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The Role of Bridge Employment in the Relationship Between Personality and
Retirement Adjustment

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Abstract

New Zealand's older population is increasing, meaning that increased research needs to be undertaken to consider older individual's needs. The present study uses the resource-based dynamic perspective postulated by Wang, Henkens and van Solinge (2011) to examine the relationship between bridge employment, personality and retirement adjustment. It was hypothesised that personality traits (as represented by the Five-Factor Model (FFM)) would be positively related to engagement in bridge employment; and that they would also influence wellbeing in retirement (retirement adjustment). The study also explored whether bridge employment mediated the relationship between personality and retirement adjustment. This study used longitudinal data from the New Zealand Aotearoa Health, Work and Retirement (HWR) study and focused on older adults aged of 55-70. The HWR postal survey included questions about socio-demographics, personality, employment and well-being.

Results in the present study show that bridge employment was not significantly related to personality. The traits of neuroticism and conscientiousness were found to significantly relate to retirement adjustment in a hierarchical regression model. Economic standard of living, age and time spent in retirement were also found to be associated with retirement adjustment in the same model. Bridge employment was not found to mediate the relationship between personality and retirement adjustment. The findings indicate that individual's personality traits have no bearing on whether they decide to engage in bridge employment. Individuals high in conscientiousness appear to adjust to retirement more easily compared to individuals low in conscientiousness. Similarly, individuals with high neuroticism appear to find it more difficult to adjust to retirement than individuals with low neuroticism. The

findings also indicate that individuals find it easier to adjust to retirement with higher socioeconomic status; indicating the importance of access to resources in retirement. Additionally, the present study provides evidence that the longer that individuals spend in retirement, the more likely it is that they will adjust to the retirement process. Implications for future research are discussed with an emphasis on motivations and reasons for bridge employment, and other variables to consider in the fields of bridge employment and retirement adjustment.

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Chapter 1: Introduction and Overview

Bridge Employment is a phenomenon defined as participation in the labour force between a full-time career and complete retirement or workforce withdrawal (Topa, Alcover, Moriana & Depolo, 2014).

1.1 Overview

Like many populations across the globe (World Health Organisation [WHO], 2015), the Aotearoa New Zealand population is ageing. New Zealand's proportion of the population aged over 65 in 2016 was 15% (Statistics New Zealand, 2016). It has been estimated by Statistics New Zealand (2016) that the proportion of the population aged over 65 has a 90 percent probability of increasing to 21-26 percent in 2043, and 24-33 percent in 2068. This trend can be attributed to several occurrences such as a lower fertility rate, increased longevity and an enhancement of the health and wellbeing of people in this cohort due to both medical advancements and improved social and health policy (Khawaja & Boddington, 2010). It is therefore imperative that research related to ageing is undertaken now so that as a society, Aotearoa has adequate knowledge to prepare for this larger population of older people in the future.

The present chapter will begin by presenting descriptive statistics on New Zealand's ageing population, followed by population projections. An introduction of contextual factors follows, in order to provide background for the present study.

New Zealand will be referred to as both New Zealand and Aotearoa interchangeably in the present study.

1.2 Population Ageing in New Zealand

Like many countries in the OECD, the demographic of older people is increasing in New Zealand (World Health Organisation [WHO], 2015; Statistics New

Zealand, 2007). As stated in the overview, by the year 2051 it has been estimated that 26% of the population will be over 65 years of age (Statistics New Zealand, 2007). Therefore, a larger proportion of the population will be older, and a larger number of them will be dependent on pensions and superannuation. The 2013 New Zealand census notes that the 65+ age group has doubled since 1981, with this group at the time of the census numbering at 607,032 (Statistics New Zealand, 2015). As the proportion of people aged 65 and older increases, the proportion of people in the younger age groups decreases (Statistics New Zealand, 2015) contributing to an ageing population.

The aged working population in Aotearoa is also increasing. In the 2013 Census, 129,513 people (22.1 percent) aged 65 or older were engaged in full or part-time employment (Statistics New Zealand, 2015). This was up from 81,369 (16.8 percent) recorded in 2006. Therefore, those undertaking work while over 65 is currently increasing.

The New Zealand Ministry of Health is working to ensure that older New Zealanders from all walks of life are healthy, independent, respected and socially connected (Associate Minister of Health, 2016). By encouraging more bridge employment, these goals can potentially be achieved.

1.3 Bridge Employment, Retirement Adjustment and Personality

Chapter one begins by defining 'bridge employment' and providing a brief review of the relevant theoretical perspectives on bridge employment. Retirement adjustment is then described and its relationship with bridge employment highlighted. This is followed by a discussion of personality, with a focus on the trait-based theory and the big five personality types. Openness to experience, conscientiousness,

extraversion, agreeableness and neuroticism will be described and the history and taxonomy of the big five personality types briefly discussed. The relationship between personality and adjustment is then reviewed highlighting specific relationships between the five factors and retirement adjustment. The relationship of personality and bridge employment is then explored. Finally, a summary is provided, and the research hypotheses are outlined.

1.4 Bridge Employment

Bridge employment can be defined in multiple ways dependant on one's theoretical perspective. Alcover et al. (2014) suggested that bridge employment can be conceptualised as forms of retirement that prolong working life. In this definition, bridge employment is just a different type of retirement, albeit one that continues a working tradition. Schultz (2003) defined bridge employment as the pattern of labour force participation exhibited by older workers as they leave career jobs and navigate towards complete labour force withdrawal. Dingemans, Henkens and van Solinge (2016) defined bridge employment for the Netherlands context as the participation in paid work amongst those older people who also received a pension income. These definitions are all similar and subscribe to overarching themes of change. Cultural considerations are also important, for instance Dingemans et al. (2016) note that defining bridge employment as when full employment ends would be unsuitable for the specific labour market context in the Netherlands.

That present study will use the following definition: Bridge Employment is a phenomenon defined as participation in the labour force between a full-time career and complete retirement or workforce withdrawal (Topa, Alcover, Moriana & Depolo, 2014). In the most straightforward sense, bridge employment can be perceived as a 'bridge' linking a full-time career to retirement. Bridge employment is

also known as phased retirement or work beyond retirement (Burkert & Hochfellner, 2017). Examples of bridge employment include taking up a part-time role within the current organisation, starting a training or support position in the same field (and as such using expertise and knowledge to help others) or a completely unrelated part-time job in a different field. Retirement is not usually a one-time exit from employment, as bridge employment can lead to new and varied opportunities whilst also assisting older workers to meet their emotional, social and financial needs (Zhan & Wang, 2015). People can choose to engage in bridge employment for a variety of reasons, including as a financial and psychological mechanism to adapt to future retirement (Zhan & Wang, 2015). Bridge employment can be part-time, salaried, waged, employed or self-employed and can differ for each individual. Bridge employment is also an increasingly common transitional stage between career employment and permanent retirement (Wang, 2013). As individuals' roles change as they transition into retirement, bridge employment offers the benefit of a new domain and a new role for individuals to step into. There is minimal New Zealand-based research on bridge employment.

An important facet of bridge employment is whether it is voluntary or involuntary which may have significant effects on the quality of bridge employment. Voluntary bridge employment occurs when individuals choose to remain in paid employment instead of retiring (Dingemans & Henkens, 2014). This choice is voluntary and provides continuity to the individual. This choice is often motivated by anticipated financial reward and flexibility in the work environment (Weckerle & Schultz, 1999). Involuntary bridge employment occurs when an older worker is forced to undertake bridge employment to have sufficient resources to safely navigate retirement. This lack of control may threaten continuity in preferred life patterns, and

by extension, stability in late-life well-being (Dingemans & Henkens, 2014). This often happens because of corporate restructuring, personal circumstances (such as caring responsibilities) or forced retirement by companies (Dingemans, Henkens & van Solinge, 2016). However, undertaking voluntary bridge employment after involuntary retirement can mitigate many of the negative effects associated with involuntary retirement (Dingemans & Henkens, 2014).

Involuntary bridge employment (particularly for financial reasons) can cause workers to report lower levels of life satisfaction than those workers engaged in bridge employment primarily because of intrinsic enjoyment (Dingemans & Henkens, 2014). This is relevant to the present study as bridge employment and the resources provided from it can assist an individual in maintaining wellbeing as they adjust to retirement (Wang, 2007), which will be discussed further in a following section.

Bridge employment is becoming more common. Furunes et al. (2015) examined this phenomenon and concluded that post-retirement employment as one way of participating in the labour market is increasing. Some employers are also offering an increasing number of older-worker-friendly options such as phased retirement and additional learning opportunities to assist older workers in engaging in bridge employment. However, Burkert and Hockfellner (2017) argue that policy makers are not adequately including bridge employment in regard to political strategies and reforms yet. In a qualitative study by Furunes et al., (2015) the authors noted that bridge employment was viewed by older workers as a way to transition smoothly into retirement. This means that depending on the circumstance, bridge employment can be viewed by older adults as the best choice when considering retirement. Bridge employment also offers opportunities for businesses to maintain

critical talent and provide knowledge transfer to younger employees (Schultz & Wang, 2011).

1.4.1 Conceptualising Bridge Employment

Bridge employment has shown to impact on retirement adjustment (Topa et al., 2014; Wang, Henkens & van Solinge, 2011). The nature of this impact varies depending on the theoretical perspective employed to conceptualise bridge employment. The most common theoretical perspectives include the life course perspective, role theory, continuity theory, and the perspective that will be utilised in the current study, the resource-based dynamic perspective.

One way to conceptualise bridge employment is through the life course perspective. This perspective articulates the importance of contextual embeddedness and emphasises the influences of individual attributes, job-related psychological variables, and family-related variables in retirement-related decision making (Wang, Zhan, Liu & Schultz, 2008). Dingemans et al. (2016) argue that life transitions do not occur in a vacuum, and therefore, being aware of wider environmental contexts are necessary and influence participation in bridge employment.

Continuity theory emphasises adaption to change and following a consistent pattern over time (Atchley, 1989). It is a theory that suggests that older adults attempt to maintain existing structures, both internal and external, to avoid the experience of disruption that can often be associated with change and ageing (Wang et al., 2008). This theory regards retirement as an opportunity for an older person to strategize and maintain a lifestyle whilst avoiding negative outcomes of retirement such as various health and social wellbeing issues. Continuity theory contrasts with the life course perspective as continuity theory is an active theory, requiring choice and strategy

from the retiree whilst the life course perspective is more passive, emphasising the influence of variables and attributes that have occurred over the retiree's lifetime.

Role theory emphasise roles, the importance of role loss from retirement, as well as the role transition process from work to full retirement (Wang et al., 2008). Role theory states that once an individual is involved and trained in a specific role (in this situation, a work role), role identity affects his or her behaviours, decisions, and rationales (Ashforth, 2001). Role theory focuses on making the work to retirement transition smooth to maintain wellbeing in retirement. In contrast to continuity theory, which treats retirement as an opportunity, role theory suggests that role loss or role transition in retirement leads to psychological stress and disruption (Wang et al., 2008). In this theory, bridge employment is potentially a role for older people to transition to from their journey from a full-time career to full-time retirement.

In the current study, bridge employment is conceptualised through a resource-based dynamic perspective. The resource-based dynamic perspective is a relatively new addition to the retirement adjustment literature, and was first postulated in 2011 by Wang, Henkens and van Solinge. The resource-based dynamic perspective provides a more integrated approach than past theories. The authors argue that the retirement process is a longitudinal process during which each retiree's levels of adjustment fluctuate as a function of their own individual resources and changes in said resources. Similar to continuity theory, the resource-based dynamic perspective holds resources to be vital to the wellbeing of the individual. This will be discussed in more detail in the retirement adjustment section.

1.5 Retirement Adjustment

In the current study, the term “retirement adjustment” is used to describe how well individuals adjust to retirement (Wang, Henkens & van Solinge, 2011). Following the psychological perspective proposed by Schultz and Wang (2011), retirement is defined here as an individual’s exit from the workforce. Each retirement situation is unique to the individual (Wang & Schultz, 2010; Wang, 2007). Retirement constitutes a major life transition which requires individuals to adjust to their new status. By conceptualising retirement as an adjustment process, particularly as an approach that incorporates both the retirement transition and the postretirement trajectory, the characteristics of the retirement transition process are elucidated (Wang & Shi, 2014). Furthermore, this conceptualisation recognises retirement as a longitudinal development process, which is a more realistic depiction of retirement (Wang et al., 2011). One way of conceptualising the process of retirement adjustment is the resource-based dynamic perspective.

The resource-based dynamic perspective accounts for the complex and multi-faceted nature of retirement adjustment (Wang et al., 2011). By focusing on the underlying mechanisms which retirement impacts, researchers can examine how particular resources (or lack of resources) can cause a change in successful adjustment. There is a large variety of unique and individual resources, from financial, physical and social to psychological and mental. The resource-based dynamic perspective predicts that decreases, increases or no changes in resources will subsequently lead to decreasing, increasing or stable trajectories in retirement adjustment, respectively. Therefore, variation in the level of adjustment along the retirement adjustment process can be perceived because of changes in resources (Wang et al., 2011). If over time, a retiree’s total resource does not change

significantly, he or she may not experience a change in their adjustment level (Wang et al., 2011). For example, if a retiree maintains previous lifestyles when they retire, it is more likely that they will adjust to retirement sufficiently. In contrast, if a retiree's total resource significantly decreases, the retiree will tend to experience a negative change in adjustment level. An example of this is a loss of a major income source, which will vastly decrease the total resources a retiree has. When considering this perspective, the ease of adjustment to retirement is the direct result of individual's access to resources. Specifically, when individuals have access to more resources to fulfil their needs that they value in retirement, they will experience less difficulty when adjusting to retirement (Wang et al., 2011).

Some people enter retirement experiencing ambivalence, fear, anxiety and a feeling of loss (Schultz & Wang, 2011). Retirement can be perceived as a negative experience for many people (Heller-Sahlgren, 2017; Palgi, Ayalon, Avidor & Bodner, 2017), but this is not necessarily the case. For others, retirement is viewed positively, a life stage where individuals are free from obligations and able to pursue their own interests (Rosenkoetter & Garris, 2001). Adjustment to retirement is a personal and individual experience, dictated by numerous variables, from the macro level, organisational level, household level and individual level (Wang et al., 2011). These variables include macro level variables such as societal norms towards retirement and governmental policies such as superannuation and retirement ages, to individual levels of health behaviours and psychological resilience (Wang et al., 2011). Gall, Evans, and Howard (1997) found that aspects of well-being for retirees changed from short-term to long-term retirement, implying that adjustment in retirement occurs over time.

1.6 Relationship of bridge employment to retirement adjustment

Bridge employment and retirement adjustment have been found to be related in past research (Kim & Feldman, 2000; Wang et al., 2011). Wang (2007) showed that those who participate in bridge employment are generally better able to maintain levels of well-being during the retirement adjustment period than those without bridge jobs. This can assist in decreasing any perceived negative issues caused by entering retirement.

The bridge employment literature often refers to retirement adjustment or retirement transition, as these concepts are interrelated. Bridge employment is often examined through perspectives such as the life course, resource-based dynamic, or continuity perspective that focus on retirement and the adjustment to retirement (Wang et al., 2011). For instance, Burkert and Hochfellner (2017), examined the role of bridge employment in relation to security, continuity and work ability within the retirement transition. This study analysed an administrative data sample representative of the German work force and their post-retirement jobs in both the same environment and different environments over time (Burkert & Hochfellner, 2017). They found that seeking financial security and seeking continuity were reasons for engaging in bridge employment.

Kim and Feldman (2000) also examined the relationship between bridge employment and retirement adjustment by examining retirement incentive programs implemented in the 1990s at the University of California. The authors reported that participation in bridge employment was strongly related to both retirement satisfaction and psychological well-being. It is likely that these relationships are pertinent to the way bridge employment is related to retirement adjustment. Kim and Feldman (2000) also found that the more extensive a retiree's involvement in bridge

employment was, the more likely he or she was to be satisfied with retirement and life in general. The authors also mention that volunteer work and leisure pursuits may also be useful complements or alternatives to bridge employment, though not as strongly related to retirement satisfaction as bridge employment (Kim & Feldman, 2000).

However, these research findings have also been criticised. Wang et al. (2008) discuss Kim and Feldman's work (2000) and state that their study used a sample of professors who had retired early from a university system – a very specific sample. Wang et al. (2008) add that this sample prevented the authors from evaluating the potential effects of educational level and financial status in regard to bridge employment, and that the conclusions made by the authors should be viewed with uncertainty.

Other studies examining the relationship of bridge employment and retirement adjustment include Wang et al.'s (2008) longitudinal study on bridge employment, exploring how it serves as a transition process from full-time work to retirement. Wang et al. (2008) state that bridge employment can be the result of a lack of retirement planning as individuals may need to engage in bridge employment in order to have enough financial stability to live in full retirement. Wang et al. discuss how bridge employment can be categorised into two types, similarly to Burkert and Hochfellner (2017), bridge employment in the same field, and bridge employment in a different field. These different categorisations of bridge employment have their own strengths; bridge employment in the same field often leads to greater financial security, flexibility and a chance to use knowledge and experience, whilst also providing a sense of continuity. Bridge employment in a different field will allow an individual to experience new work environments and meet new people, which are both related to the openness to experience and extraversion traits, respectively. Wang et al. discuss how bridge employment can redefine retirement and the retirement

transition (2008) and assist in reducing anxiety when considering and beginning retirement (Lim & Feldman, 2003). Studies such as these (Burkert & Hockfeller, 2017; Kim & Feldman, 2000; Wang et al., 2008) delve into the intricacies of bridge employment whilst also considering the effect this has on retirement and adjustment to retirement.

Individuals may engage in bridge employment so that they can adapt to the lifestyle change in retirement by continuing workforce participation (Wang & Schultz, 2010). Bridge employment can be used to counter declines in health and financial status as well as remedying adjustment issues (Kim & Feldman, 2000; Zhan et al., 2009). Engaging in career bridge employment is also associated with better mental health (Zhan et al., 2009). Something that should also be noted is that retirees that have high socioeconomic status, participate in postretirement activity and receive social support will typically report fewer health and adjustment issues in retirement (Zhan et al., 2009). Bridge employment is a way to assist an individual in all three areas (as an activity, as a social setting and as way to provide financial stability) and therefore help with health and adjustment to retirement. Bridge employment may also help retirees from experiencing a loss of role and assist from too much disruption of life patterns when adjusting to retirement (Zhan et al., 2009).

Alcover et al. (2014) state that it is likely that career bridge employment is particularly beneficial for retirees to maintain positive mental health levels. The authors state that it is likely that this occurs because bridge employment in a different field may require additional adjustment due to the unfamiliarity of the job and work environment, which may therefore provide more stress when compared to career bridge employment (Alcover et al., 2014). In the current study, no distinction has been made in the data about career bridge employment, or bridge employment in a

different field. Alcover et al. (2014) also discuss bridge employment and psychological well-being during retirement adjustment and suggest that engaging in bridge employment may protect individuals from risks involved in the retirement adjustment process. Regardless, it seems that the literature concludes that there indeed is a relationship between bridge employment and retirement, that needs to be explored.

These studies have shown that there is an interesting relationship between bridge employment and retirement adjustment, that will be explored in the current study.

1.7 Personality

Personality is a multi-faceted concept, and one that is central to the study of psychology.

There are a number of different psychological approaches to personality. Some of these major theories include psychodynamic, behavioural, cognitive, humanist and trait-based. The current study focuses on trait-based theory.

Trait theory is one of the most prominent areas within personality psychology. A trait can be defined as a component or characteristic of an individual's personality that is stable across time and external situations (Ellis et al., 2009). For example, a person who has the trait of openness to experience is likely to try new things in most situations rather than stick to a certain routine. Trait theory emphasises identifying, describing and measuring personality traits. Personality in the current study is defined through the trait-based approach, and as such, is viewed as a combination of relatively stable characteristics that cause individuals to interact with their environments in different ways. The trait-based approach is invested in the measurement of traits,

which are defined by Kassin broadly as habitual patterns of thought, behaviour, and emotion (2003). There is a biological basis for traits and trait theory - traits have a large inherited component (Ellis et al., 2009). Remarkable personality similarities have been found in twins that have been brought up apart (Bouchard et al., 1990). This infers that traits are highly related to genetics, though environment is also thought to have a potential factor regarding traits. As discussed by Bouchard et al., (1990) the evidence for the strong heritability of most psychological traits does not detract from the importance of parenting, education, or nurturing.

A strength of the trait-based approach is the use of objective criteria for categorising and measuring behaviour (Ellis et al., 2009). The trait-based approach is directly based on and corroborated by research data. A criticism of the trait-based approach is that it does not substantially account for personality changes, both temporarily and in the long-term (Ellis et al., 2009). Trait theory also tends to focus on the individual rather than the situation in which the individual is in, occasionally leading to dilemmas regarding context. Another criticism is that trait theories require personal observations or subjective self-reports to measure traits. Therefore, individuals generally need to be introspective enough to know and recognise their own behaviour or be able to report it correctly.

There are arguments in the psychological community about whether personality is stable (Elkins, Kassenboehmer & Schurer, 2017; McCrae & Costa, 1990). Elkins et al. (2017) found that a small number of life events such as marriage, long-term health problems and family members being detained in jail are associated with subsequent changes in personality. These impacts are felt most in adolescence and young adulthood. Many researchers agree that there is a possibility for a change in personality in adulthood, but major personality transformations are not expected

(Graham & Lachman, 2012; Harris, Brett, Johnson & Deary, 2016). Therefore, personality in the current study is assumed to be stable over time, especially in older individuals, the focus of this study.

1.7.1 Five-Factor Model

In the current study, the Big Five, or the five-factor model (FFM), is used to conceptualise and define trait theory. The five factors of extroversion, agreeableness, conscientiousness, neuroticism and openness to experience have been documented by numerous researchers in different cultural and situational contexts (Wilt & Revelle, 2017).

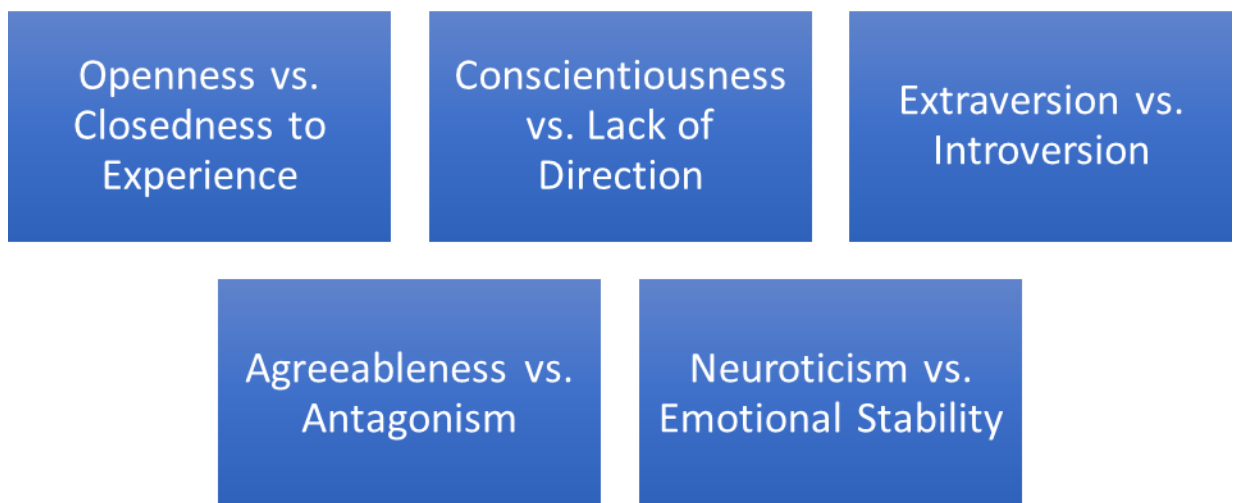


Figure 1. Costa and McCrae's (1992) NEO PI-R Facets

These five factors were derived from various factor analytic studies of self-reporting and peer-reporting, as well as personality related data (Boyle, 2008).

Extraversion indicates how outgoing, talkative and active an individual is.

Agreeableness is associated with generosity, trust and a sympathetic nature. Conscientiousness is described as being organised, efficient, reliable and thorough. A neurotic individual would be defined as anxious, self-pitying, tense and prone to worry. Openness to experience is associated with curiosity, imagination, originality and having a wide variety of interests. These traits and their opposites are showcased above in figure 1. The factors utilised in the FFM are intended to be uncorrelated, though often small positive correlations occur (Eysenck, 1990; Robinson, Demetre, & Corney, 2010).

The FFM did not have one singular author or research, but rather a multitude of different psychologists working on the theory over a significant time period. The FFM originated through both studies of natural language trait terms and personality assessment (McCrae & John, 1992). David Fiske reported in 1949 that when performing a factor analysis on data a five-factor model provided the most prudent solution. Over time, five characteristics were reported by several different psychologists when subjecting trait data to factor analysis such as Norman (1963), when attempting to develop a taxonomy of personality attributes, or Smith (1967), when examining peer ratings of personality in educational research. By the late 20th century, enough evidence had been accumulated by various sampling methods that to many trait theorists a five-factor model provided the best fit across rating technique, personality measure, and across cultures (Ellis et al., 2009). Lewis Goldberg was responsible for the term 'big five' that is also used to refer to the FFM, as they are broad factors that cover many traits (Ellis et al., 2009).

Several critics argue that the Big Five personality model does not provide a complete and detailed theory of personality (John & Srivastava, 1999; Boyle, 2008). However, it can be argued that the FFM provides an account of personality that is

descriptive rather than explanatory and was in fact developed to account for the structure and structural relations of and among personality traits (Goldberg, 1993). Therefore, the FFM provides a strong conceptual foundation that can then assist in examining underlying personality. Some critics also argue that five factors are too few to summarise all the dimensions of personality (McCrae & John, 1992). Paunonan and Jackson (2000) conclude that many personality traits lie outside the FFM, including Honesty, Deceptiveness, Humorousness and Masculinity-Femininity. Conversely, some researchers feel that not all five factors are needed. Eysenck (1992) argued that three of the five factors; openness to experience, agreeableness and conscientiousness are highly intercorrelated and are linked closely to psychoticism, and therefore lead to a three-factor model (with Neuroticism, Extraversion, and Psychoticism) rather than a five-factor model. However, the FFM is not intended to be an exhaustive description of personality, but to represent the highest hierarchical level of trait description.

These five personality traits are generally stable over time (Robinson, Demetre, & Corney, 2010). They can be situationally interrelated, and together form building blocks of the trait theory of personality. By utilising this model, the current study will be able to examine the links between personality, retirement adjustment and bridge employment.

The five personality types are stated to occur similarly across cultures, with multiple studies devoted to examining potential cultural differences (for example, Church, 2016; Reese et al., 2014; Schmitt, Realo, Voracek & Allik, 2008; Vazsonyi Ksinan, Mikuška & Jiskrova, 2015). However, research suggests that this model may be difficult to replicate in less educated groups and indigenous socio-relational concepts may be distinguishable from the five-factor model in various cultures (Church, 2016). However, the big five have been validated successfully before when

studying New Zealand Europeans, Chinese, Māori and other cultures present in the Aotearoa context (Reese et al., 2014).

1.8 Personality and Adjustment

Research has shown that all the five factor model traits are related to adjustment to life events in adulthood, including how individuals manage and adjust to career changes, and relevantly, the experience of being retired (Robinson et al., 2010).

Personality is a generally overlooked factor in the literature when discussing adjustment to retirement despite its importance in adjusting to other life events (Henning, Hansson, Berg, Lindwall & Johansson, 2017). Whilst there are no clear patterns established, there is some support for the idea that life events can be modified by personality traits (Boyce & Wood, 2011; Henning et al., 2017). For example, Boyce and Wood (2011) found that individuals with high agreeableness were more likely to recover lost life satisfaction after disability. Henning et al., (2017) discussed the role of personality for subjective well-being when individuals retire, and Vazsonyi et al. (2015) provided evidence that the different factors of the FFM were associated with measures of adolescence adjustment; measures of depression, anxiety, self-esteem and well-being. Theoretically, these FFM traits are thought to influence events such as retirement, through their association with appraisal, coping strategies, and motivation (McCrae & Costa, 2008).

There has been previous research on the five factors as predictors of psychological well-being. Grant, Langnan-Fox, and Anglim (2009) examined the relationship between the FFM traits and subjective and psychological wellbeing among 211 men and women. In their research, extraversion, neuroticism, and

conscientiousness correlated similarly with both psychological and subjective wellbeing, and as such, led to the assumption that these traits can represent personality predispositions for wellbeing. Kumari and Kumari (2017) found similar results, suggesting that these three traits, at least, play a significant role in explaining subjective wellbeing, and are significant predictors of life satisfaction.

Openness to experience is defined as awareness of one's emotions, intellectual curiosity, preference for novelty and as aesthetic sensitivity (Schretlen, van der Hulst, Pearlson, & Gordon, 2010). A low level of openness to experience may manifest as a lack of curiosity and a more withdrawn lifestyle (Henning et al., 2017). As openness to experience leads individuals to seek out new experiences, it is likely that those with high levels of the trait will want to expand their horizons with different and new working experiences, even as they approach retirement age (Henning et al., 2017).

Neuroticism is characterised as often persistent or disproportionate worrying, with individuals focusing on negative aspects of a situation rather than positives (Costa & McCrae, 1980). Those with high neuroticism have been found to be prone to negative appraisals of their life context (Gunthert, Cohen & Armeli, 1999). Recent work has also identified neuroticism as one of the major determinants of subjective well-being (Grant, Langnan-Fox, & Anglim, 2009).

Individuals that are high in agreeableness demonstrate kindness, cooperativeness, sympathy and warmth, whereas individuals lacking in agreeableness can be considered distrustful, rude and uncooperative (Church, 2016). Laursen, Pulkkinen and Adams (2002) state that the influence of agreeableness should be clearest in social adjustment, and that those that had high levels of agreeableness at

earlier periods of their lives tended to adjust well compared to those with lower levels of adjustment.

Adjustment to a major life event such as retirement may also be a function of personality.

1.9 Relationship of personality to retirement adjustment

Personality has been shown to be related to retirement adjustment. Multiple studies have explored different facets of personality and their potential relationship to retirement adjustment, wellbeing in retirement, and retirement in general (e.g. Henning et al., 2017; Robinson et al., 2010). Henning et al., (2017) discussed the role of personality for subjective well-being in the retirement transition and found for a group with low openness, agreeableness, extraversion, and conscientiousness, but high neuroticism, retirement was associated with a decrease in well-being. Reis and Gold's (1993) personality model of life satisfaction in retirement suggests a significant role of personality in retirement adjustment and that personality itself could potentially be a resource to cope with losses, establish and strengthen friendships, and discover meaningful activities in retirement.

Robinson et al. (2010) explored the links between the FFM and the experience of being retired. Similar to Henning et al. (2017) neuroticism was correlated with a negative view on retirement, as well as life satisfaction both before and after retirement, and therefore a more difficult adjustment to retirement. Other traits such as agreeableness and conscientiousness were found to promote life satisfaction whilst in retirement. Robinson et al. (2010) used cross-sectional data. This study also examined the links between the other FFM traits of extraversion, openness to experience, agreeableness and conscientiousness, and the retirement experience and found that

personality affected retirement enjoyment and satisfaction was supported (Robinson et al., 2010). Traits such as high neuroticism or openness to experience will have an impact on personal experiences of change, retirement, and indeed, the very process of adjusting to retirement.

Löckenhoff, Terracciano and Costa, (2009) examined the relationship between the FFM and the retirement transition, a similar topic to Robinson et al. (2010). According to Löckenhoff et al. retirement as a process profoundly affects patterns of everyday activities and social network composition, and the trait perspective contributes to the understanding of this process. Löckenhoff et al. made special care to examine the voluntariness of the retirement transition (i.e. whether it was voluntary or involuntary retirement) and retirement expectedness (whether or not participants had expected to retire in the year preceding their retirement). Other retirement related variables included retirement status, anticipatory thoughts and emotions (four-point scales with higher scores representing more positive emotions and greater planning towards retirement), involvement in part-time work, activity levels and retirement satisfaction (rated on a scale from satisfying to not very satisfying). They concluded that personality traits showed high levels of stability during the retirement transition and suggest that personality is related to retirement satisfaction as well as the activity levels of individuals engaging in retirement. Löckenhoff et al. (2009) found that low neuroticism and high extraversion were associated with higher overall life satisfaction. The study also found that while personality traits didn't necessarily predict future retirement, personality traits would provide stability over the retirement transition, particularly with low neuroticism and high openness to experience being associated with retirement satisfaction (Löckenhoff et al., 2009).

Specific personality traits are also likely to be related to certain responses to the retirement transition. For example, individuals high in neuroticism are more likely to view the problems of old age as crises and are more likely to complain about health issues (Reis & Gold, 1993). Individuals high in neuroticism tend to experience negative emotions and maladaptive behaviour across many situations and this does not exclude retirement (Reis & Gold, 1993; Serrat, Villar, Pratt, & Stukas, 2017). As discussed previously, low neuroticism can be associated with higher overall life satisfaction as Löckenhoff et al. (2009) discovered. This finding was corroborated by Serrat et al., (2017) who also added that individuals higher in neuroticism were more likely to obtain lower scores on eudemonic wellbeing 9 years after the retirement transition. In the study by Robinson et al. (2010), neuroticism was found to be the personality trait that was most robustly linked to life satisfaction and experiences in retirement.

Individuals high in extraversion are prone to be active, talkative and socially involved, factors that may enhance the quality of their adjustment to retirement (Serrat et al., 2017). This is because they are generally better suited to maintaining relationships and making new ones, compared to individuals with low extraversion. Extraverts also may have greater control in dealing with people and institutions which could aid in the retirement adjustment period (Reis & Gold, 1993). However, Robinson et al. (2010) speculate that being socially dominant or overly outgoing may have less adaptive value when no longer in full-time work, as individuals are no longer situated in the social setting that is employment.

Extraversion and neuroticism both have a strong relationship to retirement adjustment. The other three factors, openness to experience, agreeableness and conscientiousness historically tend to not have as strong a relationship. However, Reis

and Gold's (1993) theoretical model positively associated them with the quality of retirement adjustment.

Individuals with high openness to experience may find it easier as they adjust to retirement simply because they are more open to new ways of living. They also may find new activities and social groups because of their drive to try new things and find adjusting easier than those who do not (Reis and Gold, 1993). Lounsbury, Loveland, Sundstrom, Gibson, Drost and Hamrick (2003) found that openness to experience was related to life satisfaction during episodes of change, though they examined this through career transitions instead of transitions to retirement. It is possible that this relationship will also occur when individuals adjust to retirement. However, Serrat et al., (2017) found that openness to experience was not correlated to openness to experience. They do state that their research was not a longitudinal study and longitudinal studies may differ in results regarding this relationship. Theoretical evidence is then differing on this relationship.

Those individuals that score high in agreeableness may be more likely to develop social support networks as they will be pleasant and easier to socialise with (Reis & Gold, 1993). This is similar to extraversion in that these support networks should enhance individual's wellbeing in retirement. Robinson et al. (2010) examined the relationship between agreeableness and life satisfaction for individuals that are already retired and found a significant relationship. High agreeableness therefore may assist those in retirement in regard to their wellbeing. Löckenhoff et al. (2009) found that after retirement, retirees found themselves as less competitive and argumentative, which were facets of agreeableness in their study. Löckenhoff et al. (2009) conclude that this is evidence of a relationship and may be caused by the absence of role-related strain caused by employment.

Individuals with high levels of conscientiousness may be better prepared to cope with some of the age-related issues and financial problems associated with retirement (Serrat et al., 2017). Reis and Gold (1993) predicted that high levels of conscientiousness would lead to specifically proactive coping, wherein individuals would plan and attempt to accommodate the changes they would face in retirement. This prediction was supported in 2010 by Robinson et al., and they added that conscientiousness is related aspirational motivations for retiring, as well as proactive motivation for retiring.

As discussed in this section, the relationship between personality and retirement adjustment is a varied one. Each personality trait has its own relationship with retirement adjustment, with conscientiousness and agreeableness seeming to have the strongest positive relationship and neuroticism having the strongest negative relationship. This study will explore these relationships and the significance of said relationships.

1.10 Personality and Bridge Employment

Bridge employment has been found to be beneficial to wellbeing (Grant, Langan-Fox, & Anglim, 2009; Leslie, 2005), and as such is likely to be related to personality.

As discussed previously, openness to experience leads individuals to seek out new experiences (Henning et al., 2017). Therefore, those that have a high level of openness to experience will potentially be more likely to engage in bridge employment as it will assist in gratifying needs of novelty, curiosity and experience. Schultz and Wang (2011) state that bridge employment helps smooth the transition into retirement, and openness to experience is stated by Brown and Hirschi (2013) to

potentially facilitate adaptive behaviour in career development outcomes, such as what individuals would experience in bridge employment. There is also evidence that openness to experience (as well as conscientiousness) accounted for unique variance in career planning behaviour, though it should be noted that the sample that was used in this scenario was made up of high school students (Rogers, Creed & Glendon, 2008).

One of the many benefits of bridge employment is that it provides a social environment for older workers to participate in. Extraversion can be construed as one of the defining factors of personality (alongside its opposite, introversion) and is defined by warmth, gregariousness, assertiveness, activity, excitement seeking and positive emotion, in accordance with the factors of extraversion utilised in Costa and McCrae's five factor model (1992). The core feature of extraversion in the FFM is thought to be the disposition to engage in social behaviour (Wilt & Revelle, 2008). Extraversion may help individuals to be more active after the retirement transition and make it easier to establish new friendships (Henning et al., 2017). As a higher level of extraversion may lead people to socialise more, and workplaces can be construed as social environments, participating in bridge employment may help meet these social and relational needs.

Agreeableness includes characteristics such as altruism, caring and emotional support at one end of the spectrum, and a lack of agreeableness, indifference to others, and self-centeredness at the other (McCrae & John, 1992). Agreeableness as a trait that has been found to be positively correlated with life satisfaction (Robinson et al., 2010). Reis and Gold (1993) suggest that agreeableness, alongside extraversion, lead to a wider and stronger support network for retirees which in turn enhances emotional and social wellbeing. Potentially a low level of agreeableness could lead to decreased

social resources and a more difficult adjustment to retirement. Its relationship to involvement in bridge employment is unknown and will be explored in the present study.

By engaging in bridge employment, individuals can increase the likelihood of financial security in retirement (Topa et al., 2011) or provide a supplement to their pensions (Kim & Feldman, 2000). Thus, high neuroticism may be related to participation in bridge employment as persistent worrying about financial issues and access to resources may encourage older people to continue working to secure financial security for themselves and their families. In a study conducted on the links between the FFM, reasons for retirement and the experience of being retired, neuroticism was found to be positively correlated with negative reasons for retirement (Robinson et al., 2010). The authors also found that neuroticism was the strongest correlate of life satisfaction both before and after retirement. These findings suggest that individuals with high levels of neuroticism may find a major transition such as that associated with retirement harder to deal with (Reis & Gold, 1993). The study by Robinson et al. also supported the theory that agreeableness and conscientiousness can assist in predicting life satisfaction in those who are already retired (2010).

Someone with a high level of conscientiousness is described by McCrae and John (1992) as efficient, organised, reliable, responsible and thorough. Conscientiousness is often described as a classic dimension of character, much like agreeableness, and tends to describe a strong-willed character (McCrae & John, 1992). Conscientious individuals are more likely to be organised, reliable and thorough (McCrae & John, 1992) and as such individuals with a high level of conscientiousness may be more prepared for retirement. They may be more organised and plan financially for retirement so may see extending their working life by

engaging in bridge employment as beneficial. Potentially a high level of conscientiousness could lead to more proactive coping with stressful changes in retirement (Robinson et al., 2010). Indeed, there is evidence that conscientious individuals cope better with retirement than those individuals that have lower scores in conscientiousness (MacLean, 1983; Robinson et al., 2010). In research by Mike, Jackson and Oltmanns, (2014) the researchers found a link between conscientiousness and engagement in volunteering efforts in retirement. They concluded that conscientious individuals, when they retire, are more likely to fill their time with a meaningful activity, such as volunteering (Mike et al., 2014). It is likely that bridge employment could also fill this niche, with the benefit of financial compensation. When individual's retiree, they lose their occupational role, which may mean losing an important part of their identity (Mike et al., 2014). By engaging in bridge employment, this lack of role is lessened and should assist in the transition to retirement. Bridge employment would also, in this regard, offer an important social resource. In this context, bridge employment is like volunteering as it provides retirees with a sense of continuity and structure, as well as an avenue for individuals to make new relationships, or alternatively, maintain them. Roberts, Caspi and Moffit (2003) found that individuals with higher in scores in conscientiousness made stronger commitments to their work, which may manifest in engagement in bridge employment.

Topa et al. (2014) found for individuals that engaged in bridge employment before definite retirement favoured personal satisfaction and their perception of adequately providing for their psychosocial needs as older people. Topa et al. (2014) also note that variability in retirement wealth implies that many individuals may need to engage in bridge employment to maintain financial security, which therefore means

that financial planning would promote this engagement. Therefore, those with higher conscientiousness, which is stated to be organised, planful and thorough (McCrae & John, 1992), may be more likely to engage in bridge employment to ensure financial security.

1.11 Socioeconomic standards

Socioeconomic status is an important consideration for research when considering both bridge employment and retirement adjustment (Adler et al., 1994; Smaliukiene & Tvaronavičienė, 2014; Zhan et al., 2009). Socioeconomic status has also been found to predict health during retirement, which is an important consideration (Singh, 2006), as both physical and psychological health has been found to be related to retirement adjustment (Gall et al., 1997). When individuals retire, they lose a major income source, which may act as a lack of financial resources. Decreases in resources will have adverse effects on individual's adjustment (Wang et al., 2011). As outlined earlier, socioeconomic status may impact the decision to undertake bridge employment because individuals with higher socioeconomic status may view the decision to engage in bridge employment as unnecessary as they already have the resource available to live comfortably in retirement. Individuals that have lower socioeconomic status may realise or worry that they lack financial resources in retirement and decide to engage in bridge employment in order to ensure that they have the financial resources available to be comfortable when they fully retire.

As noted earlier, socioeconomic status impacts retirement adjustment as individuals with higher socioeconomic status may find it easier to adjust to retirement due to access to resources, whereas individuals with low socioeconomic status may find it more difficult through lack of financial resources. The present study intends to

control for socioeconomic status when exploring the relationships between personality and bridge employment, and personality and retirement adjustment.

1.12 Summary and Research Hypotheses

The exact relationship between personality and bridge employment is unclear. The topic has been briefly discussed (Löckenhoff et al., 2009; Wang et al., 2011) but the relationship has not been explored in depth. Wang et al., (2011) whilst providing the literature with the resource-based dynamic perspective, mentions the opportunity for future research to examine the relationship. This section provides the rationale for key research hypotheses based on the literature reviewed. First, hypotheses regarding the relationship between personality and bridge employment are presented. Then hypotheses regarding the relationship between personality and retirement adjustment are presented. Finally, a hypothesis proposing a mediational role for bridge employment between personality and retirement adjustment is presented.

Hypothesis 1: Personality will be related to bridge employment.

Bridge employment represents a change and a new opportunity for individuals to undertake in their retirement. Openness to experience should assist retirees in establishing new meaningful activities (Reis and Gold, 1993), such as bridge employment. Therefore, in the present study, it is hypothesised that:

H1a: Openness to experience will be positively related to bridge employment.

Löckenhoff et al. (2009) noted that those with high extraversion would be expected to maintain high levels of social activity after retirement, and one way to easily maintain this activity is through work, or in this circumstance, bridge employment. Extraversion's relationship with bridge employment may be driven through involvement in social activities in a structured environment. This is similar to

involvement in churches, clubs or other organisations in retirement because of individual's high sociability and energy levels (Okun, Pugliese, & Rook, 2007).

Extraversion may assist individuals in establishing friendships post retirement (Reis & Gold, 1993). Individuals high in extraversion may also seek social situations, such as bridge employment, in order to satisfy social needs. Therefore, in the present study, it is hypothesised that:

H1b: Extraversion will be positively related to engagement in bridge employment.

Robinson et al. (2010) examined the links between the FFM and retirement and concluded that conscientiousness could be related to aspirational motivations for retiring, meaning that individuals that were more driven to achieve were more likely to retire later than those individuals not driven to achieve. Löckenhoff et al. (2009) found that those low in conscientiousness were found to retire earlier than those with higher conscientiousness. It is speculated that as people with higher levels of conscientiousness will plan for retirement via bridge employment, i.e. they will use bridge employment to help fund a lifestyle that they want in retirement, before they retire from work fully. In addition, individuals with high conscientiousness may be more organised and thorough (McCrae & John, 1992), and therefore plan for additional financial security in retirement by engaging in bridge employment. Therefore, in the present study, it is hypothesised that:

H1c: Conscientiousness will be positively related to bridge employment.

There is little evidence in the literature that neuroticism will be significantly related to bridge employment. Hypothetically, individuals that are high in neuroticism could engage in bridge employment to help alleviate feelings of anxiety when facing

the retirement transition. It is noted that bridge employment can assist individuals by increasing the likelihood of financial security in retirement (Topa et al., 2011). It is possible that high neuroticism is related to bridge employment as excessive worrying about a lack of financial resources may inspire older workers to engage in bridge employment as a supplementary income. Therefore, in the present study, it is hypothesised that:

H1d: Neuroticism will be positively related to bridge employment.

There is minimal evidence in the literature for the relationship between agreeableness and bridge employment. An argument could be made that agreeableness functions similarly to extraversion regarding bridge employment. Hypothetically, being agreeable could help in finding and keeping new friends in retirement, and therefore bridge employment would assist in providing social interactions for the retiree. The investigation of the relationship between agreeableness and bridge employment will be exploratory in the present study.

Hypothesis 2: Personality will be related to retirement adjustment.

Personality variables and dispositional traits have been shown to be important individual resources that influence adjustment and quality of life in transition and adjustment processes (Wang & Takeuchi, 2007). Retirement is an important life transition and adjustment process (Wang et al., 2011). Several researchers have already examined this relationship within the literature (Robinson et al., 2010; Wang et al., 2011). Lounsbury et al., (2003) surveyed individuals during career changes and found that extraversion, openness to experience and conscientiousness were all significantly related to well-being during these adjustment periods.

There is further evidence that conscientiousness individuals cope better in retirement than those low in conscientiousness (MacLean, 1983; Robinson et al., 2010; Mike et al., 2014). Conscientiousness is also related to greater enjoyment of retirement (MacLean, 1983) as well as greater life satisfaction during this time (Robinson et al., 2010). Therefore, in the present study, it is hypothesised that:

H2a: Conscientiousness will be positively related to retirement adjustment.

Other researchers that have examined the relationship between retirement adjustment and extraversion. Serrat et al., (2017) in a longitudinal study found that individuals with high extraversion before retirement significantly predicted wellbeing nine years afterwards in retirement. Löckenhoff et al., (2009) also found that those high in extraversion reported both higher retirement satisfaction and higher postretirement activity levels. Therefore, in the present study, it is hypothesised that:

H2b: Extraversion will be positively related to retirement adjustment.

The relationship between agreeableness and retirement adjustment is not one that has been studied in much depth. It was, however, a key part of the work by Löckenhoff et al. (2009). They found that after retirement, individuals seemed to be less argumentative and competitive, and concluded that there was evidence of the relationship in their study. Robinson et al. (2010) also examined this relationship and found that agreeableness was a predictor of life satisfaction after individuals had retired. It is argued that an agreeable personality will lead to a wider and stronger support network in retirement (Reis & Gold, 1993), similar to extraversion. Therefore, in the present study, it is hypothesised that:

H2c: Agreeableness will be positively related to retirement adjustment.

The research on neuroticism suggests that older individuals with high levels of this trait would be more likely to perceive their environment, such as in retirement, in a more negative light (Costa, McCrae & Kay, 1995). Serrat et al., (2017) found that low neuroticism significantly predicted wellbeing nine years later in retirement. Wang (2007) also discusses neuroticism and theorises that retirees that score highly in neuroticism are more likely to experience anxiety and stress during the retirement transition. Therefore, in the present study, it is hypothesised that:

H2d: Neuroticism will be negatively related to retirement adjustment.

Reis and Gold (1993) also speculate that openness to experience could lead to acquisition of new activities in retirement, and therefore lead to enhanced retirement adjustment and satisfaction. Openness to experience was found to be related to life satisfaction in periods of change (Lounsbury et al., 2003). Therefore, in the present study, it is hypothesised that:

H2e: Openness to experience will be positively related to retirement adjustment.

Hypothesis 3: Bridge employment mediates the relationship between personality and retirement adjustment.

Previous research has found that personality is related to both bridge employment (in some circumstances) and retirement adjustment, as discussed previously (Robinson et al., 2010; Wang & Takeuchi, 2007; Wang et al., 2011). However, this specific interrelationships of personality, bridge employment and retirement adjustment has not been a focus of previous studies.

As noted above, engagement in bridge employment is associated with better retirement adjustment. Personality is also related to retirement adjustment and plays a

role in whether an individual will engage in bridge employment. Thus, the association between personality and retirement adjustment may be partly due to engagement in bridge employment. Therefore, in the present study, it is hypothesised that:

Bridge employment mediates the relationship between personality and retirement adjustment.

The three hypotheses are illustrated in figure 1.

Chapter 2: Method

Since 2006, the Massey University Health and Ageing Research Team (HART) has undertaken a number of research projects aimed at investigating and examining age and health related topics in New Zealand.

The main HART project (from which the data for the current study was collected) is the Health, Work and Retirement study (HWR). The HWR is the first longitudinal study of ageing of its kind in New Zealand, modelled after equivalent international studies of ageing in the USA, UK and Europe. It is New Zealand's only nationally representative government-funded longitudinal study designed to investigate the factors that determine independence and health in older individuals. The initial project consisted of two waves of data collection in 2006 and 2008 and the goal of the project was to grow the scientific knowledge-base on issues relating to ageing, and specifically to identify factors underpinning both health and wellbeing of New Zealanders as they transitioned from work to retirement. In 2006, the HWR study sampled a cross-section of New Zealanders aged 55-70 to assess their current health, wealth, working, social and demographic status. After completing this study, these individuals were invited to participate in the longitudinal study. Data waves are completed on a biennial basis, with off-wave surveys also undertaken.

In 2014, the HWR included a new cohort aged 55-65 in their data collection in order to refresh the sample. Thus, the study moved to a 'steady state' design wherein new cohorts would be recruited to the HWR on a regular basis (every two years) in order to ensure the sample would be sufficiently maintained and nationally representative. A supplementary data wave was also conducted in 2013, specifically to investigate older adults social support, levels of connectedness and inclusion.

The HWR projects have been funded by a number of funding organisations. These organisations included the Health Research Council of New Zealand, the Foundation for Research, Science, and Technology, the Ministry of Science and Innovation, the Ministry of Business, Innovation and Employment, and the New Zealand Earthquake Commission. Ethical Approval was granted by the Massey University Human Ethics Committee: Southern B, Application 13/30; Southern A Application 15/72.

The current study uses data from waves 2006 to 2016. The following is a summary of details on sampling, measures and procedures used for the current study and detailed in full elsewhere (Allen, Alpass & Stephens, in press).

2.1 Participants

Participants were recruited to the study in 2006, with a random sample of 13,040 persons aged 55–70, drawn from the New Zealand electoral roll, invited to participate and N=6,657 participants responded to the baseline survey (reflecting an overall response rate of 53%). An over-sample of persons of Māori descent (n=3,553, 53% of the entire sample) was undertaken to ensure adequate representation of this important New Zealand population group for statistical analyses. Nearly half identified their primary ethnicity as non- Māori (n=3,104). Approximately 3,200 of those who participated in 2006 agreed to participate in the longitudinal study and were resurveyed in 2008. These respondents and others who volunteered to continue were re-surveyed in 2008, 2010, 2012, 2013, 2014, 2016 and 2018. Over the decade of this study, many participants have moved from being engaged full-time in the work force into retirement (some undertaking part-time jobs before hand). This means that the study is a good candidate for examining bridge employment.

2.2 Procedure

The original Health, Work and Retirement surveys were conducted in 2006. As discussed earlier, each participant was selected randomly from the electoral roll. Each participant was then sent an introductory letter and information sheet explaining the purpose and method of the study (Towers, 2007). The first wave conducted in 2006 consisted of a postal survey and examined six domains; health, physical activity, social support, work status and attitudes, retirement status and attitudes, and socio-demographic information. These sections were designed to gather information on individual factors core to retirement, independence and well-being (Towers, 2007). In addition to these sections, questionnaires intended for Māori participants included an additional section for detailing Whakapapa/Whanaungatanga (meaning genealogy/relationships).

After 2006, postal surveys are administrated on a biennial basis. In addition, off-wave surveys have also been administrated in 2009 and 2013. All longitudinal surveys have core indices of health and wellbeing, economic participation and social participation. Each particular survey also had specific items providing an in-depth examination on focal topics such as: work and retirement (2006), retirement planning (2008), social connectedness (2010), living standards (2012), nutrition (2014), housing and neighborhood quality (2016) (Allen, Alpass & Stephens, in press).

2.3 Measures

2.3.1 Biographical Information

Socio-demographic information was sought from the participants, including age, ethnicity, and work status from 2006 to 2016. Participants were asked to list their date of birth and their age was calculated by subtracting their birth year from the

survey year. Participants reported which ethnicity they belonged to (participants could tick more than one identity) and these were categorised as Māori, New Zealand European, Pacific, Asian or other. Categorisation has been classified by the Statistics NZ prioritised ethnicity procedure (Allan, 2001), and when more than one ethnicity is indicated priority is given to Māori, followed by Pacific, Asian, NZ European and 'other'. Work status was reported at each wave and was categorised as full-time, part-time, retired, other (e.g. student, homemaker).

2.3.2 Personality

Personality traits were measured using the Big Five Inventory (BFI) (John & Srivastava, 1999). The BFI measures levels of neuroticism, extroversion, agreeableness, openness to experience and conscientiousness on a 44 item Likert scale. This inventory identifies the five personality types and their facets. Participants are asked to indicate the extent to which they agree or disagree that a characteristic applies to them, on a five-point Likert scale ranging from 1, disagree strongly, to 5, agree strongly (e.g. I am a person who is talkative; is helpful and unselfish with others etc.). After a number of items are reverse scored, items representing each trait are added together and divided by the number of items. Scores for each subscale range from 1 (low) to 5 (high).

This BFI has shown good reliability and validity in a number of contexts, (e.g. Löckenhoff et al., 2009; Yoon, Schmidt, & Ilies, 2002). Alpha reliabilities for the 5 subscales in the present study ranged from .75 for agreeableness to .83 for neuroticism.

2.3.3 Bridge Employment

Participants were asked to report their employment status: full-time, part-time, retired or other at all waves. Participants were categorised into two main groups: those who transitioned from full-time work to part-time work to retirement (Group 1: undertook bridge employment); and those participants who transitioned from full-time work directly into retirement (Group 2: did not undertake bridge employment). This transition period took place from anywhere between 2006 to 2016.

2.3.4 Retirement Adjustment

Retirement adjustment was operationalized using a measure of quality of life. The CASP-12 measure of quality of life explores the domains of control, pleasure, and self-realisation. The CASP-12 was developed by Wiggins, Netuveli, Hyde, Higgs and Blane (2008), from the original CASP-19. Sim, Bartlam and Bernard state that the CASP-12 appears to have superior dimensionality when compared to the CASP-19 (2011). Wiggins et al. recommend the shortened version be utilised as it has stronger measurement properties than the original CASP-19 measure (Wiggins et al., 2008). Control and autonomy are important facets of involvement in society, and the extent to which these freedoms can be realised is demonstrated by the self-realisation and pleasure domains (Wiggins et al., 2008).

The CASP-12 includes three items for each of the four domains. In a study by Wu et al (2013), a Chinese- Taiwanese version of the CASP-12 and CASP-19 were tested and validated. The CASP-12 model performed particularly well in this particular scenario and provided good clinical validity. Reliability analyses provide confirmation of the internal consistency on each domain, and intercorrelations between all these domains provided evidence to confirm their dependence on one underlying factor, 'quality of life (Wiggins et al., 2008).'

Items on the CASP-12 are scored on a four-point Likert Scale. Participants report the extent to which each item describes their feeling about their life by responding 1-Often, 2-Sometimes, 3-Not often, or 4-Never (e.g. “I feel that the future looks good for me”). After several items are reverse scored, the resulting scale scores are summed to form an index of quality of life with scores ranging from 12 to 48 where a high score indicates a better quality of life and a low score indicates ‘poorer’ quality of life (Wiggins et al., 2008).

In the current study only the total score was used as a measure of retirement adjustment. In the current study the alpha reliability for the CASP-12 was .85.

2.3.5 Economic Living Standards

The Economic Living Standard Index short form (ELSI short form) provides a valid and reliable survey tool for measuring individual’s economic standard of living. Standard of living here refers to the material standard of living that is reflected in an individual’s consumption of goods and services as well as their personal possessions. ELSI short form is a shortened version of the 40 item ELSI scale. The ELSI scale was originally constructed by the Ministry of Social Development (Jensen, Spittal, Crichton, Sathiyandra, & Krishnan, 2002). The rationale behind this scale is that individuals’ economic living standards vary on a continuum from a low score to a high score and this impacts on an individual’s ability to socialise and their engagement in social activities. The ELSI short form requires 4-6 minutes to complete and has 25 items, with self-reported answers. The scale assesses restrictions in ownership of assets (eight items), a self-rated standard of living (three items), the extent to which participants economise (eight items), and restrictions due to the cost of participating socially (six items). The ELSI short form uses different Likert Scales dependant on the question being asking. For example, one question attempts to

inquire about the availability or access to certain items. For each item that the participants have access to, they will choose one out of four different options (Yes, I have it; No, because I don't want it; No, because of the cost; and No, for some other reason). These items include a telephone, washing machine, at least two pairs of shoes, suitable clothes of important or special occasions, a personal computer, home contents insurance, and enough room for family/whānau to stay the night. The scores on all of the items are combined to form a continuous variable ranging from 0 to 31, wherein lower scores reflect lower living standards, and higher scores reflect higher living standards (Jensen et al., 2002).

The ELSI short form was used in the present study as a control variable. This score demonstrates excellent internal validity (Jensen et al., 2002), with a Cronbach alpha coefficient reported of 0.88. The ELSI short form was reviewed in 2010 by the New Zealand Ministry of Health and they reported that ELSI had strong reliability and validity, even when compared to other living standards measurements such as the New Zealand Individual Deprivation Index.

2.3.6 Length of retirement

As the length of an individual's retirement has been shown to influence their adjustment to retirement (Wang, 2007), time since retirement was included in the current study as a control variable.

This variable was computed by taking participants' age recorded in 2016 and subtracting the age at which they reported full retirement. For individuals who had retired in 2016, their scores were changed to 0.5 to reflect that they had been retired for less than a year. Therefore, the range of scores was 0.5 to 10 years.

Chapter 3: Results

3.1 Data Screening

Before proceeding with analyses, the data were screened for data entry accuracy, missing values and fit between variable descriptions and assumptions of multivariate analysis. As a secondary analysis of existing data, most variables had been previously screened and computed. Missing data was minimal (ranging from 0% to 6.6% on each key variable) so listwise deletion was employed in all analyses. Tabachnick and Fidell (1989) argue that this is an appropriate and conservative method for dealing with minimal missing data, especially as only a few cases have missing data, and they appear to be a random subsample.

Normality, linearity, and homoscedasticity were assumed in the data through examination of the normal probability plot (P-P) of the regression standardized residual and scatter plots generated in SPSS. Collinearity diagnostics indicated no cause for concern. All variables were checked for multivariate outliers using Mahalanobis distances (Tabachnick & Fidell, 1989). With the use of a $p < 0.01$ criterion for Mahalanobis distance, no outliers among the cases were identified.

3.2 Sample Description

The present study involved a secondary analysis of six waves of data collected for Massey University's Health, Work and Retirement Study, a longitudinal study of ageing (2006 to 2016).

The current sample consists of all those HWR participants in the 2016 sample who reported being retired (N=780), and who also reported being in full-time employment at any previous wave (N=455). Of this sample, 280 had engaged in

bridge employment (as per the current study's definition), and 175 went directly from full time work to full time retirement.

The mean age of this sample was 70.24 (SD = 3.81), and the age ranged from 58 to 83. The number of females was slightly higher than that of males in the sample with 54.3% female (n=247) and 45.70% male (n=208).

A quarter of the sample identified as Māori (24.4%, n=111), 69.5% (n=316) New Zealand European and 5.5% (n=25) Pacific, Asian and other ethnicities (see Table 1).

Table 1. Sample Demographics (N=455)

Demographic Categories	Number	Percent
Gender		
Male	208	45.70%
Female	247	54.30%
Ethnicity		
NZ European	316	69.50%
Māori	111	24.40%
Pacific People	4	0.90%
Asian	1	0.20%
Other	20	4.40%
Missing Values	3	0.70%

Table 2 present the means, standard deviations and the number of participants on key variables for the current study for those who undertook bridge employment and those that did not undertake bridge employment.

Those that undertook bridge employment had higher mean scores on openness to experience, neuroticism, and extraversion than those individuals that did not engage in bridge employment, while those that did not undertake bridge employment had higher mean scores on agreeableness and conscientiousness than those that

engaged in bridge employment. Of these variables, only openness to experience was significant.

In the current study, bivariate analyses were not used to determine which control variables or predictors would be in the final model for the multivariate analyses. All predictors and control variables had been chosen based on either theory or to ensure consistency with previously published studies on bridge employment, retirement adjustment and personality. Non-significant bivariate control variables in the current study include the relationship between ethnicity and all dependant and independent variables save conscientiousness, and the relationship between age and all dependant and independent variables save the CASP-12.

Table 2. Means, Standard Deviations and number of variables used in this study

Variable	1.00- Undertook Bridge Employment			2.00- Did not undertake Bridge Employment			p value
	N	Mean	Std. Deviation	N	Mean	Std. Deviation	
Age	280	70.93	4.64	175	70.47	3.98	NS
CASP12 Overall Score	279	29.28	4.49	172	29.50	5.18	NS
Extraversion Scale	265	3.23	0.60	168	3.19	0.64	NS
Agreeableness Scale	253	3.94	0.45	167	3.95	0.42	NS
Conscientiousness Scale	263	3.95	0.53	166	3.96	0.49	NS
Neuroticism Scale	260	2.40	0.59	166	2.35	0.62	NS
Openness Scale	261	3.55	0.51	164	3.44	0.53	*
Time in retirement	276	5.32	4.31	175	4.70	3.49	NS
ELSI Short Form Score 2016	268	25.79	4.64	167	25.60	4.35	NS

Notes. * $p < .05$. NS Not Significant

3.3 Data Analysis

All statistical analyses were conducted using IBM SPSS Version 24 and PROCESS Version 2.16, the observed variable path analysis modelling tool for SPSS.

SPSS Frequencies and SPSS Regression were used for evaluation of assumptions. Pearson's Product Moment Correlation, ANOVA, and independent samples t-tests were used to test bivariate relationships. Standard linear regression and mediation analyses using ordinary least squares path analysis and non-parametric bootstrapping (Hayes, 2013) were used for multivariate analyses.

As stated by Baron and Kenny (1986), a variable functions as a mediator when variations in levels of the independent variable significantly account for variations in the presumed mediator. This is presented as path **a** in Baron and Kenny's Mediation model (1986), figure 2. In the present study it was hypothesised that bridge employment mediates the relationship between personality (the independent variable) and retirement adjustment (the dependent variable). Each hypothesis explores a path from Baron and Kenny's mediational model.

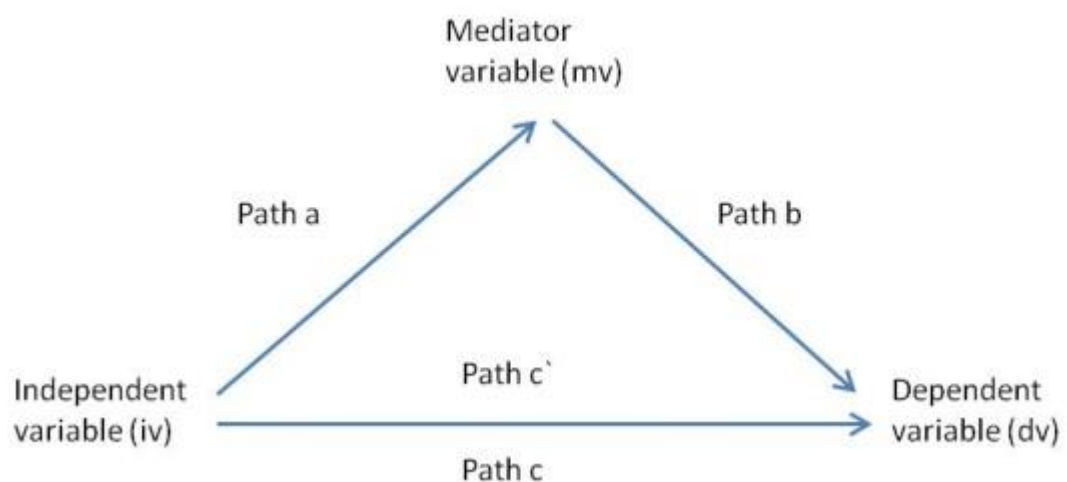


Figure 2. Baron and Kenny's Mediation model.

3.4 Hypothesis 1: Personality will be related to bridge employment.

It was hypothesised (H1a to H1d) that four of the five factors measured by the BFI would be positively related to bridge employment (openness to experience, extraversion, conscientiousness and neuroticism). Those high on these personality subscales would be more likely to participate in bridge employment. For example, an individual that scores high in neuroticism will be more likely to engage in bridge employment.

A correlation analysis was undertaken to test whether the BFI subscales related to bridge employment.

Table 3. Intercorrelations between independent, dependant, mediating and control variables in this study

	1	2	3	4	5	6	7	8	9	10	11	12
1. Bridge employment	1	-0.014	-0.075	-0.036	-0.016	0.040	-0.092	0.040	-0.074	.189**	-0.040	-0.008
		0.823	0.240	0.573	0.810	0.531	0.152	0.520	0.239	0.002	0.532	0.898
2. CASP-12	-0.014	1	.307**	.238**	.368**	-.385**	.155*	-.137*	.136*	0.060	.526**	-0.055
	0.823		0.000	0.000	0.000	0.000	0.016	0.029	0.030	0.337	0.000	0.382
3. Total Extraversion Scale	-0.075	.307**	1	.398**	.383**	-.375**	.307**	-0.075	.130*	-0.097	.232**	-0.042
	0.240	0.000		0.000	0.000	0.000	0.000	0.240	0.041	0.130	0.000	0.506
4. Total Agreeableness Scale	-0.036	.238**	.398**	1	.455**	-.539**	.235**	0.086	0.100	-0.084	0.057	0.067
	0.573	0.000	0.000		0.000	0.000	0.000	0.180	0.121	0.190	0.385	0.294
5. Total Conscientiousness Scale	-0.016	.368**	.383**	.455**	1	-.398**	.224**	0.025	.147*	0.000	.210**	-0.067
	0.810	0.000	0.000	0.000		0.000	0.001	0.694	0.022	0.999	0.001	0.299
6. Total Neuroticism Scale	0.040	-.385**	-.375**	-.539**	-.398**	1	-.216**	-0.026	-0.040	0.044	-.183**	-0.100
	0.531	0.000	0.000	0.000	0.000		0.001	0.687	0.536	0.499	0.005	0.119
7. Total Openness Scale	-0.092	.155*	.307**	.235**	.224**	-.216**	1	-0.074	0.067	-.130*	0.111	0.057
	0.152	0.016	0.000	0.000	0.001	0.001		0.250	0.295	0.043	0.090	0.371
8. Age	0.040	-.137*	-0.075	0.086	0.025	-0.026	-0.074	1	-0.109	.522**	-.137*	-0.024
	0.520	0.029	0.240	0.180	0.694	0.687	0.250		0.081	0.000	0.031	0.695
9. Gender	-0.074	.136*	.130*	0.100	.147*	-0.040	0.067	-0.109	1	-0.081	-0.005	0.076
	0.239	0.030	0.041	0.121	0.022	0.536	0.295	0.081		0.192	0.940	0.222
10. Time in retirement	.189**	0.060	-0.097	-0.084	0.000	0.044	-.130*	.522**	-0.081	1	0.024	-0.032
	0.002	0.337	0.130	0.190	0.999	0.499	0.043	0.000	0.192		0.703	0.606
11. ELSI Short Form Score 2016	-0.040	.526**	.232**	0.057	.210**	-.183**	0.111	-.137*	-0.005	0.024	1	-.141*
	0.532	0.000	0.000	0.385	0.001	0.005	0.090	0.031	0.940	0.703		0.027
12. Ethnicity Dichotomised	-0.008	-0.055	-0.042	0.067	-0.067	-0.100	0.057	-0.024	0.076	-0.032	-.141*	1
	0.898	0.382	0.506	0.294	0.299	0.119	0.371	0.695	0.222	0.606	0.027	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Correlations between independent, dependant, mediating and control variables are presented in Table 3. There were no significant relationships between the bridge employment variable and the BFI personality factor variables.

Therefore, hypothesis 1 was not supported.

3.5 Hypothesis 2: Personality will be related to retirement adjustment.

It was hypothesised that: higher levels of openness to experience, extraversion, agreeableness and conscientiousness would be related to higher levels of retirement adjustment (H2a,b,c), and that (H2d) high levels of neuroticism would be related to lower levels of retirement adjustment.

There were significant correlations between retirement adjustment and the traits of neuroticism, agreeableness, extraversion and conscientiousness at the 0.01 level, and openness to experience at the 0.05 level in the expected directions (Table 3). The bivariate correlations suggest that the hypothesis is supported.

The control variables used in this present study include age, gender, ethnicity, the ELSI short form and the time that individuals had spent in retirement. These control variables and their relationships to the independent, dependant and mediating variables are shown in table 3. As noted earlier, in the current study, bivariate analyses were not used to determine which control variables or predictors would be in the final model for the multivariate analyses. Instead, all control variables and predictors were chosen based on theory or to ensure consistency with previously published studies on either bridge employment, retirement adjustment or personality.

Hierarchical linear regression was used to assess the ability of the five BFI measures (agreeableness, conscientiousness, extraversion, neuroticism and openness to experience) to predict retirement adjustment (the CASP-12 measure), after

controlling for the influence of age, gender, ethnicity, ELSI-sf scores and time in retirement. Results are presented in Table 4.

Table 4. Predictors of CASP-12 Overall Scores

	Model 1 (<i>B</i>)	Model 2 (<i>B</i>)
Age	-0.117	-0.162**
Gender	0.139*	0.970
Time in Retirement	0.118	0.159*
ELSI sf score	0.504**	0.411***
Prioritised Ethnicity	-0.030	-0.026
Total Extraversion		0.049
Total Agreeableness		0.020
Total Conscientiousness		0.147*
Total Neuroticism		-0.228***
Total Openness		0.010
R^2	0.310	0.426
F	19.994***	16.191***
Adjusted R^2	0.294	0.400
R^2 Change		0.117
FR^2 Change		8.863***

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

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. Age, gender, prioritised ethnicity, time in retirement and the ELSI-sf scores were entered at Step 1, explaining 29% (adjusted R^2) of the variance in retirement adjustment. After entry of the five personality scales at Step 2 the total variance explained by the model as a whole was 40% (adjusted R^2), $F(5, 218) = 16$, $p < .001$. The five control measures explained an additional 12% (R^2 change) of the variance in the CASP-12 total score, after controlling for age, gender, ethnicity, ELSI-sf scores and time in retirement, F change (10, 218) = 8.68, $p < .001$. In the final model, only three measures were statistically significant: ELSI-sf ($beta = .441$, $p < .01$); neuroticism ($beta = -.228$, $p < .01$) and conscientiousness ($beta = .147$, $p < .05$). The other personality traits of

agreeableness ($beta = .020$, $p > 0.05$), extraversion ($beta = .049$, $p > 0.05$) and openness to experience ($beta = 0.10$, $p > 0.05$) were not statistically significant unique contributors to this model.

Therefore, hypothesis 2 is partially supported.

3.6 Hypothesis 3: Bridge employment mediates the relationship between personality and retirement adjustment.

Mediation can only occur when path **a** is significant (see Figure 1 and hypothesis 1). As a significant relationship was not found between personality variables and bridge employment, further mediation analyses were not undertaken. Therefore, this hypothesis was not supported.

Chapter Four: Discussion

The research goals of the present study were to investigate the relationship between personality and retirement adjustment and to examine if bridge employment mediated the relationship between these two variables. These investigations used secondary data collected by Massey University's Health and Ageing Research Team for the longitudinal Health, Work and Retirement study. This chapter will summarise the present findings and discuss them in relation to both the research goals and the literature. Limitations of the research and the future directions for research will also be discussed. Finally, conclusions are presented.

Findings are discussed in the order that hypotheses were presented in Chapter 1.

4.1 Hypothesis 1

Hypothesis one predicted that personality would be related to bridge employment.

Personality in this study was represented by five traits, also known as the big five, or the five-factor model (FFM) and measured by the Big Five Inventory (BFI).

Previous research has examined the broad relationship between personality and bridge employment and found mixed results; there are hypothetical arguments that engagement in bridge employment and certain personality traits are related, but little actual evidence (Zhan & Wang, 2015).

The first hypotheses predicted that openness to experience, extraversion, neuroticism and conscientiousness were positively related to bridge employment. However, no relationship between any of the FFM personality types and bridge employment was found, and the data do not support the hypothesis. This section will

address the predictions and findings for each of the personality factors and briefly discuss possibilities for further research in this area.

Openness to experience and bridge employment

In the current study no significant relationship was found between bridge employment and openness to experience.

It was hypothesised that this relationship exists as bridge employment represents new opportunities for individuals to undertake in retirement. Reis and Gold (1993) stated that openness to experience should assist retirees in establishing new experiences. As mentioned in the introduction, examples of bridge employment include engaging in a role in the same organisation or a different organisation; or staying in the same occupation or trying a different occupation. For individuals who begin a bridge employment role in either a different organisation or different role, bridge employment could be perceived as a new opportunity for them. In contrast, individuals who stay in the same organisation or continue with the same occupation may perceive bridge employment as a continuation of their full-time career, something which may be more appealing to individuals who are less open to experience. The context of an individual's employment history could be important when considering bridge employment and should be explored in future research.

However, one could argue that bridge employment is a continuation of a similar work pattern – after all, an individual that engages in bridge employment instead of retiring is continuing employment, whether in a full-time or part-time position. In this scenario, retiring is the new experience, and therefore bridge employment would not represent change but a continuation of similar experiences that individuals would be familiar with in their working lives.

Extraversion and bridge employment

It was hypothesised that extraversion would be positively related to bridge employment. In the current study no significant relationship was found between bridge employment and extraversion and this hypothesis was not supported.

Löckenhoff et al. (2009) noted that those with high extraversion would be expected to maintain high levels of social activity after retirement, and one way to easily maintain this activity is through work, or in this circumstance, bridge employment.

There are other avenues that extraverted individuals can utilise their social skills and need for socialisation in retirement that were not considered in the present study. It is possible that extraversion encourages volunteering because of the social benefits available, and there are numerous clubs and societies that older individuals can join. It is possible that extraverted individuals have strong support networks outside of work, and therefore may not need bridge employment to ameliorate a lack of social support as theorised in the current study. In a study by Löckenhoff et al. (2009), the authors found that extraverts reported higher post-retirement activity levels, so it is fair to assume that extraverted individuals may have other activities to utilise their time in, rather than engaging in bridge employment.

Conscientiousness and bridge employment

In the current study no significant relationship was found between bridge employment and conscientiousness. It was hypothesised that bridge employment may provide an outlet for high achieving individuals. Previous research found that individuals low in conscientiousness were more likely to retire earlier compared to individuals high in conscientiousness (Löckenhoff et al., 2009). As conscientious

individuals are stated to be organised, responsible and goal-oriented (McCrae & John, 1992), it is possible that instead of conscientious individuals engaging in bridge employment, they may be more likely to continue with full-time careers for as long as possible before transitioning to full-time retirement. In a study by Roberts, Caspi and Moffit, (2003) it was found that conscientious individuals are more likely to agree with statements saying that they would continue to work if they won the lottery, which suggests that individuals with high conscientiousness prefer having structured work to fill their time. Other factors such as organisational tenure and certainty of retirement plans (Davis, 2003; Wang et al., 2008) may also play a role in the relationship between bridge employment and conscientiousness.

Neuroticism and bridge employment

Neurotic individuals are defined by such terms as worrying, insecure and temperamental (McCrae & Costa, 1987). Neurotic individuals were hypothesised to use bridge employment to minimise anxiety about the retirement transition as it could assist individuals by increasing the likelihood of access to appropriate financial resources in retirement (Topa et al., 2011).

However, there was no significant relationship between these two variables. It was assumed that engagement in bridge employment would alleviate financial anxiety in neurotic individuals. However, the motivations for engagement in bridge employment were not explicitly measured. Future research could specifically investigate the reasons individuals are motivated to engage in bridge employment.

Although no relationship was hypothesised, there was also no relationship between bridge employment and the personality trait of agreeableness.

The current study found no significant correlations between personality traits and bridge employment. One explanation for this lack of relationship is that the bridge employment variable used in the current study did not adequately represent bridge employment in the sample. The HWR study does not include in-depth questions about bridge employment. Participants in all waves report their employment as full-time, part-time, retired or other and the bridge employment variable was derived from these classifications across time. Future data waves could include a definition of bridge employment and ask participants about changes in the nature and timing of their employment status. In addition, further questions could elicit information on individuals' motivations for undertaking bridge employment. This is discussed by Zhan et al., (2009) who argue that understanding the motivations for engaging in bridge employment may provide insight into retirement and the retirement transition, particularly regarding wellbeing. It is important to note that full retirement or bridge employment is often not a choice and post retirement work may only be available to certain sub-groups of society (Dingemans et al, 2016). Some older workers will search for bridge employment but will be unsuccessful for several reasons, including age, health or prejudice. Individuals that have had no option to engage in bridge employment may struggle to adjust to retirement, particularly if they lack financial resources to comfortably retire.

It is possible that bridge employment is unrelated to personality. There is a lack of evidence in the literature for this relationship, and several authors have discussed the need to research this relationship further (Wang et al., 2008; Topa et al., 2014). Given the ubiquity of the role of personality in adjustment in general, as noted in the introduction, it is likely that personality also plays a role in the retirement adjustment process and hence the decision to engage in bridge employment.

In summary, hypothesis 1 was not supported, no relationship was found between individual personality traits and bridge employment.

4.2 Hypothesis 2

Hypothesis two predicted that personality would be related to retirement adjustment. This hypothesis was found to be partially supported by the data.

All five personality traits of the FFM were found to have a significant relationship with retirement adjustment, as presented in Table 3. Extraversion, openness to experience, agreeableness and conscientiousness were positively related to adjustment as measured by the CASP and neuroticism, as hypothesised, had a negative relationship with retirement adjustment. These relationships were examined further with hierarchical linear regression, while controlling for sociodemographic variables, and extraversion, openness to experience and agreeableness became non-significant.

These findings are discussed in more detail below.

Conscientiousness and retirement adjustment.

Conscientiousness is defined as being organised, efficient, reliable and thorough. Previous research had found that conscientiousness was significantly related to retirement adjustment (Henning et al., 2017; Löckenhoff et al., 2009; Mike et al., 2014; Robinson et al., 2010). Conscientiousness was found to have a significant bivariate relationship with the retirement adjustment in the present study and continued to be significant when controlling for demographic variables and other personality traits. An individual who is conscientious may plan ahead for retirement and have support systems in place for retirement, therefore finding it easier to adjust from work to retirement. Conscientiousness implies a desire for individuals to take

obligations and tasks seriously (McCrae & Costa, 1987), and it is possible that this desire is relevant when considering the significant task that retiring can represent. This idea is discussed by Mike et al., (2014), who examined the relationship between conscientiousness, retirement and volunteering. In their study they concluded that conscientiousness individuals tend to do well in retirement, especially when undertaking meaningful activities such as volunteering or family life. Future research should consider investigating these variables for deeper insights into these relationships.

Reis and Gold (1993) hypothesised that conscientiousness is related to positive coping in retirement. The resource-based dynamic perspective postulates that access to (or lack of) resources can cause a change in successful adjustment, and therefore it is possible that conscientiousness leads an individual to have greater control over their own resources and, therefore a smoother adjustment to retirement.

Extraversion and retirement adjustment.

It was hypothesised that high levels of extraversion would be related to greater adjustment in retirement. Löckenhoff et al. (2009) suggested that those with high extraversion would be particularly good at maintaining social activity in retirement. Serrat et al., (2017) reported that extraversion significantly predicted retirement adjustment quality, and Löckenhoff et al., (2009), found a positive relationship between extraversion and overall retirement satisfaction. In the current study although extraversion was bivariately related to adjustment, this relationship became non-significant when controlling for demographic variables and other personality traits.

Robinson et al. (2010) argued that extraversion was of less adaptive value to individuals in retirement, as being outgoing and socially dominant is not as useful as compared to in a workplace setting. Robinson et al. (2010) found that extraversion was found to be a predictor of life satisfaction before retirement but was not related to post-retirement experiences.

Kim and Feldman (2000) found that a partner often is a substitute for the social interaction with colleagues, and could provide social support after full-time work, especially if the partner was also fully retired. Social interaction for extraverted older individuals may also be substituted by other support networks (apart from work) such as extended family (Dingemans et al., 2016). The role of partners and family in the retirement adjustment process was not examined in the current study and should be investigated in future research.

It may be that extraversion influences retirement adjustment – but at different times in retirement; Serrat et al. (2017) postulated that being active and social involved only has a mid-term effect on well-being in retirement. In the current study noted that time in retirement was not bivariately associated with retirement adjustment however, it did become significant in the regression analysis once the personality variables were entered, suggesting some interrelationship that should be explored more fully in future research.

Agreeableness and retirement adjustment.

Agreeableness was hypothesised to be related to retirement adjustment in the current study. Reis and Gold, (1993) argued that an agreeable personality should lead to a wider and stronger support network in retirement and consequently better adjustment., Robinson et al., (2010) found that agreeableness predicted life

satisfaction and positive experiences in those who had already retired. Although agreeableness was bivariately related to the retirement adjustment measure, it was not a statistically significant contributor to the model in the hierarchical linear regression once sociodemographic variables and other personality traits were controlled for. It is noted that the relationship between agreeableness and retirement adjustment has not been studied in much depth, especially compared to other traits such as neuroticism and conscientiousness. Serrat et al., (2017) discuss the difficulty of finding evidence in the literature for the relationship, and in their own study found that agreeableness was not related to retirement adjustment quality. Other authors argue that agreeableness, like extraversion, does not assist in a retirement setting as much as it would in a workplace setting (Robinson et al., 2010).

Neuroticism and retirement adjustment.

In the present study neuroticism was found to have a significant relationship with retirement adjustment both bivariately and multivariately when controlling for sociodemographic variables and other personality traits which confirms the findings in the literature (Löckenhoff et al., 2009; Reis & Gold, 1993; Robinson et al., 2010; Serrat et al., 2017).

Studies suggest that neurotic individuals tend to experience more negative emotions and maladaptive behaviour across various situations, such as retirement, which contributes to lower levels of retirement adjustment (Löckenhoff et al., 2009; Serrat et al., 2017). It is likely that neurotic individuals need more support when entering retirement to assist in this transitional period.

Openness to experience and retirement adjustment.

It was hypothesised in the current study that openness to experience was positively related to retirement adjustment. Reis and Gold's (1993) argue that a high level of openness to experience could lead individuals to explore new hobbies, ventures and interests which could lead to new sources of enjoyment in retirement. Spending time in these new ventures could help retirees broaden their horizons and adapt smoothly to retirement. Openness to experience has also been found to be related to life satisfaction in periods of change (Lounsbury et al., 2003), suggesting this may be relevant to the transition from work to retirement. While openness to experience and retirement adjustment were significantly correlated this relationship became non-significant when controlling for sociodemographic variables and other personality traits in multivariate analysis. Serrat et al., (2017) analysed this relationship and concluded that there was no relationship

The findings for hypothesis two lend empirical support to previous research findings highlighting the importance of personality in the retirement transition, specifically the personality traits of conscientiousness and neuroticism (Henning et al., 2017; Löckenhoff et al., 2009; Reis & Gold, 1993; Robinson et al., 2010; Serrat et al., 2017; Wang & Takeuchi, 2007). Robinson et al., (2010) found that conscientiousness and neuroticism were related to life satisfaction in retirement. In their study neuroticism was the strongest predictor of life satisfaction, and most robustly linked to retirement in their study. Robinson et al., (2010) suggest that emotional stability is intimately linked to quality of life around the retirement transition. These researchers also argue that conscientiousness seems to promote satisfaction in retirement as conscientiousness facilitates effective self-regulated activities when time-management is self-determined, such as in retirement. Robinson et al. (2010) also found a significant relationship between agreeableness and life

satisfaction in retirement, which was not found in the present study. Robinson et al. (2010) used a Satisfaction with Life Scale (SWLS) to measure life satisfaction, which is different than the CASP-12 used in the current study. Robinson et al. (2010) also utilised a different personality measure; the ten-item personality measure (TIPI). Using both of these different measures could have contributed to the different results experienced in both the present study and the study by Robinson et al. (2010). The procedure and sample used by Robinson et al. (2010) was also different, with a survey used instead of longitudinal study, and a sample consisting of 86 individuals planning to retire, and 279 individuals already retired, which was different to the HWR study wherein the same individuals answered surveys over time before and after retirement. Unlike the HWR study, individuals were recruited into the study by Robinson et al. (2010) via a recruitment services website, and participants would need to find out about the study through online or an email newsletter. Therefore, this sample will be more biased towards those individuals more comfortable with IT, meaning that the sample is unlikely to be randomly distributed across income levels and job sectors (Robinson et al., 2010).

It was assumed that certain socio-demographic variables would influence retirement adjustment. In the present study, living-demographic variables are represented by age, ethnicity and gender, and both time in retirement and living standards (represented by the ELSI short form scores) are also included as control variables. All control variables included in analyses were based in either theory (Topa et al., 2014; Wang & Shi, 2013) or to ensure consistency with previous literature on bridge employment, personality or retirement adjustment. In the present study, age, time in retirement and living standards were associated with adjustment to retirement when entered in the regression model with the personality variables. This finding

implies that individuals take time to adjust to retirement – the longer an individual spends in retirement, the easier they find it to adapt. Age is also associated with adjustment to retirement when entered in the regression model with the personality variables as shown in Table 4, and it seems that the variables of age and time in retirement are strongly correlated, as shown in Table 3. Older individuals will generally have spent more time in retirement compared to younger individuals. In terms of the literature, past research has often used age as a control variable to check if they have any influence on overall results (for example, Löckenhoff et al., 2009; Robinson et al., 2010; Serrat et al., 2017).

In the current study, time in retirement was associated with retirement adjustment when added in the regression model with the personality variables, which is coherent with findings in the literature (Gall et al., 1997; Wang 2007). Time in retirement controlled for the fact that people's adjustment to retirement is affected by how long they have been in retirement. Gall et al. (1997) found evidence for retirement adjustment process over time for male retirees, and Wang (2007) postulated that retirees do not follow a uniform adjustment during the retirement process, and that events like high stress jobs before retirement or unhappy marriages could impact the time it took for individuals to adjust to retirement.

It is vital to note the importance that the control variable representing living standards (ELSI-sf) played in the regression model. The ELSI-sf total score contributed significantly to the model at both step 1 and 2 and was the biggest contributor to variance in the dependent variable of retirement adjustment. It was theorised that individuals with higher living standards would find adjustment to retirement easier than individuals with lower socioeconomic standards. Future research may examine the impact of socioeconomic status on both bridge employment

and retirement adjustment in greater depth. Socioeconomic status is an important consideration as it enables individuals to access more resources – either because of higher income, access to higher education or access to health benefits through individual's lifespan, including in retirement (Präg, Mills & Wittek, 2016).

Individuals that have lower socioeconomic status may not be able to afford medical treatments to assist them in retirement, or access to mechanisms that could prevent issues in wellbeing (Adler et al., 1994). Financial imperatives such as these may encourage individuals to keep working, in either a full-time career or by engaging in bridge employment. Previous research involving socioeconomic status measures and bridge employment has been completed in the past such as research by Smaliukiene and Tvaronavičienė (2014). Smaliukiene and Tvaronavičienė (2014) discuss bridge employment on a macro level and found that factors such as wealth, organisational culture and family and personal priorities affect active transition from career to retirement. These factors are important to consider when examining bridge employment on a macro level and when considering policy (Smaliukiene and Tvaronavičienė, 2014).

4.3 Hypothesis 3

Hypothesis 3 predicted that the relationship between personality and retirement adjustment would be mediated by bridge employment. According to Baron and Kenny's mediation model (1986), the lack of a relationship between bridge employment and personality (path a in figure 1) means mediation cannot occur, and thus hypothesis was not supported

The bridge employment variable was not significantly related with other variables (except for time in retirement variable) in the correlation analysis.

Methodological issues regarding this variable and their possible influence on findings have been discussed above.

4.4 General Limitations

One of the main limitations of this study relates to the use of secondary data. In the current study specific questions about the nature of bridge employment were not able to be asked of participants. The bridge employment variable was formatted based on categories of work status (full-time, part-time, and retired) in each biennial wave across the 10 years from 2006 and 2016. This does not take into account whether the individuals undertaking bridge employment are doing so in the same field or in different fields. This can have a myriad of potential implications for the work to retirement transition experience. For instance, being employed in the same field has various advantages, such as the individual having experience and routine to draw on. Bridge employment in other fields also has advantages, such as being ‘a breath of fresh air’ for individuals, versus the cost of potential lack of experience in that field. Bridge employment in different fields may not have the same financial reimbursement as previous occupational employment (because of the lack of experience). Individuals in previous positions of power in organisations may have to relinquish this power (and the benefits it provides) for a low power role in an unknown field. Future studies should consider bridge employment in more depth and the lack of specificity regarding bridge employment should be addressed.

The current study did not focus on the types of work that individuals were engaged in before retirement. Some kinds of work are more conducive to a flexible work environment and therefore more appropriate to undertake as bridge employment. Rau and Adams (2005) found that flexible schedules and equal employment opportunities increased retiree’s likelihood of engaging in bridge

employment. It is likely that in the future more and more types of work will be able to be experienced as bridge employment as work places become more flexible, and the benefits of bridge employment become more widespread. Organisations that provide more opportunities for older workers have also become more widespread (Phillipson, Shepherd, Robinson, & Vickerstaff, 2019).

Due to the use of secondary data, in the current study individuals were not asked the reasons why they undertook bridge employment nor determined their motivations for doing so. For individuals, engaging in bridge employment may assist in meeting needs, such as social needs and providing specific resources, such as financial resources (Zhan & Wang, 2015). Future research could consider the personal, social and financial reasons why individuals undertake bridge employment and how these might impact on resource accumulation.

Access to bridge employment was a subject not explored in the current study. Individuals may struggle to access bridge employment, and if they are unable to do so may struggle to adjust to retirement (Dingemans & Henkens, 2014). An individual that has a choice and is successful in engaging in bridge employment will generally enjoy retirement more and is more likely to utilise the resources that bridge employment can offer (Dingemans & Henkens, 2014). Individuals may feel forced into undertaking bridge employment because of financial imperatives or organisational restructuring, which may cause issues in the retirement transition. Dingemans et al. (2016) also mention that older individuals may find it difficult to find employment because of age related discrimination.

The measures used to assess personality and individual's wellbeing in this study were self-report measures. Self-report measures offer insights into participants'

perspectives and personal experiences but are not objective. It could be argued that some individuals in the sample present what they think is considered acceptable ways of behaving and acting. However, Chan (2009) states that there is no strong evidence that leads researchers to conclude that self-reported data is inherently flawed or that their use will impede the interpretation of correlations.

The present study exhibits uniqueness in terms of sample which could cause an issue when attempting to generalise findings from the research. Māori were over-sampled in this study; however, this was counteracted by utilising ethnicity as a control variable in analyses. This sample is also generally healthy and financially stable, which may be different than the actual population. The age of individuals in this sample ranged from 58 to 83.

Although this study utilised longitudinal data it did not examine changes in resources over time, which is a key part of the resource dynamic perspective. Due to the use of secondary data, some resources and the changes of said resources were unable to be examined and is something that should be considered in future research.

In the current study retirement adjustment was operationalised using a quality of life measurement, the CASP-12. It could be argued that the CASP-12 was not the most relevant measure to use in this instance, because of its specificity on quality of life, instead of a focus on retirement adjustment. However, other works in the literature have also used the CASP-12 to research retirement adjustment, such as the recent study by Topa and Pra (2018) examining optimism and self-efficacy as antecedents of resource accumulation, and by extension, retirement adjustment quality. Perhaps a more specific measure would produce different results in the current study. More specific measures may provide elucidation on the relationship

between bridge employment and retirement adjustment, which was found to be unsupported in the current study, for example. An option of a different measure includes a measure of psychological wellbeing, such as Radloff's CES-D scale (1977), which was used by Wang (2007) to help measure retirement adjustment.

It is important to note that the big five is a way to research and conceptualise fundamental dimensions of personality (Wilt & Revelle, 2017), whilst also examining universality across cultures (Church, 2016). Generally, the big five translates well across cultures, but occasionally research on response styles and measurement invariance raises questions about cross-cultural trait comparisons (Church, 2016). However, for the current study, the big five are more than sufficient to provide information about the various cultures present in the study as they have been examined in previous studies successfully (Packman et al, 2005; Reese et al, 2014; Reese et al, 2017).

4.5 Future Directions

The present research illuminates potential future directions for studies looking at the role of bridge employment and personality in relation to retirement adjustment.

There is little to no research undertaking examining bridge employment in New Zealand, and as New Zealand has an ageing population, further studies on this topic will prove invaluable. Further research on the topic of bridge employment in New Zealand could examine any cultural differences in bridge employment. Usage of longitudinal studies such as the HWR which oversamples for Māori, will aid in this endeavour.

Other personality dimensions could be explored, such as utilising the HEXACO model of personality structure (Ashton et al., 2004), or Eysenck's

Personality questionnaire or EPQ, (Eysenck & Eysenck, 1975). The HEXACO model includes another dimension of personality, compared to the big 5, and adds two factors; honesty-humility and emotionality, whilst removing neuroticism (Ashton et al., 2004). The HEXACO model can assist when trying to analyse risk-taking behaviour (Weller & Tikir, 2011), which may be an interesting domain to explore when considering the risks involved in individuals choosing to engage or not to engage in bridge employment. The EPQ is similar to the big 5 in that it examines some of the same characteristics, much like the HEXACO model. The trait that the EPQ examines that is separate and distinct from the big 5 is the psychoticism/socialisation trait, a trait that is associated with aggressiveness, manipulative behaviour and assertiveness (Eysenck, Eysenck, & Barrett, 1985). The EPQ could be an asset when considering bridge employment when wanting to determine whether psychoticism as a trait has any relationship with either bridge employment or retirement adjustment. Examining these personality components may give researchers a greater understanding of the underlying mechanisms between these relationships.

Further research could examine Holland's six vocational personality types (1973) and relate these to both retirement adjustment and bridge employment. Holland's six vocational personality types are as follows; realistic, investigative, artistic, social, conventional and enterprising. Each of these vocational types correspond to a variety of different careers, such as realistic vocations wherein people's personal strengths lie in physical abilities and coordination, or enterprising vocations where personal strengths correspond to persuasion, leadership and sales – leading to a good fit in management or politics (Holland, 1997). These vocational types may affect the types of bridge employment undertaken. Cotter and Fouad

examined the relationship between the vocational personality types, the FFM and subjective wellbeing (2011). Whilst the authors found no significant correlation between subjective wellbeing and the vocational personality types, significant relationships were found between the FFM and the vocational personality types. For example, Cotter and Fouad (2011) found that there were significant relationships between extraversion and the vocational personality types of investigative, social and enterprising (social and enterprising vocational types often have a preference for social encounters) and a strong positive correlation between openness to experience and artistic (a vocational type where personal strengths correspond to creative and original activities, and generally avoids repetitive activities). This provides researchers with the opportunity to further explore the relationship between personality and vocational personality, as well as examine the relationship between bridge employment and vocational personality type. This may be useful as individuals could find aptitude in specific bridge employment scenarios. For example, an individual that has a social vocational type may find it more valuable to engage bridge employment in a job that emphasises the value of social encounters, such as sales. By engaging in bridge employment that suits specific vocational types, individuals may attain vocational satisfaction (Hollard, 1997) which will make bridge employment more satisfying and enjoyable.

In the current study, the role of a partner in retirement was not explored. A partner also approaching retirement may have significant effects on whether an individual will consider bridge employment. Decisions such to undertake bridge employment are not made in a vacuum and a partner will undoubtedly have input on an individual making that decision. Couple's joint decision making about retirement is discussed by Feldman and Beehr (2011), and they state that much more attention

needs to be given to the financial well-being of a couple, instead of an individual, including examining the couple as a unit. This is particularly important as more couples are both working full-time outside the home when they retire (Feldman & Beehr, 2011). Kim and Feldman (2000) found that if an individual's partner was working, that individual would be more likely to engage in bridge employment. Understanding the family contexts in which these decisions are made is an important topic for future research.

Kerr and Armstrong-Stassen (2011) discussed important factors such as commitment and intention to work which should be considered in future analysis of bridge employment. There may be other factors related to work that impact on people's decisions regarding bridge employment such as job satisfaction and career satisfaction. Kerr and Armstrong-Stassen (2011) found that independence and personal fulfilment impacts individuals' decisions to engage in self-employed bridge employment, whereas work connection, continued contribution and new experiences impacted on people's decisions to engage in traditional wage and salaried bridge employment. Specific work-related variables should be considered when examining bridge employment in future research.

Future research should consider several factors that are not fully accounted for in this study; such as the relationship between bridge employment and volunteering., as volunteering could be a substitute for bridge employment – being less demanding than bridge employment and more attractive to individuals that want the opportunity to work for a larger cause (Waikayi, Fearon, Morris & McLaughlin, 2012). While the current study has focused on bridge employment, active work participation for retirees can take on many forms, both paid and unpaid (Kim & Feldman, 2000; Rudolph, de Lange & Van der Heijden, 2015), and it is possible that bridge employment and

volunteering can serve similar roles for those older individuals planning to leave full-time work. In relation to this, Mike et al. (2014) examined conscientiousness and its relationship to volunteering and stated that individuals with high conscientiousness were more likely to volunteer than those with low conscientiousness, and that volunteering provides an important niche for high-striving, conscientious individuals. There are similarities between bridge employment and volunteering, and it is not unlikely that bridge employment can also serve this niche, with the added benefit of remuneration. In the current study a relationship was not found between bridge employment and conscientiousness. For conscientious individuals, the reward of volunteering may provide much more achievement or accomplishment than bridge employment (particularly if bridge employment is perceived as not as emotionally rewarding as volunteering).

4.6 Conclusion

In summary, the present study investigated the relationships between bridge employment, personality and retirement adjustment. This study did not find support for the claim that bridge employment and personality are related. The results provide partial support for the claim that retirement adjustment may be influenced by personality, specifically the traits of neuroticism and conscientiousness. Bridge employment was not found to mediate the relationship between personality and retirement adjustment, as no significant relationship existed between bridge employment and personality. The socio-demographic factors that were included in the present study were age, ethnicity, socioeconomic living standards and individual's length of retirement. Socioeconomic status was found to be related to retirement adjustment with individuals with higher socioeconomic status reporting better adjustment to retirement than individuals with lower socioeconomic status. The

current study also provides evidence that the longer that individuals spend in retirement, the more likely it is that they will adjust to the lifestyle change that retirement represents. The control variable of age was also found to be related to retirement adjustment, and strongly related to time in retirement. Ethnicity was not found to be associated with retirement adjustment, specific personality traits, or bridge employment.

More research needs to be completed on bridge employment to understand its place in the retirement adjustment literature. Burkert and Hochfellner (2017) examined the role of bridge employment in relation to security, continuity and work ability within the retirement transition. They argue that public policy should focus on ensuring mechanisms are in place for providing support to those seeking to engage in bridge employment, as well as encourage heterogeneity within the workplace and allow older workers to participate to the best of their ability. By implementing these public policies, bridge employment may become more desirable for older workers to undertake.

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Appendix

The present study involved a secondary analysis of six waves of data collected for Massey University's Health, Work and Retirement Study, a longitudinal study of ageing (2006 to 2016). For access to other Health, Work and Retirement surveys used in the present study visit Massey University's HWR website, or visit this URL:

<http://www.massey.ac.nz/massey/learning/departments/school-of-psychology/research/hart/new-zealand-health-work-and-retirement-study/health-work-and-retirement-questionnaires.cfm>

Health, Work, and Retirement Survey: 2016

General instructions for completing the survey

Please read the following carefully

- All the information you give us is in confidence and will be used only for the purposes of the Health, Work and Retirement study.
- There are no right or wrong answers; we want the response that is best for you.
- It is important that you give your own answers to the questions.
- Do not linger too long over each question; usually your first response is best.
- Completion and return of this study implies consent to take part in the study.
- We are sorry that some questions appear repetitive, but please answer all questions that apply to you.

For each question in the survey you will be asked to provide either:

- a single answer that is most appropriate. These are the most common question types - for these items, please mark (e.g. ✓ or ✗) one box on each line in pen or pencil. If you make a mistake, simply scribble it out and mark the correct answer.
- one or more responses, as appropriate. For these items you will be instructed to 'Please tick all that apply'.
- a free text response. To provide free text, please print your response as clearly as possible on the line provided.

Example question and response: Please tick 'Yes' to indicate if a health professional has told you that you have any of the following conditions:

(Please tick <u>one</u> box on each line)	No	Yes, in the last 12 months	Yes, prior to the last 12 months
Sleep disorder	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stroke	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cancer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Please specify cancer type:	melanoma		

- a number: where a number or date is required, print the figure in the box provided.

Example question and response: How many of the following people are you in regular contact with? Please place a zero or a number in the square as appropriate:

Adult child(ren) and/or grandchild(ren)/mokopuna	5
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Thank you for taking the time to complete this questionnaire

If you need help to answer any questions please contact us either on the HART free-phone line 0800 100 134 or via email: hart@massey.ac.nz

Your health, wellbeing and quality of life

Q1 These are questions about your general health.

(Please tick one box on each line)

	Excellent	Very good	Good	Fair	Poor
In general, would you say your health is:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
In general, would you say your quality of life is:	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
In general, how would you rate your physical health?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
In general, how would you rate your mental health, including your mood and your ability to think?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
In general how would you rate your satisfaction with your social activities and relationships?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
In general, please rate how well you carry out your usual social activities and roles? (This includes activities at home, at work and in your community and responsibilities as a parent, child, spouse, employee, friend etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q2 All things considered, how satisfied are you with your life as a whole these days?
(Please tick one box)

Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q3 Please answer the following questions about yourself by indicating the extent of your agreement. Be as honest as you can throughout, and try not to let your response to one question influence your response to other questions. There are no right or wrong answers.

(Please tick one box on each line)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
There is not enough purpose in my life	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
To me, the things I do are all worthwhile	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Most of what I do seems trivial and unimportant to me	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I value my activities a lot	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I don't care very much about the things I do	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I have lots of reasons for living	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

The following questions are about activities you might do during a typical day.

Q4a. Does your health now limit you in these activities? If so how much?

(Please tick one box on each line)

	Yes, limited a lot	Yes, limited a little	No, not limited at all
<u>Moderate activities</u> , such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Climbing <u>several</u> flights of stairs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Walking one block	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Bathing or dressing yourself	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Q4b. To what extent are you able to carry out your everyday physical activities such as walking, climbing stairs, carrying groceries, or moving a chair? (Please tick one box)

Completely	Mostly	Moderately	A little	Not at all
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q4c. How would you rate your quality of life? (Please tick one box)

Very poor	Poor	Neither good nor poor	Good	Very good
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q5. During the past 4 weeks, how much of the time have you had any of the following problems with your work, or other regular daily activities as a result of your physical health?

(Please tick one box on each line)

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
<u>Accomplished less</u> than you would like	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Were limited in the <u>kind</u> of work or other activities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q6. During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

(Please tick one box on each line)

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
<u>Accomplished less</u> than you would like	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Did work or other activities <u>less carefully than usual</u>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q7. During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)? (Please tick one box)

Not at all	A little bit	Moderately	Quite a bit	Extremely
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q8 These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much time during the past 4 weeks:

(Please tick one box on each line)

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
Have you felt calm and peaceful?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Have you felt downhearted and depressed?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Did you have a lot of energy?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q9 During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, whānau, etc.)? (Please tick one box)

All of the time	Most of the time	Some of the time	A little of the time	None of the time
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q10 Below is a list of some of the ways you may have felt or behaved. Please indicate how often you have felt this way during the past week (7 days).

(Please tick one box on each line)

	Rarely or none of the time	Some or a little of the time	Occasionally or a moderate amount of the time	All of the time
I was bothered by things that usually don't bother me	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I had trouble keeping my mind on what I was doing	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I felt depressed	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I felt that everything I did was an effort	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I felt hopeful about the future	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I felt fearful	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
My sleep was restless	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I was happy	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I felt lonely	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I could not "get going"	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Q11 In the past 7 days, how would you rate your pain on average? (Please tick one box)

No Pain										Worst pain imaginable
0	1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10

Q12 In the past 7 days, how would you rate your fatigue on average? (Please tick one box)

None	Mild	Moderate	Severe	Very severe
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q13 How often have you been bothered by emotional problems such as feeling anxious, depressed or irritable? (Please tick one box)

Never	Rarely	Sometimes	Often	Always
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q14 Here is a list of statements that people have used to describe their lives or how they feel. We would like to know how often, if at all, you think the following applies to you.

(Please tick one box on each line)

	Often	Sometimes	Not often	Never
My age prevents me from doing the things I would like to	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I feel that what happens to me is out of my control	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I feel left out of things	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I can do the things that I want to do	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I feel that I can please myself what I do	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Shortage of money stops me from doing things I want to do	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I look forward to each day	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I feel that my life has meaning	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I enjoy the things that I do	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I feel full of energy these days	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I feel that life is full of opportunities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I feel that the future looks good for me	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Q15 How often do you take part in sports or activities that are:

(Please tick one box on each line)

	More than once a week	Once a week	One to three times a month	Hardly ever or never
...vigorous (e.g., running or jogging, swimming, aerobics)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
...moderately energetic (e.g., gardening, brisk walking)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
...mildly energetic (e.g., vacuuming, laundry/washing)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Q16 In the last 12 months, how many times have you seen a doctor or been visited by a doctor about your own health? By 'doctor' we mean any GP or family doctor, but not a specialist. (Please tick one box)

Never	1 time	2 times	3-5 times	6-11 times	12 times or more
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6

Q17 In the last 12 months, how many times have you yourself:

(Please tick one box on each line)

	Never	1 or 2 times	3 or 4 times	5 or more times
Used a service at, or been admitted to, a hospital	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Been admitted to hospital for one night or longer	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Gone to a hospital emergency department as a patient	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Consulted another health professional other than the above	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Q18 Please tick 'Yes' to indicate if a health professional has told you that you have any of the following conditions.

(Please tick <u>one</u> box on each line)	No	Yes, in the last 12 months	Yes, prior to the last 12 months
Arthritis or rheumatism	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Disorder of the neck or back (e.g. lumbago, sciatica, chronic back or neck pain, vertebrae or disc problems)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Diabetes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Disability	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Heart trouble (e.g., angina or heart attack)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
High blood pressure or hypertension	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Depression	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Other mental illness	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Respiratory condition (e.g., bronchitis, asthma)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Sleep disorder	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Stroke	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Active or chronic gout	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Active/chronic hepatitis, cirrhosis or other liver condition	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Cancer	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Please specify (e.g. lung, leukaemia, melanoma):			
Other illness	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Please specify:			

Q19 If you have had cancer, what is your current cancer treatment status? (Please tick one box)

<input type="checkbox"/> 1	Currently being treated	<input type="checkbox"/> 2	Finished treatment
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Q20 Can you see ordinary newsprint (with glasses or contact lenses if you usually wear them)? (Please tick one box)

Easily	With difficulty	Not at all
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Q21 Can you hear a conversation with one other person (even when wearing hearing aids)? (Please tick one box)

Easily	With difficulty	Not at all
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Q22 How would you describe the health of your teeth and mouth? (Please tick one box)

Excellent	Very good	Good	Fair	Poor
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q23 How many natural teeth do you have remaining? (Please tick one box)

Over 21	11-20	1-10	None
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<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
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Q24 To what extent are your missing natural teeth replaced by artificial teeth (bridge, denture, or implant?) (Please tick one box)

Fully	Partially	Not at all
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Q25 Can you bite and chew on hard foods such as a firm apple? (Please tick one box)

Yes, without difficulty	Yes, with difficulty	No
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Q26 In the past 12 months, have you gone to a dentist for check-ups or dental care? (Please tick one box)

For a check-up	For dental treatment	Haven't been
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Q27 During the past 12 months, have you avoided dental care that you needed for any of the following reasons? (Please tick all that apply)

<input type="checkbox"/> 1 Not affordable	<input type="checkbox"/> 1 Not considered to be necessary
<input type="checkbox"/> 1 Time constraints	<input type="checkbox"/> 1 Fear of the dentist
<input type="checkbox"/> 1 No place to receive this type of care close to home	<input type="checkbox"/> 1 Other reasons
<input type="checkbox"/> 1 No, I have not avoided dental care	

Q28 Have you completed any of the following? (Please tick all that apply)

<input type="checkbox"/> 1 A Will
<input type="checkbox"/> 1 A Living Will
<input type="checkbox"/> 1 An Enduring Power of Attorney
<input type="checkbox"/> 1 An Advance Care Plan
<input type="checkbox"/> 1 None of these
<input type="checkbox"/> 1 Don't know

Q29 During the past 6 months have you had a discussion with any of the following people about your preferences concerning the end of your life? (Please tick all that apply)

<input type="checkbox"/> 1 A specialist doctor
<input type="checkbox"/> 1 Your general practitioner
<input type="checkbox"/> 1 A nurse practitioner
<input type="checkbox"/> 1 A practice nurse
<input type="checkbox"/> 1 A social worker
<input type="checkbox"/> 1 A family member
<input type="checkbox"/> 1 Your enduring power of attorney or lawyer
<input type="checkbox"/> 1 A friend
<input type="checkbox"/> 1 A spiritual advisor

- Someone else
- I have not had a discussion about these matters during the last 6 months

The following questions are about your health and health related behaviours. Please tick the box that best answers each question.

Q30 In the past 12 months, how much of the time have you had any of the following problems?

(Please tick one box on each line)

	Never or rarely	Sometimes	Often
Problems sleeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling sad or blue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Memory problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heartburn, stomach pain, nausea, or vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tripping, bumping into things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Never	1-2 times	Often
Falling/Accidents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q31 Do you now take any of these medications at least 3-4 times a week?

(Please tick one box on each line)

	At least 3-4 times per week:	
	No	Yes
Two or more regular or extra strength (100mg or more) aspirins	<input type="checkbox"/>	<input type="checkbox"/>
Arthritis and pain medicines (e.g., Apo-Allopurinol, I-Profen, Panadol, Celebrex)	<input type="checkbox"/>	<input type="checkbox"/>
Ulcer and stomach medication (e.g., Famox, Losec, Somac, Ranitidine Arrow)	<input type="checkbox"/>	<input type="checkbox"/>
Blood pressure medicines (e.g., Betaloc, Atacand, Dilzem, Felo, Apo-Prazo)	<input type="checkbox"/>	<input type="checkbox"/>
Nitrate medicines (e.g., Duride Tabs, Corangin, Nitrolingual pump spray)	<input type="checkbox"/>	<input type="checkbox"/>
Anti-depressant medicines (e.g., Amitrip, Citalopram, Anten, Fluox, Loxamine)	<input type="checkbox"/>	<input type="checkbox"/>
Anticoagulants or blood thinners (e.g., warfarin)	<input type="checkbox"/>	<input type="checkbox"/>
Seizure medicines (e.g., Tegretol, Lamotrigine, Phenobarbitone PSM, Dilantin)	<input type="checkbox"/>	<input type="checkbox"/>
Nonprescription medicines for allergies or sleep problems (e.g., Phenergan)	<input type="checkbox"/>	<input type="checkbox"/>
Prescription sedatives or sleeping medicines (e.g., Apo-Zopiclone, Hypam, Ox-Pam, Normison, Nitrados)	<input type="checkbox"/>	<input type="checkbox"/>
Stronger Narcotic medications (e.g., Codeine Phosphate Tabs, Oxycontin, Tramal)	<input type="checkbox"/>	<input type="checkbox"/>

Q32a Have you, at any stage of your life, ever been a regular smoker?

- Yes No

Q32b If you currently consider yourself a regular smoker, how many do you think you would smoke on an average day? (Please tick one box)

1 to 10	11 to 20	21 to 30	31 or more	Not a regular smoker
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The below image is a guide to how many standard drinks there are in a range of alcoholic drinks. Please use this guide when answering the following questions about alcohol consumption.

1 STANDARD DRINK	SHOT OF 40% VODKA	=	330ML BOTTLE OF 4% BEER	=	100ML GLASS OF 13% WINE	2.5 STANDARD DRINKS	250ML GLASS OF 13% WINE	7 STANDARD DRINKS	BOTTLE OF 12% WINE
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Q33 During the past 12 months, on days that you drank, how many drinks did you usually have? (Please count 'one drink' to equal: a 330ml can or bottle of beer OR a 100ml glass of wine OR a 30ml shot of spirits OR a cocktail containing 1 shot OR a glass of sherry). (Please tick one box)

Less than 1	1	2	3	4	5 or 6	7, 8 or 9	10 or more
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8

Q34 During the past 12 months, on how many days did you drive a car or other vehicle within 2 hours of having 3 or more drinks? (Please tick one box)

Never	1-2 days	3-9 days	10-15 days	16-20 days	21 or more days
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6

Q35 During the past 12 months, how often did you have:
(Please tick one box on each line)

	4-5 times a week	Once a week	Once a month	Never				
	Daily or almost daily	2-3 times a week	2-3 times a month	Less than monthly				
A drink containing alcohol?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
4 or 5 drinks on 1 occasion?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8
6 or more drinks on 1 occasion?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8

Q36 If you 'Never' had a drink containing alcohol in the past 12 months, have you ever drunk alcohol in the past?

<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 2	No
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Q37 Have you ever felt that you ought to cut down on:

(Please tick <u>one</u> box on each line)	Yes	No	Not applicable (I do not do this)
...your drinking?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
...your smoking?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
...your use of prescription medication?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
...your use of drugs other than alcohol, tobacco or prescription medication?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
...your gambling?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

This section is about public transport.

Q38 In the last 12 months, have you used public transport to travel in your local area at all? By public transport we mean public buses, trains and ferries that anyone can use to travel in your local area

Yes **No** **If you ticked 'No' go to Q40**

Q39 Thinking about just the last four weeks, how often have you used public transport to travel in your local area? (Please tick one box)

Not at all this month **On 1-4 days this month** **On 5-9 days this month** **On 10-19 days this month** **On 20 days this month**

This section is about on-road driving, which is driving on public roads on which any member of the public can drive, excluding carparks, private driveways, and farm paddocks.

Q40 How anxious are you about driving? (Please tick one box)

Not anxious at all **Extremely anxious**

0 1 2 3 4 5 6 7 8 9 10

Q41 What is your current driving status? (Please tick one box)

Current driver **Past driver** **Never been a driver – please go to Q43**

Q42 How often do you drive? (Please tick one box)

Never **Less than once a month** **At least once a month but less than weekly** **Daily, or almost daily**

If you indicated that you are a current driver in Q41, please go Q45.

Q43 When was the last time you drove? (please provide answer in years and/or months)

Years ago **Months ago** **OR** **Never**

Q44 What is the main reason you stopped driving or never drove?

Whānau, family and friends

Q45 Do you attend any of the following?

(Please tick one box on each line)

	Yes, regularly	Yes, occasionally	No
Attend any religious meetings?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Meetings of any community/neighbourhood or social groups, such as clubs, lectures or anything else?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Q46 How many of the following, are you in regular contact with? Please place a zero or a number in the squares as appropriate:

Adult child(ren)	
Grandchild(ren)/mokopuna	
Other relatives (including your parents, siblings, and all family/whānau)	
Friends	

Q47 How far away does your nearest:

(Please tick one box on each line)

	Within 10 minutes walking distance		Within 1 hour by bus/train/car		Over 3 hours by bus/train/car	
	In the same building	Within 30 minutes walking distance	Within 3 hours by bus/train/car	Within 3 hours by bus/train/car	I don't have this relationship	
Child live?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Brother or sister live?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Other relative (not including your spouse/partner) live?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6

Q48 How often do you talk/text on the phone with any of the following people?

(Please tick one box on each line)

	2-3 times per week		At least monthly		Never/don't have this relationship	
	Daily	At least weekly	Less often			
Child(ren) or grandchild(ren)/mokopuna	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Any other relatives or family/whānau members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Neighbours	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Friends	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6

Q49 How often do you meet and spend time with any of the following people?

(Please tick one box on each line)

	2-3 times per week		At least monthly		Never/don't have this relationship	
	Daily	At least weekly	Less often			
Child(ren) or grandchild(ren)/mokopuna	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Any other relatives or family/whānau members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6

Neighbours	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Friends	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6

Q50 How often do you connect online to any of the following people?

(Please tick one box on each line)

	Daily	2-3 times per week	At least weekly	At least monthly	Less often	Never/don't have this relationship
		↓		↓		↓
Child(ren) or grandchild(ren)/mokopuna	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Any other relatives or family/whānau members	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Neighbours	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
Friends	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6

Q51 Do you provide unpaid care for:

(Please tick one box on each line)

	Yes, daily	Yes, weekly	Yes, occasionally	No, never	Not applicable (I have none)
your grandchildren/mokopuna?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
other people's children/whāngai?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q52 I contribute my time and/or labour to volunteer activities: (Please tick one box)

Very often	Often	Sometimes	Rarely	Never
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q53 How many hours do you contribute to volunteer activities per week?

Hours

Q54 Please indicate whether or not you give your time in any of the ways listed below. If 'yes', please indicate how many hours per week you give on average:

(Please tick one box on each line)

	No	Yes	Hours per week
Providing a good (e.g., serving food at a homeless shelter, providing books to schools)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	
Activism, campaigning or advocacy (e.g., raising funds for campaigns, writing letters)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	
Providing a community service (e.g., coaching a sports team, working in an opportunity shop)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	
Environmental stewardship (e.g., cleaning up park lands)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	
Mahi a whānau/Kapa haka, marae or hui	<input type="checkbox"/> 1	<input type="checkbox"/> 2	
Any other way of giving your time to the community	<input type="checkbox"/> 1	<input type="checkbox"/> 2	

Please specify:

Q55 Please indicate whether or not you belong to any of these types of organisations:

(Please tick one box on each line)

	No	Yes
Sports clubs	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Community or service organisations that help people	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Political party, trade union, or professional association, or business organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Religious, church, or other spiritual organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Hobby, leisure time, or arts association/group	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Group that support cultural traditions, knowledge or arts	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Any other, club, lodge or similar organisation	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Please specify:		

For each of the following statements and/or questions, please tick the option that you feel is most appropriate in describing you.

Q56 In general, I consider myself: (Please tick one box)

Not a very happy person						A very happy person
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

Q57 Compared to most of my peers, I consider myself: (Please tick one box)

Less happy						More happy
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

Q58 Please indicate for each of the statements below, the extent to which they apply to the way you feel now.

(Please tick one box on each line)

	Yes	More or less	No
I experience a general sense of emptiness	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
There are plenty of people I can rely on when I have problems	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
There are many people I can trust completely	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
There are enough people I feel close to	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
I miss having people around	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
I often feel rejected	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

Q59 Think about your current relationships with friends, family/whānau members, co-workers, community members and so on. To what extent do you agree that each statement describes your current relationships with other people?

(Please tick one box on each line)

	Strongly Disagree	Disagree	Agree	Strongly Agree
There are people I can depend on to help me if I really need it	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I feel that I do not have close personal relationships with other people	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There is no one I can turn to for guidance in times of stress	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There are people who depend on me for help	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There are people who enjoy the same social activities I do	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Other people do not view me as competent	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I feel personally responsible for the well-being of another person	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I feel part of a group of people who share my attitudes and beliefs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
	Strongly Disagree	Disagree	Agree	Strongly Agree
I do not think other people respect my skills and abilities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
If something went wrong, no one would come to my assistance	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I have close relationships that provide me with a sense of emotional security and well-being	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There is someone I could talk to about important decisions in my life	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I have relationships where my competence and skills are recognized	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There is no one who shares my interests and concerns	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There is no one who really relies on me for their well-being	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There is a trustworthy person I could turn to for advice if I were having problems	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
	Strongly Disagree	Disagree	Agree	Strongly Agree
I feel a strong emotional bond with at least one other person	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There is no one I can depend on for aid if I really need it	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There is no one I feel comfortable talking about problems with	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There are people who admire my talents and abilities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
I lack a feeling of intimacy with another person	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There is no one who likes to do the things I do	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
There are people I can count on in an emergency	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
No one needs me to care for them	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

These questions are about providing care for someone with a long-term illness, disability or frailty. By 'providing care' we mean practical assistance for at least 3 hours a week.

Q60 Have you cared for someone with a long-term illness, disability or frailty within the last 12 months?
(Please tick one box)

<input type="checkbox"/> ₁ Yes	<input type="checkbox"/> ₂ No	If you ticked 'No' please go to Q69
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Q61 In total, how many people with a long-term illness, disability or frailty do/did you regularly provide care for? (Please tick one box)

One person	Two people	More than two people
<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃

Please select the person you have cared for the longest. Tell us about that person and their circumstances at the time of care.

Q62 Approximately how old is/was the person you care(d) for?

<input type="text"/>	Years
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Q63 How long have/had you been caring for this person?

<input type="text"/>	Years	<input type="text"/>	Months
----------------------	-------	----------------------	--------

Q64 How often on average do (did) you provide this care or assistance? (Please tick one box)

Every day	Several times per week	Once a week	Once every few weeks	Less often
<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅

Q65 On average, how many hours per week did/do you care for this person?

<input type="text"/>	Hours per week
----------------------	----------------

Q66 Is the person you care(d) for your: (Please tick one box)

<input type="checkbox"/> ₁ Spouse or partner	<input type="checkbox"/> ₂ Mother-in-law or father-in-law
<input type="checkbox"/> ₃ Mother or father	<input type="checkbox"/> ₄ Brother or sister
<input type="checkbox"/> ₅ Son or daughter	<input type="checkbox"/> ₆ Friend
<input type="checkbox"/> ₇ Other relative/whānau member	<input type="checkbox"/> ₈ Other (please specify)

Q67 Does/did the person you care(d) for: (Please tick one box)

<input type="checkbox"/> ₁ Live with you	<input type="checkbox"/> ₂ Live alone
<input type="checkbox"/> ₃ Live with their family/whānau	<input type="checkbox"/> ₄ Live in a nursing home or care facility
<input type="checkbox"/> ₅ Live with their friends	<input type="checkbox"/> ₆ Other (please specify)

Q68 Does/did the person you care(d) for have any of the following major medical conditions or disabilities?

(Please tick all that apply)

<input type="checkbox"/> 1	Frailty in old age	<input type="checkbox"/> 1	Stroke
<input type="checkbox"/> 1	Intellectual disability	<input type="checkbox"/> 1	Mental health problem (e.g., depression)
<input type="checkbox"/> 1	Visual impairment	<input type="checkbox"/> 1	Cancer
<input type="checkbox"/> 1	Alzheimer's disease/dementia	<input type="checkbox"/> 1	Respiratory condition (e.g., asthma, emphysema)
<input type="checkbox"/> 1	Severe arthritis / rheumatism	<input type="checkbox"/> 1	Other (please specify)

Where you live

- Q69 Which one of the following options best describes the type of residence that you:
- a) currently live in (your primary residence) AND;
- b) would prefer to live in (i.e., the type of residence you would like to be living in currently) AND;
- c) would prefer to live in in the future (i.e., this could be the same as options (a) or (b) or your preferred housing type for your next move).

(Please tick one box in each column)

	(a) current type	(b) preferred current type	(c) preferred future type
House or townhouse – detached or 'stand alone'	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
House, townhouse, unit or apartment joined to one or more other houses, townhouses, units or apartments	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
Unit, villa or apartment in Retirement Village	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
Moveable dwelling (e.g., caravan, motor home, boat, tent)	<input type="checkbox"/> 4	<input type="checkbox"/> 4	<input type="checkbox"/> 4
Rest home or continuing care hospital	<input type="checkbox"/> 5	<input type="checkbox"/> 5	<input type="checkbox"/> 5
Other	<input type="checkbox"/> 6	<input type="checkbox"/> 6	<input type="checkbox"/> 6

Please specify, indicating whether the answer is for question(s) 'a', 'b' or 'c':

- Q70 In terms of the ownership arrangements your primary residence, your primary residence is:

(Please tick one box)

<input type="checkbox"/> 1	Owned by yourself and/or spouse/partner with a mortgage
<input type="checkbox"/> 2	Owned by yourself and/or spouse/partner without a mortgage
<input type="checkbox"/> 3	Owned by family/whānau
<input type="checkbox"/> 4	Owned by a family/whānau trust
<input type="checkbox"/> 5	Private rental
<input type="checkbox"/> 6	State, Council or Kaumātua housing
<input type="checkbox"/> 7	None of the above
<input type="checkbox"/> 8	Licence to occupy

Other

Please specify:

Q71 How long have you lived in your present home?

 Years

 Months

Q72 Do you plan to move to a new place of residence in the future? (Please tick one box)

No	Yes, within 12 months	Yes, within 5 years	Yes, within 10 Years	Yes, later than 10 years
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q73 Please rate your level of agreement to each of these statements in relation to your present home:

(Please tick one box on each line)

	No, definitely not		Neutral		Yes, definitely
I am worried about finding a suitable place to live	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I am satisfied with my house	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I am satisfied with my neighbourhood	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I am happy with the living conditions of my house	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My house enables me to see friends and family as often as I like	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My house enables me to participate in community activities as often as I like	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My house supports all my daily activities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My home meets all my needs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My house is difficult for me to maintain	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I am able to keep my house warm	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My house is easy for me to clean	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q74 Please rate your level of agreement to each of these statements in relation to your present neighbourhood:

(Please tick one box on each line)

	No, definitely not		Neutral		Yes, definitely
I feel safe at home	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I feel safe in my neighbourhood	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
The neighbourhood is peaceful	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I have peace of mind at home	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My neighbourhood is pleasant	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I am familiar with the area	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I can get around easily in my neighbourhood	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I can get to shops easily	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I have access to transport	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I live close enough to family	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I live close enough to friends	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I have enough human contact	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I am close enough to any help I need	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I have good neighbours	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

I am close enough to important facilities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I am able to pursue my interests	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q75 How long does it take you to get to your nearest health facility?

<input type="text"/>	Hours	<input type="text"/>	Minutes
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Q76 Please rate your level of agreement to each of these statements in relation to your present neighbourhood:

(Please tick <u>one</u> box on each line)	Strongly disagree		Neutral		Strongly agree
People in this area would do something if a house was being broken into	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
In this area people would stop children if they saw them vandalising things	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
People would be afraid to walk alone after dark	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
People in this area will take advantage of you	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
If you were in trouble, there are lots of people in this area who would help you	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Most people in this area can be trusted	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I really feel part of this area	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Most people in this area are friendly	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
People in this area have lots of community spirit	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
People in this area do things to help the community	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
	Strongly disagree		Neutral		Strongly agree
I feel comfortable asking my neighbour to collect a prescription if I am ill in bed	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I feel comfortable asking my neighbour to lend me \$5	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I feel comfortable confiding a personal problem to my neighbour	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Everybody in this area should have equal rights and an equal say	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
People in this area treat each other with respect	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
People in this area are tolerant of others who are not like them	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
People in this area respect one another's privacy	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
In this area there are some people who belong, and some people who don't	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
In this area there is pressure to be like everyone else	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

You are now over half-way through the questionnaire. Time for a cuppa or a break?



Your work and retirement status

Q77 If you are retired, at what age did you retire?

<input type="text"/>	Years of age	<input type="text" value="1"/>	I am not retired
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Q78 Which of the following best describes:

- a) Your **preferred** work status (i.e., what you would like to be doing) AND;
 b) Your **current** work status

(Please tick one box in each column)

	(a) preferred status	(b) current status	
Full-time paid work, for an employer	<input type="checkbox"/> 1	<input type="checkbox"/> 1	
Part-time paid work, for an employer	<input type="checkbox"/> 2	<input type="checkbox"/> 2	
Full time self-employed paid employment	<input type="checkbox"/> 3	<input type="checkbox"/> 3	
Part time self-employed paid employment	<input type="checkbox"/> 4	<input type="checkbox"/> 4	
Flexible work schedule negotiated with employer	<input type="checkbox"/> 5	<input type="checkbox"/> 5	
Project or contract work (short term and full time)	<input type="checkbox"/> 6	<input type="checkbox"/> 6	
Project or contract work (short term and part time)	<input type="checkbox"/> 7	<input type="checkbox"/> 7	
Fully retired, no paid work	<input type="checkbox"/> 8	<input type="checkbox"/> 8	
Full time homemaker	<input type="checkbox"/> 9	<input type="checkbox"/> 9	
Full time student	<input type="checkbox"/> 10	<input type="checkbox"/> 10	
Unable to work due to health or disability issue	<input type="checkbox"/> 11	<input type="checkbox"/> 11	
Unemployed and seeking work	<input type="checkbox"/> 12	<input type="checkbox"/> 12	

If your **current** work status is here, go to Q79

If your **current** work status is here, go to Q83

Other

Please specify:

 13

 13

Q79 Which of the following best describes your current occupation? (Please tick one box)

<input type="checkbox"/> 1	Labourer (e.g., cleaner, food packer, farm worker)
<input type="checkbox"/> 2	Machinery operator/driver (e.g., machine operator, store person)
<input type="checkbox"/> 3	Sales worker (e.g., insurance agent, sales assistant, cashier)
<input type="checkbox"/> 4	Community or personal service worker (e.g., teacher aide, armed forces, hospitality worker, carer)
<input type="checkbox"/> 5	Technician/trades worker (e.g., engineer, carpenter, hairdresser)
<input type="checkbox"/> 6	Professional (e.g., accountant, doctor, nurse, teacher)
<input type="checkbox"/> 7	Manager (e.g., general manager, farm manager)
<input type="checkbox"/> 8	Other
Please specify:	

Q80 How many hours do you currently work in paid employment per week?

<input type="text"/>	Hours
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Q81 How long have you worked for your current employer?

<input type="text"/>	Years
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Q82 Which of the following best describes your current work?

(Please tick <u>one</u> box on each line)	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree
I feel fairly well satisfied with my present job	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Work should only be a small part of one's life	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I am satisfied with the progress I have made toward meeting my overall career goals	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I find my job to be very stressful	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My job makes it difficult to be the kind of spouse or parent I'd like to be	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q83 Have you ever served in the military?

<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 2	No
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Q83a If yes, which branch did you serve in? (Please tick all that apply)

<input type="checkbox"/> 1	NZ Army
<input type="checkbox"/> 1	NZ Navy
<input type="checkbox"/> 1	NZ Airforce
<input type="checkbox"/> 1	NZ Merchant Navy

Other (e.g. military force of another country, civilian deployed as part of NZDF, Land girl during WW2)

Please specify:

Your financial wellbeing

Next we ask about your financial circumstances, please be assured that your answers to these questions are completely confidential.

Please see notes at the back of the questionnaire to help work out your income if needed.

Q84a From all sources of income, what do you expect your annual personal income before tax to be this financial year?

(Please tick one box)

<input type="checkbox"/> 1	loss
<input type="checkbox"/> 2	zero income
<input type="checkbox"/> 3	\$1 - \$5,000
<input type="checkbox"/> 4	\$5,001 - \$10,000
<input type="checkbox"/> 5	\$10,001 - \$15,000
<input type="checkbox"/> 6	\$15,001 - \$20,000
<input type="checkbox"/> 7	\$20,001 - \$25,000
<input type="checkbox"/> 8	\$25,001 - \$30,000
<input type="checkbox"/> 9	\$30,001 - \$35,000
<input type="checkbox"/> 10	\$35,001 - \$40,000
<input type="checkbox"/> 11	\$40,001 - \$50,000
<input type="checkbox"/> 12	\$50,001 - \$60,000
<input type="checkbox"/> 13	\$60,001 - \$70,000
<input type="checkbox"/> 14	\$70,001 - \$100,000
<input type="checkbox"/> 15	\$100,001 - \$150,000
<input type="checkbox"/> 16	\$150,001 - \$200,000
<input type="checkbox"/> 17	\$200,001 or more

Q84b From all sources of income, what do you expect your annual household income before tax to be this financial year?

(Please tick one box)

<input type="checkbox"/> 1	loss
<input type="checkbox"/> 2	zero income
<input type="checkbox"/> 3	\$1 - \$5,000
<input type="checkbox"/> 4	\$5,001 - \$10,000
<input type="checkbox"/> 5	\$10,001 - \$15,000
<input type="checkbox"/> 6	\$15,001 - \$20,000
<input type="checkbox"/> 7	\$20,001 - \$25,000
<input type="checkbox"/> 8	\$25,001 - \$30,000
<input type="checkbox"/> 9	\$30,001 - \$35,000
<input type="checkbox"/> 10	\$35,001 - \$40,000
<input type="checkbox"/> 11	\$40,001 - \$50,000
<input type="checkbox"/> 12	\$50,001 - \$60,000
<input type="checkbox"/> 13	\$60,001 - \$70,000
<input type="checkbox"/> 14	\$70,001 - \$100,000
<input type="checkbox"/> 15	\$100,001 - \$150,000
<input type="checkbox"/> 16	\$150,001 - \$200,000
<input type="checkbox"/> 17	\$200,001 or more

Q85 Do you currently receive New Zealand Superannuation or Pension?

a Veteran's

(Please tick one box)

<input type="checkbox"/> 1	Single rate	<input type="checkbox"/> 2	Couple rate	<input type="checkbox"/> 3	No
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Q86 How many people inside and beyond your household, excluding yourself, are dependent on you for their financial support?

Total number of people:

OR

I have no financial dependents

Q87 For the following questions, please indicate whether or not you have (or have access to) the item:

(Please tick <u>one</u> box on each line)	Yes, I have it	No, because I don't want it	No, because of the cost	No, for some other reason
Telephone	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Washing machine	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
At least two pair of good shoes	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Suitable clothes for important or special occasions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Personal computer	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Home contents insurance	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Enough room for family/whānau to stay the night	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Q88 For the following questions, please indicate whether or not you do the activity:

(Please tick <u>one</u> box on each line)	Yes, I do it	No, because I don't want to	No, because of the cost	No, for some other reason
Keep the main rooms of your home adequately heated	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Give presents to family/whānau or friends on birthdays, Christmas or other special occasions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Visit the hairdresser at least once every three months	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Have holidays away from home for at least a week every year	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Have a holiday overseas at least every three years	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Have a night out for entertainment or socialising at least once a fortnight	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Have family/whānau or friends over for a meal at least once every few months	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Q89 The following are a list of things some people do to help keep costs down. In the last 12 months, have you done any of these things?

(Please tick <u>one</u> box on each line)	Not at all	A little	A lot
Gone without or cut back on fresh fruit and vegetables to help keep down costs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Continued wearing clothing that was worn out because you couldn't afford a replacement	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Put off buying clothes for as long as possible to help keep down costs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Stayed in bed longer to save on heating costs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Postponed or put off visits to the doctor to help keep down costs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
NOT picked up a prescription to help keep down costs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Spent less time on hobbies than you would like to help keep down costs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
Gone without or cut back on trips to the shops or other local places to help keep down costs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

The following questions are about your material standard of living – the things that money can buy. Your material standard of living does NOT include your capacity to enjoy life. You should NOT take your health into account.

Q90 Generally, how would you rate your material standard of living? (Please tick one box)

High	Fairly high	Medium	Fairly low	Low
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q91 Generally, how satisfied are you with your current material standard of living? (Please tick one box)

Very satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Very dissatisfied
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q92 How well does your total income meet your everyday needs for such things as accommodation, food, clothing and other necessities? (Please tick one box)

Not enough	Just enough	Enough	More than enough
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Q93 Below are statements that people have made about their standard of living. Please indicate how true these statements are for you.

(Please tick <u>one</u> box on each line)	Not true for me at all				Definitely true for me
I can afford to go to a medical specialist if I need to	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I am able to visit people whenever I wish	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I am able to give to others as much as I want	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I am able to do all the things I love	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I expect a future without money problems	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
My choices are limited by money	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I can afford to go to a dentist if I need to	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Your personal situation

Q94 What gender do you identify as? (Please tick one box)

<input type="checkbox"/> 1	Male / Tāne
<input type="checkbox"/> 2	Female / Wāhine
<input type="checkbox"/> 3	Gender diverse (please specify)

Q95 Do you identify as: (Please tick one box)

<input type="checkbox"/> 1	Heterosexual/Straight
<input type="checkbox"/> 2	Gay/Lesbian
<input type="checkbox"/> 3	Bisexual
<input type="checkbox"/> 4	Other (please specify)

- 5 Uncertain
- 6 Prefer not to answer

Q96 When were you born?

D	D	/	M	M	/	1	9	Y	Y	DD/MM/YYYY
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Q97 Which one of these statements is true about you? (Please answer for your **current**, marriage, partnership or situation). (Please tick one box)

- 1 I am married 2 I am a widow or widower
- 3 I am in a civil union/de facto/partnered relationship 4 I am single
- 5 I am divorced or permanently separated from my legal husband or wife

Q98 What is your highest educational qualification? (Please tick one box)

- 1 No qualifications
- 2 Secondary school qualifications (e.g., School Certificate, University entrance, NCEA)
- 3 Post-secondary certificate, diploma, or trade diploma
- 4 University degree

Q99 Please tick as many options as you need to indicate all the people who live in the same household as you. Please also put in the number of people. If you live alone, please tick the option at the bottom of the table.

(Please tick <u>all</u> that apply)	Yes	Number 18yrs <u>or</u> <u>over</u>	Number <u>under</u> 18yrs
My partner or de facto, boyfriend or girlfriend	<input type="checkbox"/> 1		
My parent(s) and/or parent(s)-in-law	<input type="checkbox"/> 1		
My son(s) and/or daughter(s)	<input type="checkbox"/> 1		
My sister(s) and/or brother(s)	<input type="checkbox"/> 1		
My flatmate(s)	<input type="checkbox"/> 1		
My grandchild(ren)/mokopuna	<input type="checkbox"/> 1		
My friend(s)	<input type="checkbox"/> 1		
My boarder(s)	<input type="checkbox"/> 1		
Others Please specify:	<input type="checkbox"/> 1		
None of the above – I live alone	<input type="checkbox"/> 1		

Q100 Please indicate below which ethnic group or groups you belong to: (Please tick all that apply)

- 1 New Zealand European 1 Niuean
- 1 Māori 1 Chinese
- 1 Samoan 1 Indian

<input type="checkbox"/> 1	Cook Island Māori	<input type="checkbox"/> 1	Tongan
<input type="checkbox"/> 1	Other (please specify e.g., Dutch, Japanese, Tokelauan)		

Q101 Please indicate below which ethnic group you feel you identify with the most: (Please tick one box)

<input type="checkbox"/> 1	New Zealand European	<input type="checkbox"/> 5	Niuean
<input type="checkbox"/> 2	Māori	<input type="checkbox"/> 6	Chinese
<input type="checkbox"/> 3	Samoan	<input type="checkbox"/> 7	Indian
<input type="checkbox"/> 4	Cook Island Māori	<input type="checkbox"/> 8	Tongan
<input type="checkbox"/> 9	Other (please specify e.g., Dutch, Japanese, Tokelauan)		

Q102 Please answer the following questions about the ethnic group you said you most identify with in Q101.

(Please tick one box on each line)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have spent time trying to find out more about my ethnic group, such as history, traditions, and customs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I have a strong sense of belonging to my own ethnic group	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I understand pretty well what my ethnic group membership means to me	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I have often done things that will help me understand my ethnic background better	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I have often talked to other people in order to learn more about my ethnic group	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I feel a strong attachment towards my own ethnic group	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Other people consider me a cultural resource	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

If you have Māori ancestry, please go to Q103

If you DO NOT have Māori ancestry, please turn to Q113

Q103 Do you identify as Māori? (Please tick one box)

<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 2	No
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Q104 How many generations of your Māori ancestry can you name? (Please tick one box)

<input type="checkbox"/> 1	1 generation (parents)	<input type="checkbox"/> 3	3 generations (great-grandparents)
<input type="checkbox"/> 2	2 generations (grandparents)	<input type="checkbox"/> 4	More than 3 generations

Q105 Have you ever been to a marae? (Please tick one box)

<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 2	No	If you ticked 'No' go to question 109
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Q106 How often over the past 12 months? (Please tick one box)

Not at all	Once	A few times	Several times	More than once a month
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Q107 How long does it take to get to your marae by car?

<input type="text"/>	Hours	<input type="text"/>	Minutes	OR	<input type="checkbox"/> 1	Do not visit my marae	<input type="checkbox"/> 2	Live on or by my marae
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Q108 In the past 12 months have you filled any of the following roles:

(Please tick <u>all</u> that apply)	On your marae	Somewhere other than on your marae
Kai karanga Kai/Pou kōrero	<input type="checkbox"/> 1	<input type="checkbox"/> 1
Ringa wera	<input type="checkbox"/> 1	<input type="checkbox"/> 1
Kai mahi/general help	<input type="checkbox"/> 1	<input type="checkbox"/> 1
Marae board member	<input type="checkbox"/> 1	<input type="checkbox"/> 1
Mahi wairua/religious services	<input type="checkbox"/> 1	<input type="checkbox"/> 1
Representation at hui/runanga	<input type="checkbox"/> 1	<input type="checkbox"/> 1
Other (e.g. manutaki, kai kōhi kōhā). Please specify:	<input type="checkbox"/> 1	<input type="checkbox"/> 1
None of the above	<input type="checkbox"/> 1	<input type="checkbox"/> 1

Q109 In terms of your involvement with your whānau, would you say that your whānau plays: (Please tick one box)

A very large part in your life	A large part in your life	A small part in your life	A very small part in your life
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Q110 Do you have a financial interest in Māori land (i.e., as an owner, part/potential owner or beneficiary)? (Please tick one box)

<input type="checkbox"/> 1	Yes	<input type="checkbox"/> 2	No	<input type="checkbox"/> 3	Not sure/don't know
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Q111 This question considers your contacts with people. In general, would you say that your contacts are with: (Please tick one box)

Mainly Māori	Some Māori	Few Māori	No Māori
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Q112 How would you rate your overall ability with Māori language? (Please tick one box)

Excellent	Very good	Good	Fair	Poor	None
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6

Q113 Here are a number of characteristics that may or may not apply to you. Please indicate the extent to which you agree or disagree with each statement. I am a person who...

(Please tick one box on each line)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
is talkative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tends to find fault with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
does a thorough job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is depressed, blue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is original, comes up with new ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is reserved	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is helpful and unselfish with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
can be somewhat careless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is relaxed, handles stress well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is curious about many different things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is full of energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
starts quarrels with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is a reliable worker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
can be tense	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is ingenious, a deep thinker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
generates a lot of enthusiasm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
has a forgiving nature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tends to be disorganized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
worries a lot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
has an active imagination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tends to be quiet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is generally trusting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tends to be lazy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is emotionally stable, not easily upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is inventive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
has an assertive personality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
can be cold and aloof	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
perseveres until the task is finished	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
can be moody	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
values artistic, aesthetic experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is sometimes shy, inhibited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is considerate and kind to almost everyone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
does things efficiently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
remains calm in tense situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
prefers work that is routine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is outgoing, sociable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
is sometimes rude to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
makes plans and follows through with them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
gets nervous easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
likes to reflect, play with ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
has few artistic interests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
likes to cooperate with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

is easily distracted

1

2

3

4

5

is sophisticated in art, music, or literature

1

2

3

4

5

This consent form will be kept as a confidential record of your participation by the Health and Ageing Research Team. As with all study materials, these forms will be destroyed five years after the completion of the study.

CONFIDENTIAL CONTACT DETAILS

We have found that over the years peoples circumstances might change (e.g., they move house) and that we can lose track of people if they don't let us know their new postal address. To address this we would like to ask that you to provide an alternative method of contacting you (phone and/or email), and to nominate one person whom we can contact in the event that we lose track of you. You do not have to do this, but it would help us. Please ensure that the person you name is happy to act as contact person. We will only contact this person in the event that we cannot locate you.

Your Name: _____
First name Surname

Your phone number: _____

Your email:

Your contact person's name: _____
First name Surname

Your contact person's number: _____

Your contact person's email:

Thank you!

This information will be kept separately from your survey response.

Guide notes

Why do you want to know my income?

Information such as income are used to help determine how well respondents to the New Zealand Health, Work and Retirement survey represent the general New Zealand population and whether income is a feature in ageing well. All of the answers you give are kept confidential.

How do I work out my annual personal/household income?

Remember:

- If you and your spouse / partner earn income jointly, only include your part of that income when reporting your personal income.
- Count any payments that are taken out of your income **before** you get it, such as repayments of student loans, union fees, fines or child support.
- DON'T count loans (including student loans), inheritances, sale of household or business assets, lottery wins, matrimonial / civil union / de facto property settlements or one-off lump sum payments.
- DON'T count money given by members of the same household to each other. For example, pocket money given to children, or money given for housekeeping expenses by a flatmate.

Calculating annual income before tax: If you know your weekly or fortnightly income **after tax**, use this table to work out your annual income **before tax**.

After tax weekly income\$	After tax fortnightly income \$	Before tax annual income \$
up to 86	up to 17	21 – 5,000
87 – 172	173 – 343	5,001 – 10,000
173 – 256	344 – 512	10,001 – 15,000
257 – 335	513 – 671	15,001 – 20,000
336 – 414	672 – 829	20,001 – 25,000
415 – 493	830 – 987	25,001 – 30,000
494 – 573	988 – 1,145	30,001 – 35,000
574 – 652	1,146 – 1,303	35,001 – 40,000
653 – 805	1,304 – 1,610	40,001 – 50,000
806 – 939	1,611 – 1,879	50,001 – 60,000
940 – 1,074	1,880 – 2,147	60,001 – 70,000
1,075 – 1,459	2,148 – 2,918	70,001 – 100,000
1,460 – 2,102	2,919 – 4,203	100,001 – 150,000
2,103+	4,204+	150,001+

Standard NZ Super: these are the approximate standard **before tax** rates for NZ Super.

Single, living alone		\$20,007.52
Single, sharing accommodation		\$18,468.32
Married person or partner in a civil union or de facto relationship		\$15,390.44
Married or in a civil union or de facto relationship, both qualify	Total	\$30,780.88
	Each	\$15,390.44
Married or in a civil union or de facto relationship, non-qualified partner included on or after 1 October 1991	Total	\$29,255.20
	Each	\$14,627.60
Married, non-qualified partner included before 1 October 1991	Total	\$30,780.88
	Each	\$15,390.44
Qualified partner in rest home with non-qualified partner in the community		\$13,657.28
Hospital rate		\$2,259.40