WELL-BEING IN THE OLDER MALE: AN INVESTIGATION OF MENTAL, SOCIAL AND PHYSICAL WELL-BEING INDICATORS IN WANGANUI MEN

A Thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Nursing at Massey University

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ABSTRACT

New Zealand's older population is gradually increasing. This will mean the number of people with problems related to psychological and general well-being will also rise. When compared to women, men do not live as long, are more likely to die from intentional injury and use primary health services less. There is a paucity of research on older men, particularly within a New Zealand context. Because nurses work closely with people in primary, secondary and tertiary care settings they are well placed to undertake research and utilise research findings from studies relating to the older adult to promote health and well-being. The intention of the present study was to gain a greater understanding of those factors which impact on well-being in older men. Based on Wan, Odell and Lewis's (1982) model of general well-being, mental, social and physical well-being indicators were investigated to examine their relationships to overall psychological well-being and physical health.

The data for the present study were collected from a non-probability sample of 217 older males (over 65 years) residing in the Wanganui area. Multiple regression analyses revealed that of the mental, social and physical well-being indicators only satisfaction with social supports and number of visits to the doctor in the previous 12 months were significantly related to psychological well-being, and number of medications and illness/disabilities were significantly related to physical health as measured by self ratings of health.

Findings are discussed in relation to the literature. It is clear that nurses, and other health professionals, need to be aware of the relationship between objective health status and subjective well-being, and the distinction between the quality and quantity of support in order to provide effective care to older men. Finally the general limitations and future research implications are discussed.

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INTRODUCTION AND OVERVIEW

New Zealand's older adult population is gradually increasing (Melding, 1997). This trend is in line with a global increase in numbers of older people (Belsky, 1990; Butler, Lewis & Sunderland, 1991; Eliopoulos, 1997; Santrock, 1997). In 1996, 11.8% of the population in New Zealand was 65 or over (Bonita & Beaglehole, 1998; Ministry of Health, 1997a). In the year 2025, when the baby boom generation become elderly, this age group will represent 18-19% of the total population. Based on 1991 data and considering average levels of migration and mortality, the estimated population in New Zealand of this age group will be 540,000 (Melding, 1997).

In Wanganui where the present study was undertaken, 12% of the population is aged 65 years and over, compared with 11% for the whole of the central region (Central Regional Health Authority, 1996). It is predicted that the population of Wanganui will increase by 2% over the ten year period 1991 to 2001. Within this 2% increase, there will be a 65% increase in people 75 years and over, representing the highest proportionate change across all age groups (Central Regional Health Authority).

The impact of these population changes on New Zealand society has been reviewed elsewhere (Koopman-Boyden, 1993). Increases in older populations mean numbers of people with problems related to psychological and general well-being also rise due to the high incidence of long term illness and disability in this age group (Melding, 1997; Ministry of Health, 1997d). The older person experiences a double stigma of being old and having psychological and general well-being issues that are specific to their age group, as well as those that can be generalised across the lifespan (Byrne, 1995).

The Ministry of Health (1997d) suggests that improvements in technology and general living conditions will be unable to keep up with the ageing population and more people will be disabled and/or live with a long term illness. Although there is currently minimal research to support this premise, there is sufficient contemporary evidence to be of a concern to policy makers, service planners and older people themselves (Statistics NZ, 1995).

Gender Differences in Ageing

The differences in life expectancy between men and women are well documented

(Eliopoulis, 1997). The following section reviews these differences and illuminates the importance of further research focussing on well-being in older men. During the 20th century there has not only been an increase in the number of older people but also an increase in the number of older women as a proportion of that group (Butler et al., 1991). Eliopoulos claims the ratio of women to men has dropped to the point where there are no more than seven older men for every 10 older women in the United States. Butler et al. postulate that this is due to higher male mortality from coronary heart disease, emphysema and other respiratory diseases, as well as lung cancer associated with smoking, industry related accidents and exposure to toxic chemicals, car fatalities and other accidents, suicide, and alcohol related illnesses such as cirrhosis of the liver. This landscape of gender differences, as related to longevity, indicates that most married women will become widows. In New Zealand there are four widows for every widower resulting from decreased life expectancy for men and higher numbers of men who remarry (Davey, 1994).

Historically, in colonial New Zealand, men originally outnumbered women; however, from the early 1900s the gender ratio progressively changed until 1936 when the number of women began to outnumber men both in the general and older person population (Koopman-Boyden, 1993). Statistics New Zealand (1995) identify that in 1991 there were approximately five women 85 years or older for every two men around the same age and it is predicted that by the year 2031 this discrepancy will alter to become around 3.5 women to every two men.

While many health and well-being factors influence both men and women, Adams (1997) raises specific concerns regarding men's health. For instance, as previously mentioned, men do not live as long as women and are more likely to die from intentional injury and use primary health services less (Adams). There appears to be an increase in research related to women's health (Matteson, McConnell & Linton, 1997) and a corresponding decrease related to men's health issues over the last decade (Adams). Several gerontological nursing texts, for example Matteson et al., have sections specifically related to the older woman but no corresponding section addressing health needs pertinent to the older man. Even if men are frequent participants in research, the results of the studies often render the male presence invisible by generalising results to the whole population. An example of this is the work on intentional injury by Coggan, Fanslow and Norton (1995) who clearly identify men as being the main casualties of intentional injury, yet provide little discussion on the potential causes for this major health problem. Future research specifically related to men, older men and men's health has the

potential to change the previously mentioned health outcomes.

Notwithstanding these gender differences in life expectancy, clearly there are increasing numbers of older people with more people surviving to their senior years than ever before. Not only are more individuals reaching late adulthood, but they are living longer once they do. The following section examines theories associated with the successful psychological, social and physical adjustments required of the older person.

Theories of Ageing

Views of what constitutes ageing and old age vary enormously. Some believe there is no exact definition of old age (Hall, 1984). Others have divided the older adult into two subgroups: the young-old (65 to 75 years) and the old-old (late 70s and over) (Belsky, 1990; Butler et al., 1991; Santrock, 1997). However, all agree that old age involves moving through distinct developmental stages. There are a number of theories relating to how people adjust to ageing that provide varying degrees of universality, validity and reliability (Eliopoulos, 1997). Three of the most frequently cited theories associated with successful adjustment to old age are the disengagement, activity and continuity theories.

Berger (1984) identifies disengagement theory as the most controversial of the three theories. Disengagement theory is based on the premise that the older person gradually and progressively withdraws from society psychologically, socially and physically (Cumming & Henry, 1961). Withdrawing is a mutual activity where the individual and society move away from each other to the benefit and satisfaction of both parties. Peterson (1996) claims the promotion of well-being is achieved through disengagement theory by assisting both society and the individual in preparation for the person's imminent death by the mutual withdrawing by both parties.

Activity theory argues that older people continue their middle age/middle adulthood roles for as long as possible (Santrock, 1997). If it is not possible for the individual to continue with these roles, as in the case of retirement, substitute roles are found, such as greater involvement and activity within the wider family and/or community. This change of focus enhances and/or maintains psychological well-being because the more active and involved older people are, the more likely they are to express satisfaction with their lives (Berger, 1984).

Continuity theory, also known as developmental theory, challenges the

assumptions made by both disengagement and activity theories (Berger, 1984). This perspective suggests the factors related to personality and the predisposition toward certain actions observed in old age are similar to those experienced when younger (Neugarten, 1964). Essentially, people who in old age are outgoing, happy and active also exhibited the same qualities when younger. The opposite of this is also true. Eliopoulos (1997) claims the unique features of each individual allow for the multiple adaptations and complexities associated with ageing. Continuity theory considers the complexities of ageing more so than the other theories discussed. Both Peterson (1996) and Vander Zanden (1981) argue that continuity theory views each individual as a unique being, possessing original qualities that remain with the person throughout the life span. Disengagement and activity theories do not share this proposition.

Erikson (1963) and Peck (1968) are both developmental theorists who view well-being as being a result of the successful achievement of certain developmental tasks. Berger (1984) claims that rather than trying to categorise the older person as disengaged or active the focus should move to identifying the underlying feelings the individual has about his or her life. This premise is evident in Erikson's work.

Erikson (1963) identifies eight stages, or crises, that people move through starting at infancy progressing to old age, as well as the tasks and/or challenges confronting them. The developmental stage relating to late adulthood is *ego integrity versus despair*. *Ego integrity* means the individual has looked back over his or her life and revealed a picture cognisant of a life well spent and a feeling of satisfaction (Santrock, 1997). On the other hand, *despair* is characterised by feelings of sadness, regret, bitterness and depression over the total worth of the person's life. These feelings occur as a result of not having resolved tasks/crises within the earlier developmental stages, for example having gone to prison and therefore been isolated from society during early adulthood.

Peck (1968) redefined and built on the developmental tasks of old age, as outlined by Erikson (1963), by identifying three specific challenges facing the older person. Peck identified that older adults experience:

Ego differentiation versus role preoccupation. This is where people redefine their worth or satisfaction with life in terms of something other than parental or occupational roles.

Body transcendence versus body preoccupation. Here the person adjusts to a decline in physical well-being and continues to experience psychological well-being through interpersonal relationships. The interpersonal relationships take the

individual beyond a preoccupation with the ageing body.

Ego transcendence versus ego preoccupation. At this point, while realising that dying is inevitable, the older adult reaches a stage of psychological well-being through reflection on his or her life and the things he or she has done.

Although not developmental theorists, Roper, Logan and Tierney (1990) produced a model for nursing, encapsulating the complexities of living across the lifespan. Roper et al. identify continuous change as influencing the physical, psychological, sociocultural, environmental and politicoeconomic circumstances confronting individuals throughout their lives. Each of these circumstances influence a person's ability to meet activities of daily living. Closely linked to the lifespan and activities of daily living is the dependence/independence continuum (Roper et al.). The continuum acknowledges the various points of the lifespan where a person is unable to perform some or all activities of daily living independently.

In summary, the examination of theories of ageing highlight a range of perspectives associated with successful ageing and the achievement of well-being in older adults. These emphasise that the older person's path to a state of well-being is unique, complicated and multifactorial, influenced by psychological, social and physical factors such as depression, widowhood and physical disability/illness.

The following section incorporates the profile of the older person and theories of ageing to examine health and well-being in this population. The theoretical framework underpinning the current study will then be introduced.

Health in the Older Person

Ageing is both a natural and inevitable process, but has the potential to threaten psychological, social and physical well-being when it is viewed as an illness from which there is no recovery (Hobman, 1996). It is possible to experience well-being and a healthy state even in the presence of chronic illness and/or disability (Kaufman, 1996; Viverais-Dresler & Richardson, 1991).

The World Health Organisation (1947) views health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. This suggests that an optimum state of health cannot be achieved by simply preventing and treating disorders, but must incorporate holistic principles in order to promote well-being (Orley, 1996). The World Health Organisation's definition of health implies an

ideal state of being that has many possible interpretations. However, the fundamental framework of mental, social and physical well-being has the potential to identify barriers, as well as factors, which enhance an individual's experience of health.

Many myths and negative stereotypes exist as barriers to achieving well-being in the older person (Alford & Futrell, 1992; Butler et al., 1991). An example is the belief that senility, physical decay, institutionalisation and a loss of mental functioning are synonymous with being an older person (Eliopoulis, 1997). The Hillary Commission (1996) notes there are no identified national goals in New Zealand that state the preferred health status of older persons. However the Ministry of Health (1997c, p. 206) identifies a specific goal, "Health of Older People", and has set the following objectives:

1. To maintain and improve *mobility* amongst older people.
2. To reduce death rates and disability from *injury*.
3. To protect older people from preventable *infectious* diseases, such as *influenza*.
4. To reduce death rates and disability from *depression* and promote *mental health*.
5. To reduce disability from *incontinence*.
6. To improve and maintain *social support* for older people.

As can be seen, the maintenance and advancement of health and well-being in the older adult are significant health issues facing New Zealanders today. This is also evidenced by the volume of publications relating to the older person that are produced each year by the Ministry of Health (1997a, 1997b, 1997c, 1997d).

The Central Regional Health Authority encompasses the Wanganui area where the present study was undertaken. The RHA predicts that the population of older people in the area will significantly increase and they have developed health strategies to meet the challenges posed by an older population (Central Regional Health Authority, 1996). Of the seven strategies identified, one mentions the promotion of wellness within this target population, while the rest are in response to illness rather than wellness. The ageing of this population has implications for the general well-being of the elderly. The impact of this ultimately increases the demand for health care which in turn places a strain on an already financially burdened health system.

Theoretical Framework

The present study investigated well-being in an older male sample. The following theoretical framework has been chosen to underpin the current research project. Wan,

Odell and Lewis (1982) produced a model reflecting the interrelated nature of physical, social and mental well-being to depict health in older adults. These three factors are also the basis of the previously discussed World Health Organisation's (1947) definition of health which has been pivotal and influential in defining health.

Based on the well-being and ageing literature, a modified version of Wan et al's (1982) model was used in the present study and is explained below. As shown in Figure 1, the three dimensions of well-being may operate independently or overlap in one, two or all three areas. Wan et al. note that indicators of mental, social and physical well-being are correlated; for example, the older person may have poor physical health, but good psychological and social functioning. The area where all three dimensions overlap represents the older person who is functioning well in all the three areas: physical, social and mental well-being.

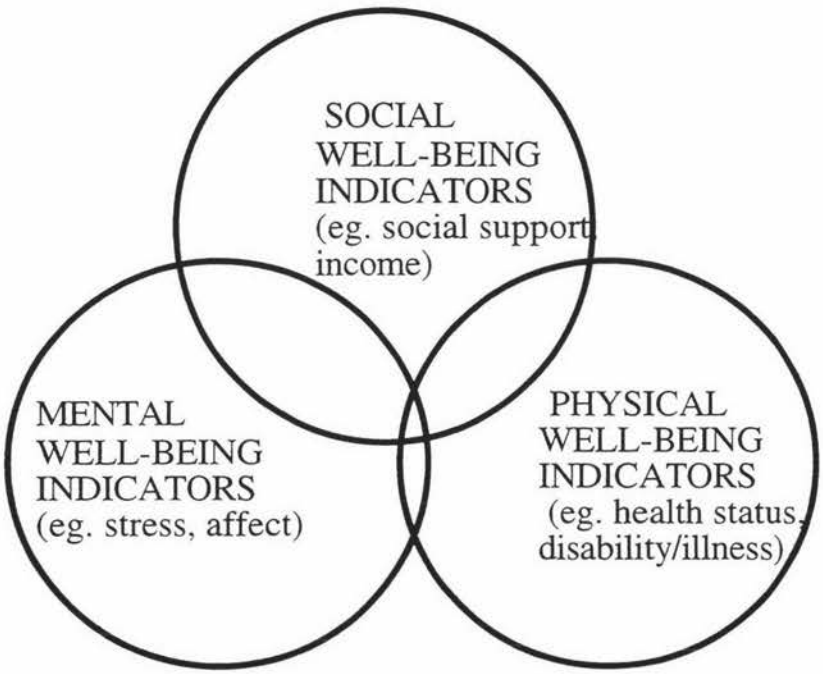

Figure 1. The relationship between the three dimensions of well-being (Wan et al., 1982).

In sum, well-being in the older adult is not a concept that lends itself to being simply and easily described. This is evidenced by the multitude of theories related to ageing. These theories suggest that well-being consists of many different factors, including the interrelationship between psychological, social and physical factors. For example, well-being is not just related to physical capabilities, but has links to a positive

and realistic attitude and a sense of belonging within a social context (Kaufman, 1996). Despite natural biological ageing and often physical deterioration, the older person can still lead a healthy, active and fulfilling life (Viverais-Dresler & Richardson, 1991).

Undeniably the number of older persons is increasing in New Zealand society as well as internationally (Melding, 1997). In New Zealand this increase will transcend gender. Associated with biological ageing is an increase in the number of people living with a long term illness/disability (Ministry of Health, 1997d). This has the potential to increase the utilisation of currently shrinking health resources.

More research is required to investigate the factors that keep the older person well and strategies need to be developed to promote well-being. Nursing is well placed to meet this challenge as nurses work in primary, secondary and tertiary settings. With increasing numbers of older adults utilising health services across the three settings, more nurses will be required to work with, care for and support this population. Trim (1997) identifies the comprehensive and ever expanding roles that nurses provide as part of their nursing practice. One of those roles is the promotion of mental, social and physical well-being within communities. There is a paucity of research relating to the older male population even though men are more likely to die from intentional injury and use primary health services less than women (Adams, 1997).

What is the importance and usefulness to nursing of researching older people's level of well-being? Andrews and Withey (1976) have proposed a number of "products of value" that ensue from such research. First, there is value in gaining baseline information for comparative purposes in order to measure change. Are older men experiencing higher or lower levels of well-being? Are community interventions effective in improving the lives of older men? Second, there is value in knowing how well-being is distributed in society. How do different subgroups feel? Does well-being decrease with age? Do the poor experience less well-being than the rich? Are the married happier than their single counterparts? Third, there is value in understanding the relationships that exist between different types of well-being. Do psychological indicators impact on physical health and vice versa? How does age, illness and disability relate to our ability to sustain satisfying relationships with others? Finally, there is value in understanding how different domains of people's lives combine into some overall evaluation of the value of life. What aspects of life are more important than others in determining one's overall well-being? Nurses need to incorporate research based knowledge on well-being as part of gathering assessment data in order to plan and implement individualised nursing care for the older

male.

Alford and Futrell (1992) suggest that philosophically nursing is continuing to implement the concept of wellness and redefine health to encompass the positive aspects of ageing. Recently, in New Zealand, the expansion of nursing roles as a means to improve client services and health outcomes has been recommended (Ministerial Task Force on Nursing, 1998). Nursing research is a pivotal component in improving client services and health outcomes, and in expanding the scope of nursing practice. There is very little quantitative nursing research currently being done in New Zealand (Ministerial Task Force on Nursing). While qualitative studies offer information about the individual human experience as a subjective expression of reality, quantitative research strives for objective reality that can be generalised to similar settings (LoBiondo-Wood & Haber, 1998). The present study seeks to measure factors, for example, psychological, social and physiological, that impact on well-being in the older male. The findings of this study will provide research based knowledge on these factors that has the potential to inform the practice of nurses who provide services for this population. This is important as historically working with the older person was seen as the Cinderella of nursing and it is only in recent times that nursing has begun to view older persons' health as a complex and challenging career option (Hylton, 1995).

The current study examined the relationships between mental, social and physical well-being indicators in men over the age of 70 years who reside in the Wanganui area. The following chapter will review the literature related to the three dimensions of well-being proposed by Wan et al. (1982) and identify the research goals.

CHAPTER ONE

WELL-BEING IN THE OLDER PERSON

This chapter will discuss the literature relating to mental, social and physical well-being indicators in the older person. Following this discussion research goals will be presented.

1.1 Mental Well-being[1]

The concept of mental well-being is not merely the absence of disease (Ministry of Health, 1997b). It cannot be viewed as a complete and absolute state, but as a point on the positive end of life's continuum (Cowen, 1994). Mental well-being includes how individuals feel about themselves and how they cope with the demands of daily life (Ministry of Health, 1997b). The Mental Health Foundation of New Zealand (1995) identifies psychological well-being as the achievement of sufficient personal development and the participation in a balanced and interdependent social, economic and cultural evolution. The following section identifies and discusses aspects of mental well-being, as defined by Wan et al. (1982). These variables are well documented in the literature as impacting on the well-being of the older person and can be viewed independently or linked as outlined by Wan et al.'s model.

1.1.1 Stress

Stress occurs as a daily part of living (Eliopoulos, 1997). Zautra, Affleck and Tennen (1994) in their review of stressful life events in the older person identified social losses, illness, changes in lifestyle such as retirement and the impact of daily life events as common experiences for this population. The examination of the effect of positive and negative daily occurrences on the older person can illuminate how life events can affect psychological well-being (Zautra et al.).

Historically stress research has focussed predominantly on major life-changes or life-events as having a negative impact on psychological well-being (Beaumont, 1994; Chamberlain & Zika, 1990). Markides and Cooper (1989) claim that until the late 1980s

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1 The terms mental and psychological well-being tend to be used interchangeably in the literature. In the current study where Wan et al.'s (1982) model is used, the terms mental well-being indicators are used to describe the independent variable and psychological well-being is used to describe the dependent variable.

through to the early 1990s there was little research on the effects of minor stressors on the older person. These authors also refer to this type of stress as occurring on a micro level. The dearth of research on minor stressors and the older adult may reflect society's view that nothing much ever changes within this age group, particularly in comparison to young or middle aged adults (Zautra et al., 1994).

Holmes and Holmes (1970) conducted one of the earliest studies looking at the effects of minor stress on people's day to day experiences and made links between stress at this level and minor physical complaints. However, it was Lazarus and Folkman (1984) who found that day to day hassles impacted on physical and emotional well-being. Laird (1989) identified links between life events, hassles and psychological well-being in an over 65 year old age group and found that women generally reported more hassles than men. Issues related to health included concerns about declining physical ability, as well as being worried about the health of a family member. Economic instability was also cited. This is supported by Laird and Chamberlain (1990) who assessed the everyday concerns of an older person sample and found that the most frequently reported hassles included health and economic viability while uplifts included positive interpersonal relationships and recreation. Research by Landreville and Vezina (1992) looked at whether daily hassles were stronger correlates of physical and psychological well-being than major life events in an older person sample. The authors classified older adults as aged 55 years and over. The results of this study showed that self rated health, limitations in daily activities through chronic illness and frequent daily hassles were associated with physical well-being. The experience of frequent daily hassles and limitations in functional activities associated with chronic illness were linked to psychological well-being. Overall results clearly demonstrated that frequent hassles had a stronger relationship to physical and psychological well-being than did major life events.

A more recent study conducted by Burnette and Mui (1997) compared the effects of stressors on levels of psychological di**stress** among young-old (65 to 79 years) and old-old (80 to 100 years) adults. Results of the research demonstrated unmet health needs and a decrease in contact with church related activities increased levels of di**stress** in the old-old population, while the effects of family conflicts increased levels of di**stress** in the young-old group. Cervilla and Prince (1997) looked at the effects of social di**stress** on the prevalence of depression in the older person. The results of this study showed a distinct relationship between depression and threatening life events in the year prior to being interviewed. This longitudinal link between stress and depression in older adults has been demonstrated not only with major life events (Glass, Kasl & Berkman, 1997),

but also with minor stressors or daily hassles in older populations (Holahan & Holahan, 1987; Musil, Haug & Warner, 1998).

1.1.2 Depression

There is considerable evidence that depression, a major antecedent for suicide, impacts on psychological well-being in the older person (Buschmann, Dixon & Tichy, 1995; Coggan et al., 1995; Dennis & Lindesay, 1995; Henderson et al., 1997; Osgood, 1991; Osgood & McIntosh, 1986). However, there is debate as to whether depression is more or less prevalent in older adults (Belsky, 1990; Butler et al., 1991; Heikkinen, Berg & Avlund, 1995; Lewinsohn, Rohde, Seeley & Fischer, 1991; Santrock, 1997). It has been argued that if the measurement of depression is based on specific diagnostic criteria, the numbers of older people who are depressed are lower, not higher, than other age groups (Heikkinen et al.). Others disagree and claim that depression is indeed more prevalent in the older age group than in any other age group (Brink et al., 1982; Gurland, 1976). These discrepancies may be partly explained by the potential for the misdiagnosis of depression in older adults. For example, Belsky warns of possible misdiagnosis between depression and dementia as the symptomatology of both share similar characteristics, such as slowing of cognitive processes, forgetfulness and confusion. A decline in intellectual functioning and personality may be indicators of dementia and not depression; however, in the early stages of dementia depression may also be present as the individual is cognisant of a decline in intellectual functioning (Eliopoulos, 1997). Misdiagnosis has implications for the measurement of these constructs.

The presence of depression in the older person is not necessarily synonymous with the normal response to growing old. However, depression is the most common functional psychosocial disability occurring in later life (Buschmann et al., 1995). The term disability is used because being in a depressed state has far reaching consequences in terms of being able to cope and function with daily matters. Combined with the often multiple health problems older people live with, for example chronic pain, depression can be an outcome either through the side effects of medication or as a response to declining health (Butler et al., 1991; Eliopoulos, 1997; Osgood, 1991). It is important to recognise that depression in the older adult can be a result of normal reactions to losses associated with ageing and, therefore, is a reflection of a decrease in life satisfaction as opposed to a label of depressive illness (Hall, 1984; Heikkinen et al., 1995). However, research has shown that major depression is notably more common in older adult suicides than in younger populations (Henriksson et al., 1995) and a number of studies have found

depression to be an important correlate of suicidal ideation (Connell & Meyer, 1991; Reynolds, 1988; Rich & Bonner, 1987).

1.1.3 Suicidal Ideation

The prevention of suicide and the identification of those at risk is receiving increased public attention, as well as being a growing public health issue, both in New Zealand and overseas. However, much of the research and associated media attention has focussed mainly on the increased incidence of suicide among the adolescent and young adult population (Beautrais, Joyce & Mulder, 1994; Cattell & Jolley, 1995). Little emphasis has been placed on suicide and/or suicidal ideation in the older person.

Internationally, New Zealand has the fifth-highest suicide rate after Hungary, Finland, Russia and France (World Health Organisation, 1994). Suicide is the second leading cause of death from injury in our country and attempts at suicide is the seventh leading cause of injury requiring hospitalisation (Coggan, 1997). The Ministry of Health (1998) notes that the incidence of suicide is increasing and offers several reasons for this phenomenon, such as increasing rates of depressive illnesses, alcohol and drug abuse, increasing violence (including sexual and child abuse), alienation from cultural and/or ethnic heritage and alterations in family structure.

Geographically, within New Zealand, the Central Regional Health Authority has the highest occurrence of suicide with a representation of 16.4 suicides per 100,000 persons per year. This figure is higher than the Northern RHA with a representation of 14.8 suicides per 100,000, the Southern RHA with 14.6 per 100,000 and the Midland RHA with 10.5 suicides per 100,000 annually (Coggan et al., 1995). It is within the Central RHA geographical area that the present study was undertaken.

Historically, the increased incidence of suicide has occurred in both young and older men. For instance, research which analysed rates of suicide in New Zealand between the period 1957-1986 discovered that while the total incidence of suicide had been stable over time, there was an elevated incidence occurring in both young and older men (Skegg & Cox, 1991). A study which explored the incidence of suicide in New Zealand during 1984 discovered that cases of suicide were highest amongst males in the 15-24 age group followed by older men (Langley & Johnston, 1990).

Between 1988 and 1992 males represented approximately 80% of all suicides in New Zealand (Coggan et al., 1995). Epidemiological studies in the United States suggest

that people aged 65 years and older take their own lives more frequently than other age groups (Courage, Godbey, Ingram, Schramm & Hale, 1993). In New Zealand the rate of suicide among older males (65 years and older) is 27.6 per 100,000 per year, compared to 6.6 per 100,000 per year for older women (Coggan et al.). Melding (1997) claims that the incidence of suicide in New Zealand men over the age of 65 is actually 33.4 per 100,000, higher than Coggan et al. suggest. However, both authors agree it is only the young male age group of 15 to 24 years who have a higher incidence of 39.3 per 100,000 per year in this country (Coggan et al.; Melding).

Among African and white American men suicide rates reach a peak in adulthood, usually around late 20s to early 30s and then diminish through middle age, peaking again in later life (Osgood & McIntosh, 1986). In New Zealand the incidence of suicide in non-Maori is noticeably greater than for Maori. For Maori there is a significant decrease in suicide rates after 24 years so that by age 65 years there are approximately 5 deaths per 100,000 (Coggan et al., 1995). It has been suggested that white men aged 70 years or over are potentially at risk for mental, social and physical ill health, including suicide, both internationally and in New Zealand (Coggan et al.; Osgood & McIntosh).

Despite the number of studies related to suicide, the increased profile of attempted and actual suicide information and the impact these have on society, this phenomenon still remains under reported (Coggan, 1997; O'Carroll, Rosenberg & Mercy, 1991). Kaplan, Adamek & Johnson (1994), when reporting on the findings of their research on suicide from using firearms, identified as a limitation of the study the reliability of data derived from death certificates. This is supported by Coggan who believes the identification of a death as being caused by suicide relies on the acceptance of society, as well as individuals within that society (for example, coroners), to distinguish a death as being from suicide.

The issue of human intent further complicates the accurate reporting of suicide. Human intent may vary from carelessness to indifference resulting in reckless behaviour and accidental death, to deliberate self-destruction (Coggan, 1997). O'Carroll et al. (1991) give a possible explanation for this reluctance by coroners and medical examiners to certify death by suicide as being on personal, religious, financial and even political grounds. Melding (1997) believes the under reporting of suicide in the older person reflects society's attitude that older people have lived their life and have a moral right to end their life which is at an end anyway. Another notion is that suicide in this age group is a result of a rational and carefully thought out plan. This implies that the consequence

of such a death is less of a burden on society and, therefore, is somewhat justifiable (Kerkhof, Visser, Diekstra & Hirschhorn, 1991).

The antecedents and influences on suicidal ideation and suicide behaviour are numerous. However, studies have consistently shown that suicidal behaviour is positively correlated with hopelessness (Connell & Meyer, 1991; Reynolds, 1988; Rich & Bonner, 1987).

1.1.4 Hopelessness

Hopelessness has been identified by Beck and Steer (1993) as a system of cognitive schema in which the common factor is characterised by a negative expectancy about the short and long term future. Hopelessness has been identified as an important clinical symptom, is a feature of depressive disorders and may develop as a consequence of other conditions (Young, Halper, Clark, Scheftner & Fawcett, 1992). The construct of hopelessness and its relationship to the physical and psychological well-being of older adults is well documented (Fry, 1984, 1986; Hayslip, Lopez & Nation, 1991; Hill, Gallagher, Thompson & Ishida, 1988).

Fry (1986) reported hopelessness to be related to increasing age and depression, but not related to changes in self-esteem or interest in social activities. Hayslip et al. (1991) while trying to validate Fry's work found that even though there was a negative correlation between hopelessness and increasing age, there was a positive correlation to self-esteem, depression, self rated health and life satisfaction.

Osgood and McIntosh (1986) and Young et al. (1992) link feelings of hopelessness to an increased risk of depression and suicide in the older population with obvious implications for psychological well-being. A study conducted by Rifai, George, Stack, Mann, Reynolds III (1994) found that older clients who experienced recurrent depression and who had previous histories of attempted suicide had higher hopelessness scores in both the acute and rehabilitation phases of their treatment than those who were depressed but had no history of attempted suicide.

A study by Hill et al. (1988) found hopelessness, depression and health perception were interrelated and predictive of suicidal ideation in the elderly. Mendonca and Holden (1996) investigated the link between hopelessness and suicidal intent in older people and found that the ideation items used to describe the desire to commit suicide were significantly correlated with feelings of hopelessness in the population studied.

Research into homeless older men found a state of hopelessness to be a common theme experienced by these people as they learned to adapt and function within the culture of poverty (Vance, 1995). Some of these men were able to adapt to their situation and utilise as well as exploit the social service networks available to them, while others could not. This finding suggests that participants who were able to adapt found a social niche in which to function and have some of their well-being needs met. Another study looked at the links between emotional well-being and family contact in a group of older people living in an institutional setting (Farber, Brod & Feinbloom, 1991). Measures of emotional well-being included depression, hopelessness and life satisfaction. Significant correlations between the quality of the family contact, rather than the quantity, and all the measures of emotional well-being were found.

Hopelessness has been characterised as a state in which the older adult perceives few if any alternatives (Bevan & Jeeawody, 1998), which in turn may lead to passive behaviour where the individual cannot mobilise resources on his or her own behalf (Gordon, 1987). The inability to activate personal resources, such as supportive relationships from others, may be linked to feelings of isolation. For instance, Bevan and Jeeawody note that hopelessness is often linked to loneliness such that hopelessness may lead to or increase the likelihood of loneliness.

1.1.5 Loneliness

Loneliness has been described as a major problem for the older person and is identified as a significant issue within society that creates often intensely felt emotional reactions (Hall, 1984). Research by Hector-Taylor and Adams (1996) identified low income, limited education, living alone and having experienced the death of a spouse within the last year as being predictors of loneliness in the older person. McWhirter (1990) also found death of a significant other along with ageist attitudes and retirement were related to loneliness in older adults. Research by Russell (1996) concluded that there is an important relationship between loneliness and psychological well-being in the older adult particularly in the areas of adjustment, life satisfaction and depression.

McWhirter (1990) claims that loneliness can occur in both the presence and absence of social contact, and to avoid loneliness people require both intimate relationships with others, as well as a sense of integration within a social context. Akerlind and Hornquist (1992) also differentiate between loneliness and social relationships. They identify the emphasis social support research places on factors

external to the person and the link to the availability of social support, whereas the focus for loneliness research is on inner feelings of affinity and the antecedents, as well as, consequences in the overall life of that person (Akerlind & Hornquist).

Researchers have identified links between loneliness and depression (Russell, 1996), suicide and suicidal ideation (McWhirter, 1990), alcohol abuse (Akerlind & Hornquist, 1992) and social support (Flett, Harcourt & Alpass, 1994). In relation to physical health, Russell found no links between loneliness and objective measures of physical health (for example, number of prescription medications and functional status), but loneliness was found to be related to chronic illnesses and self-rated health status. Flett et al. in a New Zealand study on older people with chronic leg ulceration, found loneliness was related to limited mobility, pain, concerns about health status and a decrease in self-esteem. This study is support by McWhirter who found that physical limitations and health care deficits were contributing factors to loneliness in the older person. Loneliness has also been shown to be related to psychological factors such as negative affect (Russell, Peplau & Cutrona, 1980).

1.1.6 Negative Affect

Affect is comprised of a range of emotions, moods and feeling states (Clark & Isen, 1982). Negative affect has been defined as a mood disposition characterised by individual differences in the experience of negative self concept and emotion (Moyle, 1995). Cropanzano, James and Konovsky (1993) report that people who have high levels of negative affect identify with feelings of anxiety, anger and fear. Watson and Clark (1984) conclude that people who have high levels of negative affect view the world through a negative lens and therefore tend to experience dissatisfaction with themselves and the world and dwell on their failures.

Much of the literature to date has focused on how and why individuals experience affect with little research being completed on the age related changes in the expression of affect, or the ability to measure affect in others across the life span (Schulz, O'Brien & Tompkins, 1994). Arnold (1991) claims that negative and positive affect are important ingredients influencing psychological well-being in the older population. Early research on affect in the older person identified increasing negative affect with age; however, contempory studies challenge this view (Schulz et al.). For instance, Cropanzano et al. (1993) suggest that affect, whether positive or negative, is partially inherited. Continuity theory would also challenge the stance that negative affect increases with age. This

perspective suggests that the factors related to personality and the predisposition toward certain actions observed in old age are similar to those experienced when younger (Neugarten, 1964).

A review of psychoneuroimmunology research provides evidence suggesting links between stress, negative affect, depression, social support and physical well-being (Cohen & Herbert, 1996). Diefenbach, Leventhal, Leventhal and Patrick-Miller (1996) found that older people who had high negative affect scores reported more somatic symptoms. Research by Flett et al. (1994) found that older people living with chronic leg ulcers reported higher levels of negative affect than those participants without leg ulcers. It should be noted that Watson and Clark (1984) stress that negative affect represents subjective dispositional temperament and mood rather than an index of health. Individuals high on negative affect may not be objectively less healthy than their low negative affect counterparts, but are more likely to report "distress, discomfort and dissatisfaction ... Even in the absence of any objective source of stress" (Watson & Clark, p. 483).

In sum, it is apparent that stress, depression, suicidal ideation, hopelessness, loneliness and negative affect are related to psychological well-being in the elderly. There are a limited number of studies focussing on psychological well-being in the older person and a lack of research being undertaken in New Zealand looking at well-being in older men.

1.2 Social Well-being

The following section identifies and discusses aspects of social well-being as identified by Wan et al. (1982).

1.2.1 Social Support

Having good social supports and social relationships has long been believed to positively impact on health and guard against the incidence of morbidity and mortality (Durkheim, 1951). A number of studies describe the psychological and physical benefits of social support, documenting how people who receive social support cope better psychologically with stressful events and recover from episodes of ill health more rapidly (Bloom, 1990; Grant, Patterson & Yager, 1988; Prince, Harwood, Blizard, Thomas & Mann, 1997; Taylor, 1990).

House, Umberson and Landis (1988) raise the issue of whether the relationship between social support and health is due to main (direct) or buffering effects. Followers

of the main or direct effect model argue that social support benefits health and well-being irrespective of the influence of stress levels (Cohen & Syme, 1985). On the other hand, followers of the buffering effects model identify that social support serves to protect the individual/s from the negative effects of stress inducing events (House et al.).

Cohen and Syme (1985) provide evidence to suggest that both main and buffering effects influence health and well-being. House et al. (1988) suggest main effects are reported when the support received is measured by how a person is integrated within a social context and buffering effects are reported when the support received is measured by the availability of resources to a person in response to a stressful event.

The role of social support in significantly influencing well-being in the older person has been well documented (Choi & Wodarski, 1996; Kanacki, Jones & Galbraith, 1996; Prince et al., 1997; Rook, 1994; Wan et al., 1982). Kanacki et al. suggest there is little difference between developmental stages in the links between social support and well-being. However, specific factors within each developmental stage may differ, for example, the incidence of illness has weaker links to marital status, but stronger links to friendships among older adults than among younger age groups (Rook). Santrock (1997) believes that the older person who has a range of social networks, made up of both family and friends, experiences psychological well-being as opposed to those who are more socially isolated. This is supported by Slivinske, Fitch and Morawski (1996) who identified that not having satisfying social relationships positively related to feelings of loneliness and depression, whilst those older people who had contact with close friends tended to be more active and experienced enhanced well-being.

Studies identify that it is the quality rather than quantity of time in others' company that affects the level of satisfaction with social contact (Flett et al., 1994; Maxwell, Flett & Colhoun, 1990; Mireault & de Man, 1996). Flett et al. also suggest it is the intimacy of relationships with others rather than the number which affects whether the individual is satisfied with their relationships. This is supported by research which found that close attachments to one or more people were more important than support networks as a whole (Santrock, 1997). On the other hand Melding (1997) questions whether it is the network itself or whether the onus is on the individual's ability to establish social contact that promotes well-being.

Guohua (1995) identified that married people were more likely to experience well-being than those who were single, divorced or widowed, particularly in the 70 - 79 year

age range. Research suggests that even within marriage sex differences exist, that is, compared to women, more men rely on their spouses and less on friends and family for social support (Antonucci & Akiyama, 1987). These results indicate the singularity of men's social networks as compared to the multifaceted nature of women's networks. For the older male who potentially has impoverished networks, the death of a spouse could further compromise well-being. Research conducted by Martikainen and Valkonen (1996) used a large Finnish cohort to investigate the relationship between mortality and bereavement occurring after the death of a spouse. The authors found that emotional stress, grief and loss of social support through the death of a spouse affected the well-being of the surviving spouse even in terms of everyday tasks like cleaning, preparing food and taking medication. This is also supported by Anderson and Diamond (1995) who discovered that older widowed men experienced difficulties in tasks like cooking and meal planning. Even those who described themselves as good cooks had trouble making a meal for one person or having the motivation to do the cooking every day.

Kanacki et al. (1996) conducted a study on the relationship between social support and depression in older widows and widowers. Results identified that high levels of perceived social support were linked to decreased depression scores for both sexes. However, even though men had less social support than women, their perceptions of feeling supported were not different (Kanacki et al.). Kirschling & McBride (1989) suggest the reason older men seek less social contact during bereavement is because widowers use denial more than widows.

Wenger (1994) identifies a wide community focussed network as being suitable and appropriate for outgoing older people, the basis of which has low family involvement, when kin do not live physically close, but centres around many friends and the participation in voluntary organisations. This type of network has associations with retirement migration as well as being predominantly a middle class phenomenon (Melding, 1997). Many of this demographic group are choosing to live in retirement villages as this concept is associated with high morale and a lower incidence of loneliness. In order to function in this type of environment the older adult is required to be in good health and have a good income, as well as being physically and emotionally independent. As can be seen, this phenomenon only caters for one section of the older person population. For a lot of people this way of living is not an option due to poor health and low income.

1.2.2 Marital Status

Closely linked to the concept of social support is marital status. Research has clearly demonstrated the effect that marital status has on social support and the impact of these variables on psychological well-being (Heikkinen et al., 1995; Viverais-Dresler & Richardson, 1991). Maxwell et al. (1990) and Santrock (1997) note that people who are married are generally happier than single or divorced people.

Eliopoulos (1997) notes that more men are married than women as women tend to live longer than men. Also, men tend to rely on their wives for friendship/companionship as a means to combat feelings of loneliness and if widowed then they are more likely to remarry than women (Butler et al., 1991). On the other hand Santrock (1997) claims that older men who have never been married have fewer problems coping with loneliness due to their long history of being self reliant and autonomous.

As noted earlier in the section on social support, several studies have looked at the effect bereavement, due to the death of a spouse, has on the older adult and the negative impact this loss has on psychological well-being (Anderson & Dimond, 1995; Dimond, Caserta & Lund, 1994; Herth, 1990; Martikainen & Valkonen, 1996; Siegal & Kuykendall, 1990). Siegal and Kuykendall note that older men experience significantly more physical and psychological health problems than women. When an older person has lost their spouse then social support through children, grandchildren and/or close friends assists with the healing process and the maintenance of psychological well-being (Anderson & Diamond).

Little information is available on divorce and its effect on psychological well-being in the older person (Butler et al., 1991). This is probably due to the fact that until recent times divorce was relatively uncommon in this age group. In New Zealand 5,592 men over the age of 70 years (5.2% of the total male population) are either separated or divorced (Statistics NZ, 1996). Belsky (1990) compared divorce with widowhood and discovered divorcees experienced more negative feelings, for example, anger and disappointment, than those older people who were widowed.

1.2.3 Retirement

Employment status and occupation are considered important predictors of well-being (Campbell, 1981). However, the majority of older adults are retired or facing retirement and this too impacts on well-being (Peterson, 1996; Santrock, 1997). Retirement is one of the major adjustments facing the older person, particularly for men,

as many of their social supports outside of their families are found in the work environment (Eliopoulis, 1997; Markides & Cooper, 1989). However, even though the majority of this population are retired a percentage remain in employment.

An American study by Wan et al. (1982) found that 28.7% of an older adult population sampled were still employed. The researchers linked this phenomenon to individuals not having enough capital to retire. In New Zealand, statistics identify that over 90% of men over the age of 70 years have retired and the majority of those still working are self employed (Davey, 1994). This may reflect a self employed person's flexibility to determine their own retirement depending on factors such as level of retirement savings (Davey).

Hall (1984) identifies retirement, voluntary or involuntary, as a major influence on well-being in the older adult. Research findings focusing on the impact of retirement have been inconsistent (Gall, Evans & Howard, 1997). Santrock (1997) claims that those who adjust best to retirement are healthy, have plenty of money, are active, well educated, have a supportive social network that includes family and were satisfied with their lives before retirement. This is supported by Kelly and Wescott (1991) who found that retirement increases well-being and has a positive effect on health in the older adult. These findings are supportive of the activity theory of ageing which identifies that the more active and involved older people are in retirement the more likely they are to express satisfaction with their lives (Berger, 1984). On the other hand, Gall et al. found that the older person who has retired experiences poorer health, an increased incidence of depression and feelings of loneliness and a decrease in psychological well-being. These discrepancies and findings may be partly due to the nature of the retirement. For instance, Gall et al., in a study of older males, discovered that those who voluntarily retired experienced increased interpersonal satisfaction, while those forced to retire encountered feelings of isolation. This is supported by Markides and Cooper (1989) who found that older people who voluntarily retired were more positive and reported high levels of life satisfaction, in comparison to the involuntary group who were less positive, more vulnerable and reported increased feelings of stress.

1.2.4 Income

Closely linked to satisfaction with retirement is the issue of sufficient income after retirement. Income is frequently used as a proxy measure of socioeconomic status. Not having enough money to live is a common theme amongst older people (Butler et al., 1991). Experiencing poverty is not only associated with those who have been poor all

their lives. These people are joined by a significant number who have become poor since reaching old age most likely attributable to the drop in income associated with retirement (Hall, 1984; The Public Health Commission, 1993). Santrock (1997) asserts that the number of people who are poor has declined since the 1960s, but the actual percentage of older people living in these conditions has remained the same.

In New Zealand, well-being in older adults is linked to higher socioeconomic conditions and to those who have choice as well as control over their employment status and where they live (Ministry of Health, 1997a). Koopman-Boyden (1993) reports on a New Zealand study that found single people and couples aged 60 plus had the lowest disposable income during the years 1987 to 1988. Information from the latest New Zealand census identifies that the majority of men over the age of 70 years earn between $5,001 and $25,000 annually both nationally and in the Wanganui District (Statistics NZ, 1996).

Heikkinen et al. (1995) identify a positive association between poverty and depression, while Kehn (1995) claims socioeconomic status is significantly correlated to psychological well-being. There is an increasing amount of literature linking poverty to employment, previous education and housing (Hall, 1984; Ministry of Health, 1997a; Wan et al., 1982).

1.2.5 Housing

A growing number of people in New Zealand, including those in the older age group, cope with inadequate housing (Smith, Kearns & Abbott, 1992). Having appropriate housing impacts significantly on the older person's psychological well-being by contributing to the individual's ability to remain independent (Dharmalingam & Barnes, 1998). In many instances older people find themselves in positions where their current physical environment does not suit their changing needs; for example, an inability to cope with the demands of maintaining a large and often old family home, an isolated location with poor access to community facilities and public transport, and house designs that are not suitable for alterations in mobility status (Ministry of Health, 1997d).

In America it is estimated that approximately 10% of older people live in substandard or inappropriate housing, mainly due to poverty (Butler et al., 1991). Three-quarters of this population own their own home with the remainder renting property. Many of those living in their own home exist in substandard conditions (Butler et al.). In New Zealand there is a decrease in the number of people over 70 years who own their

own home and an increase in the numbers living in rental accomodation or in residential care (Davey, 1994; Dharmalingam & Barnes, 1998). Older women are more likely to move into residential care than men as men tend to remain in the family home with family support and/or a younger partner (Statistics New Zealand, 1995).

Dimond et al. (1994) examined the impact that relocation had on psychological well-being in the older person. They found that moving out of home to live somewhere else can affect psychological, emotional and physical security. This, combined with existing grief related to the loss of a spouse and/or separation from family and friends, can result in depression (Dimond et al.).

In New Zealand there appears to be an increasing trend in the number of older people choosing to live independently within a tertiary care setting in studio units (Ministry of Health, 1997d). Frequently these facilities have been purpose built and offer support and security, as well as opportunities for social interaction, all of which are recognised as predictors of psychological well-being (Ministry of Health, 1997b). The Ministry of Health (1997d), while recognising the advantages of this system, points out the potential for social isolation and limited opportunities to mix with and have exposure to wider society.

1.2.6 Military Service

Many men over the age of 70 years experienced military service during World War II (Parr, 1995). Studies on World War II veterans demonstrate that their military experience enhanced personal attributes, such as self-reliance and interpersonal skills (Stouffer, 1949). Elder (1987) supports this finding by claiming World War II veterans believed serving in the military provided benefits on an interpersonal level. Other research suggests that military service in the second World War later affected marital status (including divorce), earning capacity and psychological well-being (Gade, 1991; Parr, 1995). Social support from comrades, wives and various returned servicemen associations have been shown to be instrumental in helping to heal some of the residual psychological scars received from the experience of active military service (Phillips, Boyack & Malore, 1988; Parr).

In sum, the social world of the older person has many dimensions. In this section social support, marital status, retirement, income, housing and military service have been explored and the various relationships to social well-being discussed. Having access to meaningful social relationships has been shown to be a vital ingredient for well-being in

the older person (Ministry of Health, 1997b). Older people who perceive their social networks to be supportive and strong appear to experience enhanced well-being over those with little or no social supports (Parr, 1995).

1.3 Physical Well-being

Ageing is often related to a decrease in health status and an increase in disability (Dharmalingam & Barnes, 1998). The following section identifies and discusses aspects of physical well-being as identified by Wan et al. (1982).

1.3.1 Physical Illness and/or Chronic Disability

Physical illness and/or chronic disability have been common factors implicated in depression, psychological well-being and suicide in older people (Coggan et al., 1995; Osgood, 1991; Zeiss, Lewinsohn, Rohde & Seeley, 1996). A study by Slivinske et al. (1996) found that being in poor physical health had a negative effect on psychological well-being through the inability of the older person to maintain his or her usual lifestyle, resulting in increased isolation and loneliness. However, Flett et al. (1994) found in a sample of older people with chronic leg ulcers that they did not experience greater feelings of loneliness or social isolation when compared to a control group without leg ulcers. However, they did report more problems with mobility, pain, concerns about their health status, had lower levels of self-esteem and higher levels of negative affect than the control group of participants.

Whittacker and Moses (1996) note that for the older person having enough money positively affects the capacity to maintain a state of good health. Achievement of this is through better opportunities for rest, appropriate nutrition, recreation, emotional security and status. Also, older people who have a higher risk of poor health include those in the old-old category (75 years plus), low income earners, those who live on their own and in rental accomodation and Maori (Dharmalingam & Barnes, 1998). Wan et al. (1982) note a higher prevalence of mortality and poor health among older people who are poor, single, less educated and live in rural areas.

Heidrich and Ryff (1993) hypothesise that an individual's physical health status is a potential stressor and has direct effects on mental health outcomes. Here mental health outcomes encompass both psychological distress and psychological well-being. They link a decline in physical health with lowered levels of well-being and higher levels of distress. The research on stress and the links to physical well-being have already been covered in the previous section on mental well-being.

Zeiss et al. (1996) discuss the relationships between depression, physical disease and functional impairment, referring to functional impairment as the inability to meet everyday aids to daily living independently. They note that the presence of physical disease increases the likelihood of developing functional impairment; however, the authors maintain that functional impairment can occur without disease. Examples of the presence of functional impairment in the absence of physical disease is evident in naturally occurring age related decreases in sensory function, for example hearing loss. Hearing loss and/or visual impairment is linked to depression in the older adult and impacts on psychological well-being (Zeiss et al.). This is supported by Garfein and Herzog (1995) who link being visually impaired with a risk of losing the ability to dress, use transport systems, shop and carry out other aids to daily living compared to non-visually impaired older people.

It has been well documented that chronic illness is a significant problem for the older person with most having at least one, but typically several chronic illnesses that need to be managed simultaneously (Eliopoulis, 1997). Commonly cited illnesses that impact on psychological well-being include endocrine and metabolic disorders, structural brain lesions, medication side effects and chronic pain (Pachana, Gallagher-Thompson & Thompson, 1994).

Despite the increased incidence of illness/disability in the older person, Wan et al. (1982) discovered that when older adults were asked how they rated their state of health in comparison to others of the same age, it was reported that three-fourths reported having excellent or good health. This is supported by both Laird and Chamberlain (1990) and Statistics New Zealand (1995) who state that although there is an increased prevalence of chronic illness in the older age group subjective health is still rated high.

1.3.2 Health Care Utilisation

The literature identifies that older people get sick more frequently than their younger counterparts (Butler et al., 1991). As stated earlier people are living longer and, understandably, along with enhanced survival rates there is an increased prevalence of disabilities and chronic illnesses (Buschmann et al., 1995). Associated with the increase in illness and/or disability is an increase in the utilisation of health resources, for example, more visits to health professionals, increased hospital admissions and an increase in the number of medications taken (Statistics New Zealand, 1993). Even though there is an increase in morbidity, the older person experiences fewer acute episodes of illness and

has a lower rate of mortality from these when compared to a young person (Eliopoulis, 1997). However, Eliopoulis notes that when an acute episode is experienced the older client requires longer periods of convalescence and has more complications than a younger person.

People in New Zealand tend to see their doctor more than any other health professional, with approximately 62% of the general population visiting five times or less and a further 16% making six or more visits in any given year (Statistics New Zealand, 1993). Older women visit their doctor more frequently than do older men, although more men than women are admitted to hospitals (Davey, 1994). The Public Health Commission (1993) states that for middle age and older men ischaemic heart disease is the major reason why this group is hospitalised.

1.3.3 Health Behaviours

Alcoholism, as a form of substance abuse, is clearly articulated in the literature as increasing the risk of suicide and decreasing well-being in all age groups (Coggan et al., 1995). Osgood, Wood and Parham (1995) believe that alcoholism and suicide are serious problems for the older person as alcohol is often used to relieve feelings of suicidal ideation. Accurate assessment of alcohol consumption is problematic (Poikolainen & Simpura, 1983) and substance abuse is often difficult to measure in the older person because current tools are generally designed for younger age groups (Krach, 1995). According to one study conducted in Arizona (Miller, 1976), about 20% of older men who had committed suicide were described by their survivors as alcoholic and another 6% as heavy drinkers.

Osgood et al. (1995) offer several reasons why alcoholism precipitates or contributes to suicide in the older person while acknowledging they are similar across all age groups. These include depression of the central nervous system leading to feelings of sadness, anxiety, guilt and remorse. Long term heavy use of alcohol produces chemical changes in the brain that can potentially alter moods. The authors also identify that regular abuse of alcohol can have a negative impact on relationships with family and friends. The deterioration of these relationships can potentially lead to social alienation and isolation.

There is little evidence to support significant drug misuse problems among the older population (Melding, 1997). Melding also notes that the overuse of prescription medication is common with significant numbers of older people developing addictions in response to long-term prescribing of benzodiazepines as hypnotics and/or anti-anxiety

agents. There is a connection between benzodiazepine overuse and an increase in morbidity, for example falls, confusional states, impairment of memory and neuropsychological deficits (Starr & Whalley, 1994). Hohagen, Kappler and Schramm (1995) cite a study where many older people were started on hypnotics when hospitalised, stayed on medication and became habitual users over time.

There is significant evidence linking cigarette smoking to a variety of health outcomes, for example, heart, circulatory, respiratory disease and cancer (Ministry of Health, 1997d; Public Health Commission, 1993; Statistics New Zealand, 1993). Connections are found to exist between alcohol and tobacco consumption, with studies suggesting that the more a person drinks the more likely they will not only smoke but smoke more heavily (Alpass, 1992; Johnson, 1990). In New Zealand, respiratory disorders are a leading cause of both health care utilisation and mortality amongst older people (Ministry of Health, 1997d). Cigarette smoking has been a key factor associated with chronic respiratory conditions in this age group with a higher prevalence occuring in Maori as opposed to the non-Maori population (Ministry of Health, 1997d).

In summary, the older age group is more likely to experience poor health, a high prevalence of morbidity and increased numbers of disabilities, all of which ultimately affect well-being (Dharmalingam & Barnes, 1998). Alcohol consumption and abuse, medication use and misuse, cigarette smoking, visits to the doctor and admissions to hospitals all have the potential to negatively impact on well-being through isolation from family, friends and the community. The importance of social support and its positive relationship to psychological well-being is well documented not only in the older person but also in the general population. It may not be possible for the older person to have large numbers of social supports, so the quality and satisfaction of those relationships becomes pivotal in promoting well-being.

1.4 Summary

Current research literature related to well-being has primarily focussed on identifying risk factors (Courage et al., 1993). The literature has identified that many older people view their lives positively even in light of the fact that with increasing age there is an increase in illness and disability (Ministry of Health, 1997b). Studies (Coggan et al., 1995; Osgood & McIntosh, 1986) have identified white men aged 70 years or over as being potentially at risk for mental, social and physical ill health. This group of people generally have experienced multiple losses and live alone with little or no social support (Lester, 1994).

A review of the literature suggests that stress, hopelessness, loneliness, depression, suicide ideation and negative affect all impact on psychological well-being in the older adult. Predictably adequate income, health, an active lifestyle and a support network of friends and/or family are also connected with well-being in the older adult (Wan et al., 1982).

The social world of the older person has many dimensions and having access to meaningful social relationships has proved to be an vital ingredient associated with well-being in the older person (Ministry of Health, 1997b). It has become clear that it is the quality of and satisfaction with social relationships with others that is important rather than the number of social suppports available (Mireault & de Man, 1996). The older age group is also more likely to live with often multiple physical disabilities and chronic illnesses. Associated with this is an increase in health care utilisation, such as visits to their doctor, hospital admissions and medication use (Statistics New Zealand, 1993).

The use and misuse of alcohol, medication and tobacco through loneliness associated with poor health, disability, multiple losses and depression all have the potential to negatively impact on well-being (Osgood et al., 1995). From reviewing the literature there are a limited number of studies focussing on well-being in the older person in New Zealand and a lack of research being undertaken looking at well-being in older men.

1.5 The Present Study

The aim of the present study is to examine those factors which relate to well-being in older men. Reviewing the literature available on the indicators related to well-being it has become evident that there is a dearth of research available, particularly within a New Zealand nursing context, on well-being in older men. Adams (1997) raises specific concerns about men's health; for instance, men are more likely to die from intentional injury, use primary health services less and live approximately six years less than women. Along with the new millenium comes a significant increase in the number of older people living in New Zealand (Bonita & Beaglehole, 1998). This phenomenon has implications for improving, protecting and maintaining the health and well-being of the older male.

The review of the literature so far has identified the mental, social and physical factors that contribute to well-being in the older male. As nurses are involved in the

provision of services to this population 24 hours a day it is crucial that they understand these factors to assist and support older men towards an individual state of well-being. The findings of this research have the potential to inform nursing practice about the positive and negative factors influencing well-being in order to develop best practice strategies that meet the older male's mental, social and physical needs.

1.6 Research Goals

The primary focus of the present research is to contribute to the understanding of those factors that impact both positively and negatively on well-being in older males. These factors are investigated in a non-probability sample of older men in the Wanganui area. Specific goals of the research include:

1. To assess the relative contribution of mental, social and physical well-being indicators to overall psychological well-being.
2. To assess the relative contribution of mental, social and physical well-being indicators to overall physical health.

It is envisaged that the findings of this research will contribute to health professionals' understanding of the issues relating to well-being in the older male. Nursing is well placed to utilise the findings of this research in the provision of appropriate services to the older male in all settings.

CHAPTER TWO

METHOD

The current study was an analysis of data collected in the Wanganui area. This study investigated well-being in older males over the age of 70 years. A summary of the sampling, measures and procedures follows.

2.1 Design

Data were collected by cross-sectional survey method. Survey materials and information were accessed from a number of sources. These sources originated from the health, psychology and nursing literature.

2.2 Subjects

Participants were obtained via a non-probability convenience sample drawn from several support networks associated with Age Concern Wanganui. Three hundred men, over the age of 70 years, residing in the Wanganui city area, were invited to participate. Of these eighty three declined participation in the study, giving a response rate of 72.3%. No cases were deleted. This resulted in a net pool of 217 respondents. A sample description is provided in the results section.

2.3 Procedure

Each participant was sent an introductory letter and information sheet giving an in depth explanation of the purpose of the study. A week later a trained volunteer, from Age Concern Wanganui, visited each prospective participant and those interested in participating were asked to sign a consent form. The consent form detailed the rights and responsibilities of both participant and researcher. Participants were then given a questionnaire to complete and a pre-paid envelope in which to return their questionnaire. The time taken to complete the quesionnaire was approximately 1.5 hours in total. Questionnaires were administered between the 14th and 18th of November 1997. Ethical approval for the study was given by the Massey University Human Ethics Committee, the Manawatu-Whanganui Ethics Committee, and the Christchurch Polytechnic Academic Research Committee.

2.4 Measures

2.4.1 Biographical Information

The study gathered information on participants' age, marital status, living arrangements, ethnicity, education and income. Questions were adapted from the New Zealand Census of Population and Dwellings (Department of Statistics, 1991). Participants were also asked to provide information on previous military experiences and past employment (Gutek & Winter, 1992).

2.4.2 Health Behaviours

Data about participants' health practices was also gathered. These items were modelled on a Ministry of Health survey of the health of the New Zealand population (Statistics New Zealand, 1993) and included measures of tobacco and alcohol consumption, health care utilisation and amount of medication taken.

2.4.3 Daily Stress

The Revised Hassles Scale (DeLongis, 1985) was used to measure levels of daily stress. This scale contains 53 items and is a revised form originally produced by Kanner, Coyne, Schaefer and Lazarus (1981). The items of the Hassles Scale identify common everyday concerns including family, intimacy, exercise, socialisation and economic sustainability. Each of the 53 items was scored on a 5 point Likert Scale measuring the extent to which each was perceived as being a hassle. The scales range from 0 (not at all) to 4 (very much). DeLongis, Folkman and Lazarus (1988) found a mean correlation from day to day for total hassles of .77, an average month to month correlation of .82 and a test-retest reliability coefficient over a five month period of .72.

2.4.4 Depression

The Geriatric Depression Scale (GDS), developed by Brink et al. (1982), is a self-report, 30 item, yes/no response questionnaire. Participants were asked to choose the best answer that represented how they felt over the previous week, including the day they completed the questionnaire. The items seek information representing depression in the older person and include lowered affect, decreased activity levels, irritability, withdrawal, distressing thoughts and negative judgements about the past, present and future. Somatic items, such as anorexia, insomnia and constipation are absent from this scale.

The GDS has shown better validity in distinguishing between nondepressed and depressed older people than the Beck Depression Inventory (Beck, Ward, Mendelson, Mock & Erbaugh, 1961) and Zung's (1965) Self-Rating Depression Scale (Pachana, Gallagher-Thompson & Thompson, 1994). Olin, Schneider, Eaton, Zemansky & Pollock (1992) have shown the GDS to function as an efficient screening tool, demonstrated by its high levels of sensitivity and specificity.

2.4.5 Suicidal Ideation

The Suicidal Ideation Questionnaire (Reynolds, 1987) is a 30 item self-reporting instrument designed to assess thoughts of suicide. The current study asked respondents to score items on a 7-point Likert Scale indicating the frequency with which each thought, relating to suicidal ideation, occurred over the past month. Scores from these items were rated in the present study from 0 (I have never had this thought) to 6 (I have had this thought almost every day). Other response options give respondents the opportunity to indicate that the thoughts experienced have occurred in the past week or month. The Suicidal Ideation Questionnaire measures both current and past suicidal thoughts and has a potential range of total scores between 0 and 180. The questionnaire has demonstrated good internal validity (Beaumont, 1994; Reynolds, 1988). Reynolds identifies a coefficient test-retest reliability of .72 over a 4 week period.

2.4.6 Hopelessness

The Hopelessness Scale (Beck et al., 1974) is comprised of 20 true/false items which measure how much a person's psychological state is governed by negative expectations of the future. Total scores vary from 0 to 20. A higher score is indicative of increased feelings of hopelessness. The Hopelessness Scale has demonstrated a high internal consistency with alpha coefficients of .93 in a sample of people who attempted suicide (Beck et al.). Clinical ratings of hopelessness have shown acceptable concurrent validity (.74) (Beck et al.).

2.4.7 Loneliness

The present study used a 12 item form of the revised University of California, Los Angeles Loneliness Scale (Russell et al., 1980) developed by Maxwell and Colhoun (1986). This shortened version sustains a high level of internal consistency (alpha coeffient = .81). A New Zealand study reported alpha coefficients ranging from .83 to .85 (Knight, Chisholm, Marsh & Godfrey, 1988).

2.4.8 Negative Affect

The Positive and Negative Affect Schedule (PANAS) (Watson, Clark & Tellegen, 1988) consists of two 10 item mood scales. The negative affect (NA) scale is comprised of the following descriptive labels: distressed, ashamed, upset, hostile, irritable, scared, afraid, guilty, nervous and jittery. These terms are rated on a 1 to 5 point scale ranging from very slightly or not at all to extremely. The scales can be utilised across time, asking whether the respondent experienced the above items on a daily, weekly, monthly or yearly basis. In the present study respondents were asked to rate their mood state as it occurred over the last month. Watson et al. reported test-retest reliability coefficients, for the Negative Affect Scale, ranging from .39 to .71 and identify moderate correlations with other scales such as the Beck Depression Inventory.

2.4.9 Social Support

Social support was measured using the 6 item Social Support Questionnaire (SSQ6) developed by Sarason, Sarason, Shearin & Pierce (1987). Each item is made up of two parts. Part one of each item asks the participant to list the number of others they feel they can seek support from in a variety of situations. Part two uses a 6-point Likert scale that asks participants to identify the level of satisfaction received from this support, ranging from very dissatisfied (1) to very satisfied (6). Siegert, Patten & Walky (1987) report, in a student sample, coefficient alphas for both part 1 and 2 subscales ranging from .90 to .93.

2.4.10 Psychological Well-being

The Mental Health Inventory (MHI) was used to measure psychological wellbeing (Veit & Ware, 1983). This tool can be scored to ascertain two higher level components on dimensions identified by the authors as psychological well-being and psychological distress, or can give an overall mental health score. In the present study, participants were asked to complete the psychological well-being dimension of the MHI. Respondents indicated how they felt about various aspects of their lives over the preceding month on a 7-point response scale. Veit & Ware identify an internal consistency measure of .92 for psychological well-being and report a one year test-retest coefficient of .63.

2.4.11 Physical Health Scale

Participants in the study were asked to identify the total number of illnesses/disabilities they had. They were also asked to provide a self-rating of their health on a 7-point scale reproduced from Laird and Chamberlain (1990). Participants were asked to compare and rate their present health status to a person in excellent health,

ranging from 1 (terrible) to 7 (excellent). Idler and Kasl (1991) note that despite its simplicity, this type of scale, and others like it, are no less valid than more complex health status instruments. They cite several recent epidemiological studies linking the self ratings of health to mortality (Idler & Kasl).

CHAPTER THREE

RESULTS

3.1 Data Screening

Before proceeding with analyses, the data were screened for data entry accuracy, missing values and fit between variable distributions and assumptions of multivariate analysis.

The independent variables assessing daily stress, suicide ideation, depression, hopelessness and loneliness were all positively skewed. In each instance square root or logarithmic transformation improved skewness markedly. Square root or logarithmic transformation also reduced negative skewness for psychological well-being, the number of social supports and satisfaction with social support. Any tests of significance were undertaken on transformed variables and were reported in this way.

In this study, sample sizes varied due to missing data. Untransformed means and standard deviations have been reported for all biographical information. All variables were checked for multivariate outliers using Mahalanobis distances (Tabachnick & Fidell, 1989), but none were found.

3.2 Sample Description

Details of biographical and health utilisation information have been provided in Tables 1 and 2 respectively. Of the 300 questionnaires distributed 217 were returned (N = 217), a response rate of 72.3%. Seventeen respondents were under 70 years with a minimum age of 65.2 years. The maximum age was 89.4 years with a mean age of 75.6 (SD = 5.0 years).

Just under 56% of respondents were married for the first time with 24.4% being widowed. The length of time widowed ranged from 4 months to 30 years, a mean of 7.8 years (SD = 7 years). One hundred and thirty seven men lived with their wife (63.1%) and 3 (1.4%) identified themselves as living with their partners. Nine respondents (4.1%) said they lived with other people. Classification of others included boarders and the pooling of resources between friends to live in the same house. Sixty-four men said they lived alone (29.5%). According to Statistics New Zealand (1996), 78,030 of men over

Table 1
Summary of biographical information for men over the age of 65 years (N=217)

	Number of Respondents	Percentage of Respondents
Age (Years)		
65-69	22	10.1
70-74	88	40.6
75-79	61	28.1
80-84	26	12.0
85-89	13	6.0
Missing data	7	3.2
Marital Status		
Never Married	5	2.3
Now Married for first time	121	55.8
Remarried	18	8.3
Separated	7	3.2
Divorced	13	6.0
Widowed	53	24.4
Who Lives In The Same Dwelling		
Lives With Mother/Father	1	.5
Lives With Wife	137	63.1
Lives With Partner/Defacto	3	1.4
Lives With Son/Daughter	8	3.7
Lives With Other Relatives	4	1.8
Lives Alone	64	29.5
Lives With Other People	9	4.1
Ethnicity		
Maori	7	3.2
European	200	92.2
Other	10	4.6

NB: Total percentages may not always equal 100% due to effects of rounding. The study was designed to include information from men over the age of 70 years. Responses were received from some men under 70 years. The information from this group was also included for analysis.

Table 1 continued
Summary of biographical information for men over the age of 65 years (N=217)

	Number of Respondents	Percentage of Respondents
Educational Qualifications		
No School Qualifications	54	24.9
School Certificate Passes	46	21.2
University Entrance +	17	7.8
Trade & Professional Qualification	57	26.3
University Qualification	36	16.6
Missing data	7	3.2
Occupation At Retirement		
Legislators, Administrators, Managers	46	21.2
Professionals	44	20.3
Technicians & Associate Professionals	19	8.8
Clerks	16	7.4
Service & Sales Workers	8	3.7
Agriculture & Fishery Workers	18	8.3
Trades Workers	33	15.2
Plant, Machine Operators & Assemblers	15	6.9
Elementary Occupations	12	5.5
Missing data	6	2.8
Annual Income		
$0 - $10,000	14	6.5
$10,100 - $20,000	96	44.2
$20,100 - $30,000	25	11.5
$30,100 - $40,000	17	7.8
$40,100 - $50,000	5	2.3
> $50,100	7	3.2
Missing data	53	24.4
Saw Active Military Service		
Yes	152	70.0
No	56	25.8
Missing data	9	4.1

NB: Total percentages may not always equal 100% due to effects of rounding.

the age of 70 years in this country are married and 20,061 widowed. In the Wanganui area, in the same age group, 1,203 men are married and 324 widowed.

Two hundred respondents identified themselves as European (92.2%), 7 as Maori (3.2%) and 10 as other (4.6%). The latter group identified as being Scottish and British. No one identified themselves as a New Zealander of Pacific Island descent. This is not surprising when Pacific Islands people only account for 1% of Wanganui's total population (Central Regional Health Authority, 1996). According to the 1996 census, there are 1,644 (95.6%) men over the age of 70 years who identify as European, 66 (3.8%) as New Zealand Maori, 9 (.52%) from the Pacific Islands and 6 (.35%) as Asian or did not specify who live in the Wanganui area (Statistics New Zealand, 1996).

The majority of respondents had some form of school, trade or university qualification, while 25.7% (n = 54) had no school qualification. Respondents' occupations at the time of their retirement were classified according to the New Zealand Classification of Occupations (Department of Statistics, 1992) and categorised into major occupational groups. Several people were still currently employed, all on a part time basis, in occupations ranging from teacher to surgeon. The mean length of time people in this research had been retired was 13.66 years (SD = 6.75).

A large number of respondents earned between $10,000 and $20,000 (44.2%), with fewer than 6% earning over $40,000 per annum. The mean income was $21,700 (SD = $15,151), ranging from $2,200 through to $120,000.

Just over 73% of respondents experienced active military service, the vast majority of which was during World War II with only a few involved in the peace keeping forces of 1945-1951 or the Korean war. Of the 26.9% who did not experience active military service some elaborated that they were in the home guard or part of the civilian staff in the army.

Most respondents claimed to have visited their doctor between one and five times over the last year (67.7%), 3.2% identified not having any contact, while 7.8% reported over twelve visits. Most people had seen their doctor within the last four weeks (45.6%), with 40.1% having been within a period of one to three months, and 7.8% not having seen their doctor for over six months.

Respondents were given a list of health professionals, other than medical doctors,

and asked to identify whether they had seen any of these people within the last four weeks. Just over 29% of subjects had seen a nurse, 66.8% a chemist, 6.9% a physiotherapist, 17.5% a dentist or dental nurse, 21.7% an optician or optometrist, 6.0% a chiropractor, 9.2% a podiatrist or chiropodist, 1.4% a naturopath, homeopath or iridologist, 6.5% a social worker, psychologist or counsellor, and 7.8% identified seeing other health professionals not previously mentioned.

Respondents were asked to identify the total number of long term disabilities or illnesses diagnosed. Nearly 13% of respondents replied they had not been diagnosed with a long term illness or disability, 21.2% with one, 29% with two, 21.7% with three, 13.8% with four and 1.4% with five. In the 1992-1993 Household Health Survey there was a noticeable increase in the proportion of people 60 years and over reporting more than one disability (Statistics New Zealand, 1993). Sixteen per cent of 60-74 year olds and 28% of people aged 75 years and over reported more than one long term illness or disability. Differences between gender were also evident with more women (82%) reporting being free from disability or long term illness than men (77%) (Statistics New Zealand).

When asked about tobacco consumption 35.5% of respondents stated they were non-smokers, 6.9% as smokers and 56.7% as being previous smokers. Seventy nine per cent of respondents indicated that they consumed alcohol. Of these 22.6% consumed alcohol every day, 12.9% over the last five to six days, 8.8% within the previous three to four days, 25.3% between one and two days, and 29% claimed not to have had any alcohol at all over that period.

The number of people who were, at the time of the study, on medication was 71%. These respondents were asked to list the medications taken to a maximum number of ten. Most respondents took between one and six different medications on a daily basis (60.4% of respondents currently taking medication). Medications were classified into broad groups. The most commonly utilised groups of drugs taken by respondents were for cardiac, dietary, pain and asthma conditions.

Table 2
Summary of health information for men over the age of 65 years (N=217)

	Number of Respondents	Percentage of Respondents
Number Of Visits To GP In The Past Year		
Don't Know	2	.9
No Contact	7	3.2
1-5 Times	147	67.7
6-11 Times	42	19.4
≥12 Times	17	7.8
Missing data	2	.9
Last Time Saw The GP		
Don't Know	2	.9
Last 4 Weeks	99	45.6
1-3 Months	87	40.1
3-6 Months	11	5.1
≥7 Months	17	7.8
Missing data	1	.5
Total Number of Health Professionals Seen ≤4 Weeks		
None	30	13.8
1	63	29.0
2	78	35.9
3	28	12.9
4	13	6.0
≥5	4	1.9
Missing data	1	.5
Total Number of Illnesses/Disabilities		
None	28	12.9
1	46	21.2
2	63	29.0
3	47	21.7
4	30	13.8
5	3	1.4
7 - 10	10	4.7

Table 2 continued
Summary of health information for men over the age of 65 years (N=217)

	Number of Respondents	Percentage of Respondents
Tobacco Consumption		
Non-Smoker	77	35.5
Smoker	15	6.9
Ex-Smoker	123	56.7
Missing data	2	.9
Alcohol Consumption		
Don't Know	1	.5
Yes	169	77.9
No	44	20.3
Missing data	3	1.4
Currently On Medication		
Yes	154	71.0
No	61	28.1
Missing data	2	.9
Total Number Of Medications		
None	76	35.0
1 - 3	95	43.8
4 - 6	36	16.6
7 - 10	10	4.7

3.3 Analysis

In the current study relationships among variables were examined using SPSS-PC (Norusis, 1988). Analyses were undertaken in two stages.

Stage one examined bivariate relationships between study variables. These variables have been categorised under mental, social, and physical well-being variables and will be reported under these headings. Simple Pearson correlations were used to examine the relationships between the continuous variables and *t*-tests were used to examine the differences across discrete independent variables on the dependent variables (psychological well-being and self rated health). In these analyses, an F test of sample variances was carried out. If the probability of F was >.05, then it was assumed sample variancies were equal and pooled variance estimates were used. If the probability of F was <.05 then it was assumed sample variances were unequal and separate variance estimates of *t* were used (Snedecor & Cochrane, 1980). Statistical significance was assessed using two-tailed tests with alpha set at 0.05. Standard deviations, means and sample size were also reported. Stage two involved multiple regression analyses to assess the contribution of independent variables to the outcome variables.

Reliability coefficients for the mental well-being and the two social support scales are presented in Table 3. All alpha coefficients were greater than .82 demonstrating a high level of reliability (LoBiondo-Wood & Haber, 1998).

3.4 Relationships between Mental, Social and Physical Well-being Variables

A number of independent variables were recoded before the analysis was performed. Marital status was recoded as: 1 = not married (including separated, never married, divorced, and widowed), 2 = married. Living arrangements were recoded as: 1 = living with others (including mother/father, wife, partner/defacto, sons/daughters, other relations and other people), 2 = lives alone. Alcohol consumption was recoded: as 1 = consumes alcohol, 2 = non-drinker. The number of times the respondent saw his doctor in the last year was recoded into two categories: less than or equal to five times, and greater than or equal to six times.

Simple correlations among the study variables are presented in Table 3. Means and standard deviations on outcome variables across marital status, living arrangements, military service, alcohol consumption, and number of visits to the doctor in the past year are presented in Table 4. Tobacco consumption was excluded in bivariate analysis due to

most people identifying as either non or ex-smokers.

3.4.1 Mental Well-being Indicators

There was a significant negative correlation between psychological well-being and hopelessness, daily hassles, loneliness, negative affect, depression and suicide ideation. Hopelessness, daily hassles, loneliness and depression all demonstrated significant positive correlations with each other. There was no significant relationship between suicidal ideation and hopelessness.

Psychological well-being was not significantly related to marital status, living arrangements, military service or alcohol consumption. People who reported going to the doctor five times or less per year rated their well-being significantly higher than those who went to the doctor six times or more, $t(90.08) = 3.83$, $p<.001$.

3.4.2 Social Well-being Indicators

There was a significant positive correlation between satisfaction with the level of social support and psychological well-being. This variable was significantly negatively correlated with hopelessness, loneliness, negative affect, depression and suicide ideation. Income was negatively correlated with daily hassles. The number of social supports was also significantly negatively correlated with the variable loneliness.

3.4.3 Physical Well-being Indicators

Total number of diagnosed disabilities and/or long term illnesses was significantly negatively correlated with psychological well-being, and positively correlated with hopelessness, daily hassles, loneliness, negative affect and depression. There was no significant relationship between this variable and any of the social well-being variables. The number of health professionals seen over the last month was significantly related to total number of disabilities. Number of medications was positively correlated with depression, negative affect, the number of health professionals seen over the last month and total number of disabilities.

Self rated health was negatively correlated with hopelessness, hassles, negative affect, loneliness, depression, age, total number of disabilities, total number of health professionals seen over the last month and total number of medications. Self rated health was positively correlated with psychological well-being, number of social supports and satisfaction with social supports.

Table 3
Intercorrelations between mental, social and physical well-being variables and alphas

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	alpha
1. Well-being															.94
2. Hopelessness	-.41***														.85
3. Hassles	-.36***	.25***													.91
4. Lonelinss	-.53***	.41***	.38***												.89
5. Negative Affect	-.43***	.28***	.47***	.42***											.83
6. Depression	-.53***	.58***	.40***	.64***	.48***										.92
7. Suicide	-.40***	.17	.33***	.38***	.37***	.34***									.87
8. Income	.17	-.13	-.19*	-.17	-.15	-.10	-.15								
9. Age	-.02	.13	-.13	.11	-.12	.17	-.08	-.08							
10. Satisfaction Soc S	.47***	-.19**	-.15	-.31***	-.26***	-.23**	-.20**	.04	.03						.97
11. Social Support	.15	-.12	-.06	-.22**	.003	-.27	.005	-.06	-.02	.13					.92
12. Illness/Disability	-.26***	.21**	.34***	.26***	.33***	.37***	.14	-.10	.05	-.03	-.14				
13. Tot Health Profs.	-.08	.10	.05	.13	.08	.14	.04	-.05	.16	-.07	.04	.23**			
14. Total Meds	-.05	.16	.10	.10	.28***	.18**	.08	-.06	.10	-.001	.02	.29***	.20**		
15. Self Rated Health	.31***	-.42***	-.21**	-.35***	-.35***	-.50***	-.11	.09	-.19**	.20**	.20**	-.42***	-.16	-.51***	

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

Abbreviations:

Hassles = Daily Hassles (Stress)
Suicide = Suicidal Ideation
Well-being = Psychological Well-Being
Satisfaction Soc S =Satisfaction with Social Supports
Illness/Disability = Total Number of Disabilities
Tot Health Profs. = Number of Health Professionals Seen
Total Meds = Number of Medications Taken
Social Support = Number of Social Supports

Table 4
Mean, standard deviation and sample size for psychological well-being and self rated health across marital status, living arrangements, military service, visits to the GP in the past year and alcohol consumption

	Marital Status							Living Arrangements							Military Service						
	Not Married			Married				With Others			Alone				Yes			No			
	n	M	SD	n	M	SD	t	n	M	SD	n	M	SD	t	n	M	SD	n	M	SD	t
Psych Well-being	78	71.46	45.67	139	74.60	13.50	ns	153	73.71	14.53	64	72.90	14.01	ns	152	74.05	13.66	56	72.13	15.14	ns
Self Rated Health	77	4.79	1.28	138	5.07	1.07	ns	152	5.08	1.11	63	4.70	1.24	*	150	4.98	1.14	56	5.00	1.18	ns

	Visits to GP in Past Year							Alcohol Consumption						
	≤5 x			≥6 x				Drinker			Non Drinker			
	n	M	SD	n	M	SD	t	n	M	SD	n	M	SD	t
Psych Well-being	54	75.83	13.09	59	66.98	15.81	***	168	4.99	1.14	47	4.99	1.14	ns
Self Rated Health	152	5.21	1.09	59	4.34	1.08	***	168	4.99	1.14	47	4.99	1.14	ns

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

Participants who lived alone rated their health lower than those who lived with others, $t(105.05) = 2.11$, $p \leq 05$. There was no significant difference in self ratings of health across marital status, military service and alcohol consumption. Participants who visited their doctor the least rated their health significantly higher than those who visited more frequently, $t(106.81) = 5.26$, $p \leq 001$.

3.5 Regression Analyses.

Hierarchical regression analyses were used to determine the contribution of independent variables (for example, mental, social and physical well-being indicator variables) to outcome variables (for example, psychological well-being and self rated health). Hierarchical regression analysis was used to enable the researcher to enter the independent variables into the model as a series of blocks (Polit, 1996). By controlling the entry of variables in this manner the researcher was able to assess how the independent variables, or block of independent variables, added to the equation at the point that it was entered (Tabachnick & Fidell, 1989).

In the present study the blocks of variables entered for hierarchical regression analysis were in the following order: mental, social and physical indicator variables. The order the blocks of variables were entered are in line with the modified model (Wan et al., 1982) described in the introduction.[1] For every regression the blocks of independent variables were entered in three stages to assess at each stage how the groups of variables related to the outcome variables.

3.5.1 Psychological Well-being

Hierarchical regression analysis was used to evaluate the contribution of each block of variables in explaining psychological well-being. The effects of the social well-being variables were estimated after controlling for mental well-being characteristics. The effects of physical well-being variables were then estimated after controlling for the effects of mental and social well-being variables. The results for these analyses are presented in Table 5.

Standardised beta coefficients for each variable within the blocks have been reported. Each step of the equation contributes to the total variance explained (adjusted

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1 Further analyses were undertaken entering the blocks of variables in a different order, however major findings remained unchanged and therefore the results are not reported here.

R^2). The added variance explained by each block of variables is referred as R^2 change. Adjusted R^2 was significant at each step of the equation.

At step one, mental well-being indicator variables explained 37.7% (adjusted R^2) of the variance in psychological well-being, $F(6,152) = 16.922$, $p<.001$. After step two, with the addition of the six social indicator variables, total variance explained in psychological well-being was 45.3% (adjusted R^2), $F(13,145) = 11.08$, $p<.001$. The social indicator variables accounted for 9.8% unique variance in psychological well-being when controlling for mental well-being indicator variables. The R^2 change when entering the social indicator variables after the psychological well-being variables was significant, $F(13,145) = 4.04$, $p<.001$. After step three, with seven physical indicator variables entered after the mental and social indicator variables, total variance identified in psychological well-being increased to 46.8% (adjusted R^2), $F(19,139) = 8.31$, $p<.001$. These physical indicator variables added a further 3.4% in variance to psychological well-being when controlling for mental and social well-being indicator variables. However, the R^2 change after entering the physical indicator variables to the equation was not significant.

By examining the beta coefficients at each step it is possible to observe the effects of independent variables on the dependent variable within each block of variables and the extent to which the addition of subsequent steps altered these effects. With all the variables in the equation (step three), only satisfaction with social supports and number of visits to the doctor were significantly related to psychological well-being. Satisfaction with social supports was also significantly related to psychological well-being at step two.

Loneliness and suicidal ideation, although significantly correlated with psychological well-being in bivariate analysis (see Table 3) and significant predictors at step one, appear to be mediated through the addition of the social indicator block of variables. Depression was also significantly correlated with psychological well-being in bivariate analysis and at step two, but was mediated by the inclusion of the physical indicator variables at step three.

Table 5
Hierarchical multiple regression of mental, social and physical well-being indicators on the outcome variable psychological well-being. Standardised regression coefficients, R, R^2, Adjusted R^2 and R^2 change for all subjects (n=170)

	Steps		
Predictors	**1**	**2**	**3**
Mental Well-being			
Hassles	-.087	-.096	-.106
Hopelessness	-.093	-.082	-.060
Negative affect	-.144	-.092	-.067
Loneliness	-.202*	-.150	-.157
Depression	-.164	-.192*	-.153
Suicide ideation	-.180*	-.119	-.124
Social Well-being			
Active military service		.016	.018
Income		.092	.078
Age		-.050	-.069
Living arrangements		.223	.146
Marital status		.131	.039
Total number of social supports		.031	.033
Satisfaction with social supports		.293***	.312***
Physical Well-being			
Number of visits to GP over last year			-.143*
Alcohol consumption			-.115
Number health professionals seen last month			.028
Total number medications taken			.085
Total number of disabilities			-.077
Self rated health			-.002
R	.633	.706	.729
R^2	.400	.498	.532
Adjusted R^2	.377***	.453***	.468***
R^2 change	.400***	.098***	.034

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

Although daily hassles, hopelessness and negative affect were all significantly related to psychological well-being at the bivariate level (see Table 3) they were not significant contributors to psychological well-being at any of the three multivariate steps. Of the physical indicator variables entered at step three, the number of visits to the doctor was the only variable significantly related to psychological well-being, even though total number of illnesses/disabilities and self rated health were also significant at the bivariate level.

The first research goal was to assess the relative contribution of mental, social and physical well-being indicators to overall psychological well-being. Of the mental well-being indicator variables only loneliness, depression (only at step two) and suicidal ideation demonstrated any relationship to psychological well-being. However, these were mediated by the inclusion of the social and physical indicator variables at subsequent steps. Only satisfaction with social supports and number of visits to the doctor were significantly related to psychological well-being at step three.

3.5.2 Physical Health

Hierarchical regression analysis was also used to evaluate the contribution of each block of variables in explaining levels of self rated health in the sample. The steps were the same as for the previous analysis except in this case psychological well-being was added into the mental well-being indicator block of variables and self rated health was removed from the physical indicator block. The results of these analyses are presented in Table 6.

At step one, mental well-being indicator variables explained 23.6% (adjusted R^2) variance in self rated health, $F(7,151) = 7.97$, $p<.001$. After adding the social indicator variables at step two the total variance explained (adjusted R^2) dropped to 23%, $F(14,144) = 4.37$, $p<.001$. The R^2 change was not significant. Physical indicator variables were included at step three. Total variance explained in self rated health increased to 45.4% (adjusted R^2), $F(19,139) = 7.91$, $p<.001$. The physical indicator variables accounted for 22.1% unique variance in self rated health when controlling for mental and social indicator variables. The R^2 change was significant, $F(19,139) = 12.81$, $p<.001$.

Table 6
Hierarchical multiple regression of mental, social and physical well-being indicators on the outcome variable self rated health. Standardised regression coefficients, R, R^2, Adjusted R^2 and R^2 change for all subjects (n=170)

	Steps		
Predictors	**1**	**2**	**3**
Mental Well-being			
Hassles	.043	.026	-.044
Hopelessness	-.188*	-.167	-.133
Negative affect	-.172	-.192*	-.026
Loneliness	-.034	.011	-.092
Depression	-.282*	-.229*	-.147
Suicide ideation	.075	.029	.029
Psychological well-being	.030	.011	-.002
Social Well-being			
Active military service		-.002	.052
Income		.049	.031
Age		-.087	-.037
Living arrangements		-.186	-.104
Marital status		-.124	-.144
Total number of social supports		.079	.087
Satisfaction with social supports		.049	.122
Physical Well-being			
Number of visits to GP over last year			-.045
Alcohol consumption			-.041
Number health professionals seen last month			.047
Total number medications taken			-.442***
Total number of disabilities			-.162*
R	.519	.546	.721
R^2	.270	.298	.520
Adjusted R^2	.236***	.230***	.454***
R^2 change	.270***	.028	.221***

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

As with the previous regression, the beta coefficients at each step were examined to observe the effects of independent variables on the dependent variable within each block of variables, as well as the extent to which the addition of subsequent steps altered these effects. With all the variables in the equation (step three), only total number of medications and total number of disabilities were significantly related to self rated health. Total number of disabilities was also significantly related to self rated health at bivariate level. Hopelessness, although significant at step one, was mediated by the addition of the social indicator variables entered at step two. Depression was significant at steps one and two, but was mediated by the inclusion of the physical indicator variables. Negative affect was significant at step two of the regression, but also was mediated by the inclusion of the physical indicator variables at step three.

Although daily hassles, loneliness, psychological well-being, living arrangements, age, total number of social supports, satisfaction with social supports and number of visits to a GP over the last year were significantly related to self rated health at the bivariate level (see Tables 3 and 4) they were not significant contributors to self rated health at any of the three multivariate steps. Total number of medications taken and total number of disabilities were significant at step three and also at bivariate analysis (see Table 3).

The second research goal was to assess the relative contribution of mental, social and physical well-being indicators to overall physical health. Of the mental well-being indicator variables only hopelessness, negative affect (at step two) and depression (at steps one and two) demonstrated any relationship to self rated health. These were mediated by the inclusion of the social and physical well-being indicator variables at subsequent steps. Only total number of medications taken and total number of disabilities were significantly related to self rated health at step three.

CHAPTER FOUR

DISCUSSION

The research goals of the present study were to assess the relative contribution of mental, social and physical well-being indicators to overall psychological well-being and physical health in a sample of men over the age of 70 years residing in the Wanganui area. Wan et al.'s (1982) model, outlined in the introductory chapter, was used as the framework for this investigation. This chapter will summarise the present findings and discuss them in relation to the research goals and the literature. General limitations of the research and future directions for research will be discussed. Finally, conclusions are presented.

4.1 Psychological Well-being

Research goal one was to assess the relative contribution of mental, social and physical well-being indicators to overall psychological well-being.

Hierarchical multiple regression of mental, social and physical well-being indicators on psychological well-being showed that only satisfaction with social supports and number of visits to the doctor were significantly related to this dependent variable. Men who were more satisfied with the level of social support reported higher levels of psychological well-being than those who were less satisfied. At the same time the number of social supports was not related to psychological well-being. This apparent discrepancy may be partially explained by disengagement theory (Cumming & Henry, 1961). This theoretical perspective suggests a state of psychological well-being can still be achieved whereby elderly men may have limited social supports but be satisfied with the quality of that support. Given this finding it is surprising that marital status and living arrangements, arguably aspects of social support, were not related to psychological well-being either at bivariate or multivariate levels. Wan et al.'s (1982) well-being framework identifies higher levels of well-being associated with being married and living with a spouse. The majority of men in the present study were married and lived with their wives. Previous research has identified marital status as one of the frequently used indicators of social support, suggesting that married older men rely on their wives to meet their social needs, having few social contacts outside of their marriage (Antonucci & Akiyama, 1987; Siegal & Kuykendall, 1990). If not married, Antonucci and Akiyama highlight that older men still have limited social networks, consisting of only one or two

other people. Both Siegal and Kuykendall's and Antonucci and Akiyama's findings emphasise the singularity of the older male's social networks and the qualitative importance of these relationships in relation to psychological well-being. In light of these findings, it may be in the present study, that marital status and living arrangements per se have little to do with psychological well-being. However, the quality of support received, be it from wives or friends, may be the important factor.

None of the other social well-being indicators were significantly related to psychological well-being at the multivariate level. The relationship between age and psychological well-being in the literature is unclear (Ministry of Health, 1997b; Melding, 1997). The age range in the present study was approximately 24 years. Any correlation coefficient is affected by the range of individual differences in the group (Anastasi, 1988). The restricted range of age in the present study may have contributed to the underestimation of any relationship between age and psychological well-being. There was also little variability in income levels with very few subjects reporting medium or high incomes (mean income = $21,700), which may partially explain the lack of a significant relationship between income and well-being commonly found (Heikkinen et al., 1995; Kehn, 1995).

Previous research on military service has identified both positive and negative effects on psychological well-being in men. Some studies suggest that through their experience men have developed personal attributes such as self-reliance (Elder, 1987; Stouffer, 1949). However, other studies suggest that veterans have problems with communication and the expression of feelings which affects relationships with others (Gade, 1991; Parr, 1995). It may be that similar shared experiences and the involvement in returned servicemen associations could have been instrumental in providing quality social support to this group. For instance, although military service itself has not impacted on these people's psychological well-being, the quality of support gained through meeting colleagues at the various clubs associated with being in the military may have influenced psychological well-being.

Of the physical well-being variables only the number of visits to the doctor over the last year was significantly related to psychological well-being. A New Zealand study by the Ministry of Health (1997d) discussed the increasing number of visits by older people to their doctor as they age. This phenomenon is largely due to an increased incidence of physical disease and functional impairment (Zeiss et al., 1996). Several authors cite physical illness and disability as impacting on psychological well-being

(Garfein & Herzog, 1995; Heidrich & Ryff, 1993; Pachana et al., 1994). The lack of significant relationships between the independent variables, self rated health and total illness/disability, and the dependent variable, psychological well-being, in multivariate analysis may be a function of the significant bivariate relationships between these variables and visits to the doctor. It is often the case in multiple regression that the unique contribution of an independent variable is small despite a substantial correlation with the dependent variable due to relationships with other independent variables (Tabachnick & Fidell, 1989). Given the lack of any significant relationship between the two remaining physical well-being variables (total number of health professionals and total number of medications) and psychological well-being in both bivariate and multivariate analyses, it would appear that these variables are redundant to the understanding of psychological well-being in this sample. It should also be noted that as a block of variables physical well-being indicators did not contribute significantly to explained variance in psychological well-being.

Despite the significant bivariate relationships between the mental well-being indicators and psychological well-being only loneliness and suicide ideation were significant at multivariate level, and only at step one of the equation. Research by Russell (1996) concluded there is an important relationship between loneliness and psychological well-being in the older person. Links have also been made between suicide ideation and psychological well-being in the same age group (Coggan et al., 1995; Ministry of Health, 1997b). However, at step two when social well-being indicators were entered into the regression both loneliness and suicidal ideation became nonsignificant. This suggests that their relationships to psychological well-being were mediated by the significant social well-being variable, satisfaction with social supports. Therefore, in the present study, it is the satisfaction or lack of satisfaction with supports that results from loneliness and suicidal ideation, rather than loneliness and suicidal ideation per se which is consequential for psychological well-being. Studies have identified links between loneliness (Russell, 1996), suicide and suicide ideation (McWhirter, 1990), social support (Flett et al., 1994) and psychological well-being. However, only longitudinal data can more adequately determine the causal relationships among these variables. Having effective social supports has clearly shown to be a significant correlate of psychological well-being (Faber et al., 1991; Lu, 1997; Ministry of Health, 1997b).

Depression, although not significant at step one, becomes significant at step two. This phenomenon can be explained by Tabachnick and Fidell (1989) who note that when independent variables are correlated with each other, correlations and regression

coefficients can be misleading. Sometimes a large regression coefficient does not directly predict the dependent variable but it predicts the dependent variable well after another independent variable suppresses irrelevant variance. The lack of significant relationships between the other mental well-being indicators and psychological well-being at multivariate level may again be attributable to the significant bivariate correlations among these variables. It would appear that there is considerable redundancy in including so many mental well-being variables in attempting to explain variance in psychological well-being in this sample.

4.2 Physical Health

Research goal two was to assess the relative contribution of mental, social and physical well-being indicators to overall physical health.

Hierarchical multiple regression of mental, social and physical well-being indicators on self rated health showed that only total number of medications taken and total number of illnesses and/or disabilities were significantly related to this dependent variable. Men who had several illnesses and/or disabilities and men who were on multiple medications rated their own health on the lower end of the continuum. Having multiple long term illnesses and/or disabilities, and taking several medications has been shown to be significantly related to a decrease in self rated health (Dharmalingam & Barnes, 1998; Garfein & Herzog, 1995). The more health problems the men in the present study were diagnosed with the greater the number of medications taken and both these factors corresponded to a decrease in self rated health. Given these findings it is surprising that the number of visits to the doctor over the last year and the number of health professionals seen within the last month, both of which are arguably linked to medication use and number of illnesses/disabilities, were not related to self rated health at multivariate level. It may be that these two variables are associated with different outcomes for different men. For instance, for some older men increased doctor and health professional visits is related to declining health whereas for others increased visits are rehabilitative in nature and are related to improving health status.

The consumption of alcohol was also not significant at multivariate level. Eliopoulis (1997) and Matteson et al. (1997) identify the difficulties in measuring alcohol consumption in the older person with under reporting being a common theme. In the present study information was obtained retrospectively by questionnaire, with participants being asked to document the amount of alcohol consumed in the last seven days. Poikolainen and Simpura (1983) suggest that participants may underestimate the total

amount of alcohol consumed by approximately 40-60% when data is obtained in this way. In addition, alcohol consumption was coded into drinkers and non-drinkers. This may not have provided a sensitive enough distinction between the two groups to detect a significant relationship. Furthermore, participants who identified as non-drinkers may have been ex-drinkers.

The literature has shown that age and income are related to health status (Dharmalingam & Barnes, 1998; Wan et al., 1982; Whittacker & Moses, 1996), such that health declines with age and the lower the income the poorer the health. In the present study age and income were not related to ratings of health. As noted earlier in the psychological well-being section, the restricted range of age and incomes in the present study may contribute to the underestimation of any relationship between these variables and self rated health. With regard to income, Campbell (1981) notes that income is not the same as satisfaction with income and standard of living and suggests that satisfaction with these aspects of life is more strongly related to health and well-being than is income. In addition, most older people tend to view their own health positively even though many live with several long term illnesses and/or disabilities (Kaufman, 1996; Ministry of Health, 1997d; Viverais-Dresler & Richardson, 1991).

There was no significant relationship between military service and ratings of health. The direct relationship between military service and self rated health in the literature is unclear. Salmond, Geddes and Salmond (1977) found factors, such as age, occupation, marital status at enlistment, as well as prisoner of war status, influenced the self assessed health status of former servicemen. In the present study participants were only asked whether they saw active military service. It may be that a more sensitive measure of service experience is required. That is, one that measures information regarding such factors as corps, unit assignment, campaign involvement and combat experience.

A large body of literature exists suggesting that having quality social support is related to higher self rated health scores in the older adult (Auslander & Litwin, 1992; Krause, 1987; Minkler & Langhauser, 1988). Choi and Wodarski (1996) also found the combination of being married, living with another person and having quality social supports positively influenced self rated health. However, in the present study neither of the social support variables were significantly linked to self rated health. Research by Grant et al. (1988) also found no association between self rated measures of physical health and quality and quantity of social supports. The findings in the current research

may be partially explained by Forster and Stoller (1992) who found that variability in findings relating to self rated health and social support were largely due to the complexity of the structure, quality and sources of social support. In this study participants were not asked questions related to the multidimensional nature of the support received. For instance, was the support received functional (as in assisting with household tasks), emotional, face to face, via telephone, or was the contact with family or community service agencies? Future research could specifically investigate the complex nature of social support and its relationship with self rated health in older adults.

Previous research has found that married people have lower morbidity and mortality rates than single people (see House et al., 1988). However, in the present research those not currently married did not rate their health more poorly than single men. It may be in this sample that the single men have developed social relationships that provide them with the protective support they need. For instance, a number of men, although not married, lived with other people including partners, children, boarders and friends. These people may act to provide the quality of support others receive from their spouse.

Despite the significant bivariate relationships between the mental well-being indicators and self rated health only hopelessness and depression were significant at multivariate level. Hopelessness was significant at step one of the equation. Links have been made between hopelessness and self rated health in the older adult (Fry, 1984, 1986; Hayslip et al., 1991). However, at step two when social well-being indicators were entered into the regression, hopelessness became nonsignificant. This suggests that the relationship of hopelessness to self rated health was mediated by the social well-being variables. However, as none of the social well-being variables were significant at steps two or three, it is unclear how the relationship between hopelessness and self rated health was mediated in this sample.

Depression was significantly related to self rated health at steps one and two. Research by Henderson et al. (1997) and Heikkinen et al. (1995) have concluded there is an important relationship between depression and self rated health in the older adult. At step three with the addition of the physical well-being indicators, depression became nonsignificant. The relationship of depression to self rated health was mediated by the inclusion of the physical well-being variables suggesting that depression may be related to self rated health through its links to medication use and disability. There is considerable evidence to suggest that medication use and disability are related to depression

(Eliopoulos, 1997; Melding, 1997; Osgood, 1991). However, as noted before, the cross-sectional nature of the present data precludes any discussion of causal relationships.

Studies on loneliness, stress and psychological well-being have identified significant relationships to self rated health (Choi & Wodarski, 1996; Heidrich & Ryff, 1993; Slivinske et al., 1996). The lack of significant relationships between these variables and self rated health at multivariate level may be attributable to the significant bivariate correlations among these variables. It would appear again that there is considerable redundancy in including so many mental well-being variables in attempting to explain variance in self rated health.

4.3 General Limitations

In the present study detailed information was only gathered from a small sample within a specific geographical location (Wanganui). Of the sample studied only a small minority identified themselves as Maori (3.2%), the majority identifying as pakeha. There were no participants of Pacific Island descent and no people representing other ethnic groups. This makes it difficult to generalise the results of the study to areas that have a high Maori, Pacific Island or other ethnic group population both in Wanganui as well as other parts of New Zealand. The Ministry of Health (1997a) identified the dearth of data available on ageing and mental health in older Maori, Pacific Island and Asian New Zealanders. They also predict that ageing trends occurring in the pakeha population will also occur within Maori (Ministry of Health, 1997d). In 1991, one in 40 Maori people were 65 years of age or over; however, by 2031 this will change to one in 11 (Statistics NZ, 1995). The current life expectancy for Maori men is 68 years with Maori women living on average 73 years (Statistics NZ, 1994).

As with Maori, Pacific Island people living in New Zealand aged 65 years and over are also predicted to increase in numbers from one in 38 in 1991 to one in 12 by the year 2031 (Ministry of Health, 1997d). Little information is available on sex differences in life expectancy within the Pacific Island group of people. There is also little information available on other older migrant populations living in New Zealand (Statistics NZ, 1995).

Several authors suggest that Maori and Pacific Island health workers/providers are the most appropriate people to meet the health requirements of Maori and Pacific Island populations (Bathgate & Pulotu-Endemann, 1997; Dyall, 1997). The Health Funding Authority has identified Maori nurses as playing a pivotal role in improving Maori health

statistics by purchasing places in tertiary education settings for these people to meet the health needs of Maori communities (O'Connor, 1998). The literature suggests that Maori and Pacific Island health workers/providers are the most appropriate people to research health issues related to Maori and Pacific Island populations (Bathgate & Pulotu-Endemann; O'Connor; Dyall). Future research on older male groups should include collaborative initiatives with Maori and Pacific Island health researchers if findings are to be generalised to the New Zealand population.

The sampling may be biased in favour of those older men living in the community. Men living in institutional settings were not fully represented. However 1996 statistical data identifies only 6.7% of all older people over the age of 65 years live in a retirement home or hospital (Prime Ministerial Task Force On Positive Ageing, 1997). Even so, this limitation suggests that data were collected from a community based population and therefore the outcome may not reflect institutionalised older males' experience of well-being. Future research representing a wider cross section of the older population would give a broader perspective of well-being in the older adult. As nurses work in a variety of settings with the older adult, future research of this kind has the potential to influence nursing practice to ensure positive health outcomes for this age group.

The cross sectional nature of the research inhibits the extent to which causal relationships can be identified regarding the antecedents and effects of study variables across time. A longitudinal study could more accurately explore the pathophysiology behind health and illness and its relationships to the mental and physical indicators of general well-being, due to the progressive nature of most health outcomes. For example, Eliopoulis (1997) supports longitudinal studies in the older adult because of the often rapid changes in this population's health status. But these studies are problematic in the older person because of high attrition rates due to death (Matteson et al., 1997).

A primary concern for researchers is how to conceptualise and operationally define the constructs under investigation. Wan et al.'s (1982) modified framework defines general well-being as being a composite of mental, social and physical well-being and identfies a number of indicators that contribute to these three components. In the present study the mental and physical components were operationalised as dependent variables using valid and reliable measures (psycholoigcal well-being (Viet & Ware, 1983) and self rated health (Laird & Chamberlain, 1990)). However, no attempt was made to operationalise a dependent measure of the third component of general well-being,

social well-being, due to the considerable ambiguity as to how this contruct would be measured. There is potential for conceptual clarification from research in the area of quality of life. The World Health Organisation Quality Of Life Group (1995) has developed a quality of life questionnaire organised into six broad domains: physical domain, psychological domain, level of independence, social relationships, environment and spirituality (religion and personal beliefs). This instrument may offer opportunities for investigating broader issues relating to social well-being and their relationships to other components of well-being and quality of life.

A further consideration is the possibility of unmeasured variables that might affect general well-being in older men. Wan et al. (1982) in their framework identify factors such as sense of environmental well-being, self assessed emotional well-being, functional dependency and nutritional status as important variables in the understanding of well-being. Other variables to include in future research relating to well-being in the older male include personal relationships, sexuality and sexual activity, financial resources and security. As noted above, the WHOQOL may be useful in measuring a wider range of well-being indicators over a broader domain. In the present research, attempts were made to include an extensive range of variables cited in the literature as impacting on well-being that demonstrated good reliability and validity.

Finally, the findings of this research may need to be interpreted cautiously as all instruments used were self report measures. Some literature is critical of using self report measures due to common method variance that may inflate the results of the research (Heidrich & Ryff, 1993; Zeiss et al., 1996). Heidrich & Ryff suggest multimethod approaches, both subjective and objective, to strengthen research findings when looking at physical and psychological well-being. Lawton & Teresi (1994) also identify the importance of using both objective and subjective perspectives when gathering data as each gives meaning to the other. However, many of the indicators used to measure general well-being, for example, psychological well-being, are intrinsically subjective and if evaluated by an observer could potentiate inaccurate findings. This premise is supported by the Ministry of Health (1997b) which suggests self report measures of well-being help overcome the problems associated with objective measures of gathering data. For instance, a limitation of objective measures of health problems is that they inadequately describe the extent to which the associated impairment impacts on an individual's life and ability to function (Fergusson, Horwood & Lynskey, 1997).

4.4 Future Directions

The present research illuminates potential future directions for studies looking at general well-being in older men. From a review of the literature there appears to be a lack of research that investigates the mental, social and physical indicators influencing well-being in older men. Much of the literature examines well-being in relation to the older person in general with few studies specifically targeting the older male. It is important to conduct research specifically related to the older male because when compared to women, men are more likely to die from injury related to illnesses and live approximately six years less than women (Adams, 1997).

There is little research undertaken from a nursing perspective on general well-being in the older adult. Further studies incorporating mental, social and physical indicators as a basis to explain well-being in older men would increase the amount of nursing related literature available to practitioners, administrators and policy makers working in primary, secondary and tertiary care settings. Nurses working with older men can use the findings of this study to develop best practice and early intervention strategies to provide quality care to this population in multiple health settings. For example, recognising that the quality of social supports may be important for the older male and providing opportunities for ongoing contact with established friends and family even if illness and/or disability has necessitated a change in living situation from independent living to rest home or hospital care. As mentioned in the general limitation section, longitudinal studies conducted in New Zealand that include comprehensive analysis of multivariate models relating to general well-being in the older adult are needed.

More research is required to make further distinctions between the number of social supports and the level of satisfaction with those social supports. Socio-political initiatives aimed at providing social contact in programmes and senior citizen groups for the older person are unlikely to be effective unless the quality of the contact is perceived to be sufficient by the older person. Dissatisfaction with social relationships has been linked to depression, loneliness and decreases in well-being (Slivinske et al., 1996). This is supported by other studies which identify quality rather than quantity of time in other's company as affecting the level of satisfaction with social contact (Flett et al., 1994; Maxwell, Flett & Colhoun, 1990; Mireault & de Man, 1996). Further research should be aimed at examining what factors influence older men's satisfaction with their social supports. It may be that more sensitive measures of social support which encompass a broad range of activities would elicit more useful information; for instance, the previously mentioned World Health Organisation's measure of quality of life indicators (The

WHOQOL Group, 1995). This instrument includes indicators such as personal relationships, practical social support, physical safety, physical and financial security, availability of social care, opportunities for acquiring information and skills, participation in and opportunities for recreation and leisure, impact of physical environment on health and the value and impact of personal beliefs (The WHOQOL Group). This instrument may be a valuable tool for assessing changes related to the risk factors influencing well-being in older men and as a mechanism for measuring the success and future development of nursing education programmes designed to improve the same in this age and gender group.

Future research into factors contributing to a state of general well-being in older men could utilise qualitative methodologies to help understand how well-being is experienced from an older male perspective. Nursing research has developed expertise in qualitative approaches as much knowledge in nursing surrounds the human experience of health and illness (LoBiondo-Wood & Haber, 1998; The Ministerial Taskforce on Nursing, 1998). This type of research expertise could be utilised to provide another dimension to the older male's experience of well-being, contributing to future directions for improving health outcomes.

4.5 Conclusions

There are popular stereotypes about the older adult that are not supported by the present study. As Jeawoddy and Bevan (1998) note, such attitudes are largely based on lack of knowledge of the real issues of growing old. One way to change negative societal attitudes toward older adults is for a better understanding of the many issues of ageing and how these processes affect well-being.

In the present study, the issues that most consistently related to well-being were those related to health. The number of visits to the doctor, number of medications taken and the number of illnesses/disabilities were all significantly related to well-being. Clearly nurses, and other health professionals, need to be aware of the relationship between objective health status and subjective well-being in order to provide effective care to older adults. As Wan et al. (1982) note, one element of well-being cannot be considered apart from the rest and all elements interact with one another to effect and make up overall well-being.

A further factor related to well-being in the present study was satisfaction with social supports. There is an inevitable loss of family and friends as one ages and this can

severely impinge on one's social interaction with society. This reduction in numbers of social supports can, however, be offset by the quality of those supports one retains, particularly for men who have fewer support resources available to begin with. Nurses, and others who work with and provide support services to older men, need to be aware of the distinction between the quality and quantity of support. Clearly there is benefit in making sure that social support initiatives are responsive to the needs of the older adult rather than the needs of the provider.

As noted earlier in the introduction, Andrews and Withey (1976) identify four "products of value" arising from research related to levels of well-being in the older adult. These include gathering baseline information for comparative purposes to measure change, valuing knowledge related to how well-being is distributed in society, the value in understanding the existing relationships between different types of well-being and finally understanding how different domains of people's lives overlap into an overall evaluation of the value of life. Studies on older people's level of well-being are important and useful to nurses who need to incorporate research based knowledge on well-being as part of gathering assessment data in order to plan and implement individualised nursing care for the older male.

The present study has advanced nursing knowledge by examining the relationships between mental, social and physical well-being indicators on psychological and physical well-being in older men. The outcomes can be utilised to inform and transform nursing practice in the area of health care of the older male as nursing realises the need for specialised knowledge in order to improve health outcomes in this population.

Adams (1997) claims that the physical, psychological and social processes influencing men's health have largely remained unexamined. This is also evident within the older male age group and within the general and nursing literature. Davey (1994) supports this premise by claiming there is no conclusive research relating to the health status of the older adult in New Zealand. The Ministry of Health (1997a) believes results from overseas studies are inadequate for both New Zealand needs and our situation because participants usually include other Caucasian races who come from different socio-cultural contexts.

Nurses operate at all levels of the health care system and older adults remain the highest users of this service. It is, therefore, crucial that nursing research utilising both

quantitative and qualitative methods be employed in order to give a comprehensive picture of the indicators influencing well-being in older men. The present study has contributed to the body of nursing knowledge related to older person's health, an area of predicted growth as the current baby boomers reach old age.

REFERENCES

Adams, P. (1997). Men. In Ministry of Health (Ed.), *Mental health in New Zealand from a public health perspective* (pp. 213-242). Wellington: Public Health Group.

Akerlind, I., & Hornquist, J. (1992). Loneliness and alcohol abuse: A review of evidence of an interplay. *Social Science and Medicine, 34* (4), 405-414.

Alford, D., & Futrell, M. (1992). Wellness and health promotion of the elderly. *Nursing Outlook, 40* (5), 221-226.

Alpass, F. (1992). *Effects of anger management and social contact on alcohol and tobacco consumption.* Unpublished doctoral dissertation, Massey University, New Zealand.

Anastasi, A. (1988). *Psychological testing.* New York: Macmillan.

Anderson, K., & Dimond, M. (1995). The experience of bereavement in older adults. *Journal of Advanced Nursing, 22*, 308-315.

Andrews, F., & Withey, S. (1976). *Social indicators of well-being: Americans' perceptions of life quality.* New York: Plenum Press.

Antonucci, T., & Akiyama, H. (1987). An examination of sex differences in social support among older men and women. *Sex Roles, 17* (11/12), 737-749.

Arnold, M. (1991). Measurement of quality of life in the frail elderly. In J. Britten, J. Lubben, J. Rowe, & D. Deutchman (Eds.), *The concept and measurement of quality of life in the frail elderly* (pp. 50-73). San Diego: Academic Press.

Auslander, G., & Litwin, H. (1992). Social networks, social support, and self-ratings of health among the elderly. *Journal of Aging and Health, 3* (4), 493-510.

Bathgate, M., & Pulotu-Endemann, F. (1997). Pacific people in New Zealand. In Ministry of Health (Eds.), *Mental health in New Zealand from a public health perspective* (pp. 104-135). Wellington: Public Health Group.

Beaumont, G. M. (1994). *Suicidal ideation in a non-clinical sample: Cross-sectional and longitudinal relationships with minor stressors, depression, hopelessness and coping behaviour.* Unpublished doctoral dissertation, Massey University, New Zealand.

Beautrais, A., Joyce, P., & Mulder, R. (1994). The Canterbury suicide project: Aims, overview and progress. *Community Mental Health in New Zealand, 8* (2), 32-39.

Beck, A., & Steer, R. (1993). *Beck hopelessness scale manual.* USA: The Psychological Corporation.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4*, 561-571.

Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The hopelessness scale. *Journal of Consulting and Clinical Psychology, 42*, 861-865.

Belsky, J. (1990). *The psychology of aging: Theory, research and interventions* (2nd ed.). California: Brooks/Cole Publishing Company.

Berger, K. (1984). *The developing person through the life span.* New York: Worth Publishers Inc.

Bevan, C., & Jeeawoody, B. (Eds.). (1998). *Successful ageing. Perspectives on health and social construction.* Sydney: Mosby.

Bloom, J. (1990). The relationship of social support and health. *Social Science and Medicine, 30* (5), 635-637.

Bonita, R., & Beaglehole, R. (1998). Primary prevention of cardiovascular disease in older New Zealanders. *A Report to the National Health Committee.* Wellington: National Advisory Committee on Health and Disability.

Brink, T. L., Yesavage, J. A., Lum, O., Heersema, P. H., Adey, M., & Rose, T. L. (1982). Screening tests for geriatric depression. *Clinical Gerontologist, 1* (1), 37-

43.

Browning, C., Kendig, H., & Minichiello, V. (1992). Research methods in gerontology. In V. Minichiello, L. Alexander, & D. Jones (Eds.), *Gerontology. A multidisciplinary approach* (pp. 164-200). Sydney: Prentice Hall.

Buchanan, D., Farran, C., & Clark, D. (1995). Suicidal thought and self-transference in older adults. *Journal of Psychosocial Nursing and Mental Health Services, 33* (10), 31-43.

Burnette, D., & Mui, A. (1997). Correlates of psychological distress among old-old Hispanics. *Journal of Clinical Geropsychology, 3* (3), 227-224.

Buschmann, M., Dixon, M., & Tichy, A. (1995). Geriatric depression. *Home Healthcare Nurse, 13* (3), 47-56.

Butler, R., Lewis, M., & Sunderland, T. (1991). *Aging and mental health. Positive psychosocial and biomedical approaches* (4th ed.). New York: Macmillan Publishing Company.

Byrne, G. (1995). Ageing: Opportunities for preventative intervention. In B. Raphael, & G. Burrows (Eds.), *Handbook of studies on preventive psychiatry.* Amsterdam: Elsevier.

Byrne, G., & Raphael, B. (1997). The psychological symptoms of conjugal bereavement in elderly men over the first 13 months. *International Journal of Geriatric Psychiatry, 12*, 241-251.

Campbell, A. (1981). T*he sense of well-being in America: Recent patterns and trends.* New York: McGraw-Hill.

Carver, C. S., Pozo, C., Harris, S. D., Noriega, V., Scheier, M. F., Robinson, D. S., Ketcham, A. S., Moffat, F. L. Jr., & Clark, K. C. (1993). How coping mediates the effect of optimism on distress: A study of women with early stage breast cancer. *Journal of Personality and Social Psychology, 65,* 375-390.

Carver, C. S., Scheier, M. F., & Weintrauch, J. K. (1989). Assessing coping

strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*, 267-283.

Cattell, H., & Jolley, D. (1995). One hundred cases of suicide in elderly people. *British Journal of Psychiatry, 166*, 451-457.

Central Regional Health Authority. (1996). *Towards a healthier Wanganui.* Wellington: Author.

Cervilla, J., & Prince, M. (1997). Cognitive impairment and social distress as different pathways to depression in the elderly: A cross-sectional study. *International Journal of Geriatric Psychiatry, 12* (10), 995-1000.

Chamberlain, K., & Zika, S. (1990). The minor events approach to stress: Support for the use of daily hassles. *British Journal of Psychology, 81*, 469-481.

Choi, N., & Wodarski, J. (1996). The relationship between social support and health status of elderly people: Does social support slow down physical and functional deterioration? *Social Work Research, 20* (1), 52-63.

Clark, F., Carlson, M., Zemke, R., Frank, G., Patterson, K., Ennevor, B., Rankin-Martinez, A., Hobson, L., Crandall, J., Mandel, D., & Lipson, L. (1995). Life domains and adaptive strategies of a group of low-income, well older adults. *The American Journal of Occupational Therapy, 50* (2), 99-108.

Clark, M., & Isen, A. (1982). Toward understanding the relationship between feeling states and social behaviour. In A. Hastorf & A. Isen (Eds.), *Cognitive and social psychology* (pp. 73-108). The Netherlands: Elsevier.

Coggan, C. (1997). Suicide and attempted suicide in New Zealand: A growing problem for young males. *The New Zealand Public Health Report, 4* (7), 49-51.

Coggan, C., Fanslow, J., & Norton, R. (1995). *Intentional injury in New Zealand.* Wellington: Public Health Commission.

Cohen, S., & Herbert, T. (1996). Health psychology: Psychological factors and physical disease from the perspective of human psychoneuroimmunology. *Annual*

Review of Psychology, 47, 113-142.

Cohen, S., & Syme, L. (Eds.). (1985). *Social support and health*. New York: Academic.

Connell, D., & Meyer, R. (1991). The reasons for living inventory and a college population: Adolescent suicidal behaviors, beliefs, and coping skills. *Journal of Clinical Psychology, 47*, 485-489.

Courage, M., Godbey, K., Ingram, D., Schramm, L., & Hale, W. (1993). Suicide in the elderly: Staying in control. *Journal of Psychosocial Nursing and Mental Health Services, 31* (7), 26-33.

Cowen, E. (1994). The enhancement of psychological wellness: Challenges and opportunities. *American Journal of Community Psychology, 22* (2), 149-179.

Cropanzano, R., James, K., & Konovsky, M. (1993). Dispositional affectivity as a predictor of work attitudes and job performance. *Journal of Organizational Behaviour, 14*, 595-606.

Cumming, E., & Henry, W. (1961). *Growing old: The process of disengagement.* New York: Basic Books.

Davey, D. (1994). *From birth to death III.* Wellington: Victoria University (Institute of Policy Studies).

Deavoll, B., Mulder, R., Beautrais, A., & Joyce, P. (1993). One hundred years of suicide in New Zealand. *Acta Psychiatrica Scandinavia, 87*, 81-85.

DeLongis, A. (1985). *The relationship of everyday stress to health and wellbeing: Inter- and intra-individual approaches.* Unpublished doctoral dissertation, University of California, Berkeley.

DeLongis, A., Folkman, S., & Lazarus, R. (1988). The impact of daily stress on health and mood: Psychological and social resources as mediators. *Journal of Personality and Social Psychology, 54*, 486-495.

Dennis, M., & Lindesay, J. (1995). Suicide in the elderly: The United Kingdom perspective. *International Psychogeriatrics, 7* (2), 263-274.

Department of Statistics. (1991). *New Zealand census of population and dwellings.* Wellington: Author.

Department of Statistics. (1992). *NZ classification of occupations 1990.* Wellington: Author.

Dharmalingam, A., & Barnes, J. (1998). *Policies and programmes for the elderly in New Zealand.* Hamilton: Waikato University (Population Studies Centre).

Diefenbach, M., Leventhal, E., Leventhal, H., & Patrick-Miller, L. (1996). Negative affect relates to cross-sectional but not longitudinal symptom reporting: Data from elderly adults. *Health Psychology, 15* (4), 282-288.

Dimond, M., Caserta, M., & Lund, D. (1994). Understanding depression in bereaved older adults. *Clinical Nursing Research, 3* (3), 253-268.

Durkheim, E. (1951). *Suicide.* New York: The Free Press.

Dyall, L. (1997). Maori. In Ministry of Health (Ed.), *Mental health in New Zealand from a public health perspective* (pp. 85-103). Wellington: Public Health Group.

Elder, G., Jr. (1987). War mobilization and the life course: A cohort of World War II veterans. *Sociological Forum, 2*, 449-472.

Eliopoulos, C. (1997). *Gerontological nursing* (4th ed.). New York: Lippincott.

Erikson, E. (1963). *Childhood and society* (2nd ed.). New York: W. W. Norton.

Farber, H., Brod, M., & Feinbloom, R. (1991). Primary family contacts and emotional health in the institutionalized elderly. *Family Practice Journal, 11* (3), 309-317.

Fergusson, D., Horwood, J., & Lynskey, M. (1997). Children and adolescents. In Ministry of Health (Ed.), *Mental health in New Zealand from a public health perspective* (pp. 136-163). Wellington: Public Health Group.

Flett, R., Harcourt, B., & Alpass, F. (1994). Psychosocial aspects of chronic lower leg ulceration in the elderly. *Western Journal of Nursing Research, 16* (2), 183-192.

Forster, L., & Stoller, E. (1992). The impact of social support on mortality: A seven-year follow-up of older men and women. *Journal of Applied Gerontology, 11,* 173-186.

Fry, P. (1984). Development of a geriatric scale of hopelessness: Implications for counselling and intervention with depressed elderly. *Journal of Counseling Psychology, 31* (3), 322-331.

Fry, P. (1986). Assessment of pessimism and despair in the elderly: A geriatric scale of hopelessness. In T. L. Brink (Ed.), *Clinical gerontology* (pp. 193-204). New York: Haworth.

Gade, P. (1991). Military service and the life-course perspective: A turning point for military personnel research. *Military Psychology, 3* (4), 187-199.

Gall, T., Evans, D., & Howard, J. (1997). The retirement adjustment process: Changes in the well-being of male retirees across time. *Journal of Gerontology: Psychological Sciences, 52B* (3), 110-117.

Garfein, A., & Herzog, A. (1995). Robust aging among the young-old, old-old, and oldest-old. *Journal of Gerontology, 50B* (2), S77-S87.

Glass, T., Kasl, S., & Berkman, L. (1997). Stressful life events and depressive symptoms among the elderly. *Journal of Aging and Health, 9* (1), 70-89.

Gordon, M. (1987). *Nursing diagnosis: Process and applications* (2nd ed.). New York: McGraw-Hill.

Grant, I., Patterson, T., & Yager, J. (1988). Social supports in relation to physical health and symptoms of depression in the elderly. *American Journal of Psychiatry, 145,* 1254-1258.

Grant, K. (1992). Practical Geriatrics. In V. Minichiello, L. Alexander, & D. Jones (Eds.), *Gerontology. A multidisciplinary approach* (pp. 201-223). Sydney: Prentice Hall.

Guohua, L. (1995). The interaction effect of bereavement and sex on the risk of suicide in the elderly: An historical cohort study. *Social Science and Medicine, 40* (6), 825-828.

Gurland, B. (1976). The comparative frequency of depression in various adult age groups. *Journal of Gerontology, 31,* 283-292.

Gutek, B. A., & Winter, S. J. (1992). Consistency of job satisfaction across situations: Fact or framing artifact? *Journal of Vocational Behaviour, 41,* 61-78.

Hall, B. (Ed.). (1984). *Mental health and the elderly.* Florida: Grune & Stratton, Inc.

Hayslip, B., Lopez, F., & Nation, P. (1991). Hopelessness in community-residing aged persons: A viable construct? *Journal of Personality Assessment, 57* (3), 498-505.

Hector-Taylor, L., & Adams, P. (1996). State versus trait loneliness in elderly New Zealanders. *Psychological Reports, 78,* 1329-1330.

Heidrich, S., & Ryff, C. (1993). Physical and mental health in later life: The self-system as mediator. *Psychology and Aging, 8* (3), 327-338.

Heikkinen, R., Berg, S., & Avlund, K. (1995). Depressive symptoms in late-life. Results from a study in three Nordic urban localities. *Journal of Cross-Cultural Gerontology, 10,* 315-330.

Henderson, A., Korten, A., Jacomb, P., MacKinnon, A., Jorm, A., Christensen, H., & Rodgers, B. (1997). The course of depression in the elderly: A longitudinal community-based study in Australia. *Psychological Medicine, 27,* 119-129.

Henriksson, M., Marttunen, M., Isometsa, E., Heikkinen, M., Aro, H., Kuoppasalmi, K., & Lonnqvist, J. (1995). Mental disorders in elderly suicide.

International Psychogeriatrics, 7 (2), 275-286.

Herth, K. (1990). Relationship of hope, coping styles, concurrent losses, and setting to grief resolution in the elderly widow(er). *Research in Nursing and Health, 13*, 109-117.

Hill, R., Gallagher, D., Thompson, L., & Ishida, T. (1988). Hopelessness as a measure of suicidal intent in the depressed elderly. *Psychology and Ageing, 3* (3), 230-232.

Hillary Commision. (1996). *Improving the quality of life for older adults.* Unpublished submission to the National Advisory Committee on Core Health and Disability Support Services.

Hobman, D. (1996). Second class treatment. *Nursing Times, 92* (49), 46.

Hohagen, F., Kappler, C., & Schramm, E. (1995). Prevalence of insomnia in elderly general practice attenders and the current treatment modalities. *Acta Psychiatr Scand, 90* (2), 102-108.

Holahan, C., & Holahan, C. (1987). Life stress, hassles, and self-efficacy in aging: A replication and extension. *Journal of Applied Social Psychology, 17* (6), 574-592.

Holmes, R., & Holmes, T. (1970). Short- term intrusions into the life style routine. *Journal of Psychosomatic Research, 11*, 213-218.

House, J., Umberson, D., & Landis, K. (1988). Structures and processes of social support. *Annual Review of Sociology, 14*, 293-318.

Hylton, J. (1995). Sending beginning nursing students to gerontological units: Best introduction to nursing or elder abuse? *Nursing Praxis in New Zealand, 10* (2), 35-41.

Idler, E. L., & Kasl, S. (1991). Health perceptions and survival: Do global evaluations of health status really predict mortality? *Journal of Gerontology, 46,* 555-565.

Jamison, C., & Scogin, F. (1992). Development of an interview-based geriatric depression rating scale. *International Journal of Aging and Human Development, 35,* 193-204.

Johnson, E. (1990). *The role of anger, hostility, and aggression in health and emotional well-being.* New York: Praeger.

Kanacki, L., Jones, P., & Galbraith, M. (1996). Social support and depression in widows and widowers. *Journal of Gerontological Nursing, 22* (2), 39-45.

Kanner, A., Coyne, J., Schaefer, C., & Lazarus, R. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine, 7,* 375-389.

Kaplan, M., Adamek, M., & Johnson, S. (1994). Trends in firearm suicide among older American males: 1979-1988. *The Gerontologist, 34* (1), 59-65.

Kaufman, J. (1996). Personal definitions of health among elderly people: A link to effective health promotion. *Family and Community Health, 19* (2), 58-68.

Kehn, D. (1995). Predictors of elderly happiness. *Activities, Adaptation and Aging, 19* (3), 11-30.

Kelly, J., & Wescott, G. (1991). Ordinary retirement: Commonalities and continuity. *International Journal of Aging and Human Development, 32,* 81-89.

Kerkhof, A., Visser, A., Diekstra, R., & Hirschhorn, P. (1991). The prevention of suicide among older people in the Netherlands: Interventions in community mental health care. Special issue: Suicide in the elderly. *Crisis, 12* (2), 59-72.

Kirschling, J., & McBride, A. (1989). Effects of age and sex on the experience of widowhood. *Western Journal of Nursing Research, 11,* 207-218.

Knight, R. G., Chisholm, B. J., Marsh, N. V., & Godfrey, H. P. (1988). Some normative, reliability and factor analytic data for the revised UCLA Loneliness Scale. *Journal of Clinical Psychology, 44* (2), 203-206.

Koopman-Boyden, P. (Ed.). (1993). *New Zealand's aging society: The implications.* Wellington: Daphne Brasell Associates.

Krach, P. (1995). Assessment of depressed older persons living in a home setting. *Home Healthcare Nurse, 13* (3), 61-64.

Krause, N. (1987). Satisfaction with social support and self-rated health in older adults. *Gerontologist, 27* (3), 301-308.

Laird, R. (1989). *Minor stressors and uplifts, affect intensity, and optimism as influences on health of the elderly.* Unpublished master's dissertation, Massey University, New Zealand.

Laird, R., & Chamberlain, K. (1990). Hassles, uplifts, and health status reports by pensioners living in a New Zealand town, *Sociology and Social Research. 75* (1), 27-30.

Landreville, P., & Vezina, J. (1992). A comparison between daily hassles and major life events as correlates of well-being in older adults. *Canadian Journal on Aging, 11* (2), 137-149.

Langley, J., & Johnston, S. (1990). Purposely self-inflicted injury resulting in death and hospitalisation in New Zealand. *Community Health Studies, 14* (2), 190-199.

La Vecchia, C., Lucchini, F., & Levi, F. (1994). Worldwide trends in suicide mortality, 1955-1989. *Acta Psychiatrica Scandinavia, 90*, 53-64.

Lawton, M., & Teresi, J. (Eds.). (1994). *Annual review of gerontology and geriatrics. Focus on assessment techniques.* New York: Springer Publishing Company.

Lazarus, R., & Folkman, S. (1984). *Stress, appraisal and coping.* New York: Springer.

Lester, D. (1994). Are there unique features of suicide in adults of different ages and developmental stages? *Omega, 29* (4), 337-348.

Lewinsohn, P., Rohde, P., Seeley, J., & Fischer, S. (1991). Age and depression: Unique and shared effects. *Psychology and Aging, 6*, 246-260.

Lobiondo-Wood, G. & Haber, J. (1998). *Nursing research. Methods, critical appraisal, and utilisation* (4th ed.). St Louis: Mosby.

Lu, L. (1997). Social support, reciprocity, and well-being. *Journal of Social Psychology, 137* (5), 618-628.

Markides, K., & Cooper, C. (1989). *Aging, stress and health.* New York: John Wiley & Sons.

Martikainen, P., & Valkonen, T. (1996). Mortality after the death of a spouse: Rates and causes of death in a large Finnish cohort. *American Journal of Public Health, 86* (8), 1087-1093.

Matteson, M., McConnell, E., & Linton, A. (1997). *Gerontological nursing. Concepts and practice* (2nd ed.). Philadelphia: W.B. Saunders Company.

Maxwell, G., & Colhoun, H. (1986, September). *Alcohol: social anxiety, loneliness and social skill: A report to the Alcoholic Liquor Advisory Council.* Dunedin, New Zealand: Otago University (Department of Psychology).

Maxwell, G., Flett, R., & Colhoun, H. (1990). Taking the psychosocial pulse: How to measure the psychological health of New Zealanders. *Community Mental Health in New Zealand, 5* (1), 11-30.

McWhirter, B. (1990). Loneliness: A review of current literature, with implications for counseling and research. *Journal of Counseling and Development, 68* (4), 417-422.

Meehan, P., Saltzman, L., & Sattin, R. (1991). Suicides among older United States residents: Epidemiologic characteristics and trends. *American Journal of Public Health, 81* (9), 1198-1200.

Melding, P. (1997). Older adults. In Ministry of Health (Ed.), *Mental health in New Zealand from a public health perspective* (pp. 164-183). Wellington: Public Health

Group.

Mellick, E., Buckwater, K., & Stolley, J. (1992). Suicide among elderly white men: Development of a profile. *Journal of Psychosocial Nursing, 30* (2), 29-34.

Mendonca, J., & Holden, R. (1996). Are all suicidal ideas closely linked to hopelessness? *Acta Psychiatrica Scandinavica, 93* (4), 246-251.

Mental Health Foundation. (1995). *Policy statement on mental health passed by the Board of Directors.* Auckland: Author.

Miller, M. (1976). *Suicide among older men.* Unpublished doctoral dissertation, University of Michigan, Ann Arbor.

Ministerial Taskforce on Nursing. (1998). *Report of the Ministerial Task Force on Nursing. Releasing the potential of nursing.* Wellington: Ministry of Health.

Ministry of Health. (1997a). *Mental health in New Zealand from a public health perspective.* Wellington: Public Health Group.

Ministry of Health. (1997b). *Mental health promotion for younger and older adults: The public health issues.* Wellington: Public Health Group.

Ministry of Health. (1997c). *Progress on health outcome targets.* Wellington: Public Health Group.

Ministry of Health. (1997d). *The health and wellbeing of older people and Kaumatua: Public health issues.* Wellington: Public Health Group.

Ministry of Health. (1998). *Preventing suicide: Guidelines for the media on the reporting of suicide.* Wellington: Author.

Minkler, M., & Langhauser, C. (1988). Assessing health differences in an elderly population. *Journal of American Geriatrics Society, 36* (2), 113-118.

Mireault, M., & de Man, A. (1996). Suicide ideation among the elderly: Personal variables, stress and social support. *Social Behaviour and Personality, 24* (4), 385-392.

Moscicki, E. (1995). North American perspectives. Epidemiology of suicide. *International Psychogeriatrics, 7* (2), 137-148.

Moyle, P. (1995). The role of negative affectivity in the stress process: Tests of alternative models. *Journal of Organizational Behaviour, 16*, 647-668.

Mrazek, P., & Haggerty, R. (Eds.). (1994). *Reducing risks for mental disorders.* Washington: Institute of Medicine.

Musil, C., Haug, M., & Warner, C. (1998). Stress, health, and depressive symptoms in older adults at three time points over 18 months. *Issues in Mental Health Nursing, 19* (3), 207-224.

Neugarten, L. (1964). *Personality in middle and late life.* New York: Atherton Press.

Norusis, M. J. (1988). *SPSS/PC+ Advanced Statistics V2.0.* Chicago: SPSS Inc.

O'Carroll, P., Rosenberg, L., & Mercy, J. (1991). Suicide. In M.L. Rosenberg & M.A. Fenley (Eds.), *Violence in America* (pp. 184-196). New York: Oxford University Press.

O'Connor, T. (1998). Nurses' role in Maori health. *Kia Tiaki: Nursing New Zealand, 4* (5), 20-21.

Olin, J., Schneider, L., Eaton, E., Zemansky, M., & Pollock, V. (1992). The geriatric depression scale and the Beck depression inventory as screening instruments in an older adult outpatient population. *Psychological Assessment, 4* (2), 190-192.

Orley, J. (1996). *Mental health promotion.* Geneva: World Health Organisation.

Osgood, N. (1991). Psychological factors in late-life suicide. *Crisis, 12* (2), 18-24.

Osgood, N., & McIntosh, J. (1986). *Suicide and the elderly: An annotated*

bibliography. London: Greenwood Press.

Osgood, N., Wood, H., & Parham, I. (1995). *Alcoholism and aging: An annotated bibliography and review.* London: Greenwood Press.

Pachana, N., Gallagher-Thompson, D., & Thompson, L. W. (1994). Assessment of depression. In M. Lawton & J. Teresi (Eds.), *Annual review of gerontology and geriatrics. Focus on assessment techniques* (pp. 234-256). New York: Springer Publishing Company.

Padula, C. (1996). Older couples decision making on health issues. *Western Journal of Nursing Research, 18*, 675-687.

Parr, A. (1995). *Silent Casualties: New Zealand's unspoken legacy of the Second World War.* North Shore: Tandem Press.

Peck, R. (1968). Psychological developments in the second half of life. In B. Neugarten (Ed.), *Middle age and aging.* Chicago: University of Chicago Press.

Peterson, C. (1996). *Looking forward through the lifespan: Developmental psychology* (3rd ed.). Sydney: Prentice Hall Australia.

Phillips, J. (1996). *A man's country?: The image of the pakeha male, a history* (2nd ed.). Auckland: Penguin.

Phillips, J., Boyack, N., & Malore, E. (Eds.). (1988). *The great adventure, New Zealand soldiers describe the First World War.* Australia: Allen & Unwin.

Poikolainen, K., & Simpura, J. (1983). One-year drinking history and mortality. *Preventative Medicine, 12*, 709-714.

Polit, D. (1996). *Data analysis and statistics for nursing research.* Stamford, CT: Appleton & Lange.

Prime Ministerial Task Force On Positive Ageing. (1997). *Facing the future. A strategic plan.* Wellington: Department of the Prime Minister and Cabinet.

Prince, M., Harwood, R., Blizard, R., Thomas, A., & Mann, A. (1997). Social support deficits, loneliness and life events as risk factors for depression in old age. The Gospel Oak Project VI. *Psychological Medicine, 27*, 323-332.

The Public Health Commission. (1993). *Our health our future. The state of the public health in New Zealand 1993.* Wellington: Author.

Reynolds, W. M. (1987). *Suicidal ideation questionnaire.* Florida: Psychological Assessment Resources.

Reynolds, W. M. (1988, August). *Suicidal Ideation and depression in adolescents: A large sample investigation.* Paper presented at the International Congress of Psychology, Sydney, Australia.

Rich, A., & Bonner, R. (1987). Concurrent validity of a stress-vulnerability model of suicidal ideation and behavior: A follow-up study. *Suicide and Life-Threatening Behavior, 19*, 265-270.

Rifai, A., George, C., Stack, J., Mann, J., & Reynolds III, C. (1994). Hopelessness in suicide attempters after acute treatment of major depression in late life. *American Journal of Psychiatry, 151* (11), 1687-1690.

Rook, K. (1994). Assessing the health-related dimensions of older adults' social relations. In M. Powell Lawton & J. Teresi (Eds.), *Annual review of gerontology and geriatrics. Focus on assessment techniques* (pp. 142-181). New York: Springer Publishing Company.

Roper, N., Logan, W., & Tierney, A. (1990). *The elements of nursing: A model for nursing based on a model of living* (3rd ed.). Edinburgh: Churchill Livingston.

Russell, D. (1996). ULCA Loneliness Scale (version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment, 66* (1), 20-40.

Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality & Social Psychology, 39* (3), 472-480.

Salmond, G., Geddes, M., & Salmond, C. (1977). *The health of former servicemen.* Wellington: War Pensions Medical Research Trust Board.

Santrock, J. (1997). *Life-span development* (6th ed.). Chicago: Brown & Benchmark.

Sarason, I. G., & Sarason, B. R. (1985). *Social support: Theory, research, and applications.* Boston: Martinus Nijhoff International.

Sarason, I. G., Sarason, B. R., Shearin, E. N., & Pierce, G. R. (1987). A brief measure of social support: Practical and theoretical implications. *Journal of Social and Personal Relationships, 4*, 497-510.

Schmidtke, A., & Weinacker, B. (1991). Covariation of suicides and undetermined deaths among elderly persons: A methodological study. *Crisis, 12* (2), 44-58.

Schulz, R., O'Brien, A., & Tompkins, C. (1994). The measurement of affect in the elderly. In M. Powell Lawton & J. Teresi (Eds.), *Annual review of gerontology and geriatrics. Focus on assessment techniques* (pp. 210-233). New York: Springer Publishing Company.

Siegal, J., & Kuykendall, D. (1990). Loss, widowhood, and psychological distress among the elderly. *Journal of Consulting and Clinical Psychology, 58* (5), 519-524.

Siegert, R., Patten, M., & Walky, F. (1987). Development of a brief social support questionnaire. *New Zealand Journal of Psychology, 16*, 79-83.

Skegg, K., & Cox, B. (1991). Suicide in New Zealand 1957-1986: The influence of age, period and birth-cohort. *Australian and New Zealand Journal of Psychiatry, 25*, 181-190.

Slivinske, L., Fitch, V., & Morawski, D. (1996). The wellness index: Developing an instrument to assess elders' well-being. *Journal of Gerontological Social Work, 25* (3/4), 185-204.

Smith, C., Kearns, R., & Abbott, M. (1992). A tale of two cities: The experience of housing problems in Auckland and Christchurch. *New Zealand Geographer, 48* (1), 2-10.

Snedecor, G., & Cochrane, W. (1980). *Statistical methods* (7th ed.). Iowa: Iowa State University Press.

Starr, J., & Whalley, L. (1994). Drug-induced dementia: Incidence, management and prevention. *Drug Saf, 11* (5), 310-317.

Statistics New Zealand. (1993). *A picture of health.* Wellington: Statistics New Zealand/Ministry of Health.

Statistics New Zealand. (1994). *New Zealand now: Maori.* Wellington: Author.

Statistics New Zealand. (1995). *New Zealand now: 65 plus.* Wellington: Author.

Statistics New Zealand. (1996). *New Zealand census of population and dwelling.* Wellington: Author.

Stouffer, S. (1949). A study of attitudes. *Scientific American, 180* (5), 11-15.

Tabachnick, B., & Fidell, L. (1989). *Using multivariate statistics* (2nd ed.). New York: Harper & Row.

Taylor, S. (1990). Health psychology: The science and the field. *American Psychologist, January,* 40-50.

Tice, C., & Perkins, K. (1996). *Mental health issues and aging. Building on strengths of older persons.* California: Brooks/Cole Publishing Company.

Trim, S. (1997). Valuing what nurses do. *Kaitiaki: Nursing New Zealand, 3* (5), 11.

Vance, D. (1995). A portrait of older homeless men: Identifying hopelessness and adaptation. *Journal of Social Distress and the Homeless, 4* (1), 57-71.

Vander Zanden, J. (1981). *Human development* (2nd ed.). New York: Knopf Inc.

Veit, C., & Ware, J. (1983). The structure of psychological distress and well-being in general populations. *Journal of Consulting and Clinical Psychology, 51* (5), 730-742.

Viverais-Dresler, G., & Richardson, H. (1991). Well elderly perceptions of the meaning of health and their health promotion practices. *The Canadian Journal of Nursing Research, 23* (4), 55-71.

Wan, T., Odell, B., & Lewis, D. (1982). *Promoting well-being of the elderly.* New York: The Haworth Press, Inc.

Watson, D., & Clark, L. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin, 96*, 465-490.

Watson, D., Clark, L., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.

Weiss, R. (1973). *Loneliness: The experience of emotional and social isolation.* Cambridge, MA: MIT Press.

Wenger, G. (1994). *Support networks of older people: A guide for practitioners.* Bangor: University of Wales (Centre for Policy Development and Research).

Whittacker, N., & Moses, R. (1996). *A New Zealand guide to living well in retirement.* Auckland: Hodder Moa Beckett Publishers Ltd.

The WHOQOL Group. (1995). The World Health Organisation quality of life assessment (WHOQOL): Position paper from The World Health Organisation. *Social Science and Medicine, 41* (10), 1403-1409.

Wilson, B. (1995). Who cares for our elderly? *Kai Tiaki: Nursing New Zealand, 1* (6), 20.

World Health Organisation. (1947). The constitution of the World Health Organisation.*World Health Organisation Chronicles, 1*, 29.

World Health Organisation. (1990). *The introduction of a mental health component into primary health care.* London: World Health Organisation.

World Health Organisation. (1994). *World health annual statistics.* Geneva: World Health Organisation.

Yesavage, J. A., Brink, T.L., & Rose, T. L. (1983). Development and validation of a geriatric depression scale: A preliminary report. *Journal of Psychiatric Residents, 17*, 37-49.

Young, M., Halper, I., Clark, D., Scheftner, W., & Fawcett, J. (1992). An item-response theory evaluation of the Beck hopelessness scale. *Cognitive Therapy and Research, 16* (5), 579-587.

Zautra, A., Affleck, G., & Tennen, H. (1994). Assessing life events among older adults. In M. Lawton & J. Teresi (Eds.), *Annual review of gerontology and geriatrics. Focus on assessment techniques* (pp. 324-352). New York: Springer Publishing Company.

Zeiss, A., Lewinsohn, P., Rohde, P., & Seeley, J. (1996). Relationship of physical disease and functional impairment to depression in older people. *Psychology and Aging, 11* (4), 572-581.

Zung, W. K. (1965). A self-rating depression scale. *Archives of General Psychiatry, 12*, 63-70.

APPENDIX ONE

The Information Sheet.

Title: Psychological wellbeing in a New Zealand elderly male sample.

Principle Investigator: This project has been designed by Stephen Neville, a nurse educator employed by Christchurch Polytechnic, to fulfill the requirements of a Masters degree in Nursing through Massey University. The project supervisor is Dr. Fiona Alpass, Research Coordinator, Department of Nursing and Midwifery. Dr. Alpass can be contacted on (03) 356 9099 ext 7384.

Introduction

You are invited to take part in a study designed to assess levels of psychological wellbeing in men over the age of 70 years. The findings will enable health providers to review and potentially change the range of support services available for elderly men.

About the study

- The aim of the study is to interview men over the age of 70 years to determine what factors contribute to psychological wellbeing.
- Your name has been selected through Age Concern Wanganui. We invite you to participate in this study.
- There will be approximately 150 men over 70 years participating in this study.
- You will be contacted in a weeks time by trained volunteer from Age Concern to see if you wish to be included in this study.
- If you agree to take part in this study the trained volunteer will ask you to sign a consent form so that we can use the information that you give us. We will then ask you to fill out a questionnaire in your own home. We have allocated a week for you to do this in. During that time if you are unsure about anything in the questionnaire a trained volunteer from Age Concern will be available to assist you. We will leave a stamped addressed envelope with the questionnaire so that you can post it to us when you have finished. Filling out the questionnaire should take about 1.5 hours in total.
- At the end of the study all questionnaires will be destroyed.

Risks and benefits

- There are no risks to you as a participant.
- A benefit of this study is that Age Concern Wanganui will receive a summary of this study. They will then be able to provide services that best meet the needs of men over the age of 70 years.

Participation

- Your participation in this study is entirely voluntary (your choice). You do not have to take part in this study.
- If you do agree to take part you are free to withdraw from the study at any time, without having to give a reason and this will in no way affect your future health care.

General

- If you require more information about the study please contact Stephen Neville or Dr. Fiona Alpass at the above number. If you wish to contact Age Concern Wanganui, their number is (06) 345 1799.
- If you require an interpreter or assistance with filling out the questionnaire please contact Age Concern Wanganui.
- You have the right to refuse to be a participant, not to answer any particular questions, or withdraw from the study at any time.

Confidentiality

- No material which could personally identify you will be used in any reports on this study.
- Any information that you give will be treated in strictest confidence. We will allocate you a code number rather than use your name on questionnaires. A main list linking your name to your code number will be stored securely and separately. Only the main researcher, Stephen Neville will have access to this information.
- Your name will not appear on any reports about this study.

Results

- Once all information has been analysed a summary of the study will be made available to you.
- A report of the results of the research will be provided to Age Concern Wanganui.

Statement of approval

This study has received ethical approval from the Manawatu-Whanganui Ethics Committee and the Massey University Human Ethics Committee.

Please feel free to contact the researcher if you have any questions about this study.

APPENDIX TWO

Participant Consent Form.

Project Title: Psychological wellbeing in a New Zealand elderly male sample.

Principle Investigator: **Stephen Neville.**

Participant's name: _____
Address: _____
_____
_____

- I have read and I understand the information sheet dated _____ for volunteers taking part in the study designed to find out what factors influence psychological wellbeing in men over the age of 70 years. I have had the opportunity to discuss this study . I am satisfied with the answers I have been given.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time and this will in no way affect my future health care.
- I understand that my participation in this study is confidential and that no material which could identify me will be used in any reports on this study.
- I have had time to consider whether to take part.
- I understand that I may ask further questions at any time during the project.
- I understand that I have the right to change my mind, refuse to answer particular questions or withdraw form the project at any time.

I,_____(full name), hereby consent to take part in this study.

This project has been approved by the Manawatu-Whanganui Ethics Committee and the Massey University Human Ethics Committee. This means that the Ethics Committee may check that this study is running smoothly, and has followed appropriate ethical procedures. Complete confidentiality is assured.

If you have any ethical concerns about the study, you may contact the Manawatu-Whanganui Ethics Committee on 0-6 356 7773, or the Massey University Human Ethics Committee.

Date

Signature

Full names of Researchers
Stephen Neville
Dr. Fiona Alpass

Contact Phone Number for researchers
(03) 326 5812 - home.
(03) 364 9074 ext 8295 - work.
(Note: A copy of the consent form to be retained by participant and (in the case of patients) a copy to be placed in the medical file.)

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APPENDIX THREE

FOR OFFICE USE

Wellbeing in the Older Person.

A research project conducted in conjunction with Age Concern, Wanganui, by independent researchers from Massey University.

Filling in this questionairre implies consent

Firstly we would like some general background information about you. Circle the number for the answer which is best for you, or give details in the spaces provided.

What is your date of birth? .....

What is your present marital status?

- Never married 1
- Now married for the first time 2
- Remarried 3
- Separated from legal wife 4
- Divorced or marriage dissolved 5
- Widowed 6

  If you are widowed please state length of time:

Who are the persons that usually live in the same dwelling as you (Include children and babies)? Circle all numbers which apply.

- My father / mother 1
- My wife 2
- My partner (such as defacto spouse) 3
- My sons / daughters 4
- Other related persons (such as cousin, daughter-in-law, grandson) 5
- I live alone - nobody else lives in my dwelling 6
- Other persons (such as flatmates) 7

  please state: .....

If you live, or were to live in a rest home which would you prefer:

- Single sex 1
- Mixed 2

What ethnic group do you belong to?

- New Zealander of Maori descent 1
- New Zealander of European descent 2
- New Zealander of Pacific Island descent 3
- Other, specify 4

IN CONFIDENCE

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FOR OFFICE USE

What is your highest educational qualification? ☐

- No school qualification 1
- School certificate passes 2
- School qualifications, University Entrance and above .. 3
- Trade certificate or Professional certificate or diploma 4
- University degree, diploma, or certificate 5

If you are retired, how many years have you been retired? ☐☐

- (Not Applicable) 0
- Number of Years: .....

Was your retirement ☐

- (Not Applicable) 0
- Forced 1
- Voluntary 2

What was your main occupation at retirement? ☐☐☐☐

.....

Before your last job (as stated above) what were the previous two occupations you had?

1 ..... ☐☐☐☐

2 ..... ☐☐☐☐

- (Not Applicable) 0

Think back to the job you had when you retired. All in all, how satisfied were you with the job you had then? ☐

- (Not Applicable) 0
- Very satisfied 1
- Somewhat satisfied 2
- Not too satisfied 3
- Not at all satisfied 4

What is your present personal gross **annual** income (excluding your partner's salary and/or benefits)

$ ..... ☐☐☐☐

Have you experienced active military service? ☐

- Yes 1
- No 2

Please specify where and when:

..... ☐☐☐☐

IN CONFIDENCE

FOR OFFICE USE

We would like to ask you some questions about your state of health.

Overall, would you say your health is:

- Excellent 1
- Good 2
- Not so good 3
- Poor 4

Compared to a person in excellent health, how would you rate your health at the present time?

- Terrible 1
- Very poor 2
- Poor 3
- Fair 4
- Good 5
- Very good 6
- Excellent 7

Has a doctor or nurse, or other health worker told you that you have a long term illness or disability? (By long term we mean something that you have had for six months or more, or something that is likely to last for at least 6 months).

- Yes 1
- No 2
- Don't know / can't remember 0

Do you have any of the following:

Please answer these with a number from this scale:

Don't know/can't remember 0
YES 1
NO 2

Hearing loss? ..... 0 - 1 - 2

Sight loss? ..... 0 - 1 - 2

Any other physical disability? ..... 0 - 1 - 2

A psychiatric or psychological problem? ..... 0 - 1 - 2

Any other long-standing illness or disability? ..... 0 - 1 - 2

FOR OFFICE USE

Since this time last year, how many times have you seen a doctor, or been visited by a doctor? By 'doctor' we mean any GP or family doctor, but not a specialist. ☐

- No contact 1
- 1-5 times 2
- 6-11 times 3
- 12 times or more 4
- Don't know/can't remember 0

The last time you saw a doctor, was it: ☐

- Within the last 4 weeks 1
- More than 4 weeks and up to 3 months ago 2
- More than 3 months and up to 6 months ago 3
- More than 6 months ago 4
- Don't know/can't remember 0

In the last four weeks have you seen any of the following people for health care or advise?

Please answer these with a number from this scale:

Don't know/can't remember 0
YES 1
NO 2

☐

a) A nurse (including the GP's practice nurse)? ..... 0 - 1 - 2 ☐

b) A chemist or pharmacist, including getting doctor's prescription made up, but not including just buying toiletries etc? ..... 0 - 1 - 2 ☐

c) A physiotherapist? ..... 0 - 1 - 2 ☐

d) A dentist or dental nurse? ..... 0 - 1 - 2 ☐

e) An optician or optometrist? ..... 0 - 1 - 2 ☐

f) A chiropractor? ..... 0 - 1 - 2 ☐

g) A podiatrist or chiropodist? ..... 0 - 1 - 2 ☐

h) A naturopath or homeopath or iridologist? ..... 0 - 1 - 2 ☐

i) A social worker or psychologist or counsellor? ..... 0 - 1 - 2 ☐

FOR OFFICE USE

j) Any other? ☐

- Yes (Please state) 1
- No 2
- Don't know/can't remember 0

Would you describe yourself as a: ☐

- Tobacco Smoker? 1
- Tobacco Ex-Smoker? 2
- Tobacco Non-Smoker? 0

Do you drink alcohol? ☐

- Yes 1
- No 2
- Don't know/can't remember 0

On how many days in the last **seven days**, would you say you drank any type of alcohol? ☐

- Every day 1
- Five to six days 2
- Three to four days 3
- One to two days 4
- Not at all 5
- Don't know/can't remember 0

On average, how many standard glasses or nips of the following alcohol did you drink per day?

- Beer ..... ☐ ☐☐
- Wine ..... ☐ ☐☐
- Spirits ..... ☐ ☐☐
- Don't know/can't remember ..... 0 ☐

Are you currently on medication? ☐

- Yes 1
- No 2

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If you answered yes, please list medication and state briefly what they are for:

- .....
- .....
- .....
- .....
- .....
- .....
- .....
- .....
- .....
- .....
- .....

Has there been a time when you got a prescription from the doctor but did not take it to the chemist?

- Yes 1
- No 2
- Don't know/can't remember 0

Has there been a time when you took a prescription to the Chemist but did not pick it up?

- Yes 1
- No 2
- Don't know/can't remember 0

If you did not take the prescription to the Chemist or did not pick it up, what were the main reasons for this? *You may select more than one option from the following list:*

- Too expensive 1
- Over-the-counter medicine is cheaper 2
- I got better without medication 3
- I thought the medicine wouldn't/didn't work 4
- Medicine made it worse 5
- Doctor wrote prescription just in case 6
- I forgot or I couldn't be bothered 7
- Don't know/can't remember 0

FOR OFFICE USE

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. We want you to think about what you generally do and feel when you experience stressful events.

For each of the following items, <u>circle</u> the one number which best describes what you usually do when you are under stress. There are no "right" or "wrong" answers. Choose the most accurate answer for YOU, not what you think "most people" would say or do.

Indicate what you usually do to deal with stress.

I usually don't do this at all ..... 1 I usually do this a little bit..... 2 I usually do this a medium amount ..... 3 I usually do this a lot 4

- I try to grow as a person as a result of the experience . 1 2 3 4 ☐
- I turn to work or other substitute activities to take my mind off things ..... 1 2 3 4 ☐
- I get upset and let my emotions out ..... 1 2 3 4 ☐
- I try to get advice from someone about what to do ..... 1 2 3 4 ☐
- I concentrate my efforts on doing something about it .. 1 2 3 4 ☐
- I say to myself "this isn't real"..... 1 2 3 4 ☐
- I put my trust in God ..... 1 2 3 4 ☐
- I laugh about the situation ..... 1 2 3 4 ☐
- I admit to myself that I can't deal with it, and stop trying..... 1 2 3 4 ☐
- I restrain myself from doing anything too quickly ..... 1 2 3 4 ☐
- I discuss my feelings with someone ..... 1 2 3 4 ☐
- I use alcohol or drugs to make myself feel better ..... 1 2 3 4 ☐
- I get used to the idea that it happened ..... 1 2 3 4 ☐
- I talk to someone to find out more about the situation 1 2 3 4 ☐
- I keep myself from getting distracted by other thoughts or activities..... 1 2 3 4 ☐

Circle the one number which best describes what you usually do when you are under stress.

FOR OFFICE USE

I usually don't do this at all 1
I usually do this a little bit..... 2
I usually do this a medium amount 3
I usually do this a lot 4

- I daydream about things other than this ..... 1 2 3 4 ☐
- I get upset, and am really aware of it ..... 1 2 3 4 ☐
- I seek God's help ..... 1 2 3 4 ☐
- I make a plan of action ..... 1 2 3 4 ☐
- I make jokes about it ..... 1 2 3 4 ☐
- I accept that this has happened and that it can't be changed ..... 1 2 3 4 ☐
- I hold off doing anything about it until the situation permits ..... 1 2 3 4 ☐
- I try to get emotional support from friends or relatives 1 2 3 4 ☐
- I just give up trying to reach my goal ..... 1 2 3 4 ☐
- I take additional action to try to get rid of the problem 1 2 3 4 ☐
- I try to lose myself for a while by drinking alcohol or taking drugs ..... 1 2 3 4 ☐
- I refuse to believe that it has happened ..... 1 2 3 4 ☐
- I let my feelings out ..... 1 2 3 4 ☐
- I try to see it in a different light, to make it seem more positive ..... 1 2 3 4 ☐
- I talk to someone who could do something concrete about the problem ..... 1 2 3 4 ☐
- I sleep more than usual ..... 1 2 3 4 ☐
- I try to come up with a strategy about what to do ..... 1 2 3 4 ☐
- I focus on dealing with this problem, and if necessary let other things slide a little ..... 1 2 3 4 ☐
- I get sympathy and understanding from someone ..... 1 2 3 4 ☐

Circle the one number which best describes what you usually do when you are under stress.

FOR OFFICE USE

I usually don't do this at all	1
I usually do this a little bit	2
I usually do this a medium amount	3
I usually do this a lot	4

- I drink alcohol or take drugs, in order to think about it less ..... 1 2 3 4 ☐
- I kid around about it ..... 1 2 3 4 ☐
- I give up the attempt to get what I want ..... 1 2 3 4 ☐
- I look for something good in what is happening ..... 1 2 3 4 ☐
- I think about how I might best handle the problem ..... 1 2 3 4 ☐
- I pretend that it hasn't really happened ..... 1 2 3 4 ☐
- I make sure not to make matters worse by acting too soon ..... 1 2 3 4 ☐
- I try hard to prevent other things from interfering with my efforts at dealing with this ..... 1 2 3 4 ☐
- I go to movies or watch TV, to think about it less ..... 1 2 3 4 ☐
- I accept the reality of the fact that it happened ..... 1 2 3 4 ☐
- I ask people who have had similar experiences what they did ..... 1 2 3 4 ☐
- I feel a lot of emotional distress and I find myself expressing those feelings a lot ..... 1 2 3 4 ☐
- I take direct action to get around the problem ..... 1 2 3 4 ☐
- I try to find comfort in my religion ..... 1 2 3 4 ☐
- I force myself to wait for the right time to do something ..... 1 2 3 4 ☐
- I make fun of the situation ..... 1 2 3 4 ☐
- I reduce the amount of effort I'm putting into solving the problem ..... 1 2 3 4 ☐
- I talk to someone about how I feel ..... 1 2 3 4 ☐
- I use alcohol or drugs to help me get through it ..... 1 2 3 4 ☐

Circle the one number which best describes what you usually do when you are under stress.

FOR OFFICE USE

I usually don't do this at all 1
I usually do this a little bit..... 2
I usually do this a medium amount 3
I usually do this a lot 4

- I learn to live with it ..... 1 2 3 4 ☐
- I put aside other activities in order to concentrate on this..... 1 2 3 4 ☐
- I think hard about what steps to take ..... 1 2 3 4 ☐
- I act as though it hasn't even happened..... 1 2 3 4 ☐
- I do what has to be done, one step at a time ..... 1 2 3 4 ☐
- I learn something from the experience..... 1 2 3 4 ☐
- I pray more than usual ..... 1 2 3 4 ☐

Below are a number of words that describe different feelings and emotions. Read each word and then circle the appropriate number to indicate to what extent you have felt this way over the last month.

Use the following scale to indicate the strength of your feeling.

Not at all 1
A Little 2
Moderately 3
Quite a bit 4
Extremely..... 5

interested	1 ..... 2 ..... 3 ..... 4..... 5	☐
distressed	1 ..... 2 ..... 3 ..... 4..... 5	☐
excited	1 ..... 2 ..... 3 ..... 4..... 5	☐
upset	1 ..... 2 ..... 3 ..... 4..... 5	☐
strong	1 ..... 2 ..... 3 ..... 4..... 5	☐
guilty	1 ..... 2 ..... 3 ..... 4..... 5	☐
scared	1 ..... 2 ..... 3 ..... 4..... 5	☐
hostile	1 ..... 2 ..... 3 ..... 4..... 5	☐
enthusiastic	1 ..... 2 ..... 3 ..... 4..... 5	☐

Read each word and then circle the appropriate number to indicate to what extent you have felt this way over the last month.

FOR OFFICE USE

Not at all	1
A Little	2
Moderately	3
Quite a bit	4
Extremely	5

proud	1 ..... 2 ..... 3 ..... 4 5	☐
irritable	1 ..... 2 ..... 3 ..... 4 5	☐
alert	1 ..... 2 ..... 3 ..... 4 5	☐
ashamed	1 ..... 2 ..... 3 ..... 4 5	☐
inspired	1 ..... 2 ..... 3 ..... 4 5	☐
nervous	1 ..... 2 ..... 3 ..... 4 5	☐
determined	1 ..... 2 ..... 3 ..... 4 5	☐
attentive	1 ..... 2 ..... 3 ..... 4 5	☐
jittery	1 ..... 2 ..... 3 ..... 4 5	☐
active	1 ..... 2 ..... 3 ..... 4 5	☐
afraid	1 ..... 2 ..... 3 ..... 4 5	☐

Please read each of the following statements carefully and decide whether they are true (T) as applied to you or false (F) as applied to you. Please circle the appropriate answer at the end of each statement.

• I look forward to the future with hope and enthusiasm.	T	F	☐
• I might as well give up because I can't make things better for myself	T	F	☐
• When things are going badly I am helped by knowing they can't stay that way forever...	T	F	☐
• I can't imagine what my life would be like in 10 years .	T	F	☐
• I have enough time to accomplish the things I most want to do	T	F	☐
• In the future I expect to succeed in what concerns me most	T	F	☐

Please circle the appropriate answer at the end of each statement.

FOR OFFICE USE

- My future seems dark to me ..... T F
- I expect to get more of the good things in life than the average person ..... T F
- I just don't get the breaks, and there is no reason to believe I will in the future ..... T F
- My past experiences have prepared me well for my future ..... T F
- All I can see ahead of me is unpleasantness rather than pleasantness ..... T F
- I don't expect to get what I really want ..... T F
- When I look ahead to the future I expect I will be happier than I am now ..... T F
- Things just won't work out the way I want them to ..... T F
- I have great faith in the future ..... T F
- I never get what I want so it's foolish to want anything T F
- It is very unlikely that I will get any real satisfaction in the future ..... T F
- The future seems vague and uncertain to me ..... T F
- I can look forward to more good times than bad times. T F
- There's no use in really trying to get something I want because I probably won't get it ..... T F

These next questions are about how you feel, and how things have been with you over the last month. For each question, please circle a number for the one answer that comes closest to the way you have been feeling.

- During the past month, how much of the time were you a happy person?

  All of the time — None of the time
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

- How happy, satisfied, or pleased have you been with your personal life during the past month?

  Extremely happy — Extremely unhappy
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

FOR OFFICE USE

For each question, please circle a number for the one answer that comes closest to the way you have been feeling.

- How much of the time, during the past month, has your daily life been full of things that were interesting to you?

  All of the time — None of the time
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

- How much of the time, during the past month, have you felt calm and peaceful?

  All of the time — None of the time
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

- How much of the time, during the past month, have you felt cheerful, lighthearted?

  All of the time — None of the time
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

- During the past month, how much of the time have you generally enjoyed the things you do?

  All of the time — None of the time
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

- How much of the time, during the past month, did you feel relaxed and free of tension?

  All of the time — None of the time
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

- During the past month, how much of the time has living been a wonderful adventure for you?

  All of the time — None of the time
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

- When you got up in the morning, this last month, about how often did you expect to have an interesting day?

  Always — Never
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

- How often, during the past month, have you been waking up feeling fresh and rested?

  Always — Never
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

FOR OFFICE USE

For each question, please circle a number for the one answer that comes closest to the way you have been feeling.

- During the past month, how much of the time have you felt that the future looks hopeful and promising? ☐

  All of the time — None of the time
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

- During the past month, how much of the time have you felt loved and wanted? ☐

  All of the time — None of the time
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

- How much of the time, during the past month, were you able to relax without difficulty? ☐

  All of the time — None of the time
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

- During the past month, how much of the time did you feel that your love relationships, loving and being loved, were full and complete? ☐

  All of the time — None of the time
  1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

FOR OFFICE USE

The following questions ask about people who give you help or support. Each question has two parts.

Part one: list all the people you know, but not yourself, who you can count on for help or support in the way described. Only give the person's initials. Do not write more than one person next to each of the numbers beneath the question, and do not list more than nine people per question. If you have no support for a question, tick in the space [ ] beside the words "no one".

Part two: circle how satisfied you are with the overall support you have for each question area. Do this for all questions, even where you have ticked "no one".

Who can you really count on to take your mind off your worries when you feel under stress?

PART ONE:

0 (no one) [ ] Tick	5 .....
1	6 .....
2	7 .....
3	8 .....
4	9 .....

PART TWO:
How satisfied are you with the support you receive? ☐☐

Very Satisfied Very Dissatisfied
1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

Who can you really count on to help you feel more relaxed when you are under pressure or tense?

PART ONE:

0 (no one) [ ] Tick	5 .....
1	6 .....
2	7 .....
3	8 .....
4	9 .....

PART TWO:
How satisfied are you with the support you receive? ☐☐

Very Satisfied Very Dissatisfied
1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

FOR OFFICE USE

Who accepts you totally, including your worst and best points?

PART ONE:

0 (no one) [ ] Tick	5 .....
1	6 .....
2	7 .....
3	8 .....
4	9 .....

PART TWO:
How satisfied are you with the support you receive? ☐☐

Very Satisfied Very Dissatisfied
1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

Who can you really count on to care about you, regardless of what is happening to you?

PART ONE:

0 (no one) [ ] Tick	5 .....
1	6 .....
2	7 .....
3	8 .....
4	9 .....

PART TWO:
How satisfied are you with the support you receive? ☐☐

Very Satisfied Very Dissatisfied
1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

Who can you really count on to help you feel better when you are feeling generally "down in the dumps"?

PART ONE:

0 (no one) [ ] Tick	5 .....
1	6 .....
2	7 .....
3	8 .....
4	9 .....

PART TWO:
How satisfied are you with the support you receive? ☐☐

Very Satisfied Very Dissatisfied
1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

FOR OFFICE USE

Who can you count on to help you feel better when you are very upset?

PART ONE:

0 (no one) [ ] Tick ..... 5 .....
1 ..... 6 .....
2 ..... 7 .....
3 ..... 8 .....
4 ..... 9 .....

PART TWO:
How satisfied are you with the support you receive?

Very Satisfied Very Dissatisfied
1 -------- 2 -------- 3 -------- 4 -------- 5 -------- 6 -------- 7

Below are a set of yes or no statements. Choose the best answer for how you felt over the past week, including today.

- Are you basically satisfied with your life?..... YES NO
- Have you dropped many of your activities and interests YES NO
- Do you feel that your life is empty?..... YES NO
- Do you often get bored? ..... YES NO
- Are you hopeful about the future? ..... YES NO
- Are you bothered by thoughts you can't get out of your head?..... YES NO
- Are you in good spirits most of the time? ..... YES NO
- Are you afraid that something bad is going to happen to you? ..... YES NO
- Do you feel happy most of the time? ..... YES NO
- Do you feel helpless? ..... YES NO
- Do you often get restless and fidgety?..... YES NO
- Do you prefer to stay at home rather than go out and do new things?..... YES NO
- Do you frequently worry about the future? ..... YES NO
- Do you feel that you have more problems with memory than most?..... YES NO

Choose the best answer for how you felt over the past week, including today.

- Do you think it's wonderful to be alive now? ..... YES NO ☐
- Do you often feel downhearted and blue? ..... YES NO ☐
- Do you feel pretty worthless the way you are now? ..... YES NO ☐
- Do you worry a lot about the past? ..... YES NO ☐
- Do you find life very exciting? ..... YES NO ☐
- Is it hard for you to get started on new projects? ..... YES NO ☐
- Do you feel full of energy? ..... YES NO ☐
- Do you feel that your situation is hopeless? ..... YES NO ☐
- Do you think that most people are better off than you? YES NO ☐
- Do you frequently get upset over little things? ..... YES NO ☐
- Do you frequently feel like crying? ..... YES NO ☐
- Do you have trouble concentrating? ..... YES NO ☐
- Do you enjoy getting up in the morning? ..... YES NO ☐
- Do you prefer to avoid social gatherings? ..... YES NO ☐
- Is it easy for you to make a decision? ..... YES NO ☐
- Is your mind a s clear as it used to be? ..... YES NO ☐

Listed below are a number of sentences about thoughts that people sometimes have. Please indicate which of these thoughts you have had in the last month. After each statement circle a number from the 7 below, which best describes your own thoughts. Be sure to circle a number after each sentence. Remember there are no right or wrong answers.

Almost every day 1
Couple of times a week 2
About once a week 3
Couple of times a month 4
About once a month 5
I had this thought before but not in the last month 6
I never had this thought 7

- I thought it would be better if I was alive ..... 1 2 3 4 5 6 7 ☐
- I thought about killing myself ..... 1 2 3 4 5 6 7 ☐

Please indicate which of these thoughts you have had in the last month. After each statement circle a number from the 7 below, which best describes your own thoughts.

FOR OFFICE USE

Almost every day 1
Couple of times a week 2
About once a week 3
Couple of times a month 4
About once a month 5
I had this thought before but not in the last month 6
I never had this thought 7

- I thought about how I would kill myself ..... 1 2 3 4 5 6 7 ☐
- I thought about when I would kill myself ..... 1 2 3 4 5 6 7 ☐
- I thought about people dying ..... 1 2 3 4 5 6 7 ☐
- I thought about death ..... 1 2 3 4 5 6 7 ☐
- I thought about what to write in a suicide note ..... 1 2 3 4 5 6 7 ☐
- I thought about writing a will ..... 1 2 3 4 5 6 7 ☐
- I thought about telling people I plan to kill myself ..... 1 2 3 4 5 6 7 ☐
- I thought that people would be happier if I were not around ..... 1 2 3 4 5 6 7 ☐
- I thought about how people would feel if I killed myself ..... 1 2 3 4 5 6 7 ☐
- I wished I were dead ..... 1 2 3 4 5 6 7 ☐
- I thought about how easy it would be to end it all ..... 1 2 3 4 5 6 7 ☐
- I thought that killing myself would solve my problems . 1 2 3 4 5 6 7 ☐
- I thought others would be better off if I was dead ..... 1 2 3 4 5 6 7 ☐
- I wished I had the nerve to kill myself ..... 1 2 3 4 5 6 7 ☐
- I wished that I had never been born ..... 1 2 3 4 5 6 7 ☐
- I thought if I had the chance I would kill myself ..... 1 2 3 4 5 6 7 ☐
- I thought about the ways people kill themselves ..... 1 2 3 4 5 6 7 ☐
- I thought about killing myself, but would not do it ..... 1 2 3 4 5 6 7 ☐
- I thought about having a bad accident ..... 1 2 3 4 5 6 7 ☐
- I thought that life was not worth living ..... 1 2 3 4 5 6 7 ☐

IN CONFIDENCE

Please indicate which of these thoughts you have had in the last month. After each statement circle a number from the 7 below, which best describes your own thoughts. FOR OFFICE USE

Almost every day 1
Couple of times a week 2
About once a week 3
Couple of times a month 4
About once a month 5
I had this thought before but not in the last month 6
I never had this thought 7

- I thought that my life was too rotten to continue ..... 1 2 3 4 5 6 7 ☐
- I thought that the only way to be noticied is to kill myself ..... 1 2 3 4 5 6 7 ☐
- I thought that if I killed myself people would realise I was worth caring about ..... 1 2 3 4 5 6 7 ☐
- I thought no one cared if I lived or died ..... 1 2 3 4 5 6 7 ☐
- I thought about hurting myself but not really killing myself ..... 1 2 3 4 5 6 7 ☐
- I wondered if I had the nerve to kill myself ..... 1 2 3 4 5 6 7 ☐
- I thought that if things did not get better I would kill myself ..... 1 2 3 4 5 6 7 ☐
- I wished that I had the right to kill myself ..... 1 2 3 4 5 6 7 ☐

For each question below please circle the number that best applies to you

Almost Never 1
Not Often 2
Sometimes 3
Often 4
Almost always 5

- I lack companionship ..... 1 2 3 4 5 ☐
- I am unhappy being so withdrawn ..... 1 2 3 4 5 ☐
- There are people I can turn to ..... 1 2 3 4 5 ☐
- I feel alone ..... 1 2 3 4 5 ☐
- I feel left out ..... 1 2 3 4 5 ☐
- I feel isolated from others ..... 1 2 3 4 5 ☐
- My social relationships are superficial ..... 1 2 3 4 5 ☐

FOR OFFICE USE

Almost Never 1
Not Often 2
Sometimes 3
Often 4
Almost always 5

- I would describe myself as lonely ..... 1 2 3 4 5 ☐
- I feel I am no longer close to anybody ..... 1 2 3 4 5 ☐
- I feel no one really knows me well ..... 1 2 3 4 5 ☐
- People are around me but not with me ..... 1 2 3 4 5 ☐
- There are people I can talk to ..... 1 2 3 4 5 ☐

We experience many hassles in our daily lives. Hassles are irritants that can range from minor annoyances to fairly major pressures, problems, or difficulties. They can occur few or many times.

Listed below are a number of things that could be considered hassles. Please consider how much of a hassle each of these was for you over the last month.

Circle a number for the one answer that best indicates the degree to which each of these has been a hassle for you over the last month.

How much of a hassle was each of the following for you over the last month?

Please answer the following questions with a number from this scale:

not at all 0
somewhat 1
quite a lot 2
very much 3
not applicable 4

- Your Children ..... 0 1 2 3 4 ☐
- Your parents or parents-in-law ..... 0 1 2 3 4 ☐

How much of a hassle was each of the following for you over the last month?

not at all	0
somewhat	1
quite a lot	2
very much	3
not applicable	4

FOR OFFICE USE

- Other relative(s) ..... 0 1 2 3 4 ☐
- Your spouse / partner ..... 0 1 2 3 4 ☐
- Time spent with family ..... 0 1 2 3 4 ☐
- Health or well-being of a family member ..... 0 1 2 3 4 ☐
- Sex ..... 0 1 2 3 4 ☐
- Intimacy ..... 0 1 2 3 4 ☐
- Family related obligations ..... 0 1 2 3 4 ☐
- Your friend(s) ..... 0 1 2 3 4 ☐
- Fellow workers ..... 0 1 2 3 4 ☐
- Customers, patients etc ..... 0 1 2 3 4 ☐
- Your supervisor, employer ..... 0 1 2 3 4 ☐
- The nature of your work ..... 0 1 2 3 4 ☐
- Your work load ..... 0 1 2 3 4 ☐
- Your job security ..... 0 1 2 3 4 ☐
- Meeting deadlines or goals on the job ..... 0 1 2 3 4 ☐
- Enough money for necessities (eg food, clothing, housing, health care, taxes, insurance) ..... 0 1 2 3 4 ☐
- Enough money for education ..... 0 1 2 3 4 ☐
- Enough money for emergencies ..... 0 1 2 3 4 ☐
- Enough money for extras (eg vacations, recreation, entertainment) ..... 0 1 2 3 4 ☐
- Financial care for someone who doesn't live with you .. 0 1 2 3 4 ☐
- Investments ..... 0 1 2 3 4 ☐

How much of a hassle was each of the following for you over the last month?

not at all	0
somewhat	1
quite a lot	2
very much	3
not applicable	4

FOR OFFICE USE

• Your smoking	0 1 2 3 4	
• Your drinking	0 1 2 3 4	
• Mood-altering drugs	0 1 2 3 4	
• Your physical appearance	0 1 2 3 4	
• Contraception	0 1 2 3 4	
• Exercise	0 1 2 3 4	
• Your medical care	0 1 2 3 4	
• Your health	0 1 2 3 4	
• Your physical abilities	0 1 2 3 4	
• The weather	0 1 2 3 4	
• News events	0 1 2 3 4	
• Your environment (eg quality of air, noise level, trees and greenery)	0 1 2 3 4	
• Political or social issues	0 1 2 3 4	
• Your neighbourhood (eg neighbours, the area you live in)	0 1 2 3 4	
• Conserving (gas, electricity, water, petrol, etc)	0 1 2 3 4	
• Pets	0 1 2 3 4	
• Cooking	0 1 2 3 4	
• Housework	0 1 2 3 4	
• Home repairs	0 1 2 3 4	
• Section maintenance	0 1 2 3 4	
• Car maintenance	0 1 2 3 4	

FOR OFFICE USE

How much of a hassle was each of the following for you over the last month?

not at all 0
somewhat 1
quite a lot 2
very much 3
not applicable 4

- Taking care of paperwork (eg paying bills, filling out forms) ..... 0 1 2 3 4 ☐
- Home entertainment (eg TV, music, reading) ..... 0 1 2 3 4 ☐
- Amount of free time ..... 0 1 2 3 4 ☐
- Recreation and entertainment outside the home (eg movies, sport, eating out, walking) ..... 0 1 2 3 4 ☐
- Daily meals / eating at home ..... 0 1 2 3 4 ☐
- Church and community organizations ..... 0 1 2 3 4 ☐
- Legal matters ..... 0 1 2 3 4 ☐
- Being organized ..... 0 1 2 3 4 ☐
- Social commitments ..... 0 1 2 3 4 ☐

FOR OFFICE USE

Finally, we would like your comments on the questions below. Please read the following questions and respond in the space provided. If you require more room use the extra pages provided at the back of the questionnaire.

1. What would make a difference to your life at this point?

2. What coping strategies do you use to deal with thoughts of being better off dead?

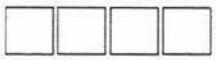
FOR OFFICE USE

3. Do you have an experience in your life that you have found difficult to talk about, that you have carried with you and have not been able to resolve? Could you briefly describe this experience.

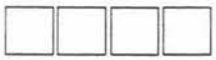
4. In general, how satisfying do you find the way you're spending your life today? Would you call it: completely satisfying, pretty satisfying, or not very satisfying? Why?

FOR OFFICE USE

5. What outside community groups and/or service agencies do you access / participate in regularly?



6. This space is available to add any additional comments.



This is the end of the questionnaire. Thankyou very much for the time and effort you have put into completing this questionnaire. It is very much appreciated.