only a small proportion of older people lived in a shared household with others, clearly there were important gender differences. Older men were more likely to have the company of a partner in the shared household than older women. Future research may want to take a closer look at the gender differences within shared households and the impact of social support and care.

Older people who shared their household with others did so primarily with their adult children. This is an interesting finding considering that previous research suggests that older people predominantly prefer not to live with their adult children (Davey et al., 2004). International research has shown that co-residence between parents and their adult children is affected by: a shortage of affordable housing for first home buyers, job insecurity among young adults, parental need for care in old age, and few institutional care facilities for older adults (Fokkema, ter Bekke, & Dykstra, 2008). Future research is needed to explain the motives for co-residence of older New Zealanders with their adult children.

Health was clearly perceived as the most important factor which enabled older people to continue to live in their own home. Moreover, those who had a low self-rated health had more difficulties with getting to shops or public transport. Thus health appears to have an impact on people feeling comfortable to stay on in their own home and be involved within the community. The social network of an older person is also important for them making a decision to stay. Having family and friends and living in a desirable neighbourhood were rated by the majority of participants as being key factors. Associated with that was the importance of mobility, such that people in their own homes had easy access to transport to get to places that were important to them. A high proportion of older New Zealanders in this study (just under half) considered housing costs needed to be reasonable for them to stay.

Regarding wellbeing, there seems to be a clear pattern where older people who live with a partner have a higher level of wellbeing than older people living alone (divorced or widowed) or with others, who in turn have greater wellbeing than older people who are single and living alone. An explanation for the benefit of living with a partner might be that this relationship not only fulfills basic and universal human needs (Rook, 1984), but also provides companionship and freedom from loneliness (Peters & Liefbroer, 1997). Moreover, older people living with a partner have more economic resources than those in other households (Hughes & Waite, 2002).

Another important association with wellbeing which was identified in this chapter was that difficulties accessing amenities was negatively associated with wellbeing. Within the current policy settings aimed at ageing in place, it will become increasingly important to focus not only on older people being able to remain living in their own home but also being able to remain in their community. In

¹⁵⁷ $\chi^2 = 37.0, p < .001$

this respect, housing for older people should ideally be sited near to basic community services and social networks. Davey (2006) indicates that services such as home help, gardening, meal deliveries, health care and home maintenance are services which will support ageing in place.

Overall, these results reflect the diversity of living arrangements among older age groups, and between men and women. In this context more attention needs to be paid to the impact of gender differences on the living arrangements of older people within the 65-84 year age group, and in particular to the differential impact of marital status for men and women. Moreover, the findings demonstrate, in line with international research, the positive impact of living with a partner in late life in relation to the wellbeing of older New Zealanders.

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Chapter 11: Safety

Peter King

1. Introduction

Sensational media accounts of crime and safety issues for older people represent older people's safety related wellbeing as being under constant threat. Approaching the question of safety from the perspective of bodily and psychological integrity and freedom from victimisation, the findings of this study suggest that older New Zealanders enjoy much greater safety than media representations suggest. The findings also suggest that the positive experience of safety is countered to some extent by older New Zealanders' lower perceptions of safety, which, perhaps, reflects the negative media representations.

The enjoyment of personal safety by not being subject to violence, crime, dangerous or unhealthy surroundings, or other threats to bodily integrity, is a core element of the New Zealand Government Positive Ageing Strategy (Dalziel, 2001). Goal 5 of that strategy states that older people should feel safe and secure and can 'age in place'. Safety is included in wellbeing and quality of life measures, such as the WHO Quality of Life Index, and forms one of the ten dimensions of the Ministry of Social Development's Social Wellbeing measure (Ministry of Social Development, 2007).

Bodily integrity and safety are identified as key capabilities by researchers working in the capabilities based wellbeing paradigm. For example, both Nussbaum (1995) and Robeyns (2003) include bodily integrity and safety in the lists they developed with respect to the processes of engagement with philosophical and theoretical frameworks. Clark and Gough (2005) identified safety as a concern of people in their survey based investigation of perceptions of wellbeing which built on and evaluated the theory-based capability categories originally nominated by Nussbaum & Sen (1993). Indeed, from a capabilities-based perspective, personal safety and bodily integrity are basic requirements for people to be able to freely exercise and apply their capabilities to the achievement of their wellbeing.

In this chapter preliminary findings are presented based on the analysis of responses to the safety-related survey questions and any relationships they have with: age, gender, marital/partnership status, living arrangements, rural/urban location, personal income. Findings on the relationship of safety with subjective wellbeing or general satisfaction with life, loneliness, and leisure and recreation are also included. Different patterns of responses to the more 'objective', experience based questions from those to the more 'subjective', perception based question are identified and discussed.

2. Theoretical Background

There is a common view that the safety of older people is at risk in society. This view stems from and is supported by the frequently sensational media reporting of crime against older people (Sacco 1995, Powell & Wahidin, 2008) which emphasises their vulnerability to crime in conjunction with negative stereotypes about them (Stacey & Osborne, 1998). Such representations support a common sense view that the experience and perception of personal safety, in the forms of bodily and psychological integrity and freedom from victimisation might be positively related to wellbeing. This postulated positive relationship has also been proposed, without evidence, by some researchers in the field, as documented by Michalos & Zumbo, (2000). However, studies that have investigated relationships between fear of crime and/or perceptions of personal safety, and subjective wellbeing, quality of life or happiness have found no clear relationship (Michalos & Zumbo, 2000, Silverman & Kennedy, 1985), while Hartnagel (1979) found a negative association between Edmontonians' feelings of safety in their neighbourhoods and their satisfaction with them. In common with those studies, this present study also found no significant relationship between perceptions (or experiences) of safety and

subjective wellbeing or general satisfaction with life. Silverman and Kennedy (1985:10) suggest that the expected positive relationship between feeling safe and subjective wellbeing is countered by the possibility that people who are more satisfied with their lives have more to lose if they are victimised, and therefore express more fear of crime.

As the relationship between experiences and perceptions of safety and subjective evaluations of wellbeing is unclear, its selection as a dimension of wellbeing might be open to question. This might explain why safety, as it is studied in this research project, has not been a feature of other important studies of ageing such as: Old Age and Autonomy - The role of Service systems and Intergenerational Solidarity (OASIS), The European Study on Ageing Well (ESAW), The Survey of Health Ageing and Retirement in Europe (SHARE), and The English Longitudinal Study of Ageing (ELSA).

However, from a capabilities-based wellbeing perspective, its inclusion is certainly justified because it represents what Sen calls an “instrumental freedom”. In Sen’s framework instrumental freedoms “contribute, directly or indirectly, to the overall freedom that people have to live the way they would like to live” (Sen, 1999:38). Sen proposes a non-exhaustive list of five types of instrumental freedoms: political freedoms; economic facilities; social opportunities; transparency guarantees; and protective security (Ibid.). Of these, protective security aligns most clearly with the dimension of safety included in this study. From a capabilities perspective, then, the absence of an expected positive association between feeling safe and life satisfaction does not disqualify safety from consideration as a dimension of wellbeing. As an instrumental freedom, safety, both objective and subjective, represents one condition necessary for people to apply their capabilities to the achievement of their wellbeing. The inclusion of “safety”, specifically, is justified on both theoretical (Nussbaum, 1995; Robeyns, 2003) and empirical grounds (Clark & Gough, 2005) as already indicated. Additionally, as Powell and Wahidin (2008:94) argue, the consequences of victimisation for older people can be more serious than for mid-life and younger people, making its inclusion as a dimension of wellbeing for older people all the more important.

From a capabilities based theoretical perspective, people’s safety is most usefully examined in relation to their engagement in events and activities, and with other people. In this chapter, the relationship between safety and participation in leisure and recreation provides a useful avenue for assessing the status of safety as a capability-related variable. The tension between the experience and perception of safety is also of interest from a capabilities perspective because while the objective, experience-based, measures can suggest that there is nothing much the matter with the safety of older people, overall, the subjective, perception-based, measure is consistently related significantly, if not strongly,¹⁵⁸ to all of the other variables included in this analysis, except for subjective wellbeing or general satisfaction with life. So whether or not people are, on the whole, objectively safe, their subjective perception of whether or not they are safe might have a capabilities related bearing on their ability to enjoy life. As an example of this, the debilitating effects of the fear of crime are identified by Adams and Serpe (2000) in their Los Angeles based study which identified its impact upon people’s life satisfaction by lowering their sense of control over their lives. The same study found that social integration was associated with reduced feelings of vulnerability.

3. Method

3.1 Data

The current survey of 65-84 year-olds canvassed respondents’ experiences and perceptions of their personal safety in their homes and neighbourhoods. The data used to measure ‘safety wellbeing’ were derived from six questions¹⁵⁹ that covered respondent’ perceptions of their personal safety within their homes and neighbourhoods. Responses to the six questions were combined to form three variables

¹⁵⁸¹⁵⁸Cramer’s V coefficients are all below 0.2 with the exception of the relationship between gender and feelings of safety in the neighbourhood at night.

¹⁵⁹ Questions 256 to 261 in the questionnaire for 65 to 84 year olds.

covering, respectively, whether: 1. Respondents felt safe or not in and around their own homes, and, if they did not, why that was the case; 2. During the previous 12 months, respondents had been in situations within their neighbourhoods when they felt their safety had been threatened, and if so how often this had happened. Respondents felt safe in their neighbourhoods in the evenings or at night while walking alone. The first two variables measured respondents' experiences of safety or victimisation in a more objective sense, whereas the third variable measured perceptions of safety in a subjective sense. In addition, the questionnaire included one question in which respondents were asked to indicate whether or not they were satisfied with their situation in relation to each of the ten dimensions of wellbeing included in this study. Responses to the part of that question concerned with their satisfaction with their personal safety have also been included in the 'Subjective wellbeing or general satisfaction with life' section of this chapter.

Because the numbers of respondents in the various 'not safe' categories were very small, further analysis – beyond the overall frequencies that follow in the first four tables – was carried out with the responses dichotomised into 'safe' and 'not safe' categories in order to achieve adequate data cell sizes. The three areas of safety were next examined in relation to the following variables: age, gender, marital/partnership status, household type, rural/urban location, personal income, overall subjective wellbeing and satisfaction with personal safety, loneliness, and leisure and recreation. The tables summarising these results do not include non-responses, don't knows, or refusals, and as these vary from question to question, the totals in the tables also vary from table to table. The percentages presented are therefore percentages of the valid responses.

The marital/partnership status variable was also restructured for this analysis by collapsing the 34 marital/partnership status categories contained in the database to the five categories displayed in Table 11.7

The category 'never married or in a relationship' already exists as a distinct category in the database. The category 'in a relationship' is new and represents 15 categories in the database that encompass a range of opposite sex and same sex relationships of varying degrees of formality. The next two new categories: 'widowed and no longer in a relationship' and 'no longer in a relationship but not widowed' have been kept separate in order to allow discrimination between becoming single again through the death of a partner, on the one hand, and through separation or divorce, on the other. The last category includes people who are 'in a relationship but not living in the same home'.

3.2 *Analysis*

Bivariate relationships are examined between each of the three areas of safety and the following variables: age, gender, marital/partnership status, living arrangements, rural/urban location, personal income, health, subjective wellbeing or general satisfaction with life, loneliness, and leisure and recreation. The first seven are basic demographic and personal status variables that are examined for any relationships they have with the three dimensions of safety. The next two: subjective wellbeing, and loneliness, are subjective measures of respondents' general satisfaction with their lives and their emotional and social connection with other people. The last is an objective measure of engagement in leisure and recreation, and is examined in order to identify any relationship between the experience and/or perception of safety and the likelihood of engaging in and contributing to leisure and recreation activities in the wider community. Statistical tests used and their levels of significance are shown as either footnotes or table notes.

As detailed in Chapter Three, sampling weights have been calculated and applied to adjust for gender and age, and all analyses in this chapter uses weighted data.

4. Findings

4.1 Overall Frequencies

Overall, experiences of safety are very high among 65-84 year-old New Zealanders. As Table 11.1 shows, 92.3 percent of all respondents felt safe around their own homes without having experienced any threats to their safety. When those who did not answer are excluded (6%), the percentage who felt safe increases to 98.2 percent. No cases of intra-household threats to safety were reported, and only neighbours and non-household members were identified as behaving threateningly.

Table 11.1
Feelings of Safety in the Home (%)

Safety at Home	
Feel safe around their home	98.2
Do not feel safe around home due to:	
Threatening behaviour of neighbours	0.2
Threatening behaviour of non-household members	0.3
Being a recent victim of crime	0.4
Other reason	0.7
Do not feel safe, but refused to say in what way	0.2
Total	100%
N =	1579

Table 11.2 shows similarly high perceptions of safety within neighbourhoods, with 93.4 percent of those who answered feeling that their safety had not been threatened at all.

Table 11.2
Feelings of Safety in the Neighbourhood (%)

Safety in the Neighbourhood	
Do not feel safety was threatened	93.4
Safety was threatened once	4.2
Safety was threatened several times	2.0
Safety was threatened many times	0.3
Safety was threatened, but don't know how often	0.1
Total	100%
N =	1634

In Table 11.3, the results presented in the earlier tables are combined to obtain an overall prevalence of threats to safety, or victimisation. The resulting prevalence of victimisation is 7.8 percent, which is higher than the prevalence of 5.0 percent for people aged 60 and over reported by the 2001 New Zealand National Survey of Crime Victims¹⁶⁰ (Morris & Reilly, 2003). This difference is likely to reflect a combination of different methods of measurement and also, perhaps, the six years between the crime victims survey and the EWAS survey.¹⁶¹

¹⁶⁰Despite its title, the survey of crime victims was a survey of the general population and was thus able to develop incidence and prevalence rates.

¹⁶¹Directly comparable figures were not given in the report of the 2006 survey (Mayhew & Reilly, 2007).

Table 11.3
Feelings of Safety in the Home and Neighbourhood Combined (%)

Feeling of Safety in the Home or Neighbourhood Combined	
Feel safe	92.2
Feel unsafe in one of: the home or the neighbourhood	7.0
Feel unsafe in both the home and the neighbourhood	0.8
Total	100%
N =	1578

As far as feelings of safety in the neighbourhood at night are concerned, Table 11.4 reveals lower perceptions of safety, with only 62.7 percent of those who answered feeling safe when walking alone at night in their neighbourhood. 30 percent of the respondents said that they never walked alone at night.

Overall, the proportions shown in Table 11.4 are consistent with results from the 2001 New Zealand National Survey of Crime Victims (Morris & Reilly, 2003) which found that 63.8 percent¹⁶² of people aged 60 and over felt either very safe or fairly safe about walking alone in their neighbourhood after dark, compared to 62.7 percent in this 2007 survey of those aged 65-84 years.

Table 11.4
Feelings of Safety in their Neighbourhood in the Evenings or at Night when Walking Alone (%)

Safety in the Neighbourhood at Night	
Yes	64.4
No	4.7
Never walk alone in neighbourhood at night	30.9
Total	100%
N =	1627

The higher perceptions of safety reported in 11.1, 11.2 and 11.3 are based on the more objective indicators of respondents' actual experiences, compared to the lower perceptions reported in Table 11.4 that are based on more subjective evaluations. These differences illustrate the disjuncture between subjective fear of crime or victimisation and the objective risk of it happening.

4.2 Age

Older people feel less safe around their homes as they age. The trend is small, but significant¹⁶³, and differs from Australian research that identified similarly high levels of feelings of safety in the home (and neighbourhood) for older Australians, but no difference across age groups (Quine & Morrell, 2008).

People's experience of safety in their neighbourhood did not vary significantly across the age groups and therefore is not further reported here. On the other hand, feelings of safety in the neighbourhood at night were significantly related to age. Table 11.5

shows a clear decline in feeling safe with increasing age, with 72.4 percent of those aged 65-69 feeling safe compared to 54.2 percent of those aged 80-84 years.

¹⁶² Table A9.3b, page 272 (Morris & Reilly, 2003).

¹⁶³ Chi-square (3) = 9.448, $p < .025$. Cramer's V = .077, $p < .025$.

Table 11.5

Feelings of Safety in the Neighbourhood at Night by Age Group (%)

Feelings of Safety in Neighbourhood at Night	Age Group				Total
	65-69	70-74	75-79	80-84	
Feel safe	72.4	64.0	59.7	54.2	64.4
Do not feel safe/Never walk alone at night	27.6	36.0	40.3	45.8	35.6
Total	100.0	100.0	100.0	100.0	100.0
N=	569	428	367	264	1628

Note: *Chi-square* (3) = 31.566, $p < .001$. *Cramer's V* = .139, $p < .001$.

The declining subjective perceptions of safety with age shown in Table 11.5 are consistent with the findings of another recent Australian study (Ziersch et al., 2007) that was also based on overall perceptions of safety in the neighbourhood at night.

4.3 Gender

No significant gender-based differences were found for either the experience of safety around the home or in the neighbourhood during the day. On the other hand, feelings of safety in the neighbourhood at night did vary significantly by gender. As 11.6 clearly shows, men are much more likely than women to feel safe in their neighbourhoods after dark (with an odds ratio of 3.24¹⁶⁴), and they are less likely to experience victimisation than women (see also Mayhew & Reilly, 2007 and Morris & Reilly, 2003).

Table 11.6

Feelings of Safety in the Neighbourhood at Night by Gender (%)

Feelings of Safety in the Neighbourhood at Night	Gender		Total
	Male	Female	
Feel safe	78.1	52.4	64.4
Do not feel safe/Never walk alone at night	21.9	47.6	35.6
Total	100.0	100.0	100.0
N=	750	844	1594

Note: *Chi-square* (1) = 116.080, $p < .001$. *Phi* = .267, $p < .001$.

4.4 Marital/Partnership Status

People's feelings of safety in the home and their experience of safety in their neighbourhood during the day did not vary significantly across marital/partnership status categories and therefore are not further reported here. Feelings of safety in the neighbourhood at night did vary significantly, however Table 11.7 shows that those who were widowed and no longer in a relationship, were much less likely to feel safe in their neighbourhoods at night, than other people. The difference between those widowed and no longer in a relationship and those no longer in a relationship but not widowed, is quite marked. The majority (364) of those widowed were women, while almost equal numbers of men and women were in the no longer in a relationship but not widowed category. A majority of the men in both categories felt safe, while the reverse was the case for women.

¹⁶⁴ Odds of male feeling safe (78.1 / 21.9 = 3.57) / odds of female feeling safe (52.4 / 47.6 = 1.1) = 3.24

Table 11.7

Feelings of Safety in the Neighbourhood at Night by Marital/Partnership Status (%)

Feelings of Safety in the Neighbourhood at Night	Marital/Partnership Status					Total
	Never married or in a relationship	In a relationship	Widowed and no longer in a relationship	No longer in a relationship but not widowed	In a relationship but living apart	
Feel safe	68.3	68.9	55.3	63.9	64.7	64.4
Do not feel safe/ Never walk alone at night	31.7	31.1	44.7	36.1	35.3	35.6
Total	100	100	100	100	100	100
N=	40	902	457	161	34	1594

Note: *Chi-square* (4) = 25.508, $p < .001$. *Cramer's V* = .125, $p < .001$.

4.5 Living Arrangements

Living arrangements were defined in terms of household type based on eight categories of household composition: couple only, couple with other persons, couples with children, couples with children and other persons, one parent with children, one parent with children and other persons, multi-person households of related people, and single person households.¹⁶⁵ No statistically significant relationships were found between household type and either feelings of safety in the home or in the neighbourhood during the day. In terms of feelings of safety in the neighbourhood at night, couples with children, followed by couples with children and other persons were significantly¹⁶⁶ more likely to feel safe than those in other household types. Gender was an important factor in lower perceptions of safety found in those who were widowed, in relation to marital/partnership status. Additionally, gender is also likely to be implicated in the lower perceptions of safety found in single parent households with children.

4.6 Rural/Urban location

No statistically significant relationships were found between rural/urban location and either feelings of safety in the home or in the neighbourhood during the day. In terms of feelings of safety in the neighbourhood at night, those living in rural areas were significantly¹⁶⁷ more likely to feel safe than others, while those living on the outskirts of a city who were the least likely to feel safe in their neighbourhood at night. These differences between urban and rural areas are consistent with findings from other research into victimisation in New Zealand (Mayhew & Reilly, 2007; Morris & Reilly, 2003), the United States (Adams & Serpe, 2000) and the United Kingdom (O'Mahony & Quinn, 1999).

4.7 Personal Income

Data on annual personal income (before tax) from all sources was obtained for about 68 percent of respondents. Respondents were asked for an actual dollar value, so the income data were available as a continuous variable as well as in constructed categories. The analysis in this section has been carried out with both forms of the income data.

No relationships were found between personal income and either safety in the home or safety in the neighbourhood. A significant relationship was found, however, between personal income and feelings of safety in the neighbourhood at night. In Table 11.8, the original 16 income categories have been collapsed to achieve adequate cell sizes. The table displays a tendency for the percentages

¹⁶⁵ See Methods section, 3.1, for details of category construction.

¹⁶⁶ *Chi-square* (7) = 27.205, $p < .001$. *Cramer's V* = .129, $p < .001$.

¹⁶⁷ *Chi-square* (5) = 20.053, $p = .001$. *Cramer's V* = .111, $p = .001$.

of those reporting that they feel safe to increase as personal income increases.¹⁶⁸ About 60 percent of those with incomes below \$20,000 felt safe, with this rising to 86 percent of those with income of \$60,000 and above feeling safe.

The positive relationship between income and perceptions of safety is consistent with research that has found a similar relationship between levels of feeling unsafe and deprivation in New Zealand (Mayhew & Reilly, 2007)¹⁶⁹; and the United Kingdom (Pantazis, 2000), and with socioeconomic status in the United Kingdom (Koffman, 1996) and the United States (James & Graycar, 2000). However, previous New Zealand research (Morris & Reilly, 2003) using the New Zealand Socioeconomic Index of Occupational Status (NZSEI) (Davis, et al., 1997) is less clear about this relationship.

Table 11.8

Feelings of Safety in the Neighbourhood at Night by Personal Income (%)

Feelings of Safety in the Neighbourhood at Night	Personal Income brackets					Total
	\$0-\$15,000	\$15,000-\$20,000	\$20,000-\$30,000	\$30,000-\$60,000	\$60,000 +	
Feel safe	60.8	58.9	72.7	75.6	86.0	68.1
Don't feel safe/Never walk alone at night	39.2	41.1	27.3	24.4	14.0	31.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
N=	155	387	297	193	100	1132

Note: *Chi-square* (4) = 41.675, $p < .001$. *Cramer's V* = .192, $p < .001$.

4.8 Health

As detailed in Chapter 4, self reported health status information was obtained using the SF-12 instrument. This provided three measures: global self-reported health rated on a five point scale from excellent to poor; a physical health scale and a mental health scale. As reported in Chapter 4, global self-reported health was positively associated with overall satisfaction with personal safety. Further analyses have been conducted to identify any significant relationships between self reported health and the three areas of safety discussed in this chapter.

Global self-reported health was significantly and positively associated with the perception of safety in the neighbourhood at night¹⁷⁰, but no significant relationships were found with the experience of safety either in the home or in the neighbourhood. Perception of safety in the neighbourhood at night was also positively associated with SF-12 rated physical health¹⁷¹, but not associated with mental health.

The relationship between perception of safety in the neighbourhood at night and physical health is consistent with the negative association between perception of safety in the neighbourhood at night and age, given that physical health status declines with age, as reported in Chapter 4. As physical health declines more markedly than mental health with age (see Chapter 4), it is possible that declining physical health heightens people's feelings of being unsafe. The possibility that poorer physical health, rather than age alone, contributes to subjectively feeling unsafe is supported by the absence of any relationship between either physical health or mental health and the objective experience of safety in the neighbourhood.

¹⁶⁸ This trend is supported by a Spearman rank correlation of -.188 (significant at .01) between the full 16 income categories treated as ordinal data and the two safety categories treated as ordinal, with safety being threatened = 2 and safety not being threatened = 1. Hence a negative correlation indicates that feeling unsafe declines as income increases.

¹⁶⁹ Using the area based New Zealand Index of Deprivation (NZDep) (Salmond, et al 1998) as a proxy individual measure of respondent deprivation.

¹⁷⁰ Chi-square (3) = 17.809, $p < .001$. *Cramer's V* = .107, $p < .001$.

¹⁷¹ Spearman's rho = .151, $p = .01$. $z = 6.274$, $p < .001$.

4.9 Subjective Wellbeing or General Satisfaction with Life

Respondents' subjective wellbeing or general satisfaction with life was measured on a five point scale ranging from very satisfied to very dissatisfied. No significant relationships were found between subjective wellbeing and either feelings of safety in the home, in the neighbourhood or in the neighbourhood at night. As already indicated in the Theory section of this chapter, the absence of a relationship between perceptions of safety is consistent with other research in the field.

General satisfaction was also measured across each of the ten dimensions of wellbeing covered in this study. For each dimension, respondents were asked whether they were either satisfied or dissatisfied with it in the context of their lives. For the 'satisfaction with personal safety aspect', satisfaction was very high at 97 percent. Satisfaction with personal safety was positively, though not strongly, associated with subjective wellbeing or general satisfaction with life.¹⁷²

In Table 11.9, responses to the question about satisfaction with personal safety are cross tabulated with each of the three safety dimensions. Relationships between the categories satisfied and dissatisfied about personal safety are significantly related to feeling safe around the home,¹⁷³ in the neighbourhood,¹⁷⁴ and in the neighbourhood at night.¹⁷⁵ Those who are dissatisfied with their safety are less likely to feel safe around their homes or in their neighbourhoods than those who are satisfied with their personal safety. Nonetheless, 83 percent of those who are dissatisfied with their personal safety do feel safe around their homes. This falls to 64.6 percent when it comes to feeling safe around the neighbourhood, suggesting that people's subjective evaluations of their safety are focused more on the environment outside the home than within the home. Finally, there is a clear, symmetrical, relationship between satisfaction with personal safety and feelings of safety in the neighbourhood at night.

Table 11.9:

Feelings of Safety in Various Locations by Satisfaction with Personal Safety (%)

Feelings of Safety		Satisfaction with Personal Safety		
		Satisfied	Dissatisfied	Total
Around the Home	Feel safe around home	98.8	83.0	98.3
	Do not feel safe around home	1.2	17.0	1.7
	Total	100.0	100.0	100.0
	N=	1501	47	1548
In the Neighbourhood	Safety not threatened	94.4	64.6	93.5
	Safety was threatened	5.6	35.4	6.5
	Total	100.0	100.0	100.0
	N=	1550	49	1599
In the Neighbourhood at Night	Feel Safe	65.8	34.7	64.9
	Do not feel safe/Never walk alone at night	34.2	65.3	35.1
	Total	100.0	100.0	100.0
	N=	1555	48	1603

The relationship between feelings of safety in the neighbourhood at night and satisfaction with personal safety does indicate, however, that some of those who do not feel safe or never walk alone at night are still satisfied with their personal safety. In fact 96.5 percent of those said they did not walk alone at night expressed satisfaction with their personal safety. This is probably because these people felt safe as a result of their decision not to walk alone at night.

¹⁷² $r=.102, p<.001$

¹⁷³ $z = -8.639, p = <.001$

¹⁷⁴ $z = -8.656, p = <.001$

¹⁷⁵ $z = -4.544, p = <.001$

4.10 Loneliness

Loneliness was measured using the de Jong Gierveld Loneliness Scale (de Jong Gierveld & van Tilburg, 2006). This scale measures overall loneliness on a seven point scale with four point subscales that measure emotional loneliness and social loneliness, respectively. Higher scale numbers indicate higher levels of loneliness. No clear relationships were found for overall loneliness and either safety in the home, safety in the neighbourhood or perception of safety in the neighbourhood at night.

On the other hand, both social loneliness and emotional loneliness were significantly related to feelings of safety in the neighbourhood. As Table 11.10 shows, feelings of safety tend to fluctuate in the percentages of the low to mid 90's across the social loneliness scores 0 to 2 and then fall noticeably to the low 80's at the highest social loneliness score of 3. The prevalence of safety having been threatened increases as social and emotional loneliness increases (see Table 11.11).

While the relationship between loneliness and fear of victimisation or fear for personal safety has been examined in other research (e.g., Donder et al., 2005; Acierno et al., 2004), the relationship between loneliness and experiencing victimisation is less well examined. While it is possible that the isolation associated with loneliness could be associated with increased risk of being victimised, it is also possible that being victimised leads to social and emotional withdrawal and the experience of loneliness associated with that.

Table 11.10

Feelings of Safety in the Neighbourhood by Level of Social Loneliness (%)

Feelings of Safety in the Neighbourhood	Social Loneliness Scores				Total
	0	1	2	3	
Safety not threatened	94.7	91.6	95.4	81.9	93.4
Safety was threatened	5.3	8.4	4.6	18.1	6.6
Total	100.0	100.0	100.0	100.0	100.0
N=	1103	249	130	105	1587

Note: *Chi-square* (3) = 27.433, $p < .001$. *Cramer's V* = .131, $p < .001$.

Table 11.11

Feelings of Safety in the Neighbourhood by Level of Emotional Loneliness (%)

Feelings of Safety in the Neighbourhood	Emotional Loneliness Scores				Total
	0	1	2	3	
Safety not threatened	94.6	93.3	89.9	86.8	93.3
Safety was threatened	5.4	6.7	10.1	13.2	6.7
Total	100.0	100.0	100.0	100.0	100.0
N=	837	490	208	53	1588

Note: *Chi-square* (3) = 9.807, $p = .02$. *Cramer's V* = .079, $p = .02$.

4.11 Leisure and Recreation

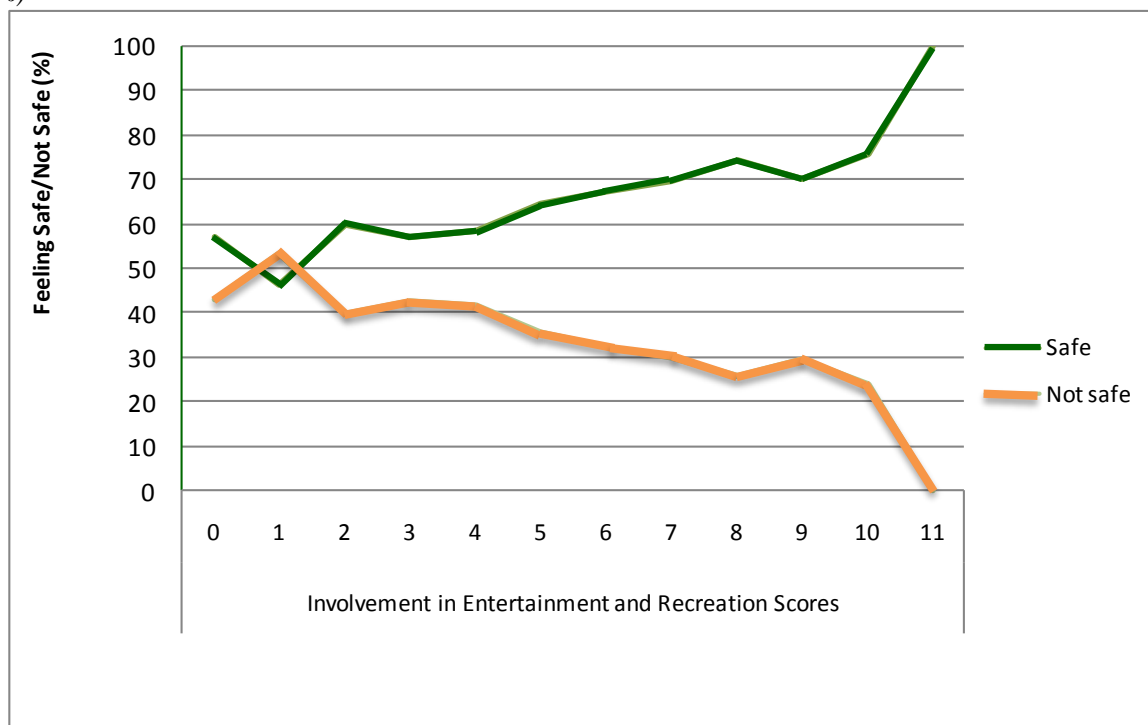
Relationships between experience and perception of safety and participation in leisure and recreation activities were examined to assess the status of safety as a capabilities-related variable. Does being safe and feeling safe increase the likelihood of participation in the wider community?

In two sets of questions, respondents were asked to indicate their degree of involvement in a range of clubs and community based organisations and their participation in a range of entertainment and recreation activities. Involvement in clubs and organisations was measured on a three point scale (0 = No involvement, 1 = Involvement in last month, and 2 = Organisation or leadership role). Participation in entertainment and recreation in the last month was measured as No or Yes. Simple involvement and participation scores were calculated by summing each participant's responses across the club/organisation and entertainment/recreation categories, respectively. Higher involvement scores reflected greater breadth and/or depth of involvement with clubs and organisations, while higher participation scores reflected greater breadth of participation only.

No significant relationships were found between either involvement or participation and any of the safety dimensions except for participation in entertainment and recreation and feelings of safety around the neighbourhood at night. This relationship is shown in Figure 11.1 and indicates that those who feel safe tend to participate in more entertainment and recreation activities than those who do not feel safe in their neighbourhoods at night. The feeling of being unsafe at night appears to be at least a partial barrier to participation in entertainment and recreation. More detailed analysis will need to be carried out to find out whether different types of leisure and recreation activities are related to safety in different ways.

Figure 11.1

Feelings of Safety in the Neighbourhood at Night by Involvement in Entertainment and Recreation (%)



Note: Chi-square (11) = 32.990, $p = .001$. Cramer's $V = .142$, $p = .001$.

As a further test of safety and social engagement, the three dimensions of safety were examined in relation to the numbers of social contacts reported by respondents, but no relationships were found.

4. Conclusion

This analysis of safety using data from the 2007 survey of New Zealand residents aged 65 to 84 years has found that overall objective experiences of safety are very high, both in the home and the neighbourhood, with 98.2 percent not experiencing threats to their safety around their homes and 93.4 percent not experiencing threats to their safety in their neighbourhoods. However, subjective perception of safety, measured with reference to feeling safe in the neighbourhood at night, is lower, with 62.7 percent feeling safe in their neighbourhoods at night. In common with other research into relationships between perceptions of safety and satisfaction with life, or subjective wellbeing, this research has found no significant relationship between the two.

Significant, but not strong,¹⁷⁶ relationships identified in this analysis are summarised below:

Subjective perception of safety, represented by feelings of safety in the neighbourhood at night, was found to be:

- inversely related to age
- over three times more likely to be felt by men than by women
- significantly lower for those widowed than other marital/partnership status types
- highest for those in couple households with children and lowest for single parent households with children
- highest in rural areas and lowest on the outskirts of cities
- positively related to personal income
- positively related to physical health and global self-assessed health
- unclearly related to general, subjective, wellbeing and its personal safety component;
- inversely related to overall loneliness
- positively related to participation in leisure and recreation activities.

Objective experience of safety around the home was found to be:

- inversely related to age
- positively related to the satisfaction with personal safety component of general wellbeing.

Objective experience of safety in the neighbourhood was found to be:

- positively related to the satisfaction with personal safety component of general wellbeing
- inversely related to emotional and social loneliness.

The results reported in this chapter show quite different patterns of responses to the more ‘objective’, experience-based, questions from those to the more ‘subjective’, perception-based question. These differences are consistent with other research that has found no necessary link between the subjective fear of crime or victimisation and the objective risk of it happening¹⁷⁷ (e.g., Thomas & Hyman 1977, White 2000, Morris & Reilly 2003, Powell & Wahidin, 2007). The strongly positive experiences of personal safety contrast with the sensational media accounts of older people as victims. At the same time, the lower subjective perception of safety perhaps reflects the influence of that same negative media representation.

This analysis suggests that the use of a purely objective measure could lead to the conclusion that safety was not a serious concern requiring attention, while masking the existence of subjective concerns that older people might have about their safety – justified or not – that impair their capacity to age positively. The use of both levels of measurement makes it possible to obtain a balanced view of the issues involved in older people’s safety. Such a balanced view can support the development of responses to older people’s safety-related subjective needs that are consistent with both the nature of the safety-related conditions they face in their homes and communities and their integration in those communities.

Resulting from this preliminary analysis, further analysis will be carried out into the interplay between perceptions of safety, social and emotional loneliness, social engagement and integration, gender, age, and income. Further analysis of income will be supplemented by consideration of socioeconomic status based on former occupation. Particular attention will be paid to gender because it was the relationship between gender and the perception of safety that was the strongest found in this analysis.¹⁷⁸

¹⁷⁶ See footnote 158.

¹⁷⁷ Also of relevance here is the distinction observed in other research between people’s perceptions of their own safety and their perceptions of the safety of others (Quine and Morrell 2008:72; Abramson and Silverstein 2004; Ranzijn et al. 2002).

¹⁷⁸ The Phi coefficient of .267 (see **Error! Reference source not found.**) indicated a moderate relationship in contrast to the other relationships which could only be described as weak, despite being significant.

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Chapter 12: Social Connectedness and Wellbeing among Older New Zealanders

Peggy Koopman-Boyden and Suzan van der Pas

1. Introduction

Social connectedness refers to “the relationships people have with others”, and as a process can require considerable time, energy and commitment (Ministry of Social Development, 2008:110). As part of this social connectedness, individuals rely on family, friends, neighbours and colleagues for support in a whole range of human activities. International research has clearly established that social connectedness is beneficial to quality of life or wellbeing (Heliwell, 2003; Antonucci, 1990; Berkman, Glass, Brisette & Seeman, 2000).

In New Zealand, the importance of social connectedness is clear from the Ministry of Social Development’s statement that,

“Social connectedness is integral to wellbeing. People are defined by their social roles, whether as partners, parents, children, friends, caregivers, teammates, staff or employers, or a myriad of other roles. Relationships give people support, happiness, contentment and a sense they belong and have a role to play in society...Social connectedness also refers to people joining together to achieve shared goals that benefit each other and society as a whole” (2008:110).

The term ‘social connectedness’ is also linked to the concept of ‘social integration’, which has been defined as “the connections that individuals have to significant others in their social environments” (Pillemer, Moen, Wethington & Glasgow, 2000). Social integration refers to both participation in meaningful roles and the social contacts that people have. Examples of such social integration include involvement in the local community through participation in organisations and contact with family, neighbours and friends.

There is great diversity and change in the contacts that people have in later life with family and friends (van Tilburg, 1998). In studying the social relationships of older people the dominant focus has been on a reduction in social contacts (van Tilburg & Thomese, forthcoming). Life events such as retirement, widowhood, declining health of significant others and death result in losses, and limitations in personal resources (such as health or income) may reduce the ability to maintain relationships.

However, not all older people are confronted with a decline in social contacts. Social connectedness can also be developed through more formal networks such as being a member of a club and/or doing volunteer work for an organisation. Nevertheless, while children may build such social capital by developing new friendships, and the middle-aged may ensure it through having a family, those in their older years are traditionally reliant on the forms of social connectedness they have already developed.

The aim of this chapter is to examine the social connectedness of older New Zealanders by describing the number, frequency and type of social contact¹⁷⁹ that older people have. It considers the associations of number, frequency and type of social contacts with age, gender, educational and income level, living arrangements, health, and level of urbanisation. A second aim of this chapter is to examine the extent to which older people are active in community organisations, as a member and as a leader, as a form of social connectedness. The chapter concludes by considering the association between social connectedness and wellbeing.

¹⁷⁹ Contact frequency and importance of relationships were used as criteria for identifying social contacts (see further Methods section for definition).

2. Social Connectedness and Wellbeing of Older People

There is a long-standing tradition in the field of gerontology of studying the social contacts of older people. Social contacts are a source of support, contributing to older people's functioning and wellbeing (van Tilburg & Thomese, forthcoming). Research has shown repeatedly how the number of social contacts declines as people grow older (Lang & Carstensen, 1994). Many theories have evolved, either explaining this phenomenon as a reaction to the undesirable conditions unique to old age: those of role loss, societal barriers to social access, and the increasing fragility of older people, - Cumming & Henry, 1961), or by asserting that reduced social contact reflects the means by which older people strengthen emotional ties and optimise their social environments (Carstensen, 1992).

In line with this second perspective, socio-emotional selectivity theory (Carstensen, 1992) suggests that older people are less motivated to engage in emotionally meaningless, but perhaps otherwise functional social contact, and instead make choices based on the potential for emotional rewards derived from social interactions – the older person keeps the level of close social support intact in the course of normal ageing through conserving and investing in close social relationships. They may even have the same number of contacts as formerly, but focus on a more intimate relationship with a few “core” members, making such contacts more emotionally intense (van Tilburg, 1998; Lang & Carstensen, 1994).

As well, within the theory of socio-emotional selectivity of promoting positive support, it has been suggested that individuals adjust their expectations of social contact and evaluate their circumstances in the light of their social environment, so that the occurrence of a goal-achievement gap can trigger declining expectations as a way of elevating the satisfaction that elders derive from the networks they already have (Schnittker, 2007:677). In short, lowering their expectations may be one of the strategies older people use to cope with declining social contacts.

Another perspective offers a life course view, where an individual is seen to be surrounded by a ‘convoy’ of persons with whom they develop relationships from early childhood to old age (Kahn & Antonucci, 1980). During the life course, relationships may end due to transitions such as divorce, death of the spouse or changing jobs. At the same time, other relationships will be maintained or may enter the network as a result of (re)marriage, job transition, or becoming a parent or grandparent. People thereby enter old age with social contacts that reflect earlier transitions in their lives which have affected their opportunities and individual choices to maintain and develop relationships (van Tilburg & Thomese, forthcoming). Thus the dynamics of social contacts in later life lie in the situational and personal characteristics of older people (van der Pas & van Tilburg, 2007).

International research also shows that over an individual's life course, there are times when there is more or less contact and support exchanged within their social network. For example, both parents and adult children may devote less time to intergenerational relationships during the “empty nest” phase, when children go through the transition from youth to adulthood and leave home (Aquilino, 1997; van der Pas, 2006). However, consistent findings have also been reported in numerous studies that partners and children are the most important people within the social network of older people, having more social contact and exchanging both emotional support and instrumental support (Broese van Groenou & van Tilburg, 1996; van Tilburg & van der Pas, 2008). While older people, who have no partner or children available, generally have more contact and receive more support from close relatives, siblings in particular, and from neighbours and friends (Wenger, 2001), the contact and support from these types of relationships seldom reaches the level of intensity of that provided by a spouse and children.

The social contacts of older people can be affected in a number of ways. Firstly, considering the number and source of social contacts, international research has shown similarities in size regardless of gender, e.g. in a Netherlands sample of middle aged and older married men and women, similarities were found in the size and composition of their core networks, the provision of emotional

support to and from the partner, and in the provision of instrumental support to others (Stevens and Westerhof, 2006).

Secondly, the importance of geographical proximity of social contacts is recognised in various empirical studies (Pillemer et al, 2000). For example, intergenerational contact is greatly affected by geographical distance between households, with more distant children interacting less often with parents (Lawton, Silverstein, & Bengtson, 1994). Thus, co-residence of parents with their adult children is associated with higher levels of interaction and more support exchanged than with those living nearby (van der Pas & van Tilburg, 2007; White & Rogers, 1997).

Thirdly, and obviously, the loss of network members through death can impact on the social contacts of older adults. The transition to widowhood is particularly stressful, both immediately following the spouse's death as in the long term (Peeters & Liefbroer, 1997). Research indicates that loneliness is common in the years following the death of a spouse (van Baarsen, 2002). Compared to married people, widowed people are less likely to have a close social contact (or confidant), yet they have more contact and receive greater support from children, friends and relatives (Guiaux, van Tilburg, & Broese van Groenou, 2007; Ha, 2008:306).

Fourthly, declining health is another transition which can reduce social contacts. The number of chronic conditions increases with age (Penninx, van Tilburg, Kriegsman, Deeg, Boeke, & van Eijk, 1997), resulting in functional limitations which impact on the ability to maintain social contacts.

Finally, the loss of a work role is also an important life course transition which can impact on the social contacts of older adults. While retirement may be viewed as a positive experience for some individuals (Gall, Evens, & Howard, 1997), it can also entail the loss of relationships based around the workplace (van Tilburg, 2003).

In these, and many other instances, international research has established many of the ways in which social connectedness can be influenced. Such research has also noted the differences in psychological wellbeing according to the level and type of social contacts and social support, e.g. family contacts and support contribute more to the older person's quality of life than does support from friends (Thompson & Heller, 1990; Yeung & Fung, 2007). People who have intimate companions in later life (usually their spouse) have higher levels of life satisfaction (Payne, Mowen & Montoro-Rodriguez, 2006), because they feel valued, needed, and a sense of belonging, all of which can be seen as indicators of social support. However, for those who do not value family relationships, social contact and support from family members may not be welcome because of the perception of being dependent on them. There are also studies which have shown that friendship is more important than family relationships in predicting psychological wellbeing of older people (Fiori, Antonucci, & Cortina, 2006).

3. New Zealand Research on Social Connectedness and Wellbeing

There is very little New Zealand research which explores either the level of social connectedness that older people have or the association of such social connectedness with the wellbeing of older people. Historically, the level of social connectedness has instead been associated almost solely with the level of social support. An early study of 249 older people aged 65 years and over sought information on the extent to which older people expected their adult children to support them (Koopman-Boyden, 1978). The results showed that 81% expected their children to support them and a third indicated that the assistance they valued the most was "social contact and company" (32%) (p.59).

In a more recent study, Petrie summarised some of the findings from the 2000 Survey of Older People (2000), the 2001 Census and other publications of Statistics New Zealand regarding "social contacts". He noted that "fifty-five percent of women aged 65+ had daily contact with close friends and family compared with 44% of men aged 65+" (2006:313). He also found that about 1 in 12 people aged 65+

provided regular financial assistance to extended family members (i.e. those outside the household). This ranged from 12% for those aged 65-69 to 4% for those aged 85+. Men provided more financial assistance than women (Petrie, 2006: 313).

The Ministry of Social Development's 2008 Social Report showed that people aged 65 years and over had family or friends over for a meal less often than adults aged 18 to 64 years. 71.1% of the younger group, as compared with 63.7% of the older group had had family and friends over for a meal in the last month. There was however an income related difference within the 65+ age-group. Of those who were in employment or had other income above New Zealand Superannuation, 79.7% had regular contact with family/friends, while those with little or no other income above NZ Super had 61.8% contact (Ministry of Social Development, 2008:114).

In the Positive Ageing Indicators Report (2007) by the Ministry, reference is made to the Quality of Life Survey (TNS, 2007) which showed that people aged 65 years and over were more likely to feel a sense of community than younger people (18-64). Around seven out of ten older people reported that they felt a sense of community with others in their local community. More than three quarters of older people indicated that it is important for them to feel a sense of community with others (2007: 109). The main types of social networks older people said they belonged to were based around their family (66 percent), a hobby (47 percent), the community (44 percent) and church (36 percent) (2007: 109). In this respect, family relationships are a major source of contact and support for older people (van Tilburg & van der Pas, 2008). A qualitative New Zealand study on social capital found that families are the most important connection for everybody (Stephens, 2008). The results showed that particularly adult children and grandchildren played a central role in the lives of older people, and middle-aged people maintained regular contact with their older parents (Stephens, 2008).

The lack of New Zealand research on social connectedness for this age group is obvious. It is hoped that the focus on the subject in this chapter offers new research evidence that will provide a foundation for future studies on this topic.

4. Method

The data were collected as part of the Enhancing Wellbeing in an Ageing Society research programme. The sample included 1,680 New Zealand respondents (46.7% men and 53.3% women) aged between 65-84 years, who were interviewed using computer assisted telephone interviewing (refer to Chapter 3, Methodological Background, for further details).

Social connectedness was measured in two general ways: social contact, and participation in community organisations.

4.1 Social Connectedness

Social contact was measured by the number, frequency, and type of social contact. To obtain information on the number of social contacts, the older person was asked: "Who would be the people (other than your partner/spouse) you have frequent and important contact with, for your wellbeing?" The size of the social network was determined by the number of people who were named. Of the first 14 social contacts that the respondents reported, questions were asked on the frequency and type of contact. Respondents were asked whether the frequency of contact was: daily, several times a week, weekly, fortnightly, monthly, or less frequently than monthly. Respondents were also asked whether the contact was in person, by phone, letter, or email.

4.2 Participation in Community Organisations

Participation in organisations was measured by asking respondents whether they participated in a list of 13 different organisations or clubs in the month before the interview, with a response of either 'Yes' or 'No'. The specified organisations or clubs were: hobby association, community or service

organisation that help people, religious or church organisation, sports club, Returned Services Association (RSA) or workingmen's clubs, women's organisation, other club/organisation, trade union, political party, school organisation, choir, drama or music society, ethnic (Māori) organisation and other ethnic organisation. The participants were also asked if they had a leadership role in any of the organisations in which they participated.

4.3 Satisfaction with Contacts and Wellbeing

Two measures of satisfaction with contacts were obtained through the dichotomous response (satisfied/dissatisfied) to the question as to whether the respondent was satisfied with their contact with family, and whether they were satisfied with their contact with other people.

The overall wellbeing of the respondents was measured by asking: "How satisfied are you with your life as a whole these days?" The response categories ranged from 1 'very dissatisfied' to 5 'very satisfied'. The average level of overall wellbeing was 4.3 (SD = .85) (see Chapter 3, Methodological Background, for a discussion of the Wellbeing Scale – the World Values Survey).

4.4 Other Measures

To measure the socio-demographic characteristics, the following variables were examined: gender, age, educational and income level, living arrangements, number of children, health, and level of urbanisation. Four age categories were distinguished: ages 65-69 years, 70-74, 75-79, and 80-84. Respondents were asked their highest completed educational qualification. The responses were recoded into four categories: up to primary education, secondary education, vocational or trade qualification, and university qualification (for further explanation see Chapter 5 Education). Income level was based on the 'total personal income before tax' (in income bands) and was divided into five categories: up to \$15,000, \$15,001-20,000, \$20,001-30,000, \$30,001-40,000, and \$40,001 or more.

'Living arrangements' was a composite variable of partner status and household composition. Within this variable five categories were distinguished, namely: (1) respondents living with their partner (or spouse) (and others); respondents living alone (in a one-person household), and: (2) never-married; (3) divorced or separated, (4) widowed. Finally, there was a category of (5) respondents living with others, related and/or unrelated (without a partner).

Health was measured by asking respondents to assess, on a five point scale, their own health status. Three categories of self-rated health were distinguished: poor/fair, good, and very good/excellent. Finally, the level of urbanisation was divided into four categories: urban areas, outskirts of a city, small town, and rural area.

4.5 Procedure

In the descriptive analyses, bivariate associations were investigated between gender, age, marital status, educational and income level, living arrangements, number of children, health, and level of urbanisation on the one hand and the number of social contacts and participation in organisations on the other. Gender, age, educational and income level, living arrangements, number of children, health, and level of urbanisation differences were also analysed for frequency and type of contact. Lastly, associations were investigated between number of social contacts, satisfaction with these social contacts, participation in organisations, and wellbeing. The analyses include frequency distributions where the differences between categorical variables were examined using chi-square tests. The data has been weighted to make the results representative of the New Zealand population aged 65 to 84, as noted in the Methods chapter.

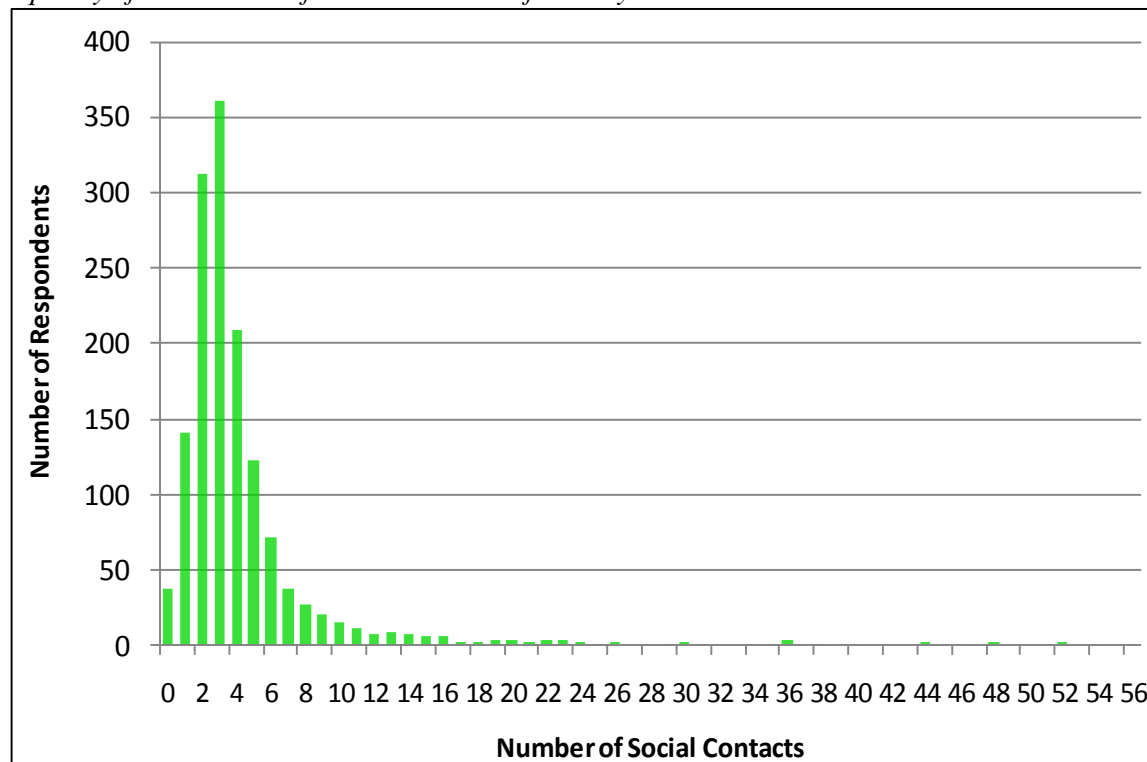
5. Findings

5.1 Number of Social Contacts

The 1450 respondents who answered the question asking for their “frequent and important contacts” nominated 6,592 social contacts, which gave an average of 4.6 contacts each ($SD = 5.8$). Using the weighted data to make it representative of the New Zealand population, the mean is 4.5. There was a wide variation around the mean ($SD = 5.9$), as illustrated in Figure 12.1, with 38 respondents not nominating any social contacts at all, and 141 respondents nominating only one person. However, some respondents listed a large number of contacts, with a maximum of 56. The mode was 3 social contacts.

Figure 12.1

Frequency of the Number of Social Contacts of 65-84 year-olds



5.2 Differences in the Number of Social Contact by Gender, Age, and Other Variables

The number of social contacts was similar for men and women ($t_{(1445)} = 1.01$, $p = .31$). For men the mean number of social contacts was 4.7 ($SD = 6.8$) and for women 4.4 ($SD = 4.9$).

Bivariate analyses showed no significant differences in the number of social contacts according to age category¹⁸⁰. Those who were aged 65-69 had a mean number of social contacts of 4.3 ($SD = 5.5$), those 70-74 had a mean number of 4.9 ($SD = 6.3$), 75-79 year olds had a mean number of 4.6 ($SD = 6.0$) and the 80-84 year olds had a mean number of 4.3 ($SD = 6.0$).

There were no significant differences in the number of social contacts of the respondents by educational and income level, living arrangements, the number of children of the respondents, or level of urbanisation.

5.3 Frequency and Type of Social Contact

Respondents reported on their frequency and type of contact with up to 14 people in their social networks. Such contacts did not include their spouse. 41% of the respondents had daily contact with

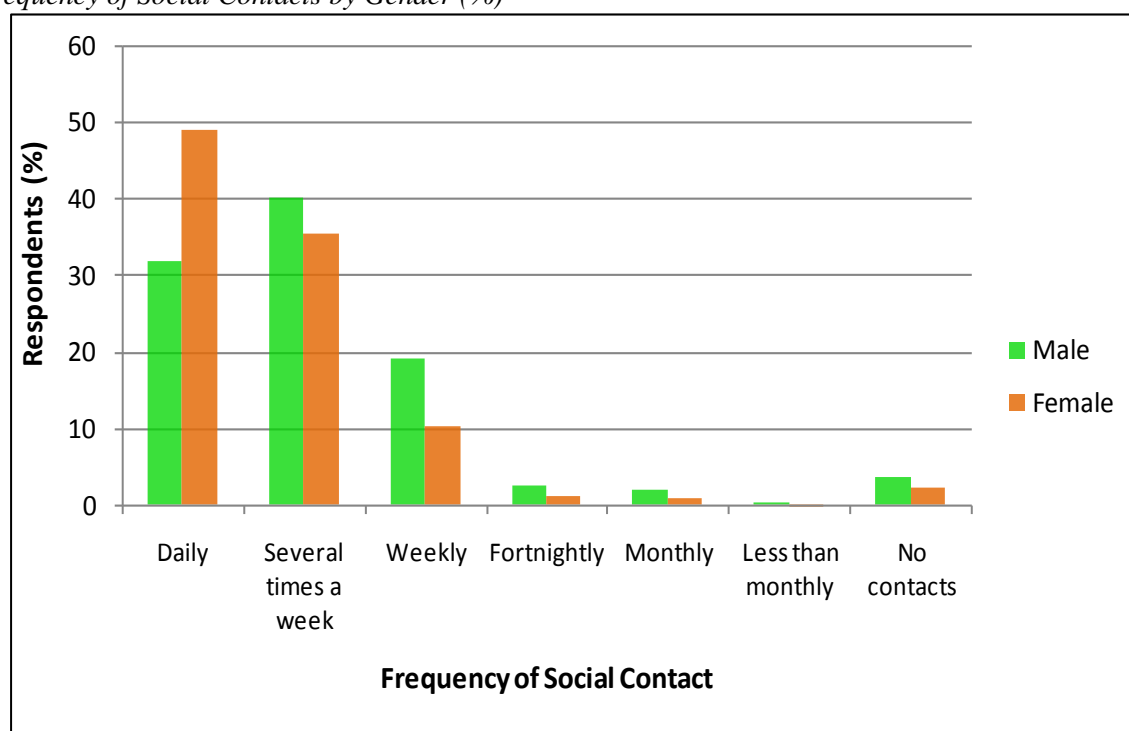
¹⁸⁰ $F_{(1446,3)} = 0.8$, $p = .52$

one or more people in their social network, 38% had contact several times a week and 14% had contact on a weekly basis. This left 4% who only had contact fortnightly or less with one or more people in their social network and 3% who had no contact at all.

There was no significant association between frequency of contact and the different age categories, however, there was a significant association with gender (Figure 12.2)¹⁸¹. Women had more contact on a daily basis with at least one person in their social network than men. In contrast men had more contact on a weekly basis than women.

Figure 12.2

Frequency of Social Contacts by Gender (%)



A significant association was found between frequency of contact and educational and income level. Respondents with a lower educational level were more likely to have daily contact than those with a higher educational level (results not shown)¹⁸². More highly educated older people were more likely to have weekly contact (or less). Further, respondents with a lower personal income were more likely to have daily contact than those with a higher income¹⁸³. Respondents with a higher personal income were more likely to have weekly contact compared to those with a lower personal income.

No significant association was found between frequency of contact and level of urbanisation. However, frequency of contact was significantly associated with living arrangements (Figure 12.3)¹⁸⁴. As expected, respondents living with others were most likely to have daily contact. This is followed by widowed respondents living alone. Interestingly, those living with a partner were less likely to have contact on a daily basis, perhaps recognising that they already had an existing daily contact. Respondents who were divorced and living alone were the least likely to have contact when compared with the other household composition types, thereby creating a risk of isolation.

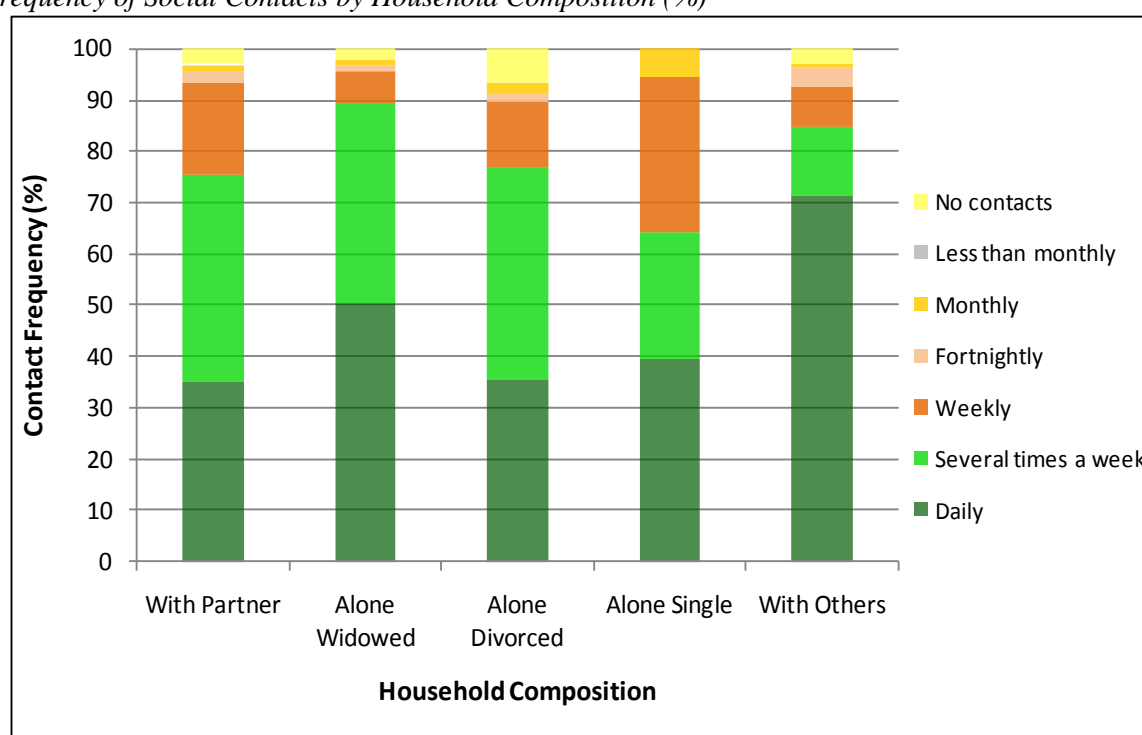
¹⁸¹ $\chi^2 = 65.5, p < .001$

¹⁸² $\chi^2 = 50.9, p = .001$

¹⁸³ $\chi^2 = 61.0, p = .001$

¹⁸⁴ $\chi^2 = 127.9, p = .001$

Figure 12.3
Frequency of Social Contacts by Household Composition (%)



Finally frequency of contact was also associated with self-rated health (results not shown)¹⁸⁵. Respondents who had a poor or fair self-rated health were more likely to have daily contact than those with an excellent or very good self-rated health, perhaps recognising that they had contact with a regular carer. Conversely, respondents with an excellent or very good self-rated health were more likely to have the less frequent contact of several times a week, compared to those with a lower self-rated health.

Looking at the type of contact, older people in general had contact predominately in person and on the phone (46%). Another 25% had contact in person only and 19% had contact via the phone only. The remaining 10% consisted of 3% who had contact in person, by phone and email, 2% who had contact only via phone and email, 2% who had multiple combinations of contact¹⁸⁶ and 3% did not have any contact at all.

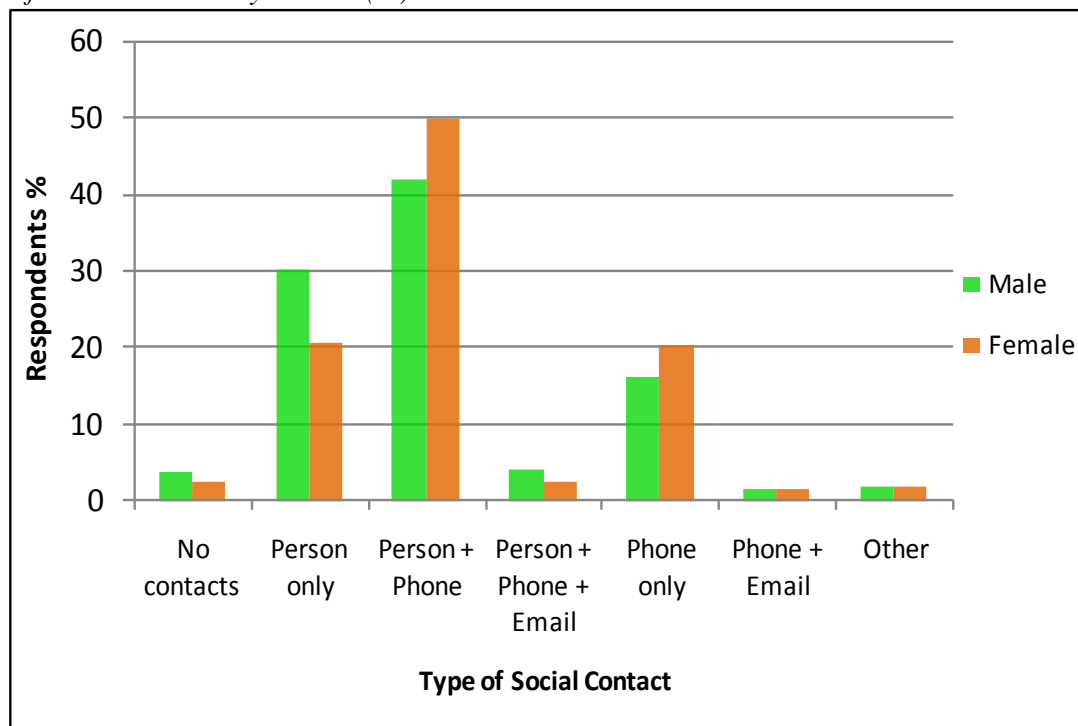
As with frequency of contact, there was no association between type of contact and the different age categories. However there was a significant association with gender (Figure 12.4)¹⁸⁷. Women more often had contact in person and on the phone while men more often had contact in person.

¹⁸⁵ $\chi^2 = 38.5$, $p = .001$

¹⁸⁶ Other combinations which gave very small numbers and were combined to form 'other' category'. These were person+letter, person+email, person+phone+letter, person+phone+letter+email, phone+letter, phone+letter+email, letter only, letter+email, and email only.

¹⁸⁷ $\chi^2 = 29.8$, $p = .001$

Figure 12.4
Type of Social Contacts by Gender (%)



No significant association was found between type of contact and income level, health or level of urbanisation. However, a significant association was found between type of contact and educational level (results not shown)¹⁸⁸. Respondents with a lower educational level were more likely to have contact in person than those with a higher educational level, while those with a university qualification were more likely to have contact in person as well as phone and/or email contact.

This is an interesting finding in that older people with a lower educational level are more likely to have daily contact with others, while those with a higher education have contact in a variety of ways - in person, phone, by email (as reported before). Thus, overall those with a lower educational level are more likely to have 'closer' contact with others - being daily and in person, while those with a higher education had more 'distant' types of contact, being less frequent (weekly), and in a variety of ways - in person, phone, by email.

The type of contact was also associated with living arrangements (results not shown)¹⁸⁹. Respondents who were single and living alone or living with others were more likely to have in person contact only compared to other household composition types. Respondents who were widowed and living alone were more likely to have contact in person and on the phone or on the phone only. Respondents who were divorced and living alone and those living with a partner were more likely to combine in person contact or phone contact with email contact.

5.4 Satisfaction with Social Contacts

Two measures of satisfaction with social contacts were established by the dichotomous response "satisfied" or "dissatisfied" to the questions of whether the respondent was satisfied with contact with his/her family, and whether the respondent was satisfied with contact with other people.

Overall levels of satisfaction with both types of contact were high. 95.8 percent of the respondents reported that they were satisfied with their family contacts (4.2 percent were dissatisfied), and 97.5

¹⁸⁸ $\chi^2 = 44.3, p < .001$

¹⁸⁹ $\chi^2 = 50.7, p < .001$

percent of respondents reported that they were satisfied with contact with other people (2.5 percent were dissatisfied).

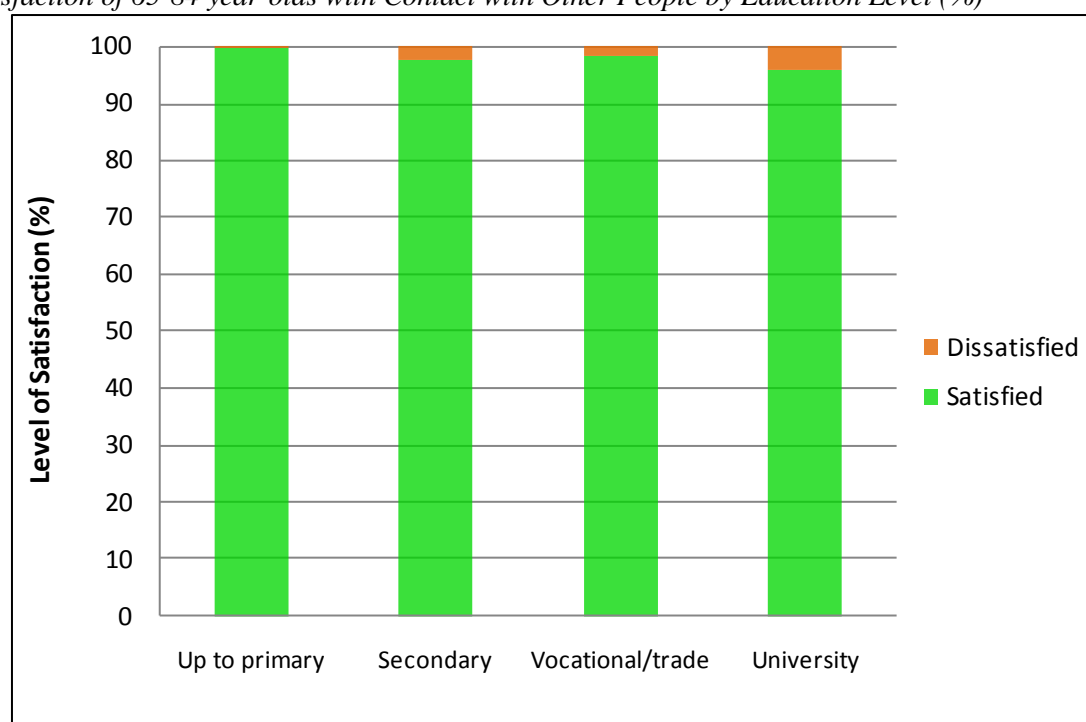
5.5 Differences in the Level of Satisfaction with Social Contacts, by Gender, Age, and Other Variables

There were no differences in the satisfaction level of older people either with contact with their family or contact with other people between genders,¹⁹⁰ or between different age groups¹⁹¹ (data not shown). Satisfaction with contact with family was also not significantly associated with education¹⁹² (data not shown).

However, the satisfaction of older people with contact with *other people* was significantly associated, negatively, with education level – the higher the education level, the lower the level of satisfaction with contacts with other people¹⁹³. For older people with a university qualification, Figure 12.5 shows that 4.3 percent were dissatisfied with contact with other people compared to 1.6 percent with vocational/trade qualification, 2.4 percent secondary education, and 0.5 percent up to primary education. Such a finding requires further research as to the reasons for this association – beyond the possibility that those with higher education might have more diverse and perhaps more demanding expectations of social relationships.

Figure 12.5

Satisfaction of 65-84 year-olds with Contact with Other People by Education Level (%)



Reported satisfaction with contact both with family and with other people was significantly associated with living arrangements (see Figures 12.6 and 12.7), in that those who lived with others tended to be more satisfied with their social contacts of whatever type than those living alone (with the exception of the widowed)¹⁹⁴.

Figure 12.6

¹⁹⁰ $\chi^2 = 1.8$, $p = .18$ for satisfaction with contact with family; $\chi^2 = 1.1$, $p = .29$ for satisfaction with contact with other people

¹⁹¹ $\chi^2 = 2.0$, $p = .58$ for satisfaction with contact with family; $\chi^2 = 1.8$, $p = .62$ for satisfaction with contact with other people

¹⁹² $\chi^2 = 1.7$, $p = .64$

¹⁹³ $\chi^2 = 7.8$, $p = .05$

¹⁹⁴ $\chi^2 = 66.8$, $p < .001$ for satisfaction with contact with family; $\chi^2 = 24.0$, $p < .001$ for satisfaction with contact with other people

Satisfaction of 65-84 year-olds with Contact with Family by Household Composition (%)

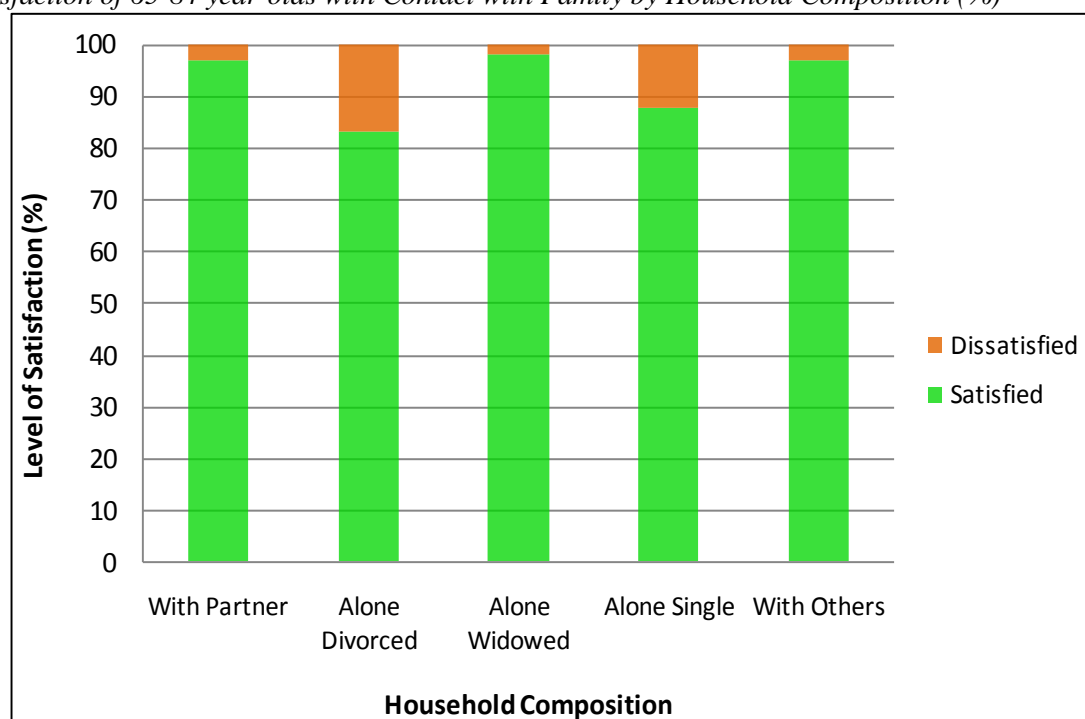
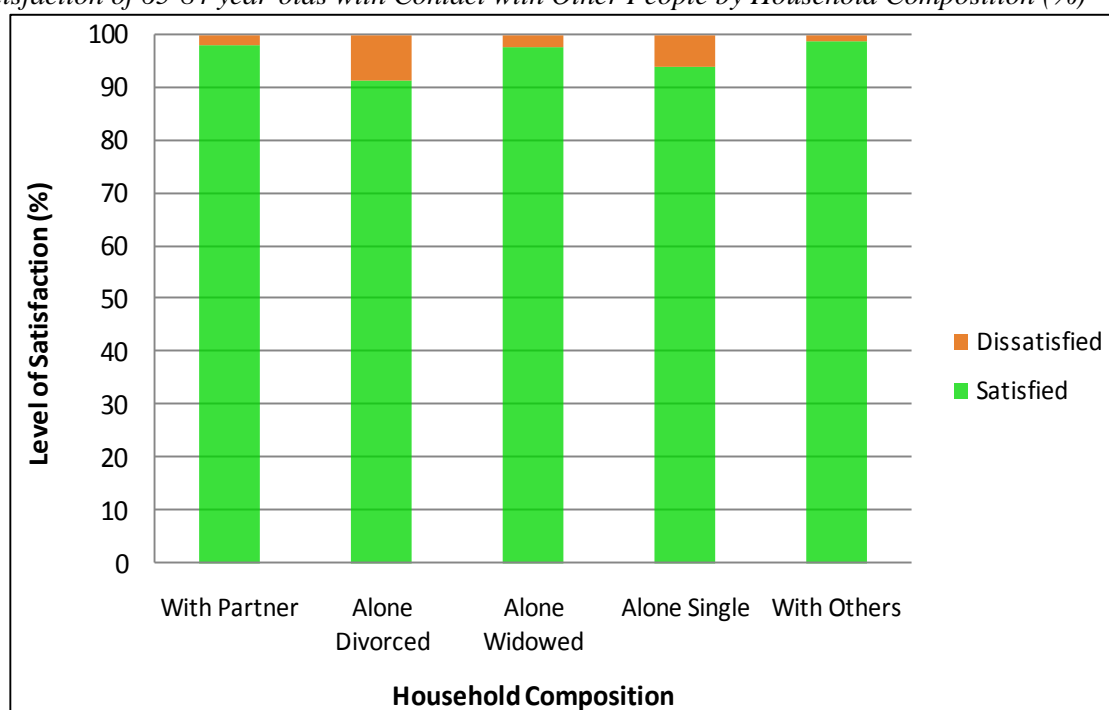


Figure 12.7

Satisfaction of 65-84 year-olds with Contact with Other People by Household Composition (%)

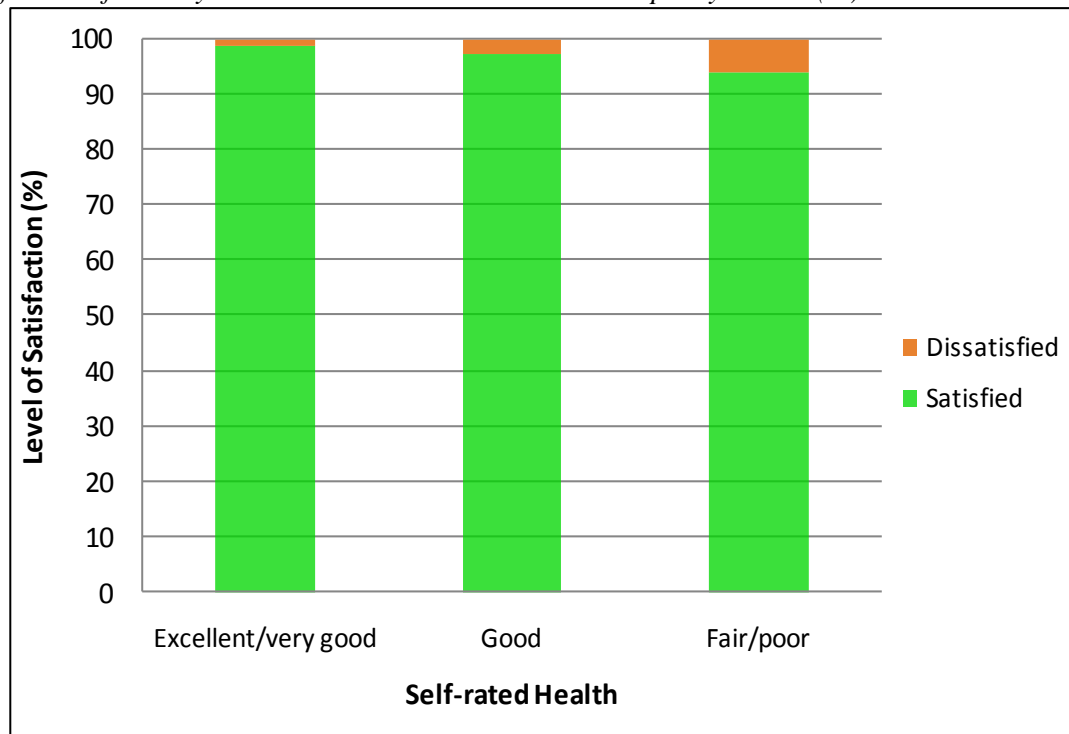


Thus, older people who were divorced/separated or single and who lived alone were less satisfied with contact with their family and with other people, compared to those with a partner or in a shared household. However, for the widowed who lived alone their level of satisfaction with contacts with their family and with others was higher than those in other household composition types. Overall, the highest level of satisfaction with both their family and other social contacts was held by those who lived with a partner or with others, along with the widowed who presumably had had experience of living in such households.

Reported satisfaction with contacts with family was not associated with the health status of the older person¹⁹⁵. However, reported satisfaction with contacts with other people, was significantly associated with health (see Figure 12.8), with those older people who enjoyed better health being more satisfied with their contacts with others than older people in poorer health¹⁹⁶.

Figure 12.8

Satisfaction of 65-84 year-olds with Contact with Other People by Health (%)



This is an interesting finding in that those with poorer health had more frequent social contacts with others (daily rather than several times a week or less) than those with excellent/very good health (as reported before). Thus, overall those with good health had less frequent contact with others but higher satisfaction with these contacts, while those with poorer health has more frequent contact with others, but had lower satisfaction with these contacts.

5.6 Participation and Leadership in Community Organisations

To further examine the social connectedness of older New Zealanders, this study was also interested in the extent to which older people participated in a number of community organisations and took leadership roles.

The average number of organisations that older people participated in was 1.8 (SD = 1.5). Almost a quarter of the respondents did not participate in any organisations at all (24%) and another quarter of the respondents participated in only one organisation (25%, results not shown).

Information on the different types of community organisations in which respondents were involved is provided in Table 12.1. Of all the community organisations listed, older people were most likely to be involved in some form of hobby (36%). Involvement in community services (32.7%), religious organisations (26.5%) and in sport (24.4%) also ranked highly.

Table 12.1

¹⁹⁵ $\chi^2 = 4.9$, $p = .09$

¹⁹⁶ $\chi^2 = 17.7$, $p < .001$

Level of Participation and Leadership in Community Organisations (%)

		Leadership Role ¹⁹⁷
Hobby	36.1	14.4
Community organisation	32.7	30.3
Religious organisation	26.5	24.8
Sports Club	24.4	23.8
RSA, workingmen's club	13.7	8.2
Women's organisation	9.3	22.4
Other club, organisation	10.8	8.3
Choir, drama, music society	8.7	19.3
Trade union	5.4	15.6
Political party	4.2	5.7
School	3.1	19.6
Ethnic (Māori) organisation	2.4	25.0
Other ethnic organisation	0.5	0

With respect to taking a leadership role in these organisations, the highest participation in leadership roles was in community services (30%, of those who were involved in a community or service organisation), with almost quarter of those active in a religious organisation undertaking a leadership role (24.8%), and almost a quarter of those participating in a sports club taking a leadership role (23.8%). There was also a high level of leadership exhibited by older people who were members of women's organisations (22.4%) and Māori ethnic organisations (25%). In both these types of organisations however, relatively few older people were involved (9.3% and 2.4%). Looking at both the level of participation and the undertaking of a leadership role, few of the older people were leaders in a school organisation, political party, trade union or ethnic organisation other than Māori.

5.7 Differences in Participation in Community Organisations

To examine the influence of a number of possible determinants of participation in organisations, gender, age, educational and income level, health and living arrangements of older people were examined.

Women were slightly more actively involved in organisations than were men ($M = 1.9$ and $M = 1.7$ respectively¹⁹⁸) (Figure 12.9).

¹⁹⁷ % of the respondents active in each community organisation

¹⁹⁸ $t_{(1678)} = -2.5, p < .05$

Figure 12.9
Participation in Community Organisations (out of thirteen) by Gender (%)

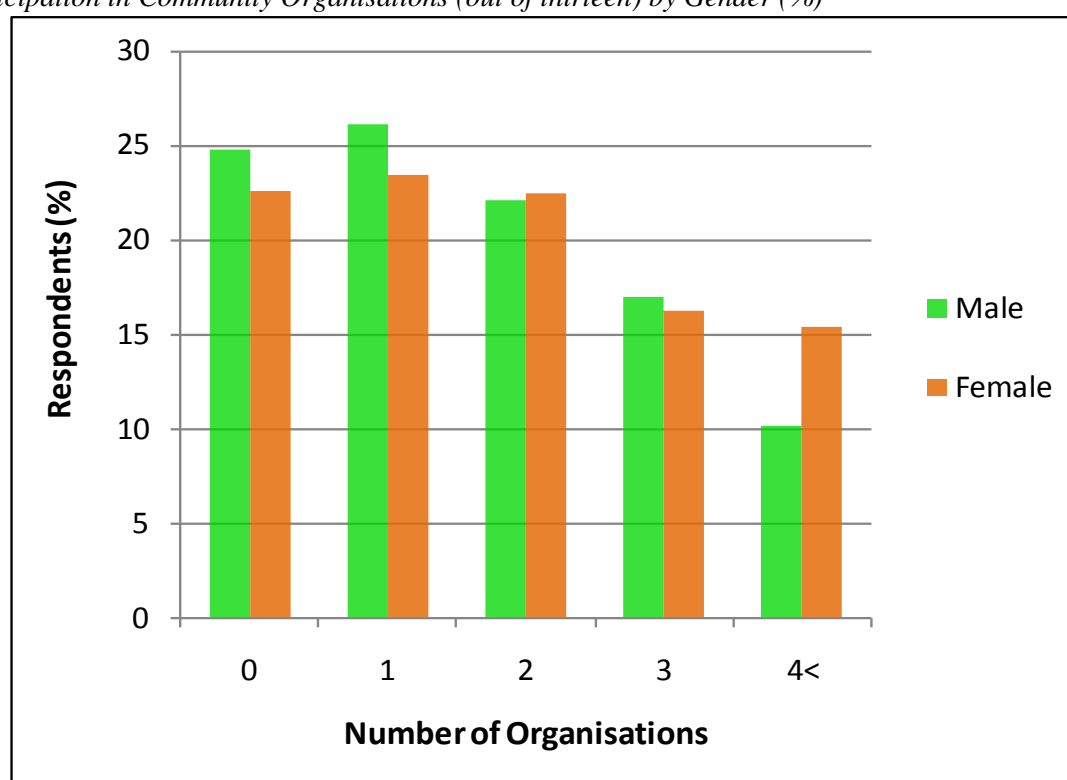


Table 12.2 shows that women were significantly more active than men in hobbies, community organisations, women's organisations and religious organisations.

Table 12.2
Participation in Community Organisations by Gender (%)

	Males	Females	
Hobby	31.8	39.7	***
Community organisation	30.1	34.9	*
Religious organisation	21.5	30.9	***
Sports club	28.3	21.1	***
RSA, workingmen's club	21.6	6.9	***
Women's organisation	0.3	17.1	***
Other club/organisation	9.7	11.6	
Choir, drama, music society	7.4	9.7	
Trade union	6.9	4.0	**
Political party	4.1	4.1	
School	2.4	3.6	
Ethnic (Māori) organisation	2.9	1.9	
Other ethnic organisation	0.9	0.2	

* $p < .05$, ** $p < .01$, *** $p < .001$

Men were significantly more active than women in sports clubs, the Returned Servicemen's Association (RSA) /workingmen's clubs and in a trade union. Interestingly, older women were involved in traditionally men's' clubs such as the RSA and workingmen's clubs (6.9%), while few men ventured into the traditional women's organisations (0.3%).

There was no significant association between participation in the different types of organisations and age, except for participation in 'other clubs or organisations'. The results showed that the 80-84 year

old group participated more in ‘other clubs or organisations’ than those in the younger age categories, showing perhaps a wider diversity of interests.¹⁹⁹

Older people who had a higher self-rated health had a higher participation rate in organisations (M = 2.0) than those who had a lower self-rated health (M = 1.3)²⁰⁰. Those who had a higher self-rated health were more involved in hobbies, community organisations, religious organisations, sports clubs, and other clubs or organisations (Table 12.3).

Table 12.3
Participation in Different Types of Organisations by Health (%)

	Fair/poor	Good	Very good/ Excellent	
Hobby	32.2	33.9	40.0	*
Community organisation	24.5	33.1	35.9	**
Religious organisations	18.3	28.5	27.9	**
Sports club	11.4	22.8	29.9	***
RSA, workingmen’s club	12.2	18.0	12.1	**
Women’s organisation	7.0	8.1	11.1	
Other club, organisation	6.1	10.5	12.6	*
Choir, drama, music society	5.2	8.9	9.6	
Trade union	3.9	5.3	6.1	
Political party	4.8	3.8	4.5	
School	1.3	4.6	2.9	*
Ethnic (Māori) organisation	0.9	4.4	1.8	**
Other ethnic organisation	0	0.4	0.8	

* $p < .05$, ** $p < .01$, *** $p < .001$

In contrast, little difference was found in the self-rated health and the involvement in women’s organisations, choir, drama or music society, trade unions, political party or other ethnic clubs or organisations, suggesting that older people could remain socially connected in these organisations regardless of their health.

The participation rate in organisations was also significantly associated with both educational and income level. Respondents with higher educational levels were more involved in organisations (M = 2.1) than those with lower educational levels (M = 1.6)²⁰¹. Higher educated respondents were more involved in hobbies, community organisations, choir, drama or music society, and trade unions (Table 12.4).²⁰²

¹⁹⁹ $\chi^2 = 10.9, p < .05$

²⁰⁰ $F_{(2,1601)} = 18.2, p < .001$

²⁰¹ $F_{(3,1488)} = 8.9, p < .001$

²⁰² The number for other ethnic organisations was too low to interpret the association found.

Table 12.4

Participation in Different Types of Organisations by Education Level (%)

	Up to primary	Secondary	Vocational/trade	University	
Hobby	28.1	35.0	41.5	42.5	**
Community organisations	29.1	30.4	37.0	43.9	***
Religious organisations	27.0	25.5	30.0	27.6	
Sports club	24.5	26.0	22.0	29.9	
RSA, workman's club	14.4	12.3	17.4	10.7	*
Women's organisation	6.6	8.5	12.3	7.9	
Other club, organisation	6.7	11.8	11.7	9.8	
Choir, drama, music society	9.7	7.2	8.5	14.0	*
Trade union	3.1	2.7	8.1	10.7	***
Political party	4.6	3.1	4.7	7.0	
School	1.0	3.0	2.9	5.1	
Ethnic (Māori) organisation	2.6	1.9	2.7	4.2	
Other ethnic organisation	1.5	0.2	0	2.3	***

* $p < .05$, ** $p < .01$, *** $p < .001$

The results of the association between participation in organisations and income level were similar to the findings on educational level. The average participation rate in organisations was the highest for respondents who had the highest personal income ($M = 1.7$), in comparison to those with the lowest personal income ($M = 1.4$).²⁰³

5.8 *Number of Social Contacts of Older People, Satisfaction with their Contacts, Participation in Organisations, and Overall Wellbeing*

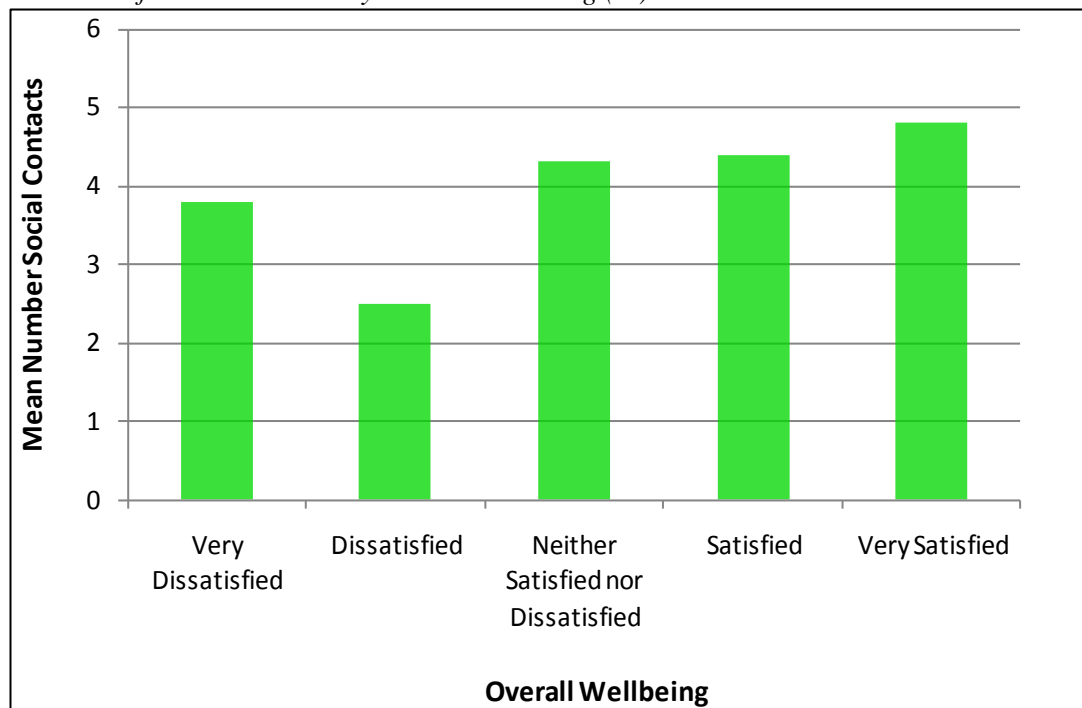
The research was interested in finding any relationship between number of social contacts, satisfaction with their contacts, participation in organisations, and overall wellbeing.

Firstly, the mean number of social contacts of older people was not significantly associated with their wellbeing, that is, older people had on average between 3-5 social contacts, irrespective of whether they were dissatisfied or satisfied with their life in general (see Figure 12.10).²⁰⁴

²⁰³ $F_{(4,1143)} = 7.6, p < .001$

²⁰⁴ $F_{(1445,4)} = 1.5, p = .19$

Figure 12.10
Mean Number of Social Contacts by Overall Wellbeing (%)



Secondly, and somewhat differently from the previous lack of association between the mean number of social contacts and wellbeing shown in Figure 12.10, the level of satisfaction among older people with their contacts with family and with other people had a close association with their overall wellbeing (see Figures 12.11 and 12.12).

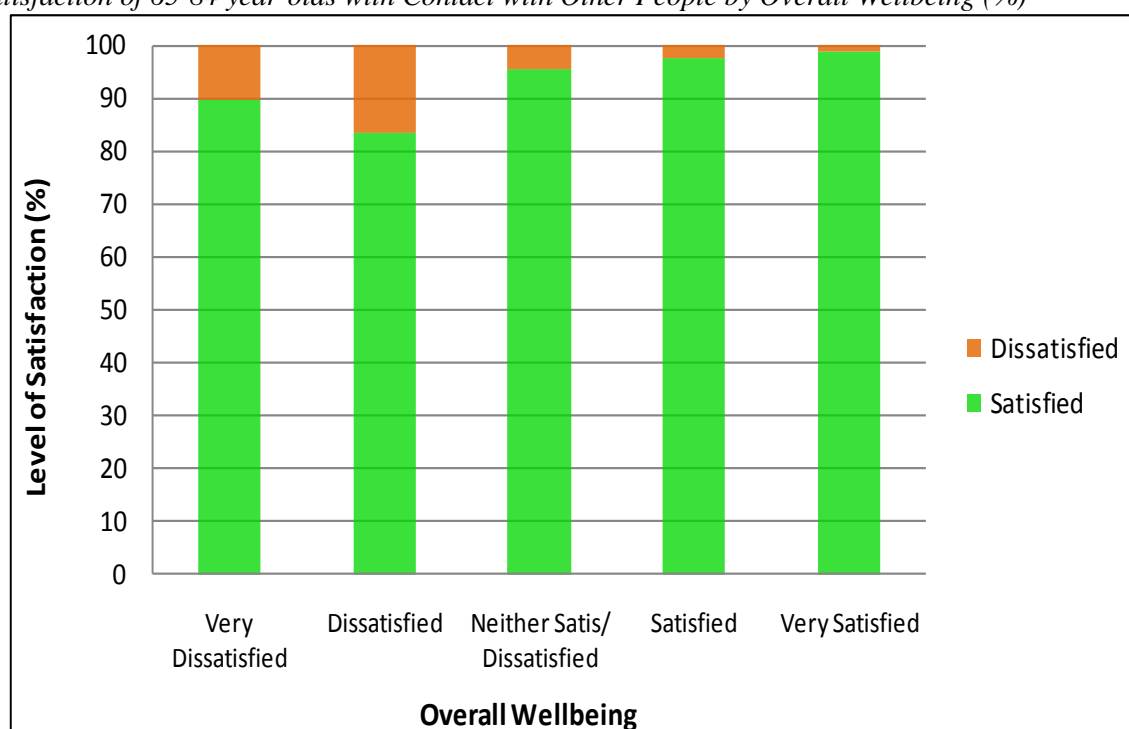
Figure 12.11
Satisfaction of 65-84 year-olds with Contact with Family by Overall Wellbeing (%)



Those with a high level of satisfaction with contact with family and with other people had a significantly higher level of overall wellbeing²⁰⁵.

Figure 12.12

Satisfaction of 65-84 year-olds with Contact with Other People by Overall Wellbeing (%)



Thirdly, the participation rate in community organisations was also significantly related to overall wellbeing. Older people who were involved in a larger number of organisations had a higher overall wellbeing (see Figure 12.13)²⁰⁶.

Further to this, the results of the association between participation in different types of community organisations and overall wellbeing show that older people who were involved in a community organisation or sports clubs were significantly more satisfied with their overall wellbeing (results not shown).²⁰⁷ Also, a significant association was found between involvement in a community organisation and satisfaction with contact with other people. Older people who were involved in a community organisation were significantly more satisfied with the contact with other people (results not shown)²⁰⁸.

²⁰⁵ $\chi^2 = 24.6$, $p < .001$ for satisfaction with contact with family; $\chi^2 = 46.1$, $p < .001$ for satisfaction with contact with other people

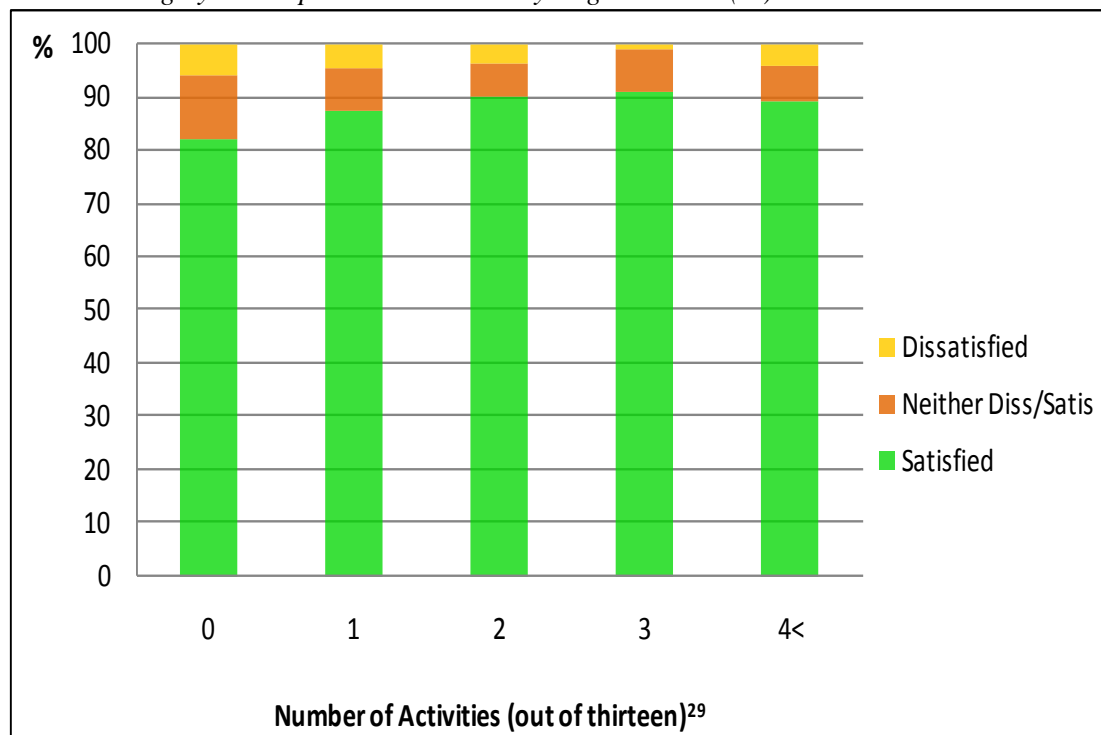
²⁰⁶ $\chi^2 = 22.7$, $p < .01$

²⁰⁷ Participation in 4 or more community organisations was collapsed into one category.

²⁰⁷ Only involvement in community services and sports clubs was significantly associated with overall wellbeing ($p < .01$ and $p < .05$ respectively)

²⁰⁸ $\chi^2 = 6.7$, $p < .01$

Figure 12.13
Overall Wellbeing by Participation in Community Organisations (%)



6. Conclusion

This chapter set out to consider the dimensions of social connectedness among 65-84 year-olds in New Zealand in 2007, by investigating their social contacts and satisfaction with these contacts, along with their level of community participation, and the association of these forms of social connectedness with wellbeing.

In measuring the number of social contacts, the respondents overall had an average of 4.5 “frequent and important” contacts, ranging from no contact to 56 contacts. There were no differences in the number of social contacts (either with family members or with other people) by a wide array of variables (age, gender, marital status, education, income, living arrangements, the number of children of the respondents or rural/urban location). The explanation for the different number of social contacts with the family or other people of 65-84 year-olds must therefore fall outside these variables. There was also no relationship between the number of social contacts of older people and their wellbeing.

It is difficult to compare the level of social contacts with other surveys, as the definition of what constitutes a “social contact” varies widely. The inclusion/exclusion of a spouse within the definition of social contacts also varies. In this research, which did not include the spouse in the definition of social contacts, the average of 4.5 is below the range that has been found in a large number of international studies which have used similar delineation methods. For example, in an Australian study of older people the average number of social contacts was 6.6 (Mugford & Kendig, 1986).

This New Zealand research also found a high level of satisfaction with these social contacts, with almost 96% of the respondents expressing satisfaction with their family contacts and over 97% expressing satisfaction with their contacts with other people, giving a picture of “happy families” and “happy friendships” among this older age-group.

In considering the determinants of the level of satisfaction, it was found that the older person's satisfaction with their family contacts was related to living arrangements only, but not related to age, gender, education or health, while satisfaction with their contacts with other people was related to living arrangements, health and education, but not to age and gender.

Thus it would appear that the level of satisfaction with family contacts was intrinsic and not dependent on other variables – perhaps where social contacts with family are being largely prescribed, family members were likely to feel that they had an obligation to undertake such social contacts. Satisfaction was achieved in meeting this obligation. However, the intrinsic motivation may also stem from love or a genuine wish to be close to the older person. Satisfaction then becomes more a reflection of the quality of the relationship itself. On the other hand, respondents seemed more discriminating in their satisfaction with other people, with it being reliant on a greater alignment in life style through health and education.

It is notable that living arrangements were associated with both the older persons' satisfaction with family contacts and with their contacts with others. With both types of social contact, those who lived with others expressed a higher level of satisfaction with their social contacts than those who lived alone. The major exception was for widowed people who lived alone and who also expressed a high level of satisfaction with all of their social contacts. It may be that among this older age-group those who are single or divorced and who live alone have some difficulty in maintaining social contacts, while those who are widowed and live alone find it easier to be accepted and maintain their previous social contacts.

The research revealed that there was an association between the respondents' satisfaction with their social contacts and wellbeing. Thus, while the *number* of social contacts did not influence the older persons' wellbeing, their *satisfaction* with those social contacts, or the quality of those relationships, did have a bearing on their wellbeing.

This is an interesting distinction in that it is slightly different from much of the international research which suggests that both the number of social contacts and satisfaction with these contacts is important to wellbeing. The New Zealand finding provides a foundation for the possibility that this age-group, at least, recognises that the quality of a social contact, or relationship, is more important than the number of such contacts.

Turning to the level of community participation as another indicator of social connectedness, the research revealed a high level of little or no involvement in the listed community organisations (almost a quarter of the respondents had no involvement, a further quarter were involved in only one organisation), with the average number of organisations that older people participated in being 1.8, ie one or two organisations. Nevertheless within a number of these organisations, around a quarter of the participating respondents were in a leadership role.

This is also an important finding in that it clearly shows the high level of commitment many older people continue to make to community organisations, especially community services, religious organisations and sports clubs. It is also an indicator of how the expertise and status of these older people is being recognised and the high level of social integration that they have within their own communities.

The level of participation in community organisations overall and their choice of organisation was related to gender, health, education and income, in that the better the respondent's health, level of education or income, the higher their participation. The research also revealed that there was a relationship between the respondents' level of participation in community organisations and their level of wellbeing.

Overall, the research on social connectedness suggests that while the number of social contacts that older people have with their family or with other people is not related to their level of wellbeing, their

satisfaction with those contacts does have a significant influence on their wellbeing. Consistent with the socio-emotional selectivity theory, it is not sufficient to simply have a wide network of social contacts (as some did). Instead, it is the satisfaction that older people have with these contacts that enables them to have a higher level of overall wellbeing. In other words, the quality of the older persons' social contacts or relationships is more important than the number or quantity of their social contacts (Carstensen, 1992). The decline in the number of social contacts of older people as they age may therefore not be such a problem, where the quality of those contacts can be maintained.

A further indicator of the importance of social connectedness to wellbeing was found in the higher level of wellbeing reported among older people who were involved in community organisations. Participants in community organisations usually share a common interest, and it therefore follows that the continued participation of older people allows for a greater sense of wellbeing and belonging. The encouragement of this current participation along with participation into and beyond their early 80s, may help ensure older people's continued overall wellbeing, and integration in society. As the international research has shown, social connectedness leads to higher integration (Pillemer et al, 2000).

A cross-sectional analysis does not allow us to conclude exactly how older people maintain their social contacts over time or how they compensate for any attrition (if any) in their contacts as they get older, but the findings are clearly in line with the international research, confirming the importance of the contribution of satisfying social connectedness in later life to the wellbeing of older New Zealanders.

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Chapter 13: Culture and Religion

Charles Waldegrave

1. Introduction

Unlike the previous chapters, this chapter gathers the data on two quite separate domains, those of culture and religion. Cultural identity, like all the other domains analysed in this monograph, is a domain addressed in the Social Report (Ministry of Social Development, 2008). However, religion is not. When designing this study, the research team noticed that the larger international studies varied in the way they either addressed the subject of religion and its relationship to wellbeing, or simply did not consider it as in the case of, the Social Report. It was decided it would be prudent to include some questions on religious practice and attitudes in the questionnaire, because studies have shown them to be positively associated with quality of life indicators and census data shows there is a much higher religious affiliation among older people than the rest of the population.

This chapter begins with an introduction to the literature on these two domains, beginning with culture and then religion. This is followed by a brief section on the methods used, and then the results are presented in two discrete sections, first culture and then religion. The final section addresses the summary and conclusions for both.

The results in the section on culture focussed only on Māori and their relationship to the various indicators of wellbeing in this research. The national random sample of 65-84 year-olds yielded only a small number of non-Pakeha/European participants. The cell sizes in the Pacific and Asian groups were also too small for analytical purposes. Despite numerous attempts to attract the resources to be able to over-sample for Māori and other cultural groups, funding was not forthcoming.

The religious questions focussed primarily on participation, the importance participants placed on faith, and the wellbeing indicators associated with it.

2. The Literature

2.1 Culture

The ethnic diversity for those over 65 years in New Zealand is much less than for New Zealand's population as a whole. For the population as a whole, the ethnic distribution of Pakeha/Europeans (77.0 percent), Māori (14.6 percent), Pacific (6.9 percent) Asian (9.2 percent) and Other (0.2 percent) is rapidly diversifying (Statistics New Zealand, 2007a).

In contrast for those over 65, Pakeha/Europeans (87.6) dominate: Māori make up 4.4 percent, Pacific 2.0 percent, Asian 3.2 percent and Other 0.2 percent (Statistics New Zealand, 2007b). Data from previous censuses show that the non-Pakeha/European population is increasing while the Pakeha/European group is decreasing. Ethnic diversity can be expected to increase in future years, as the more diverse younger age groups move into the 65+ cohort.

The cultural data in this chapter will focus on comparisons between Māori and non-Māori who are 65 years or over, because the numbers of Pacific and Asian in this cohort are small, and the recruited sample for this survey showed an even smaller proportion. (The ethnic distribution numbers and proportions are set out in the results section of this chapter.) It was decided that the Pacific and Asian groups were too few to warrant comparative statistical calculations. The Māori numbers, though small, are sufficient to support comparative analysis and qualified conclusions that can be compared with trends in the census data and other studies.

2.1.1 *Older Māori*

In a study of 400 older Māori of 60 years and over, Durie et al., (1996) identified certain key factors that impacted on Māori wellbeing. They found that over half ‘the kaumātua’ (elders) reported major or minor disabilities and around a third reported poor health. Most of the older Māori lived on an income of less than \$20,000 with little opportunity to supplement it, and thus depended on New Zealand Superannuation. Three quarters lived in their own home and most shared that home with whanau (extended family) members. The older Māori sample had reciprocal relationships with their whanau and by far the most common finding was that kaumātua offered assistance, including cultural assistance, strong leadership in learning and speaking te reo Māori (the Māori language), encouragement in education and support during illness.

In a comprehensive study of the living standards of a random sample of 542 older Māori aged between 65 and 69 (Cunningham, et al., 2002), almost half (47 percent) were single, either living alone or with others, and 53 percent were couples. 77 percent lived in urban areas and 23 percent in rural areas. 57 percent had no formal educational qualifications, whereas just over 10 percent had received a tertiary education. The researchers developed a cultural identity scale to measure the level of identification with, and participation in, te Ao Māori (the Māori world). The scale assessed a number of variables which included the ability to speak the language and participation with whanau, other Māori and Māori cultural activities. They found that though there was considerable variability, older Māori tended to score higher than the general Māori population on the cultural identity scale.

The researchers also found that older Māori experienced greater financial hardship than their equivalent cohort in the general population. 15 percent experienced some financial difficulty, and a further 20 percent experienced severe difficulties, whereas for the older population generally, 10 percent experienced some financial difficulty, and only a further 6 percent severe difficulties. Older single Māori tended to be in a worse financial situation than older Māori couples. Māori had lower income levels, lower levels of savings and assets, and were less likely to own their own home than non-Māori. These differences were particularly evident for single older Māori. A relatively large minority of the participants reported serious health problems, particularly hypertension, coronary heart disease, diabetes and arthritis.

A qualitative study of social ageing among four ethnic groups of urban women, (New Zealand European, New Zealand Māori, New Zealand Chinese and Central European), found there were ethnic variations in women’s self-perception of how the role of grandmother contributed to their being socially old (Armstrong, 2003). NZ Māori and NZ Chinese grandmothers indicated a stronger association of the role with seniority and social status within the family and community settings. For Māori, “the ideas of old age and leadership status intertwine” (p197).

2.1.2 *International Literature*

A number of studies have recorded a positive association between overall wellbeing (or satisfaction with life) and identification with, and participation in, the values, practices and activities associated with one’s ethnicity and culture. A selection of these is summarised below.

In the United Kingdom, an Economic and Social Research Council (ESRC) study in its Growing Older Programme carried out in-depth interviews with 170 women between 60 and 80 years (Wray, 2003). They came from a number of self-defined ethnic groupings (African-Caribbean, West Indian, Pakistani, British-Polish, Indian and English). Most women in this study strongly desired inter-dependence rather than independence. There was an ongoing desire to be part of, and engage with, the communal world.

Activities which contributed to fulfilment differed across ethnic groups. For example, African-Caribbean, West Indian, Pakistani, British-Polish and Indian women were more likely than English women to have religious belief as the greatest influence on their happiness. For non-English women, activities such as attending religious activities, prayer and holy pilgrimage were important, and added to their sense of belonging.

The author points out that 'successful ageing' has many cultural-specific and culturally defined meanings that vary across ethnic groups, and that this is often not adequately taken into consideration. Concepts like successful ageing and quality of life need to be redefined within the subject's own culture, because culture shapes different notions of ageing. Wray argues that the evidence from the study challenges standard gerontological approaches that have linked wellbeing almost exclusively to income, housing and other structures and thus made cultural experience in later life invisible.

"It is not enough to simply add gender and ethnic differences to the current theoretical framework. There is a need to reconceptualise the categories that are used to analyse later life, in order to provide an adequate theoretical framework with which to examine the diverse nature of women's experiences of growing older" (Wray, 2003: 524).

In another ESCR study within the Growing Older programme (Moriarty and Butt 2004), the inequalities in the quality of life of 203 people aged 55 years and over from different ethnic groups was assessed, using data from a cross sectional survey. The ethnic groups that participated were White British, Asian, Black Caribbean, Black African and Chinese people, all of whom lived in England and Scotland. The study found differences in health, income and social support, with White people scoring better health and higher incomes. However, when data on self-rated health status was considered women in the different ethnic groups rated their health similarly and, although there was a tendency towards an association between culture and self-rated health status with men, it was not significant. There were, however, significant differences in the number of health problems reported, with white people reporting fewer. The authors suggested the differences in self ratings and reported health ratings may be explained by differing expectations.

A study of 2,275 Chinese seniors living in seven Canadian cities (Chappell, 2005) found that participation in traditional Chinese culture contributed to positive experiences of ageing. While financial adequacy and good health were significant predictors of important aspects of wellbeing, involvement in the traditional culture was a significant predictor of the overall scale devised to measure subjective wellbeing or life satisfaction in a culturally and age appropriate way. It was also a positive predictor of specific domains, including social relationships, community participation and attitudes towards life and spirituality.

A number of other studies have also demonstrated positive associations between ethnic identity and wellbeing. In an early study Ortega et al., (1983) found that Blacks in Northern Alabama demonstrated higher subjective wellbeing ratings than Whites, despite living in worse objective conditions in term of housing and income. Regression analysis showed that it was the relationships developed in the Black churches that made the difference. Guglani et al., (2000) applied a range of cultural identity and self esteem scales in a comparative study of 36 extended and 34 nuclear Indian families. They found that grandmothers were better adjusted in extended rather than nuclear families, with the adjustment largely mediated by the level of traditional belief in the family. Consedine et al., (2004) in an ethnographic study of 1,118 older adults of different ethnic backgrounds from New York assessed physical resiliency in relation to different styles of emotional functioning. They found that older people of African descent were more likely to use patterns of adaptation characterised by religious beliefs, whereas US born and immigrant Whites were more likely to use non-religious social connections. They noted that successful patterns of adaptation varied systemically across ethnic groups.

Outcomes were less clear in a number of other studies. Bajekal et al., (2004), using data from the Fourth National Survey of Ethnic Minorities of England Wales, found that for factors based on conventional indicators like material circumstances, health, participation in social networks and quality of physical environment, the White group ranked highest. However for more immediate and subjective factors like frequency of family contact, and the desirability of the residential neighbourhood, an opposite ranking occurred with the White group behind the Pakistani, Indian and Caribbean groups. Lamura et al., (2003) in a comparative report for the European Study of Adult Wellbeing (ESAW) research programme found that not being part of the national majority in the 6

European countries studied increased the likelihood of a lower income, particularly in the UK, Sweden and to a lesser extent the Netherlands and Luxemburg. Generally those with higher life satisfaction and a better life appraisal were part of the national ethnic majority – along with being younger, married, male, living in rural areas and with a higher educational level. The data showed that in all the countries of the ESAW study, the national ethnic majority were more satisfied with their economic situation than non-nationals particularly compared to non-European subjects.

Studies that focus on standard measures like health, income and housing with general populations, rather than subjective wellbeing or life satisfaction in ethnic communities that do not form the majority culture of the country, tend to be more negative in their results. The American HRS study (Hodes & Suzman, 2007), for example, which focuses considerably on measures of health status, work and retirement and income and wealth, nevertheless revealed that White participants are nearly twice as likely to report their health as good or excellent (45%) as Black or Hispanic participants (25%), and not all of this difference can be explained by socio-economic status.. The New Zealand Positive Ageing Indicators (Ministry of Social Development, 2007) revealed lower outcomes for Māori in life expectancy, general health, housing tenure, paid employment and educational qualifications.

2.2 *Religion*

Very little focus has been given to the relationship between religion and ageing, or spirituality and ageing in New Zealand. The goals and objectives of the New Zealand Positive Ageing Strategy (Dalziel, 2001, updated 2008) for example, do not refer to faith or spirituality, implying by omission that such activities have little relevance for the quality of life and wellbeing of older people. Likewise, references to religion and spirituality are absent from the positive ageing indicators (Ministry of Social Development, 2007). This is surprising, given the substantially greater religious affiliation of older New Zealanders when compared with the population as a whole. The 2006 Census (Statistics New Zealand, 2007c) showed that 62.9 percent of the New Zealand population was affiliated to some form of religious faith, while 37.1 percent stated no religion. However for the population 65 years and over, 87.2 percent were religiously affiliated and only 12.8 stated no religion.

Koopman-Boyden (2001) has noted how relatively little research has addressed the relationship between religion and ageing. She says there needs to be “more research on the relationship between religion and ageing (especially in older ages) in the widest diversity of religious communities, both formal and informal, different ethnic, class and gender groupings, and with different age cohorts” (p178). Reliable data on regular religious participation rates by age are almost impossible to locate, because of the ad hoc way different churches and other religious groups record their data. However, it is very obvious to anyone who attends a range of religious activities that the proportion of older people usually substantially outweighs the numbers of younger people. The dearth of research and policy focus in this area raises the question as to whether there may be a secular bias in New Zealand research and public policy in this field.

To be fair, there are difficulties with both defining and measuring spirituality because it usually involves notions of meaning and purpose in life that go beyond the more accessible material and temporal dimensions of people. It follows that indicators of successful ageing in most research internationally has focused primarily on physical, psychological and social health and functioning (Rowe & Kahn, 1997). Brennan & Heisler (2004) refer to the conceptual and methodological problems of trying to define and measure religion and spirituality and cite these as a reason why they are often overlooked.

One of the many foci of this study has been to explore how older people in New Zealand participate in religious activities, the importance they accord to such activities and the relationship of those with overall wellbeing.

2.2.1 *International Literature*

Much of the literature distinguishes between spirituality and religiosity. The former refers to the existential search for meaning and purpose in life that goes beyond the material world and the latter refers to participation in religious organisations and the importance of religious beliefs. While most studies show positive relationships between spirituality and wellbeing and to a lesser extent between religiosity and wellbeing (cited examples follow), the results vary.

Sadler & Biggs, (2006) in an overview of empirical studies stated the results “generally support the view that spirituality, measured beyond traditional forms of religiosity, to be positively associated with ‘successful ageing’” (p275).

In a study that examined the impact of religious involvement on health status and psychological wellbeing in three large US national probability surveys, the authors (Levin & Chatters 1998) noted the findings revealed “the presence of statistically significant religious effects, notably positive net effects of organizational religiosity, in all three samples” (p504). Religious involvement was moderately and significantly associated with health and psychological wellbeing. These associations survived controlling for the effects of demographic factors, such as age, race and gender, and emerged across a variety of indicators.

In an earlier longitudinal study that produced contrary results, Atchley (1997), found 65.5 percent of the sample consistently reported that being a religious person was important or very important during the fourteen years from 1977 to 1991. Despite this, the results showed that those who valued being religious displayed no significant differences on measures of health and morale than those who did not value being religious. The results were quite conclusive in showing “that the importance of being religious had no predictive value whatsoever in terms of 1991 health or psychological wellbeing” (p139).

A Canadian study (Fry, 2000) examined the combined contribution of dimensions of religiosity and spirituality on a sample of community living and institutionally living older citizens. The results showed that a number of variables were significant predictors of wellbeing for the combined sample. These included personal meaning, involvement in formal religion, participation in spiritual practices, importance of religion, degree of comfort derived from religion, sense of inner peace with self, and accessibility to religious resources. The existential variables accounted for more than twice the variance (24 percent) in wellbeing compared with the traditional measures (10 percent), like social resources, physical health and negative life events. “Of special note is the fact that present results which tapped several constructs related to religiosity and spirituality provide empirical support for the hypothesis that a significant proportion of the variance in psychological wellbeing among older adults is explained by specific dimensions of religiosity and spirituality” (p383).

In a comprehensive life course study of 130 older persons, Wink & Dillon (2003) examined the associations between religiousness, spirituality and various domains of psychosocial functioning. They found that religiousness and spirituality had different effects. A stable pattern of religiousness over 40 years was significantly related to affirmative relationships with others, participation in community, social activities and generativity in late adulthood (defined as late 60s to late 70s). Spirituality was related to positive affects on wellbeing from personal growth, involvement in knowledge, artistic activities, and wisdom. This increased from mid to late life, particularly among women and from those of a higher social class.

Koenig (2000), in a study of 87 depressed patients admitted to Duke University Medical Center aged 60 years and over, found that high intrinsic religiosity scores (IR - a personal sense of the importance of spirituality and religion) independently predicted remission from depression at a 47 week follow up assessment. “One of the most important findings of the study, however, was that in the subgroup of subjects whose physical health was not improving, the effect of IR was especially strong” (p88). He suggested that religious beliefs may provide a perspective or view of life in which suffering has meaning and purpose. Similarly, Kirby et al., (2004) found that spirituality significantly moderated

the negative effect of frailty on psychological wellbeing and is even more significant where older people experience greater levels of frailty.

3. Method

The data used in this chapter were in two parts: the first investigated cultural and ethnic associations with a range of indicators and the second investigated religiosity and spirituality associations with another range of indicators.

With regard to culture and ethnicity, as has already been noted, differences and associations were sought only between Māori and non-Māori on account of the very small cell size of the Pacific and Asian groups. The data used as indicators were (i) demographic variables, (ii) social factors, (iii) overall wellbeing and (iv) cultural activities and expression.

The demographic variables involved standard questions about ethnicity, gender, age category (5 year bands), marital status, household type and household location. Social factors covered health, educational qualifications, personal income and housing tenure. The internationally applied self-report scale SF-12 was used to measure physical and mental health status. The other three social factors involved standard questions that sought highest qualification, personal income and housing tenure. Overall subjective wellbeing was assessed by applying the World Values Survey (WVS) question on Wellbeing.

3.1 Indicators of Cultural and Ethnic Activities

The cultural activities and expression factors were Māori language (for Māori respondents), faith and leisure. The question was asked as to whether they could have a conversation in Māori covering everyday things. Two questions were asked with regard to faith. The first enquired as to how much they practiced religion, attended services or otherwise participated in religious activities. The second involved a question asking how important faith was to them. Two sets of questions were asked about leisure. The first asked if they had participated in any of a list of clubs or organisations in the last month and if they exercised a leadership role in the organisation. The list was very wide and included sports clubs, choirs, ethnic organisations and many more. The second asked if the respondent had participated in particular activities. Again, the list was wide and included cafes, hui (Māori meeting), libraries and many others.

3.2 Indicators of Religious Activities

The religiosity and spirituality part focussed on religious affiliation, the importance of faith and its relationship to participation in religious activities, wellbeing, ethnicity and leisure pursuits. Participants' religious affiliation was sought through a standard question. The importance of faith and its relationship to participation in religious activities was assessed in the same manner as it was in the ethnicity data noted above, by asking the question on the importance of faith and another on participation in religious activities.

3.3 Indicator of Wellbeing

Overall subjective wellbeing was assessed by applying the World Values Survey (WVS) question on Wellbeing.

3.4 Other Indicators

Respondents were also asked how they spent their leisure time. Thirteen different types of organisations and clubs were named and participants were asked whether or not they had actively participated in them, and whether or not they exercised a leadership role. Demographic and social questions, noted above in the cultural and ethnic part, were also asked in this part.

4. Findings

4.1 Culture

As noted at the beginning of this chapter, the ethnic diversity of those over 65 years in New Zealand is much less than for the population as a whole. The respondents in this survey displayed even less diversity than their proportions in the total population of older people, although the differences were not great and the trend was in the same direction. Table 13.1 sets out the frequencies for the four main ethnic groupings.

Table 13.1
Prioritised²⁰⁹ and Un-prioritised Ethnicity

	Prioritised		Un-prioritised	
	Frequency	Percent	Frequency	Percent
Pakeha/European	1,568	93.3	1,592	96.0
Māori	56	3.3	56	3.3
Pacific	11	0.7	15	0.9
Asian	22	1.3	24	1.4
Total	1,657	100.0	1,687	101.6

The results show that the numbers in the Asian and Pacific groups are too small to warrant comparative statistical calculations. The Māori group numbers, though small, are sufficient to support comparative analysis and qualified conclusions that can be compared with trends in the census data and other studies, for example. The following analysis will compare Māori and non-Māori on a range of indicators.

4.1.1 Living Arrangements

There was a small but not significant tendency for Māori participants to be more highly represented in rural areas and small towns, and less in urban areas, than non-Māori. 18 percent of Māori and 13 percent of non-Māori lived in rural areas, for example. 27 percent of Māori and 18 percent of non-Māori lived in small towns, whereas 43 percent of Māori and 53 percent of non-Māori lived in urban areas. This probably reflects the desire of many Māori to live in or close to their tribal land.

The marital status of older Māori demonstrated a significantly different profile²¹⁰ from that of non-Māori. As Table 13.2 demonstrates, the percent of non-Māori who were married or partnered was almost twice that for Māori, whereas the percent of Māori who were widowed was almost twice that of non-Māori. These figures are probably due to differences in life expectancy.

Table 13.2
Māori and non-Māori Marital Status (%)

	Percent Māori	Percent non-Māori
Single	3.6	3.5
Married/Partnered	30.4	59.0
Divorced/Separated	10.7	9.3
Widowed	55.4	28.2

Although the ethnic gap in life expectancy has begun to close, currently for Māori males, life expectancy is 8.2 years less than for non-Māori and for Māori females it is 8.8 years less than for non-Māori females (Statistics New Zealand, 2008). It follows that more Māori are likely to be widowed at an earlier age than non-Māori and particularly in this sample, aged 65 to 84 years, more Māori men than non-Māori men are likely to have died.

²⁰⁹ Prioritised data is a classification which assigns the ethnicity of a person who has given multiple responses to just one ethnicity. This process ensures that the total number of responses equals the total population. In New Zealand, Māori has been accorded highest priority, then Pacific people, Asian and Pakeha/European respectively.

²¹⁰ Chi square statistic had a p-value of < 0.001

Given the differences in marital status, it is not surprising that Māori and non-Māori also demonstrated a significant difference²¹¹ in their profiles of household type, as shown in Table 13.3. The percent of non-Māori couple households was almost twice that of Māori. For Māori, the percentage of single person households was more than double those of couple households, whereas for non-Māori there were considerably fewer such households when compared with couple households. The numbers in multi-person households for both were quite small.

Table 13.3
Māori and non-Māori Household Type (%)

	Percent Māori	Percent non-Māori
Couple	28.6	56.9
Single	62.5	40.9
Multi-person	8.9	2.2

4.1.2 Social Indicators

Although there were differences between Māori and non-Māori, significant differences were not found in this study for gender distribution, age category, personal income, educational qualifications or self-reported health status. However, there was a significant difference²¹² in the responses to the question on how their income met their everyday needs for such things as accommodation, food, clothing and other necessities. Only 35.8 percent of Māori reported having enough or more than enough money, compared with 59 percent of non-Māori.

Despite the high rate of home ownership for the older people in this study, housing tenure was significantly different²¹³ for Māori compared with non-Māori. As Table 13.4 shows the percentage of Māori who owned their own home was considerably less than non-Māori, whereas the percent who rented accommodation was three times the non-Māori rate.

Table 13.4
Māori and non-Māori Housing Tenure (%)

	Percent Māori	Percent non-Māori
Owned	64.2	76.8
Rented	22.6	7.4
Other	13.2	15.9

4.1.3 Wellbeing

No significant relationship, was found between Māori and non-Māori assessment of how satisfied they were with their life as a whole. Both groups expressed high levels of satisfaction, with Māori (92.8 percent satisfied or very satisfied) slightly higher than non-Māori (87.7 percent). Similarly, there were no significant differences in response to a question concerning their satisfaction or dissatisfaction with their cultural identity and involvement. 96.3 percent of Māori were satisfied and 97.8 percent of non-Māori were also satisfied.

4.1.4 Cultural Activities and Expression

There were a number of questions asked about cultural activities and expression on areas such as language, faith, social involvement and leadership. Māori and non-Māori responses were compared.

Māori Language. 52 percent of the Māori participants stated they could hold a conversation in Māori covering everyday things. This is comparable with the Census data that showed 48 percent of Māori 65 years and over, could have a conversation about everyday things in Māori (Statistics New Zealand, 2007b). By contrast, only 2 percent of non-Māori could do the same. This result is not unexpected

²¹¹ Chi square statistic had a p-value of < 0.001

²¹² Chi square statistic had a p-value of < 0.001

²¹³ Chi square statistic had a p-value of < 0.001

among this age group as many older Māori were brought up in tribal areas and there was not the drive to teach Māori to non-Māori as schools do today.

Faith. A question was asked about the frequency of participants' practice of religion, attendance at services or religious activities. No significant differences were found between Māori and non-Māori. However, a separate question was asked about how important their faith was to them. The response to this question was significant²¹⁴, with Māori attaching more importance to faith as Table 13.5 shows. Again this is not particularly surprising, given the importance of spirituality in Māori life and the tendency towards secularism in Pakeha/European society.

Table 13.5

Māori and non-Māori Importance of Faith (%)

	Percentage Māori	Percentage non-Māori
Extremely important	60.4	39.6
Reasonably important	29.2	36.4
Little or no importance	10.4	24.1

Leisure. When the older people were asked about their participation and leadership in a large range of leisure and service organisations, few differences were found between Māori and non-Māori, apart from involvement in political parties, school or kohanga reo organisations and Māori organisations. While the data cells were too small to support reliable calculations of significance, there was a definite tendency towards more Māori involvement in these three areas. Leadership roles across the different organisations were similar for Māori and non-Māori, but as expected, Māori exercised considerably more leadership in Māori organisations.

In a separate set of questions that enquired into a range of activities people had participated in over the last month, four demonstrated significant differences between Māori and non-Māori. There were modest positive associations between being Māori and being a spectator at a sports event²¹⁵ or attending a barbecue, hangi or similar social occasion²¹⁶. There were stronger associations between being Māori and attending a tangi or a funeral²¹⁷, or participating in outdoor activities²¹⁸.

The results for leisure activities show Māori to be as involved as non-Māori in the full range of activities and services. However beyond this, a greater percentage of Māori than non-Māori were involved in particular events associated with sport, Māori cultural activities (including tangihanga or funerals), participating in political parties and social events with barbecues or hangi.

4.2 Religion

4.2.1 Religious Affiliation

The religious affiliation of the older people was overwhelmingly Christian, as one would expect of that age group in New Zealand. The 2006 Census showed that 86 percent of New Zealanders 65 years or over were affiliated to some form of Christian religion and 13 percent stated no religion at all (Statistics New Zealand, 2007c). By contrast, the distribution of religious affiliation in the total population was 58 percent for Christian religions and 37 percent for no religion. As Figure 13.1 below shows, 72.6 percent of participants in this study were Christian and 23.1 percent had no religious affiliation. Though predominantly Christian, the somewhat smaller proportion of them and the larger proportion of non-religious older people (nearly double) in this study may reflect the make

²¹⁴ Chi square statistic had a p-value of < 0.01

²¹⁵ Chi square statistic had a p-value of < 0.01

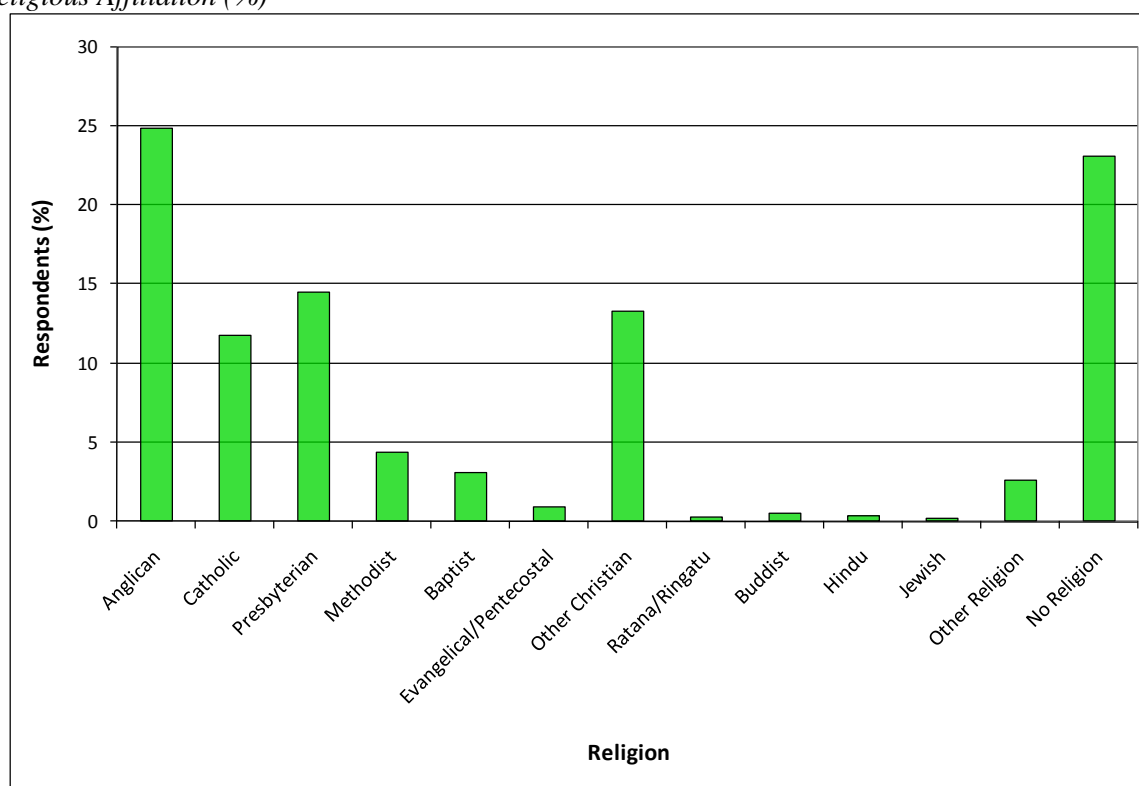
²¹⁶ Chi square statistic had a p-value of < 0.01

²¹⁷ Chi square statistic had a p-value of < 0.001

²¹⁸ Chi square statistic had a p-value of < 0.001

up of the sample, which was 65 to 84 year olds living independently or semi-independently, whereas the census figures quoted include people aged over 84 and those not living independently.

Figure 13.1
Religious Affiliation (%)



4.2.2 Importance of Faith and Religious Participation

Participants were asked firstly if faith was important to them, and if they answered in the affirmative, they were asked how important it was to them. The questions received a 74 percent response rate (n = 1246). It is interesting to note that 76.6 percent considered their faith was either extremely important to them (40.3 percent) or reasonably important to them (36.3 percent). 23.4 percent thought it was of little or no importance at all. This result is higher than was expected and will be discussed further below in relation to wellbeing.

The researchers were interested in the relationship between the importance many older people placed on faith and their participation in religious activities. A significant relationship²¹⁹ was found, which is illustrated in Figure 13.2. The column bars in the chart that indicate faith is extremely important to them, completely dominate the high frequency categories (daily, several times a week and once a week). 45.1 percent practiced their religion once a week or more and they made up 83.7 percent of those who considered their faith to be extremely important.

²¹⁹ Chi square statistic had a p-value of < 0.001

Figure 13.2
Importance of Faith by Frequency of Religious Participation (%)

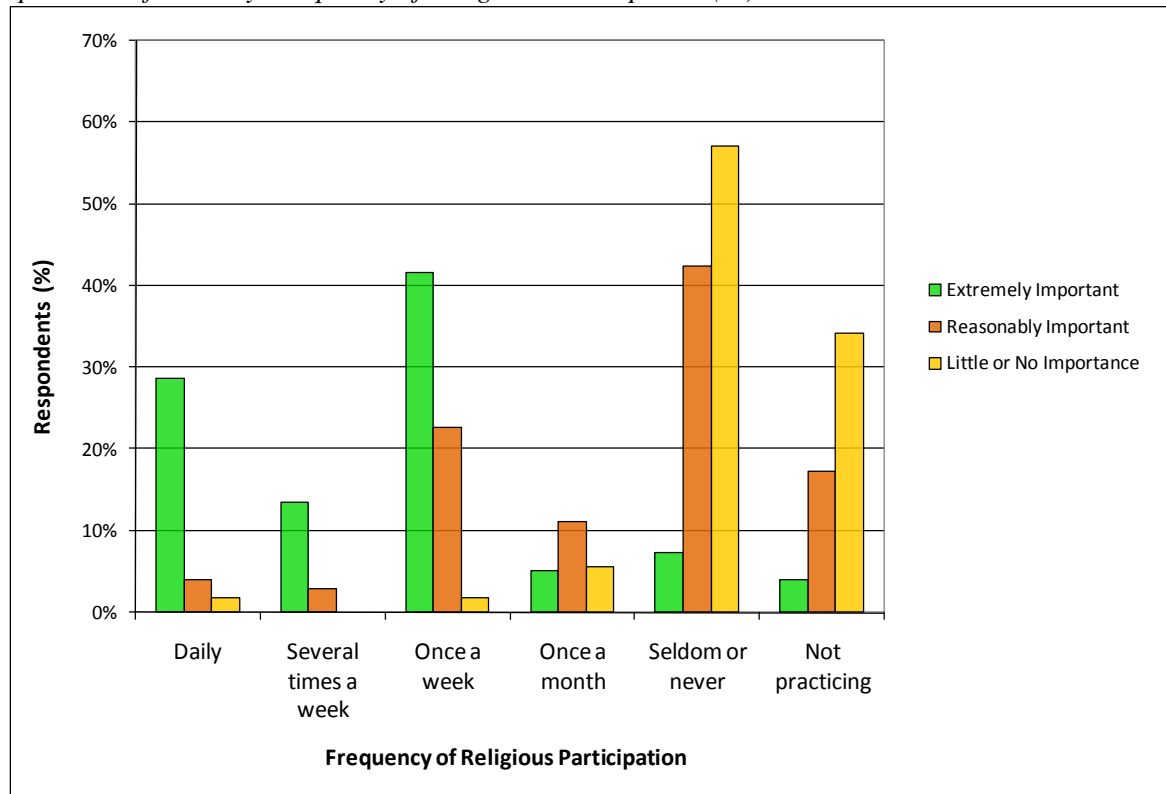
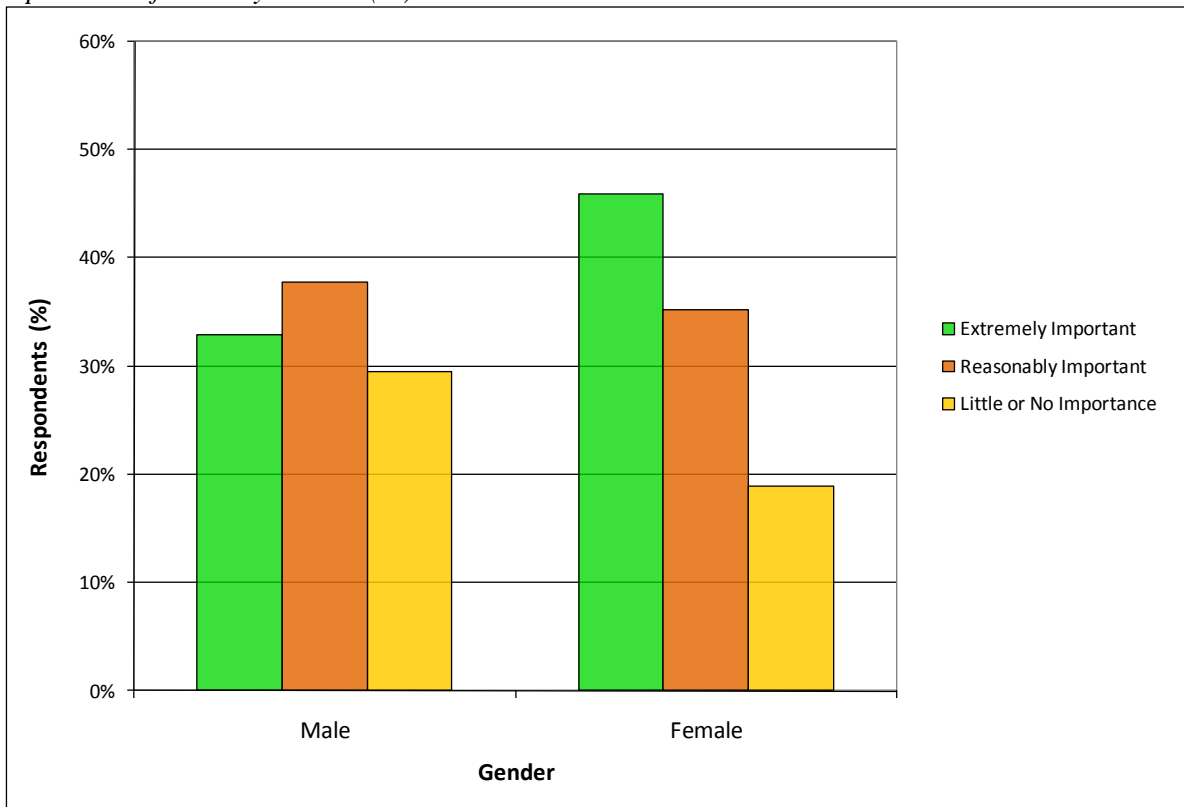


Figure 13.3
Importance of Faith by Gender (%)



4.2.3 Importance of Faith and Overall Wellbeing

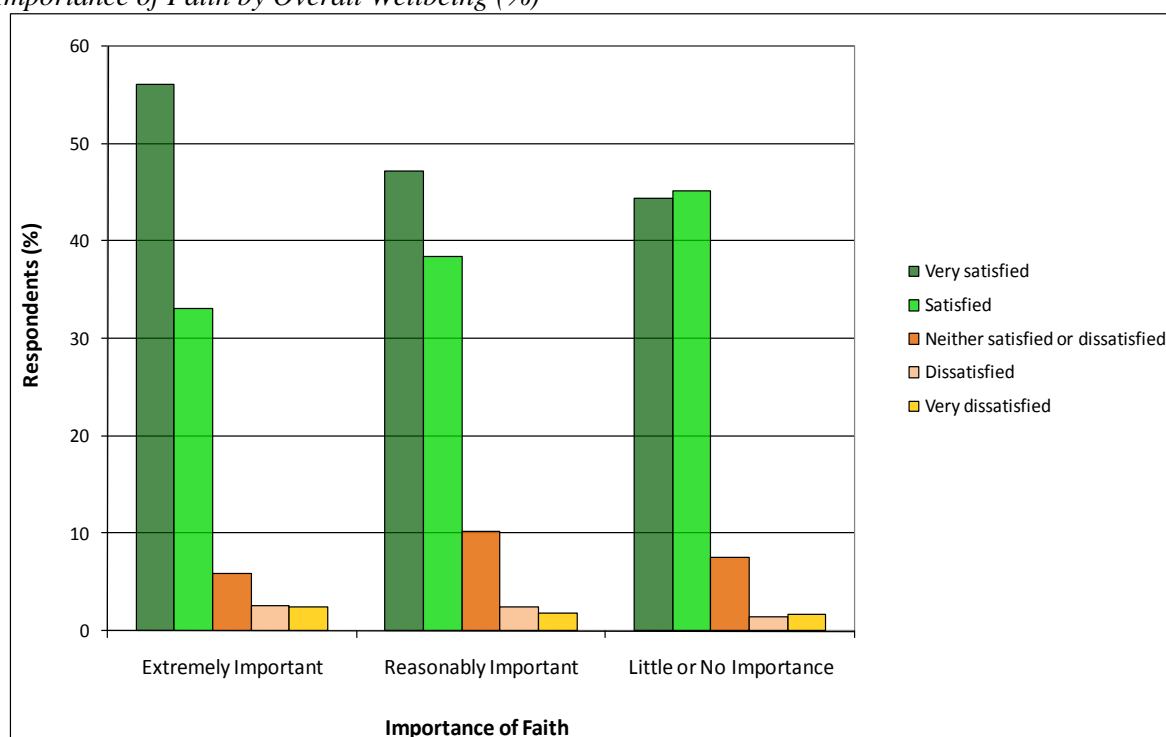
There was a modest but significant relationship²²⁰ between the importance of faith to participants and overall wellbeing, as measured by the World Values Survey indicator. Figure 13.4 shows the positive association between respondents for whom faith was important and their overall satisfaction with life. This association is important, because faith and spirituality are only intermittently identified in the literature as indicators of wellbeing among older persons, as has already been noted in the literature section of this chapter.

Table 13.5 earlier in this chapter pointed to the modest but significant association²²¹ between Māori and the importance of faith when compared with non-Māori.

Significant associations between the importance of faith and a range of other indicators of wellbeing were sought, but not found. These indicators included: income, assets, marital status, household type, educational qualifications, physical health and mental health.

Figure 13.4

Importance of Faith by Overall Wellbeing (%)



4.2.4 Importance of Faith and Leisure Time Pursuits

Respondents were asked how they spent their leisure time. Thirteen different types of organisations and clubs were named and participants were asked whether or not they had actively participated in them, and whether or not they exercised a leadership role. There was an interesting set of associations with some of these activities and none at all with others. A significant relationship²²² was found between the importance of faith and participation and leadership in religious or church organisations in the last month. As Figure 13.5 shows, 80.7 percent of those who exercised leadership and 69.9 percent of who had simply been involved during the last month, considered faith to be extremely important.

²²⁰ Chi square statistic had a p-value of < 0.01

²²¹ Chi square statistic had a p-value of < 0.01

²²² Chi square statistic had a p-value of < 0.001

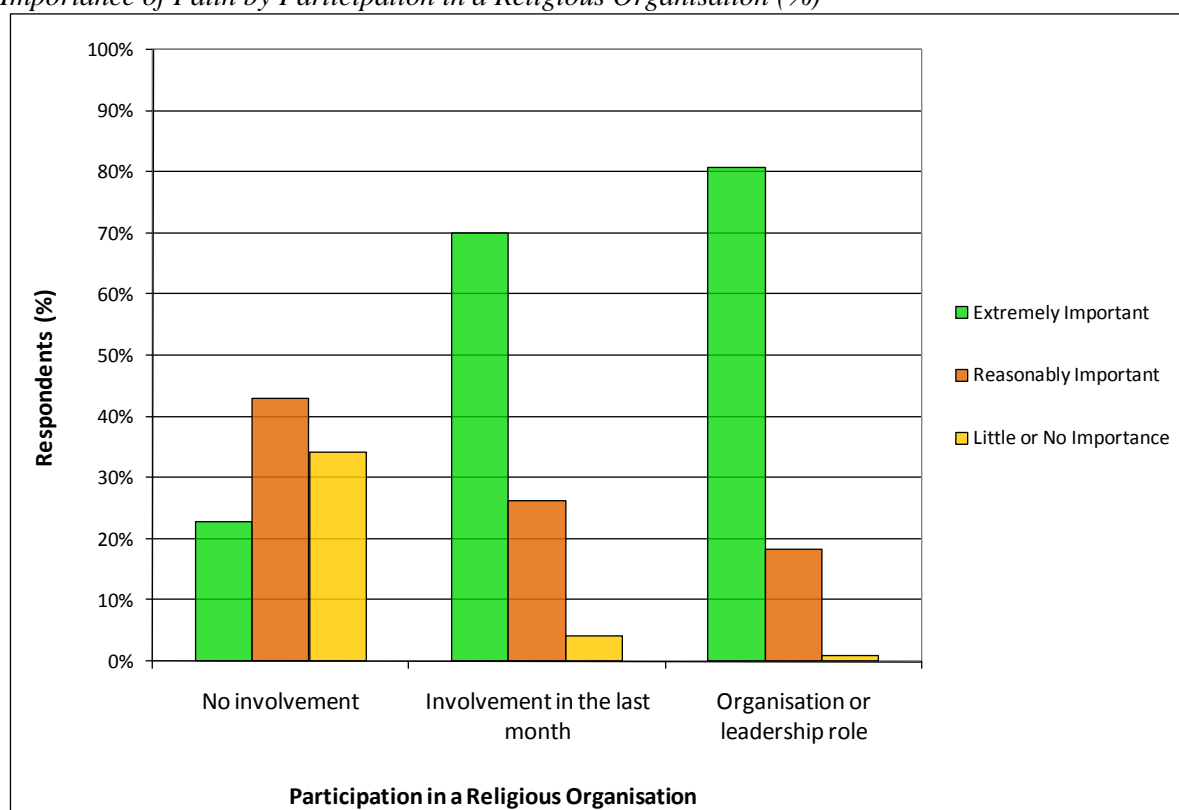
Positive associations were also found between the importance of faith and participation in a community or service organisation²²³ and with participation in a women's organisation²²⁴. The importance of faith was also positively and more strongly associated with participating in choir, drama or music societies²²⁵. Modest negative associations were found between the importance of faith and participating in a sports club²²⁶, and participating in an RSA or Working Men's club²²⁷.

While the positive associations were somewhat predictable because churches encourage community service, sing with choirs and have their own women's groups, the negative associations are less explicable. They may simply reflect the lack of spare time religious people have after their involvement in a church community, for example.

No significant associations were found between the importance of faith and participating in: trade union or professional associations; political parties; hobby or leisure time associations; school or kohanga reo organisations; Māori organisations; other ethnic organisations; or clubs, lodges, etc.

Figure 13.5

Importance of Faith by Participation in a Religious Organisation (%)



5. Conclusion

The results of this research are set out in the sections *Culture* and *Religion*. Within the culture section, it was noted that the expected differences between older Māori and non-Māori for a number of important social indicators did not occur. There were no significant differences, for example, between the two groups for personal income, educational qualifications or physical or mental health.

²²³ Chi square statistic had a p-value of < 0.01

²²⁴ Chi square statistic had a p-value equal to 0.01

²²⁵ Chi square statistic had a p-value of < 0.001

²²⁶ Chi square statistic had a p-value of < 0.01

²²⁷ Chi square statistic had a p-value of < 0.01

However, the significant differences that were found in both the objective indicator of housing tenure and the subjective indicator sufficient income to meet essential needs, point to the disadvantage noted in the literature that Māori in New Zealand and minority groups in other countries, experience.

The Māori rate of overall subjective wellbeing was almost identical, though slightly higher than for non-Māori. Unsurprisingly, the results showed the higher level of Māori involvement in cultural activities and expression with just over half able to speak Māori conversationally, proportionately more than non-Māori considering faith to be important, and a higher level of participation in Māori organisations and events. The significantly higher proportion of widowed and single Māori elders carries important community and home based policy implications. These results suggest that proportionately many more than non-Māori are living alone and, though they may be supported by their whanau (extended family), numbers are likely to be in need of community health and other social services.

A substantial number of older people in this study demonstrated considerable involvement in faith and religious activities. The numbers stating religious affiliation (76.9 percent), though not as high as the census number for those 65 years and over (87.2 percent), were considerably more than the census figure for the general population (62.9 percent). Over three quarters considered their faith to be either extremely or reasonably important to them, and this result was significantly associated with religious practice, which showed that 45 percent practiced their religion, attended services or otherwise participated in religious activities once a week or more. A significant relationship was also found between the importance of faith and participation and leadership in religious or church organisations in the last month. There was a strong gender difference with nearly half of the women, compared to only around one third of the men, considering faith to be extremely important, and almost half the women, but only 38 percent of the men, participating in religious activities once a week or more.

There was a modest but significant relationship found between the importance of faith to participants and overall wellbeing. The same was also found between being Māori and the importance of faith when compared with non-Māori. Other positive associations were demonstrated between the importance of faith and participating in a community or service organisation that helped people and with participating in a women's organisation. It was also positively, and more strongly associated with participating in choir, drama or music societies. No significant associations were found between the importance of faith and a range of standard social indicators, which included income, assets, physical and mental health, household type and educational qualifications.

These results demonstrate the high level of involvement by older people in faith and religious activities. This finding is particularly important given the general neglect of this area of satisfaction and wellbeing for many older people in ageing research and public policy in New Zealand. There appears to be a secular bias that, in effect, makes older people's choices in this area invisible, probably because of the difficulties of defining and measuring spirituality. If researchers and policy makers are genuinely interested in wellbeing and quality of life as older people experience it, rather than the way they think older people should experience it, then greater consideration in future research and policy making should be accorded to this area. While there are difficulties with definitions and measurement, these obstacles are not too hard to overcome, as the brief literature review and this research have demonstrated.

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Chapter 14: Ageing and Wellbeing in New Zealand – An Overview

Charles Waldegrave and Peggy Koopman-Boyden

1. Executive Summary

From the survey of 1,680 people aged 65-84 years in 2007, the results suggest that most 65-84 year-olds feel satisfied with their life (87.8%), and that this high level of subjective wellbeing, is associated with the following social indicators:

- Good health
- A higher personal income
- Living with a partner or with others
- Home ownership
- Participation in leisure and recreational activities
- Participation in community organisations
- Access to amenities like shops and public transport
- Not having long periods outside the workforce during their working lives
- Not being forced into retirement
- Not going without essential items and services
- Considering religious faith to be important
- An expectation of rights and entitlements that include financial security, family support and access to health and residential care.

2. Focus of the Research

The central focus of the research reported here was to investigate the level of wellbeing of older people and the determinants of this wellbeing, both in any direct relationships with wellbeing, and also through indirect (or intermediate) relationships with wellbeing. This involved using both a subjective and a capabilities approach to wellbeing (see Chapter 2) and its determinants. As well, the research was interested in the possible ways of improving the wellbeing of older people; hence the title of the research programme: Enhancing Wellbeing in an Ageing Society (EWAS).

The theoretical background and conceptualisation of *wellbeing* for this research programme has been located within the extensive literature on the subject and has consequently combined elements of both hedonic and eudaimonic, a subjective sense of satisfaction and an ability to access resources along with the capability to do something with them (see Chapter 2). Thus, wellbeing in this research involves people, both experiencing a sense of satisfaction with life, and acquiring appropriate capabilities to achieve a good quality of life. This conceptualisation is consistent with current developments across disciplines and the views of stakeholder groups questioned at the beginning of the research programme. Such a broad conceptualisation of wellbeing is necessary to take into account the social context in which wellbeing is achieved, along with the framework within which people's needs in relation to achieving it can help develop appropriate policies. Such policies should be aimed at maintaining and increasing levels of wellbeing in all sections of an ageing society.

As with many studies on wellbeing, this research has enquired into participants' subjective feelings of satisfaction, and, in particular, their overall satisfaction with life. It also recorded their subjective feelings of satisfaction in relation to specific domains like health, work, income and safety, for example.

However (as noted in Chapter 2), people can adjust their feelings and expectations to worsening (or improving) conditions, with the result that material changes in people's lives are not always fully reflected in subjective measures. Other measures that focus on people's access to resources and their capabilities are able to help overcome this problem. This is particularly important with an ageing population where physical and often social abilities tend to decline with increasing age. For these reasons, therefore, information was sought from survey respondents on their participation and achievement in each capability area and this was set alongside the subjective measures of satisfaction to provide a broad view of how capability and satisfaction contribute to wellbeing.

The ten "domains" of wellbeing in the Ministry of Development's Social Report were chosen as the basis for the collection of both subjective and objective data on wellbeing, although the content and some titles were slightly modified (see Chapter 3). The Ministry, for example, does not seek information on subjective feelings of satisfaction, nor participation in religion and the importance of faith. Nevertheless the ten broad domains of the Ministry's annual Social Reports have been used to structure this monograph under the following domain areas. It will be noted that religion is not included as one of the domains in the Social Report, but in this research has been found to be important.

- Health
- Education
- Work and Retirement
- Economic Standard of Living
- Rights and Entitlements
- Leisure and Recreation
- Living Arrangements
- Safety
- Social Connectedness
- Culture and Religion.

These ten domains provide a broad coverage of the capabilities, needs and subjective areas of satisfaction that is consistent with the theoretical approach adopted in this research.

Thus, in each of the chapters, the domain areas, were related to:

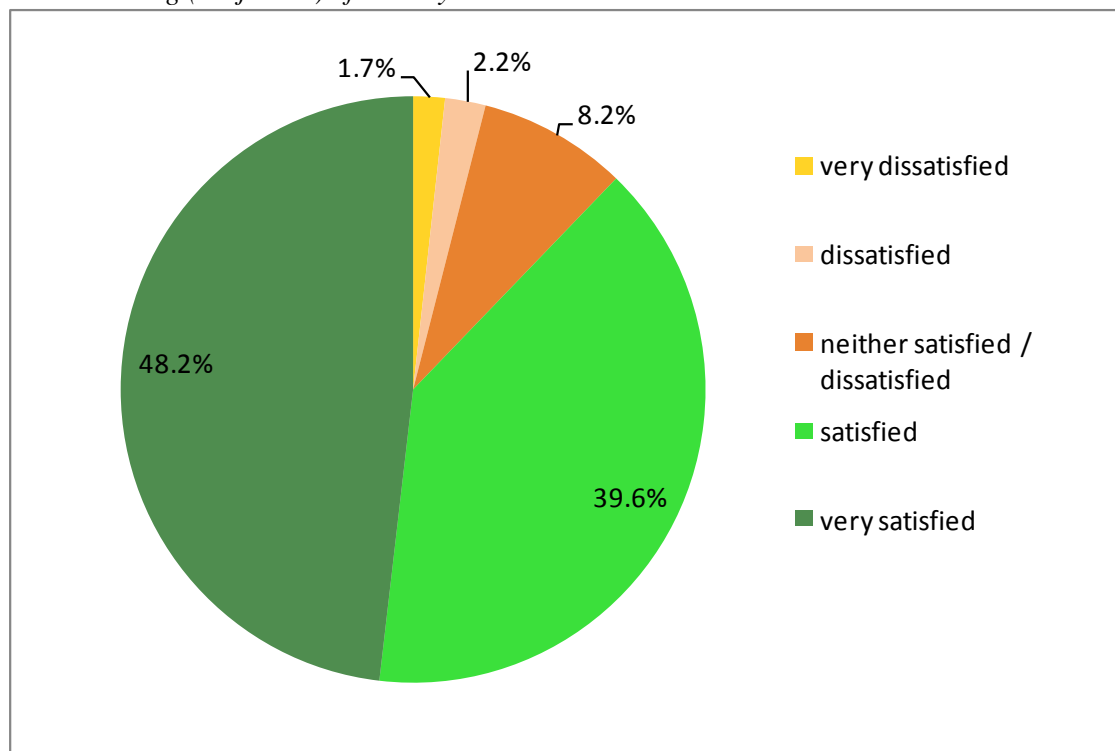
- (a) the socio-demographic variables of age, gender, marital status;
- (b) overall subjective wellbeing (measured by the level of satisfaction with life; and referred to as Overall Wellbeing)
- (c) domain subjective wellbeing (measured by the level of satisfaction with each of the specific domains; and referred to as Domain Wellbeing, e.g. Work Wellbeing)
- (d) a variety of other subjective and objective indicators appropriate to each domain, e.g. health, education, income, level of urbanisation, perception of safety at night, perception of rights and entitlements, etc).

A general summary and discussion of the research findings follows.

3. What is the Level of Overall Wellbeing among 65-84 year-olds? (Overall Subjective Wellbeing)

The level of overall subjective wellbeing of older New Zealanders shown in this research is high. As Figure 14.1 shows, 87.8% of the respondents were either 'very satisfied' or 'satisfied' with their life and only 3.9% were 'very dissatisfied' or 'dissatisfied'. A further 8.2% were non-committal either way.

Figure 14.1
Overall Wellbeing (subjective) of 65-84 year-old New Zealanders in 2007



This high level of overall wellbeing among older New Zealanders, has been stable for almost a decade. Figure 14.2 shows a comparison of the New Zealand responses to the World Values Survey in 1998 and to the same World Values question used in the EWAS survey of 2007.

Figure 14.2
Overall Wellbeing (subjective) of 65-84 year olds: Comparison NZ World Values Survey 1998 and EWAS 2007



In 1998 the respondents 'satisfied' with their level of overall wellbeing accounted for 89.1% of the sample; in 2007 the same level of satisfaction was expressed by 87.8% of the EWAS sample. Given these high levels of subjective overall wellbeing, the research team was interested to discover if they were significantly associated with age, gender and marital status.

4. Is Wellbeing Affected by Age, Gender and Marital Status?

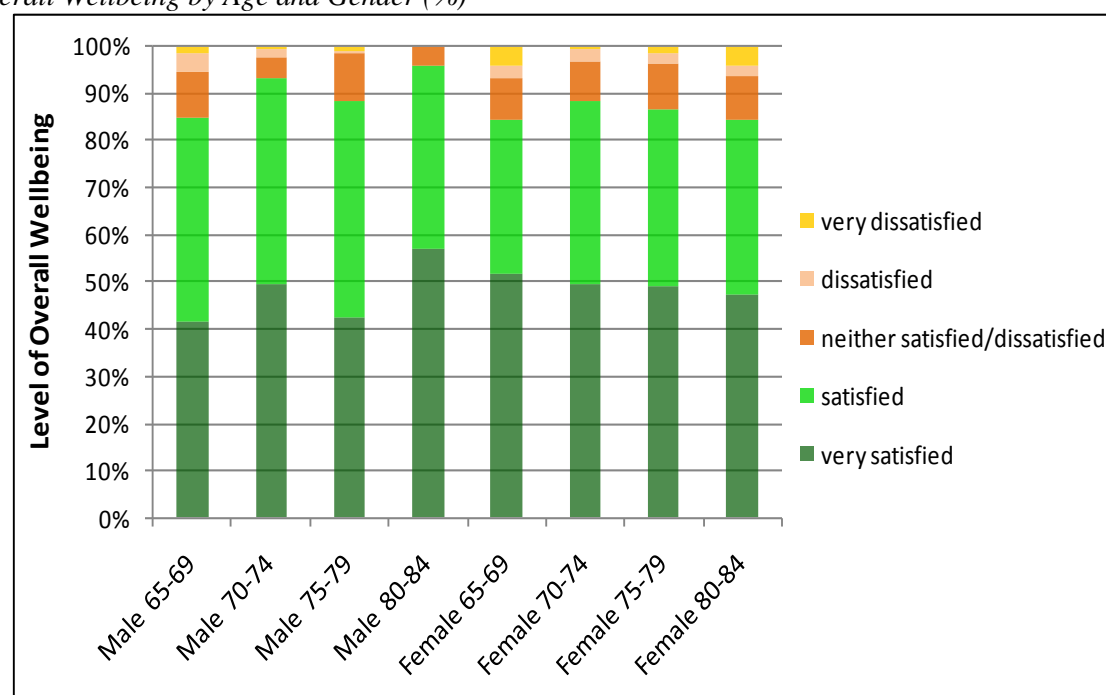
The high level of overall wellbeing provided little room for differences by age, gender or marital status. No significant relationship between age and overall wellbeing was found, although a significant relationship was found with gender²²⁸ men reported greater wellbeing than women.

When the relationships of age, gender and marital status were brought together with overall wellbeing, a possible explanation for these results appeared. Figure 14.3 shows that the greatest age/gender difference is between the 80-84 year-old males and females, where a considerably higher level of wellbeing was expressed by the men than the women. With men of this age being more likely to be married and the women more likely to be widowed, this difference in wellbeing may be due to their marital status.

In support of this view, Figure 14.4 shows the difference in overall wellbeing according to marital status. Those living in a relationship had a higher level of overall wellbeing than any other status. Single people had the lowest level, while the widowed and the divorced/separated both had a higher level of overall wellbeing than single persons, but less than those in a relationship.

Figure 14.3

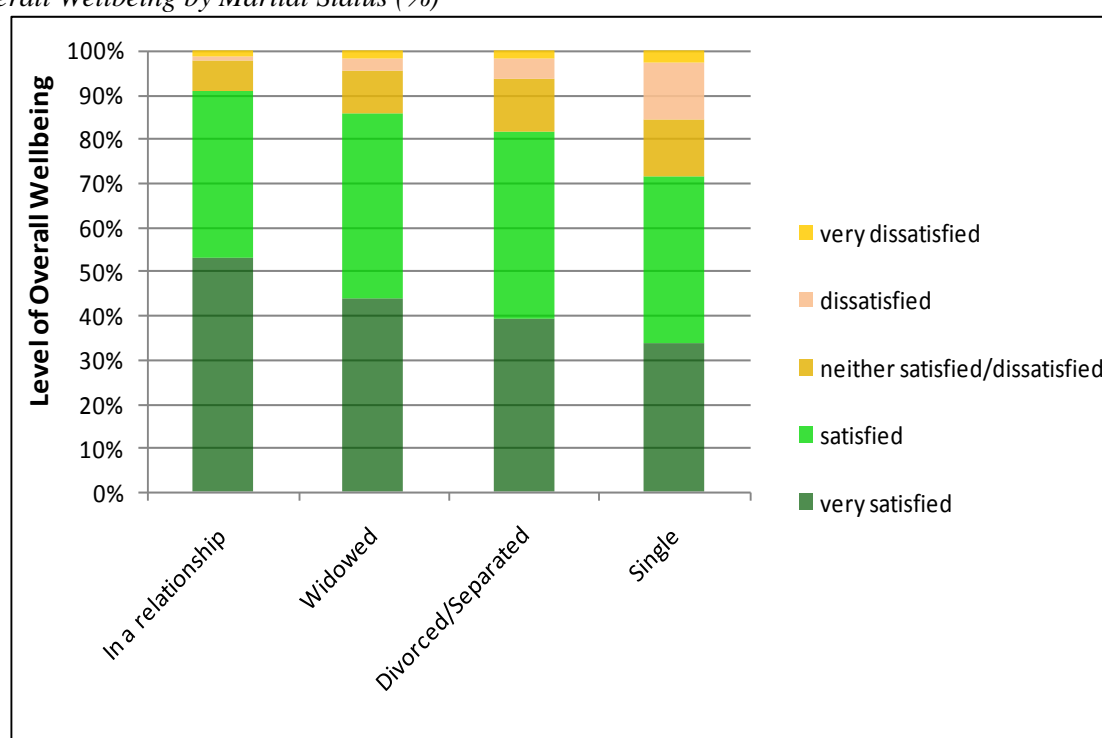
Overall Wellbeing by Age and Gender (%)



p-value of <0.01

²²⁸ p-value of <0.01

Figure 14.4
Overall Wellbeing by Marital Status (%)



p-value of <0.001

5. Is Wellbeing Affected by Indicators of the Ten Domains?

Given the high levels of subjective wellbeing, the research team was also interested to discover from the findings in the previous chapters, which capability variables were significantly associated with overall subjective wellbeing. It is notable that the following domains were all positively related to the level of overall subjective wellbeing as set out in Table 14.1: health (both physical and mental health), income (personal income only), housing (home-ownership), participation in leisure and recreation, living arrangements and social connectedness (measured by participation in community organisations).

The domain of work and retirement was negatively related for men who had more periods outside the workforce for at least a year and also for those who were forced to retire because of: health, injury or disability matters; employer forced retirement or redundancy; or the unavailability of jobs in their area.

However the following domains were not related to overall wellbeing: educational attainment, work and social connectedness (measured by number of social contacts). Some of these domains could have been expected to be significantly associated with overall wellbeing, according to the literature. Instead, several of them can be hypothesized to be intermediate variables that contributed to other domain variables that in turn led to overall wellbeing (see Section 6, below).

Table 14.1

Capability Indicators in the Domains and their Significant Association with Overall Wellbeing

<p style="text-align: center;">p-value of <0.001</p> <p>Those with a higher level of wellbeing were:</p> <ul style="list-style-type: none"> • Living Arrangements: Living with a partner or with others and having easy access to amenities like shops and public transport • Leisure and Recreation: Participating more in leisure and recreational activities • Work: Unlikely to have had periods of at least 1 year outside workforce – negative association for men only. Not in forced retirement – negative association • Rights and entitlements: More likely to expect rights and entitlements that include financial security, family support, and access to health care and residential care.
<p style="text-align: center;">p-value of <0.01</p> <p>Those with a higher level of wellbeing were:</p> <ul style="list-style-type: none"> • Gender: More likely to be men than women • Health: Experiencing better physical and better mental health • Social Connectedness: Participating more in community organisations • Religion: More likely to consider religious faith to be important.
<p style="text-align: center;">p-value of <0.05</p> <p>Those with a higher level of wellbeing were:</p> <ul style="list-style-type: none"> • Economic Standard of Living: More likely to have higher income, and more likely to have homeownership.
<p style="text-align: center;">p-value – Not significant</p> <ul style="list-style-type: none"> • Education: No significant relationship between wellbeing and when left school, year of completion of highest qualification and level of education • Economic Living Standard: No significant relationship with asset accumulation • Safety: No significant relationships between wellbeing and feelings of safety in the home, neighbourhood, or in neighbourhood at night • Social Connectedness: No significant relationship between wellbeing and the number of social contacts • Work: No significant relationships between wellbeing and past work experiences during midlife, current work, or work during retirement.

6. Are the Indicators of the Ten Domains Affected by Older Persons' Satisfaction with each of the Domains?

As reported in Table 14.1, the domain variables education, economic living standards (measured by asset accumulation), safety, social connectedness (measured by number of social contacts), and work were found to be NOT significantly associated with overall wellbeing. The researchers were therefore interested as to whether the indicators used, e.g. level of education attainment and perceptions of safety, would be related to the respondents satisfaction with (for example) education and safety, respectively.

The research thus examined indicators of each of the ten domains (health, work, education, etc) and then considered their subjective feelings of satisfaction in relation to these ten domains (domain wellbeing, e.g. health wellbeing, work wellbeing, etc).

Interestingly, in most, though not all the domains, the relationships were significant, as Table 14.2 shows, e.g. an increase in the rate of participation in leisure and recreation brings a higher level of satisfaction with leisure and recreation (leisure and recreation wellbeing) and greater asset wealth brings a higher level of satisfaction with their economic standard of living (economic standard of living wellbeing). At a common sense level this would seem to be reasonable - an increase in the level of a public or private good brings higher satisfaction with that public or private good.

Table 14.2

Indicators of Domains and their Significant Associations with Domain Wellbeing

<p style="text-align: center;">p-value of <0.001</p> <ul style="list-style-type: none"> • Education: A higher level of education and older age when left school is associated <i>with</i> greater satisfaction with education (Education Wellbeing) • Economic Standard of Living: A higher personal income is associated <i>with</i> greater satisfaction with economic standard of living (Economic Standard of Living Wellbeing) • Economic Standard of Living: More asset wealth is associated <i>with</i> greater satisfaction with economic standard of living (Economic Standard of Living Wellbeing) • Economic Standard of Living: Homeownership is associated <i>with</i> satisfaction with economic standard of living (Economic Standard of Living Wellbeing) • Rights and Entitlements: Expectations of support for rights and entitlements were positively associated <i>with</i> their satisfaction with their rights and entitlements (Rights and entitlements Wellbeing) • Leisure and Recreation: Greater participation in leisure and recreation activities is associated <i>with</i> greater satisfaction with leisure and recreation activities (Leisure and Recreation Wellbeing) • Social Connectedness: Living with a partner or others is associated <i>with</i> greater satisfaction with contacts with family and with others (Social Connectedness Wellbeing) • Safety: Greater positive perceptions of safety around the home and in the neighbourhood (and at night) is associated <i>with</i> greater satisfaction with personal safety (Safety Wellbeing).
<p style="text-align: center;">p-value of <0.01</p> <ul style="list-style-type: none"> • Health: Better physical health and better mental health is associated <i>with</i> greater satisfaction with health (Health Wellbeing) • Living Arrangements: Those who were single and living alone were the most satisfied with the size of their house (Living Arrangements).
<p style="text-align: center;">p-value not significant</p> <ul style="list-style-type: none"> • Work: No significant relationships between past work experiences during midlife, current work, or work during retirement and greater satisfaction with work • Culture: No significant relationship between culture and satisfaction with cultural identity.

7. Domain Wellbeing and the Significant Association with Overall Wellbeing

As noted earlier, the interesting variables from Table 14.2 are those that did not demonstrate a significant relationship with overall wellbeing but did demonstrate a significant relationship with satisfaction, i.e., subjective wellbeing, in their domain specific area. These were education level, asset wealth, safety and number of social contacts. When the domain specific satisfaction for each of these, i.e., satisfaction with education, satisfaction with economic standard of living, satisfaction with personal safety and satisfaction with social connectedness were tested for their relationship with overall subjective wellbeing, each was found to be significantly associated as shown in Table 14.3.

These results suggest that the level of education or asset accumulation (for example) may not be directly related to overall wellbeing, but it is instead the level of satisfaction with education or social connectedness which is related to overall wellbeing. Thus it is not necessarily an increase in the amount of a public or private good which leads to a higher level of wellbeing, but the satisfaction with that public or private good which brings overall wellbeing to the older person. Such results are shown in Table 14.3.

These results also suggest that capability variables like education and asset wealth (for example) may be intermediate variables that contribute to the effects of other variables. That hypothesis gains some support from the significant associations found between education and income, and between asset wealth and physical health. Together with the more direct associations, they provide a broader canvas for identifying the bases of wellbeing for older people.

Table 14.3

Domain Wellbeing and the Significant Association with Overall Wellbeing

p-value of <0.001
The following Domains of Satisfaction and Wellbeing were significantly associated with higher Overall Wellbeing:

- **Health Wellbeing**
- **Education Wellbeing**
- **Work Wellbeing**
- **Economic Standard of Living Wellbeing**
- **Rights and Entitlements Wellbeing**
- **Leisure and Recreation Participation Wellbeing**
- **Living Arrangements Wellbeing**
- **Social Connectedness Wellbeing**
- **Safety Wellbeing.**

8. Other Significant Relationships

There were a number of other significant relationships across different domains. Health status, education and income levels were all positively associated with participation in leisure and recreational activities. Participation in community organisations was also significantly associated with health status, education and income levels. Satisfaction with social contacts was positively associated with health status but negatively associated with educational level.

Physical health status was positively associated with perception of safety in the neighbourhood at night, whereas personal income was negatively associated. Social and emotional loneliness were inversely related to feelings of safety in the neighbourhood. Overall loneliness was inversely associated with participants' perception of their rights and entitlement to financial security, healthcare, residential care and support from their families.

Significant differences were found for Māori and non-Māori for both marital status and household type with Māori having around half the proportion of married or partnered people as non-Māori. This is probably because of the lower levels of life expectancy. Negative associations were found for Māori regarding their perception of how well their income met their everyday needs and significantly more of them rented rather than owned houses. They considered their faith to be significantly more important to them than did non-Māori. These findings need to be treated cautiously, though, because of the small numbers surveyed.

Over three quarters of the participants considered their faith to be extremely or reasonably important to them and this was significantly associated with an objective variable of religious practice. Women considered faith to be significantly more important than was the case for men.

9. Areas of Particular Focus for Policy

All of the above significant relationships have policy implications. It is the intention of the research programme to identify research findings and their possible policy implications with stakeholders, professionals caring for older people, policy makers, and older people themselves. A few of these are discussed below.

Age - Although age did not demonstrate a significant relationship with overall wellbeing, significant relationships were found between age and higher incomes, health, greater asset wealth, higher participation in leisure and recreation and internet usage, each of which favoured younger over older age.

Policy will need to increasingly take into account the huge diversity among older people, and recognise that at this age, a group spanning twenty years covers a huge range of capabilities and needs.

Gender – Many of the gender differences among this age-group are probably associated with the lower life expectancy of men. While men reported greater overall wellbeing, this is likely to be influenced by their marital status and living arrangements (usually with a partner). Furthermore, their shorter life expectancy, when compared with women, means that fewer of the men lived on their own in their later years. However, women had significantly more social contacts than men and were slightly more involved in community organisations.

Policy at the government and community level should ensure the involvement of older people, regardless of gender, in easy access to transport, participation in community organisations and well resourced home based services. Such a strategy would also ensure that women have other means of social support when (and if) they later live by themselves.

Marital Status/Living Arrangements – Marital status was a significant indicator of overall wellbeing. Men, and those who were married or in a partnership, had significantly higher incomes, significantly greater asset wealth and participated in significantly more leisure and recreational activities. Men were also significantly more likely to be living in a relationship than women.

Policy could encourage the accommodation of different lifestyles such as communal living within housing developments and planned housing that encourages neighbourhood contact. Such living arrangements could allow for greater community participation.

Ageing-in-Place - Policy makers could well take note of the responses to a number of specific questions regarding the future expectations of 65-84 year-olds, e.g. a question regarding ageing-in-place: *“What would you say are the most important things that would enable you to continue to live in your own home as you grow older?”*

The responses to this question showed that almost all of the older people (97.5%) intended to remain in their own home, but that the most important aspects to allow them to “age-in-place” included (in order of importance):

- their own or their spouse’s good health (80%)
- having family and friends close by
- living in a desirable neighbourhood
- having easy access to transport
- reasonable rent or maintenance.

These recommendations that come from the older people themselves are pertinent to policy makers at the government and local body levels.

Economic Living Standard – Although this study showed few people live in severe poverty, the clustering of older people’s households between 50 and 60 percent of median household income should be of concern to policy makers. This is occurring with a cohort that has very high homeownership rates. The lower rates of homeownership (and consequent higher housing costs) of the younger cohort behind them, combined with most incomes clustering between the two internationally recognised poverty thresholds, suggests that the poverty levels could be expected to grow in later decades. For this reason it is vitally important to sustain the relative level of New Zealand Superannuation in future years. Furthermore, given the minimal rent protection for low income households in New Zealand when compared with other countries, policies that will reverse the trend in lowering homeownership levels for younger people will contribute to better living standards for them in future years.

Leisure, Recreation, Participation in Community Organisations – The results of this study indicate that older people experience greater levels of wellbeing when they are able to pursue their interests, participate with others and have access to a range of choice in activities beyond their home. With the greater emphasis on continuing to live in one’s neighbourhood, it is important that national and local policy makers ensure that older people have good access to transport and are able to participate in activities of their choice beyond their homes. Support for community organisations and voluntary associations that are frequented by older people (as participants, leaders or staff) provide a valuable policy investment in their quality of life.

Cultural Groups – Although the numbers of Māori over 65 years are currently small and the numbers of other cultural and ethnic groups are even smaller, demographic projections indicate these younger populations will increase in future years and their life expectancy is increasing. It is important that policies ensure that essential services support their cultural needs and ways of doing things. Furthermore, their particular activities beyond the home can be expected to involve cultural components and practices that will be important for their sense of identity and wellbeing, and will require the same sort of support as the extracurricular activities of the rest of the population. Policies will need to fully recognise the range of cultural diversity emerging in New Zealand and protect against disparities.

In further publications, the research programme intends to consider ways in which 65-84 year-olds can better live their older years by not only maintaining their current level of societal involvement, but also by increasing this involvement. Forthcoming findings from the MidLife sample (40-64 year-olds) will also be compared with the current study of 65-84 year olds and the policy implications considered as a means to enhance wellbeing in an ageing society.

Appendix One: Questionnaire Details

The full questionnaire contains 269 questions, is 44 pages long, and can be made available separately.

This Appendix includes a brief listing of the general areas covered in the questionnaire in the order in which they were asked (Section 1). It will be noted that this format has been used for the organisation of the Monograph, i.e. according to the “indicators of the specific domains of wellbeing.”

There is also a more detailed listing of the areas of questioning within these topics (Section 2).

1. Index of Questionnaire

- (a) Introduction/Screening questions
- (b) Socio-demographic and life cycle questions
- (c) Overall indicator of wellbeing – World Values Survey question
- (d) Indicators of specific domains of wellbeing:
 - Health
 - Education
 - Paid work
 - Economic standard of living
 - Rights
 - Leisure and recreation
 - Physical environment (Living arrangements)
 - Safety
 - Social connectedness
 - Cultural identity and religion.
- (e) Endpiece – further question on overall wellbeing (World Health Organisation Quality of Life question), and questions in relation to specific domains.

2. More Specific Areas of Questioning

- Screening questions to exclude those who: are not aged 65-84, and who are not independent or semi-independent.
- Socio-demographic questions (age, gender, ethnicity).
- Language (languages spoken by respondent).
- Religion (religion of respondent, frequency of practice, importance of respondent’s faith to them).
- Background and upbringing (country of birth, age of parents when born, area where respondent raised, years lived overseas, age when came to New Zealand, years lived in present dwelling, where living 5 years ago - rural/urban location).
- Siblings (number born, number still alive, number live in household, other place of residence).
- Living arrangements (type of residence, rural/urban location, number of co-residents, household type).
- Relationships (marital/partnership status, times been married/partnered, age of first marriage/partnership (of at least 3 months), age entered current marriage/partnership, age when last marriage/partnership ended).
- Current spouse/partner (age, location of residence).
- Other household matters (relationship to others in their household, age of other person/s).
- Children (number of children born or adopted, age of respondent when first and last child born/adopted, number of other child dependents cared for (e.g. stepchildren, grandchildren, foster children, nephews/nieces), number of all children listed who live in household, number

and location of all children not living in household, number deceased children, age of respondent when last child left home, where these children now live).

- Wellbeing (general level of wellbeing (World Values Survey question, and World Health Organisation Quality of Life question), specific level of satisfaction with: health, education, work, economic standard of living, entitlements and rights, leisure and recreation activities, physical environment, personal safety, contact with family, contact with other people, cultural identity).
- Health (SF-12 questions).
- Education (respondent age when left school, highest qualification, age when completed highest qualification, access to email/internet).
- Work and retirement (first main job and type of job, age when started first main job, midlife job and type of job, age when started midlife job, current job and type, age when started current job, age when finished most recent job, times been outside the workforce (for over a year), reason why outside the workforce, age when retired, reason for retiring, age when expect to retire, looking forward to retiring, number of hours would like to work after retirement, sage when respondent, or someone else, started saving for their retirement).
- Income (sources of personal income, total amount of personal income, sources of household income, total amount of household income, adequacy of person/household total income for specific everyday needs).
- Housing (number of people living in household, amount of specific outgoings for current dwelling, total housing costs).
- Other assets (ownership of other assets as a means of support in older years: property, reverse mortgages, shares, interest bearing funds, trust funds, business ownership, private superannuation, other assets; total value of these assets).
- Entitlements and rights (level of access or adequacy of the following rights: finance, health care, residential care, family support, government support).
- Leisure and recreation (participation in specific leisure and recreation activities in last month, leadership in community organisations in the last month).
- Physical environment (importance of factors allowing respondent to stay in own home: access to shops, reasonable rent or maintenance costs, desirability of neighbourhood, proximity of family and friends, level of health, access to transport, access to services, safety, availability of help).
- Safety (level of safety in own home, in their neighbourhood, in their neighbourhood at night, reason why not feel safe).
- Social contact (number of “frequent and important” social contacts of respondents, for each contact: the relationship with respondent, gender of contact, frequency of contact, type of contact, importance of contact with respondent to that person; level of loneliness – measured by the De Jong Gierveld Loneliness Scale).

Appendix Two: Scales Used in the 65-84 Year-old Survey (2007)

1. The Health Scale: SF-12 Health Survey

After careful consideration of two other internationally reputable health indices (EuroQol, and HUI3), the SF-12 Health Survey was chosen on the following grounds.

1.1 International Usage

The SF-12 began development at The Health Institute, USA, in 1994, when the SF-36 Health Survey (at the time the most widely-used health survey throughout the world) was found to be too long for some large-scale surveys. SF-12 (and the later version SF-12v2) as a shorter version of SF-36 but using the same health domains, has now overtaken the longer SF-36 in useage, and has been translated into over 30 languages, with detailed work showing that it is not strongly affected by cultural/ethnic differences. It has also been widely used in New Zealand by public agencies (see Ware, Kosinski, Turner-Bowker & Gandek (2007:199-217) for a listing of all publications relating to SF-12, especially those regarding validations studies and methodological issues.

1.2 Breadth of Questioning

The SF-12 includes an overall question on the level of general health; followed by eleven questions on specific aspects of health relating to the level of general limitations/accomplishments on physical and mental health, and the time period of any limitations on physical and mental health. The twelve items in the scale specifically measure: physical functioning (PF), role physical (RP), bodily pain (BP), general health (GH), vitality (VT), social functioning (SF), role emotional (RE), and mental health (MH). It allows for the separation of physical and mental health, and provides a summary measure of each – the Physical Component Summary (PCS) and Mental Component Summary (MCS). The data on functioning also allows for extrapolation upwards to macro-level indices, such as health expectancy and other life-table measures, and in turn to inform the policy debate.

As with the SF-36 format, the SF-12 questions relate to a time period of 4 weeks, and require this recall on almost all the questions. Given the older age group of the study with a higher likelihood of poorer recall and health fluctuations, a shorter time period could have been considered more appropriate, but the survey was essentially interested in a more representative sample of general health, not unduly affected by daily or momentary fluctuations.

1.3 Brevity

The SF-12 Health Survey is a multipurpose short-form with only 12 questions. It was therefore chosen (rather than the SF-36) in the interests of time efficiency in a large questionnaire and survey, especially where the respondents were older and likely to become confused regarding the detail of the questions. Other studies have shown that the SF-12 is a satisfactory alternative to the SF-36, especially where the sample is large and the objective is to monitor overall physical and mental health outcomes, rather than either of these in detail.

1.4 Suitability for a CATI Administered Survey

While the SF-12 was developed mainly for administration in a written form, multi-country trials of over a decade have ensured that the wording is suitable for oral presentation to English speaking respondents in many countries (and in other languages). In the survey reported on here, there were no difficulties in adopting the precise wording of the questions in the SF-12.

Scoring of the SF-12 is set out in a series of manuals, with instructions as to how to score each of the SF-12 items, along with instructions as to how to undertake norm-based scoring of the overall SF-12 scale as well as the separate physical and mental summary measures.

The documentation on SF-12 can be seen on www.sf-36.org/tools/sf12.shtml, or Ware, Kosinski, Turner-Bowker & Gandek (2007), and the questions included in the EWAS Questionnaire as Questions 66-77.

2. The De Jong Gierveld Loneliness Scale

The 6-item De Jong Gierveld Loneliness Scale was chosen as a reliable and valid instrument for measuring overall, emotional, and social loneliness, suitable for a large survey (De Jong Gierveld & Van Tilburg, 2006). This scale takes loneliness as one of the main indicators of social wellbeing, by reflecting an individual's subjective evaluation of their social participation or isolation. The scale thereby complemented the several objective indicators of the networks of personal relationships already included in the survey questionnaire.

The De Jong Gierveld Loneliness Scale draws on a cognitive approach to loneliness, where loneliness is seen as a subjective experience and is not directly related to situational factors. The scale thereby tied in with the theoretical position of the current research programme in aiming to use subjective and well as objective indicators. The importance of social perceptions and evaluations of one's personal relationships is emphasised. "Loneliness includes situations where the number of existing relationships is smaller than desirable or acceptable, as well as situations where the intimacy wished for has not been realised" (De Jong Gierveld, 1998, in De Jong Gierveld & Tilburg 2007:3).

The De Jong Gierveld Loneliness Scale specifically pertains to the feeling of missing an intimate relationship (emotional loneliness) or missing a wider social network (social loneliness), with the central question being "to what extent is an individual alone?" Thus the 6-item Scale has three items on emotional loneliness and three on social loneliness, these being two dimensions of the overarching loneliness concept, but with only a very small correlation between these two factors (De Jong Gierveld & Van Tilburg, 2006:593).

The Loneliness Scale is currently being used in the Longitudinal Aging Study Amsterdam, and it is hoped that comparisons can be made with the New Zealand study.

It should also be noted that while the Loneliness Scale has attained a high level of internal and external validation with respect to the two dimensions of loneliness and with the determinants of partner status and health, the authors suggest that, having tested it on a mail questionnaire, the "use of the shortened version (i.e. 6-items) of the loneliness scale in telephone modes needs to be further explored" (De Jong Gierveld & Van Tilburg, 2006:594). The current researchers were prepared to accept this challenge, and are in contact with the initiating research team.

Documentation and comment on the De Jong Gierveld Loneliness Scale can be seen on:

De Jong Gierveld, J. and Van Tilburg, T. (2007). *Manual of the loneliness scale, 1999*, Vrije Universiteit, Amsterdam. Retrieved 16 April 2008, Web site:

http://home.fsw.vu.nl/TG.van.Tilburg/manual_manual_loneliness_scale_1999.html

De Jong Gierveld, J. and Van Tilburg, T. (2006). A 6-Item scale for overall, emotional and social loneliness: Confirmatory tests on survey data. *Research on Aging*, Vol. 28 (5): 582-598.

De Jong Gierveld, J. (1989). A review of loneliness: Concept and definitions, determinants and consequences. *Reviews in Clinical Gerontology*, 8, 73-80.



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