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Psychological and Socioeconomic Factors Influencing Men and Women’s Planning for Retirement

A thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Psychology at Massey University, Turitea, New Zealand.

John Hamilton Noone

2010
Abstract

Concerns for the future well-being of the Post World War II “Baby Boom” generation continue to increase as many approach retirement age. These concerns stem from the expected strain on social security and health systems when this generation leaves the paid workforce. Retirement planning has been identified by social science researchers as one way of protecting pre-retirees’ future well-being, but there are many problems within this research. For example, the long-term benefits of retirement planning are yet to be confirmed, the causal relationships between socioeconomic, psychological, and demographic variables have been under-theorised, and existing conceptualisations of retirement planning have not adequately captured the construct. This has had implications for the resultant measures and for the development of new retirement planning knowledge. A programme comprising four studies was designed to address these limitations in the retirement planning research.

For Study One, longitudinal data from the American Health and Retirement Survey were used to illustrate the prospective benefits of retirement planning on well-being in later life. For Study Two, a sub-sample of 2,277 working men and women from the New Zealand Health, Work, and Retirement survey, was used to theorise and model the causal effects of SES, work involvement, and retirement perceptions on retirement planning from a gendered perspective. Study Three described the development and validation of a comprehensive and theoretically driven measure of retirement planning using a population sample of 1,449 New Zealand pre-retirees. Fifty two items were developed to assess each stage of the retirement planning process for financial, health, lifestyle, and psychosocial planning. The final study used the same data to examine the relationships between certain psychological, socioeconomic, and demographic variables and the process of retirement planning. The results indicated that these variables were inconsistently correlated with the different stages
of the planning process. These inconsistencies were theorised as barriers to completing the retirement planning process.

Overall, the results of the four studies indicate that retirement planning predicts well-being and that certain groups are less prepared than others. Conceptualising retirement planning as a process has the potential to build on our current understandings by generating research questions that have not previously been considered. These new understandings will have implications for future research and for retirement policy aimed at promoting retirement planning for the next generation of retirees.
Preface

This thesis is based on four research manuscripts. The first manuscript was published in ‘Research on Aging’ in 2009. The second manuscript was also submitted for publication to ‘Research on Aging’ in 2009 and it has undergone two rounds of peer review since that time. This manuscript is currently being reviewed by the editor for a final decision. The third manuscript has been accepted for publication in ‘Psychological Assessment’ and it is currently in press. The final manuscript has not yet been submitted for publication, but it will be submitted to ‘The Gerontologist’ later this year.

The ideas presented in this thesis are completely my own. My supervisors helped me to structure my arguments, they provided me with statistical advice, and they helped me to select the appropriate journals for publication. For these reasons, Dr Christine Stephens and Dr Fiona Alpass were included as co-authors for the publications that comprise this thesis.

Jack Noone

Doctoral Candidate

Massey University
I have thoroughly enjoyed completing my doctoral thesis and this is due, in no small part, to the people who have guided and shared my journey. To Chris Stephens and Fiona Alpass, thank you so much. You’ve taught me everything I know and I look forward to working alongside you in the future. Thank you to Charlotte Paddison. I look back on our time as office-mates with fondness. You showed me that I could do it (and I did). I would also like to thank Antonia Lyons and Ian Goodwin. Your support and advice has been greatly appreciated. Thank you to all my Wellington colleagues. Thanks in particular to Ella Kahu for being a wonderful colleague and for your friendship. Thank you to my parents and my brother. It looks like I’m a city boy now, but the Ida Valley will always hold a place in my heart. Thank you to Cristina, my wonderful wife. Aside from the financial and emotional support, you have defended me against those unremitting questions: “Is he still a student? When is he going to get a job?”

I would also like to acknowledge the financial support from the Retirement Commission, the Ministry of Social Development, and the School of Psychology. This project would not have been possible without the financial assistance from these organisations.
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Introduction

It is predicted that people aged over 65 will make up 20% of the New Zealand population by 2026 (Statistics New Zealand, 2004). Fewer people in the paid workforce will place greater strain on our social security system and other formal support structures such as public health care. Retirement planning to supplement these support systems has been identified by social science researchers (Elder & Rudolph, 1999; Reitzes & Mutran, 2004) as one way of protecting the health and well-being of the Post-World War II “Baby Boom” generation. The potential benefits of retirement planning have stimulated research into the different ways people prepare for later life, the effects of planning on retirement outcomes, and the factors that may influence planning activities. These three aspects of the retirement planning research will be introduced in the following sections. It will then be argued that the current conceptualisations of retirement planning do not adequately capture the planning construct. A theoretical rationale for developing a comprehensive measure of retirement planning will then be introduced and the outline of this thesis will be presented. But firstly, the retirement planning research is placed in context with a brief discussion of the history of retirement and the complexities surrounding the term ‘retirement’ itself.

The emergence of state and private funded pensions in the late 19th century established retirement as a social institution in Western society. The German Chancellor, Otto van Bismark, has been widely credited with the first steps towards institutionalisation by introducing a social security system for older adults in 1883 (Costa, 1998; Donahue, Orbach, & Pollak, 1960). This movement soon shifted into the rest of Europe with many countries introducing social security systems before World War I (Fischer, 1978). In America, employer provided pensions (and compulsory retirement) first emerged for Baltimore and Ohio railroad workers (Atchley, 1982) and Union Army men (Costa, 1998) in the 1890s.
However, it was not until the introduction of the Social Security Act in 1935 that the institution of retirement was established in earnest. New Zealand’s first formal pension scheme was formalised in 1898, but unlike many western nations, this scheme was funded entirely by the taxpayer (Preston, 2008). Today, retirement is jointly funded by the government, by the individual, and in some cases, by employers. As in many other countries, New Zealand’s pension schemes have changed significantly over the last century, as has the nature of retirement itself.

The act of retirement has evolved from a requirement for older workers to a complex process involving difficult decisions, periods of readjustment, and even further career development (Wang & Shultz, 2009). For example, the initiation of the retirement process is based on many "push" and “pull” factors (Barnes-Farrell, 2003; Shultz, Morton, & Weckerle, 1998) including poor health (Disney, Emmerson, & Wakefield, 2006; Mein et al., 2000), sufficient financial resources (Gruber & Wise, 1998), negative attitudes towards work (Beehr, Glazer, Nielson, & Farmer, 2000), and increasing family commitments (Wolcott, 1998). The meaning of retirement also differs across groups. For some people, retirement may mean the exit from a ‘career’ job into bridge employment or a reduction in hours rather than complete exit from the paid workforce (Feldman, 1994; Ruhm, 1990). However, not all workers have this element of choice. Some people will perceive retirement as un-affordable while others may be forced into retirement by poor health or redundancy (Dwyer & Mitchell, 1999). Finally, for those who are not working for pay, retirement may be signalled by the receipt of superannuation or the retirement of a spouse or partner. Although a full description of the complexities surrounding the retirement process is beyond the aims of the current research, it is evident that applying a blanket definition of retirement to all pre-retirees would not be
appropriate. Instead, the different meanings people attach to retirement need to be acknowledged if we are to examine how they plan for this event.

**The Nature of Retirement Planning**

Financial planning to subsidise governmental and employer pensions has been encouraged since retirement became a social institution (Preston, 2008). However, it was not until the early 1970’s that other, non-financial, ways of planning for retirement emerged (Hunter, 1976; Jacobson, 1974). For example, early educational initiatives (e.g. Dennis, 1984) encouraged pre-retirees to think about changing their diet to protect their long-term health (health planning) and to plan how to be ‘useful’ when they left paid work (psychosocial planning). For instance, community work and childcare were touted as viable alternatives to paid employment (Denis, 1984). Pre-retirees were also encouraged to think about and develop new activities to fill the ‘void’ following workforce exit (lifestyle planning).

Although recent research has confirmed the relevance of financial, health, lifestyle, and psychosocial planning domains for contemporary pre-retirees (Hershey, Brown, Jacobs-Lawson, & Jackson, 2001; Lee, 2003; Lee & Law, 2004; Petkoska & Earl, 2009), the majority of the research draws on different planning measures. For example, a commonly used set of measures assesses the extent to which people think about retirement and discuss it with others (Elder & Rudolph, 1999; Lusardi & Mitchell, 2007; Quick & Moen, 1998). However, other research has also assessed the number of leisure and physical activities pre-retirees have developed (Schellenberg, Turcotte, & Ram, 2005). The financial planning research typically focuses on retirement or superannuation wealth or consultations with financial advisors (Clare, 2004; Panis, 2003; Sharpley & Layton, 1998). It is these types of measures which have been used to examine the relationships between retirement planning and positive outcomes in later life.
The Positive Effects of Retirement Planning

A small body of cross-sectional and retrospective research suggests that retirement planning leads to positive outcomes including better health, greater satisfaction with retirement, and better adjustment (Elder & Rudolph, 1999; Schellenberg et al., 2005; Zhu-Sams, 2004). For example, Schellenberg et al. (2005) found that retirees were more satisfied with their retirement if they had sought advice from a retirement consultant or had developed leisure and physical activities. The relationship between planning and positive retirement outcomes, or well-being, is also supported by a small number of longitudinal studies (Panis, 2003; Spiegel & Shultz, 2003). For example, Spiegel and Shultz found that perceptions of preparedness in 1981 predicted adjustment to civilian life in 1987, for 672 retired military personnel.

A number of theories have attempted to explain the positive relationship between retirement planning and well-being. For example, proponents of continuity theory (Quick & Moen, 1998) argue that retirement planning enables an individual to maintain lifestyles, activities, and social ties in retirement. It is the consistency of these patterns over time which may lead to more positive outcomes. According to role theory (Biddle, 1986; Burr, 1972; Cottrell, 1942), retirement planning provides the means for anticipatory socialisation into future retirement roles (Reitzes & Mutran, 2004). Those who gain an understanding of retirement roles before leaving the workforce will find the transition to retirement easier than those who are less prepared. Finally, Taylor and Doverspike (2003) argue that retirement expectations mediate the relationship between retirement planning and retirement adjustment. Retirement planning enables the individual to develop realistic expectations of their retirement. If these expectations are met, then the individual is likely to adjust well to retirement (Taylor, Goldberg, Shore, & Lipka, 2008). Given the empirical and theoretical importance attached to
Correlates of Retirement Planning

Research has identified many psychological, socioeconomic, and demographic factors that are associated with financial retirement planning and, to a lesser extent, the non-financial domains of retirement planning.

Psychological variables. Research has identified a positive relationship between locus of control and “future planning” (Prenda & Lachman, 2001, p. 206). According to theory, those who do not believe their current actions will lead to desired outcomes will undertake less planning because these actions are deemed futile (Lachman & Burack, 1993; Skinner, 1997). Conversely, planning may also foster a sense of control, especially when people face an unknown or undesired event (Lachman & Burack, 1993). A number of studies have examined the relationship between locus of control and retirement planning (Ingram, 2006; J. E Kim & Moen, 2001; McKenna & Nickols, 1986; Moen, Huang, Plassmann, & Dentinger, 2006) and positive correlations were consistently found. For example, McKenna and Nicols (1986) found that locus of control predicted levels of financial retirement planning for 220 female pre-retirees after controlling for household income, occupation, age, and financial risk. Moen et al. (2006) found that perceived control was positively associated with financial and lifestyle planning.

Hershey and colleagues have demonstrated the positive relationship between financial planning, financial goals, and Future Time Perspective (FTP) across a series of empirical studies (Hershey, Henkens, & Van Dalen, 2010; Hershey, Henkens, & van Dalen, 2006, 2007; Hershey, Jacobs-Lawson, McArdle, & Hamagami, 2007; Hershey & Mowen, 2000;
Topa, Moriano, Depolo, Alcover, & Morales, 2009). Those who tend to look to the future are more likely to plan for retirement as preparing for a future event requires a sense of foresight. For example, Hershey and Mowen (2000) showed that FTP had a moderate effect on financial preparedness after controlling for levels of financial knowledge and the perceived importance of retirement. However, little research has examined the relationship between FTP and non-financial planning domains.

Retirement confidence, attitudes, and expectations have been widely examined in relation to retirement planning (Joo & Grable, 2001; Joo & Pauwels, 2002; J. E Kim, Kwon, & Anderson, 2005; Reitzes & Mutran, 2004; Taylor-Carter, Cook, & Weinberg, 1999; Topa et al., 2009; Turner, Bailey, & Scott, 1994). The majority of research has shown that those with more positive perceptions of retirement report higher levels of retirement planning. For example, Gordon (1994) found that financial planning remained a significant predictor of retirement attitudes after controlling for work commitment, attitudes towards leisure time, and spousal attitudes towards the respondent’s retirement.

\textit{Socioeconomic and demographic variables.} Economic factors such as household income and education are linked to financial planning and financial preparedness (M. Anderson, Li, Bechhofer, McCrone, & Stewart, 2000; Moen, Sweet, & Swisher, 2005; Yeo & Geistfeld, 2005; Zhan & Pandey, 2002). For example, Yeo and Giestfeld (2005) found that educational qualifications were positively correlated with expected retirement wealth. However, these effects disappeared when household income was accounted for. Lee (2003) and Petroska and Earl (2009) found that household income and education were positively correlated with health, lifestyle, and psychological planning.
Finally, research suggests that women undertake less financial retirement planning than men (Clare, 2004; Gee et al., 2002; Glass & Kilpatrick, 1998; Jefferson, 2005; Kosloski, Ekerdt, & DeViney, 2001; Maria & Kilty, 1995; Quick & Moen, 1998; Worthington, 2005). Clare’s (2004) analysis of Australian pre-retirees’ superannuation holdings showed that 54 to 65 year old men had, on average, accumulated twice the pension wealth ($183,600) compared to same-aged women ($94,000). Gee et al. (2002) found that New Zealand women were saving significantly less for their retirement than men. Explanations for these differences have focused on the role of ‘gendered factors’ in men and women’s retirement planning.

Variations in men and women’s socioeconomic status and perceptions of retirement may explain gender differences in retirement planning. For example, women tend to work in lower status occupations than men and tend to earn less (Statistics New Zealand, 2006b). This has impacted on their access to superannuation and their ability to save for retirement. For example, Jefferson’s (2005) review of the literature suggests that, despite the presence of compulsory superannuation for workers, Australian women’s lower incomes were responsible for comparatively lower levels of expected retirement wealth. Gee et al.’s (2003) analysis of New Zealand data lead to the same conclusion. Other theorists have suggested that women have more negative perceptions of retirement because of their typically interrupted careers (Block, 1984; Jacobson, 1974). It may be that many women do not have enough time in the workforce to fulfil their work related goals. The resulting negative perceptions of retirement may impact negatively on women’s retirement plans because they do not want to think about an undesirable event (Newman, Sherman, & Higgins, 1982).

**Limitations within the Research**

Despite the growing interest in retirement planning, there are a number of limitations within the research. Firstly, the non-financial domains of retirement planning have not received
sufficient research attention. Secondly, the existing conceptualisations of retirement planning have hindered the advancement of retirement planning knowledge. The following sections detail the problematic aspects of the retirement planning research and provide the theoretical basis for resolving these limitations.

Relatively few studies have examined the health, lifestyle, and psychosocial domains of retirement planning and there is little longitudinal data to test their long-term efficacy. However, retrospective research has provided some evidence for the importance of these non-financial retirement planning domains. For example, in a study of 764 American retirees, Rosenkoetter and Garris (2001) found that 35% of retirees felt that planning for psychological adjustment to retirement was important. However, only 4.5% had actually received this kind of information from employer provided education. Likewise, 41% felt that planning for time spent in retirement was important compared to only 2.5% that received planning education in this area. In a smaller study, Hershey et al. (2001) found that retirees retrospectively rated both health planning and financial planning with equal importance. These were closely followed by planning for leisure and recreation time, community involvement, and changes in familial relationships. The results from these studies and from the financial planning research (e.g., Panis, 2003) suggest that future research would benefit from a comprehensive perspective on retirement planning.

Current conceptualisations of retirement planning do not sufficiently capture the planning construct. Based on Lachman and Burack’s (1993) general definition, retirement planning can be defined as the thoughts and behaviours undertaken to fulfil retirement goals. However, much of the research cited above focuses on retirement thoughts, behaviours, or goals rather than the relationships between these components. For example, previous studies have
examined retirement-based thoughts (e.g., Anderson, Li, Bechhofer, McCrone, & Stewart, 2000), but they have not shown how these cognitions can materialise into goal-setting or planning behaviours. Other studies have examined retirement planning behaviours, such as saving for retirement (Clare, 2004) or developing hobbies (Schellenberg et al., 2005), without considering their cognitive motivators. In other words, the current research has not integrated the cognitive and behavioural components of retirement planning in a meaningful way. This has constrained the way that retirement planning can be conceptualised and therefore the understandings that can be generated from further research.

It is unlikely that research based on existing conceptualisations will generate further retirement planning knowledge. For example, current research can determine the extent to which individuals are preparing for retirement, but it cannot determine how retirement plans can evolve from thoughts about the future to the development of retirement planning behaviours. Furthermore, current research has not examined how certain factors might influence this process. In order to increase our understandings, retirement planning must be conceptualised in a way that integrates the different components of Lachman and Burack’s (1993) definition. One way to achieve this is to re-conceptualise retirement planning as a process rather than the one-step event which has characterised the previous research. The first stage in achieving this goal is the close examination of planning theory.

Theoretical Basis for an Integrated Conceptualisation of Retirement Planning

Friedman and Scholnich’s (1997) process theory of general planning posits that individuals progress through a series of stages as they plan for an event. The first stage of the process is to develop a mental representation of the problem space. Once a cognitive understanding of the subject has been developed, goals for the future are established. At the next step,
individuals make a decision to start preparing or undertaking the behaviours necessary to fulfil their goals. This decision is based on issues of timing and the perceived efficacy of preparatory behaviours. They then formulate a plan or a strategy to fulfil their goals. Finally, plans are implemented and revised if necessary.

The process model of general planning (Friedman & Scholnich, 1997) provides the basis for the generation of retirement planning items. For the current research, items will be developed to assess each stage of the retirement planning process across the financial, health, lifestyle, and psychosocial planning domains. With respect to Lachman and Burack’s (1993) definition, the initial stages reflect the cognitive components of retirement planning while the final stage reflects the planning behaviours undertaken to fulfil retirement goals.

Conceptualising retirement planning as a process will have benefits for future research, retirement policy, and educational programmes. For example, future research will be able to gauge the progress pre-retirees are making with their retirement plans. This is important because certain groups of people may become “stuck” at a particular phase of the retirement planning process or may never start the process at all. This will allow retirement policy and educational initiatives to direct their initiatives at those who need it most and where they need it most. Finally, this research will build on our current understandings of retirement planning by generating research questions which have not previously been considered.

**Summary and Research Aims**

The retirement planning research is primarily concerned with the effects of planning on future well-being and the factors that differentiate those who are planning from those who are not. However, it will be argued that the continued use of the current conceptualisations of planning and the resultant limited measures will hinder research progress towards greater
understanding of retirement planning and the factors that can affect those plans. A new measure, based on planning theory, will be developed to address the limitations with the current measures. This measure will then be used to demonstrate the research benefits of conceptualising retirement planning as a process. Based on the limitations with the current retirement planning research, this thesis is informed by three research aims:

1) To determine if retirement planning predicts well-being in later life.

2) To develop a comprehensive and theory driven measure of the retirement planning process.

3) To theorise and examine the effects of psychological, socioeconomic, and demographic variables on the retirement planning process.

**Thesis Outline**

This thesis comprises four studies (see Figure 1) and a series of personal reflections which link each study with the next. The first study examines the relationship between retirement planning and well-being in later life and provides a rationale for more detailed measures of retirement planning. The second study models the theoretical effects of psychological, socioeconomic, and demographic variables on retirement planning within a gendered framework. This research highlights the importance of gender in the study of retirement planning and identifies the variables that are relevant to New Zealanders’ retirement planning. The third study describes the development and validation of the Process of Retirement Planning Scale (PRePS). The fourth study examines the relationships between the stages of the retirement planning process and the socioeconomic, psychological, and demographic variables identified in the second study. The fourth study also demonstrates how conceptualising retirement planning as a process may advance our current understandings of retirement planning by generating research questions that have not previously been considered.
Study One. Although theory (e.g., Taylor and Doverspike, 2003) and common sense suggest that retirement planning is a worthwhile endeavour, the long term influence of retirement planning on retirement outcomes is still relatively unknown (Wang & Shultz, 2009). This is because the existing cross-sectional research cannot exclude the possibility that retirees’ retrospective accounts of their prior planning are influenced by their current situation. Although longitudinal studies can solve this methodological issue, they are sparse in number, typically focused on financial retirement planning, and they tend to cover only the first few years of retirement. Therefore, further longitudinal research is needed to confirm the relationship between retirement planning and well-being in later life. This is important
because if retirement planning does not improve well-being in retirement, then there is little point in developing an instrument to measure it. Therefore, the aim of Study One was to determine if pre-retirement planning predicts well-being in later life.

The data for Study One were drawn from the American Health and Retirement Study. The analysis draws on 12 years of longitudinal data to examine the relationship between retirement planning for workers in 1992 and their subjective reports of mental health, physical health, and retirement satisfaction as retirees in 2004.

The results indicated that the more workers had talked to their spouse about retirement, the higher they rated their physical health, mental health, and retirement satisfaction as retirees. Those who had a private superannuation scheme were also more likely to report higher levels of well-being in retirement when levels of spousal discussion were not statistically controlled for. Therefore, the results from this study provided a rationale for the development of a more detailed retirement planning measure.

Study Two. Much of the retirement planning research over the last three decades focuses on gender differences in retirement planning and in the factors that predict planning. However, the causal relationships have seldom been theorised and statistically modelled. One exception is Topa et al.’s (2009) recent meta-analysis. In this study, retirement planning was statistically modelled alongside its antecedents and consequences. For example, the effects of health, work variables, and retirement attitudes were modelled on retirement planning. The effects of retirement planning were then modelled on physical health, mental health, bridge employment, life satisfaction, and retirement satisfaction. However, variables including SES, gender, and marital status were missing from the analysis. Therefore, the aim of Study Two was to theorise and model the causal relationships between retirement planning and its
antecedents from a gendered perspective. A further aim of this study was to identify the factors that are relevant to the further study of New Zealanders’ retirement planning.

The data for Study Two came from the first wave of the New Zealand Health, Work, and Retirement study. Structural equation modelling was used to model the causal relationships between perceptions of work and retirement, SES, and financial retirement planning. Each of these factors was then tested for gender differences.

The results showed that SES had a moderate positive effect on financial preparedness for retirement. Women were disadvantaged in terms of their SES and their financial retirement planning and this was especially evident for those without partners. However, factors such as retirement perceptions, while still related to retirement planning, showed no gender differences. Finally, the extent to which individuals were involved with the paid workforce did not emerge as an important variable for men or women. In light of the gender differences in SES and financial preparedness, and the effects of marital status on these variables, it was argued that retirement and retirement planning is of particular concern for women.

Study Three. The current conceptualisations of retirement planning do not integrate the goal-directed thoughts and behaviours which characterise retirement planning (Lachman & Burack, 1993). Furthermore, much of the research utilises vague measures which disclose very little about the nature of retirement plans. For example, assessing the extent to which people have thought about retirement or discussed it with others discloses nothing about the subject of their plans, how they relate to retirement goals, or how they motivate planning behaviours. What is needed now is a more integrated conceptualisation of retirement planning and more detailed measures to assess the retirement planning construct. Study Three draws on planning theory to re-conceptualise retirement planning as a process and to develop
items to assess the different stages that people progress through as they prepare for retirement.

Fifty two items based on Friedman and Scholnich’s (1997) theory, interview data, and previous research (Lee, 2003), were developed to assess the process of financial, health, lifestyle, and psychological planning. These items were then tested on a representative sample of 1,449 non-retired individuals aged 49 to 60. Factor analysis was used to determine if the items developed to measure the different stages of the planning process loaded onto their respective factors. Correlations between the factor scores of the Process of Retirement Planning Scale (PRePS) and variables such as economic living standards, FTP, locus of control, and expected time to retirement were also examined. Overall, the results from this study supported the validity of the PRePS as a measure of retirement planning.

Study Four. Few studies have examined the psychological, socioeconomic, and demographic correlates of non-financial retirement planning and no research, to the author’s knowledge, has considered how these correlates may influence the process of retirement planning. Therefore, the aim of Study Four is to examine the relationships between the process of financial, health, lifestyle, and psychosocial planning and the correlates identified in Study Two. A further aim is to demonstrate how conceptualising retirement planning as a process may build on our current understandings by generating new research questions.

Study Four is essentially an extension of Study Three as it draws on the same data. This study analyses the bivariate relationships between sex, marital status, perceptions of retirement, SES, and the process of financial, health, lifestyle, and psychosocial retirement planning.
The results showed no gender differences in retirement planning across the four domains. However, both men and women without partners were significantly disadvantaged in terms of their financial planning. The strength of the relationships between the relevant factors and the stages of the planning process differed according to the domain of retirement planning and according to the stage in the retirement planning process. These patterns were theorised as barriers to completing the retirement planning process. For example, certain groups may be able to complete the cognitive stages of the financial planning process (i.e., the development of financial representations, financial goals, and the decisions to start preparing), but they face structural and psychological barriers to completing the final, behavioural, stage of the financial planning process (i.e., financial preparedness). In contrast, completion of the non-financial planning domains did not appear to be affected by the same barriers. It may be that individuals have more control over these domains, or that other factors may affect the process of health, lifestyle, and psychosocial planning. These explanations represent a new way of thinking about retirement planning and generate research questions that have not previously been considered.
Study One: Pre-retirement planning and well-being in later life


Abstract

Cross sectional and retrospective research has identified a reliable relationship between pre-retirement planning and well-being in later life. Although it is intuitive to assume that retirement planning leads to more positive outcomes in retirement, to date there is limited longitudinal analysis to either confirm the directionality of this relationship or to understand its complexities. One study that can clarify this relationship is the Health and Retirement Study (HRS), a prospective survey of American workers and retirees from 1992 to the present day. Data signifying the pre-retirement activities of 1008 employed individuals from the 1992 wave of the HRS were compared to their post-retirement ratings of retirement satisfaction and subjective physical and emotional health in 2004. An ordinal regression analysis indicated that those who had discussed retirement with their spouse and had a retirement superannuation or savings plan in 1992, reported greater well-being in 2004 (after controlling for health status, the reason for retirement, and income in 1992). These results confirm the importance of pre-retirement preparation and provide a rationale for the development of more comprehensive and theory driven measures of retirement planning.
As the “Baby Boom” generation approaches retirement, research to determine how individuals are preparing for impending retirement has grown exponentially. The predicted strain on social security systems, as a considerable proportion of the population retires from the work force, has focussed social policy on the notion that individuals should actively plan for their retirement years (Rowlingson, 2002). Underlying this concept of pre-retirement planning is an assumption that those who prepare for their retirement will have more positive outcomes in retirement. This paper will draw on research that tests that assumption.

Pre-retirement planning may be undertaken formally through seminars or informally through discussions with partners, reading, and talking with friends about retirement. It includes both financial planning and planning for the psychosocial and physical changes in social status, identity, health, leisure, and changes in family and marital relationships (Kim & Moen, 2001). The following overview highlights the importance of retirement planning activities from this holistic perspective.

In the 1970s and 1980s empirical studies suggested that those who participated in pre-retirement planning were more likely to report greater well-being in retirement (Becker et al., 1983; Glamser, 1976, 1981). This early research concentrated on formal retirement programmes offered by large corporations and has been criticised since for its narrow conception of planning and focus on men’s retirement (Beeson, 1975; Kim & Moen, 2002). Beehr (1986) argued that the lack of comprehensive research was due to a common sense view of pre-retirement planning: Because it is intuitive to assume that planning for retirement will lead to positive outcomes, the dynamics of the relationship and the influence that different types of pre-retirement planning have on well-being have been neglected. Since that time, a growing body of research has identified a reliable relationship between pre-retirement...
planning and outcomes such as health, adjustment to retirement, positive attitudes towards retirement, and life satisfaction. Furthermore the relationship between planning and these measures of subjective well-being is consistent across the domains of financial and psychosocial planning.

Among different aspects of retirement planning, ensuring a regular income has, until recently, dominated the literature examining well-being in retirement. One way individuals can ensure their financial security is through an employer provided superannuation scheme and this has been widely used as an indicator of financial retirement planning in previous research (Behling, Kilty, & Foster, 1983; Clare, 2004; Glass & Flynn, 2000; Panis, 2003). Although some superannuation schemes require little input from the individual, they all help the individual to achieve their financial goals. It is this goal orientated behaviour that defines planning (see Lachman & Burack, 1993) rather than the complexity of the particular scheme. Much of the financial planning research suggests that although those with more disposable income tend to report greater satisfaction with their retirement, financial planning remains a significant predictor of well-being in later life, regardless of household wealth (Brunson, Snow, & Gustafson, 1998; Hurd, 1990; Zhu-Sams, 2004). For example, Zhu-Sams (2004) found that retirees who made pre-retirement financial preparation were more likely to rate their retirement as better than expected. In such cases, perceived levels of preparedness, evidence of personal savings, and evidence of spousal savings were all positively related to reports of having sufficient funds to cover basic expenses, medical expenses, and to self-reported satisfaction with overall standard of living.

More recently, research indicates that well-being in retirement depends on numerous factors including wealth, health, and adaptation to the psychological and social changes following
exit from the workforce (Dorfman, 1989; Quick & Moen, 1998; Schellenberg, Turcotte, & Ram, 2005). On changing employment status, individuals must adapt to changes in identity, gender roles, time allocation, health status, and marital relationships. After controlling for health and income, those individuals who actively plan for these types of change are more likely to report greater quality of life in retirement. For example, Quick and Moen (1998) showed that 75% of individuals who had thought about retirement and made substantial plans, reported being very satisfied with their retirement. Conversely, for those who had not planned at all, only 45% rated their retirement years as satisfying. In another example, Schellenberg, Turcotte, and Ram (2005) found that satisfaction was positively correlated with non-financial planning activities.

The last decade has seen a rise in the number of institutions offering seminars to assist employees prepare for retirement through financial and psychosocial planning (Bernheim & Garrett, 1996). Although evaluations of such retirement programmes have not always been positive (Jeanneret, 1995; Rosenkoetter & Garris, 2001), much of this research has found a positive relationship between participation and well-being in retirement. Anderson and Weber (1993), Sharpley and Layton (1998), and Rosenkoetter and Garris (2001) found that participants in comprehensive seminars reported less anxiety, stress, and depression, greater satisfaction and more post-retirement social involvement than non-participants. Similarly, Elder and Rudolf (1999) found that having thought about retirement and attendance at formal planning programmes was related to greater satisfaction with retirement, controlling for economic circumstances. Those who were forced into retirement through redundancy or poor health were less likely to report a satisfactory retirement, although those who had the opportunity to plan for such forced retirement were more likely to be satisfied with retirement than those who had no opportunity to plan.
Limitations of Retirement Planning Research

Although these studies together support a relationship between planning and well-being in retirement, their cross-sectional nature does not allow for conclusions about direction. Although it is assumed that planning leads to positive outcomes in retirement, they do not test whether planning precedes well-being or well-being influences the ability to plan. Furthermore, they all rely on retrospective reports of planning leading to the possibility of self-selection. Elder and Rudolph (1999) and Zhu-Sams (2004) argue that the relationship between planning and well-being may be overestimated through common method variance: Those who report having planned for retirement are more likely to report satisfaction.

One solution for eliminating self-selection and directional ambiguity is the prospective study of individuals as they progress from paid workers to retirees. Under this design, levels of pre-retirement planning are measured, while individuals are still formally employed, to be later compared to post-retirement levels of satisfaction, adjustment, or well-being in retirement (Glamser, 1981; Mutran, Reitzes, & Fernandez, 1997; Panis, 2003; Reitzes & Mutran, 2004). Glamser (1981) studied the predictive effects of psychosocial factors on men’s attitudes towards retirement and life satisfaction. Preparedness and preparation behaviour accounted for approximately ten percent of the variance in retirement attitudes. Social activity and perceived level of preparedness each accounted for eight percent of the total variance in life satisfaction. In a longitudinal study based on data from the Health and Retirement Study (HRS) from 1992 to 2000, Panis (2003) found that individuals who reported undertaking financial planning whilst employed were more likely to report satisfaction in retirement than those who had not planned, even when household income was held constant.
Although longitudinal studies can alleviate some of the shortcomings of cross-sectional research, these results are not conclusive. Glamser (1981) and Reitzes and Mutran’s (2004) research utilised non-representative samples. In Panis’ (2003) large-scale survey, the focus was entirely on financial planning. Recent research suggests that both planning for financial security and preparing for the psychosocial changes that accompany retirement are important for well-being in later life. This study aims to account for the limitations of cross-sectional research to date by utilising a prospective design and a nationally representative sample. It also builds on previous longitudinal research with HWR data (Panis, 2003) by studying a wider array of planning variables, by examining the relationship between planning and well-being over a longer time frame, and by controlling for the nature of the retirement decision, which has been widely identified as an important factor for well-being in retirement (Elder & Rudolf, 1999). The study hypothesis is that financial and psychosocial retirement planning in 1992 will be significant predictors of satisfaction with retirement and self reported physical and psychological health in 2004.

Methods

Background

The American Health and Retirement Study (HRS) follows a cohort born in 1931-1941. Sponsored by the National Institute of Aging (grant number NIA U01AG009740) the HRS was designed to investigate factors affecting retirement age and financial stability throughout later life. The first wave of data collection began in 1992 with further interviews conducted every two years after this date (see Burkhauser & Gertler, 1995; Juster & Suzman, 1995). This study is concerned with those who have left the work force and how the respondents’ levels of pre-retirement planning in 1992 are related to their self-reported well-being in 2004.
Participants

In the early 1990s two studies of ageing, Assets and Health Dynamics Among the Oldest Old (AHEAD) and the HRS, were running concurrently. In 1996 the two studies were merged, and for the purposes of this analysis, the 131 participants in both the 1992 HRS and 1993 AHEAD studies were deleted from the database. Only data from the financial respondent of each household were included in order to satisfy the statistical assumption of unrelated cases. This left an initial sample of 6,393. As this analysis examines retirement planning between spouses, 2,350 individuals who did not have a spouse were excluded. Those who identified as homemakers, retired, or partially retired in 1992 were also removed from the analysis. The data from 2,886 individuals were then merged with their responses to the outcome variables in 2004. By 2004, 873 cases were lost to attrition and 576 individuals were not yet retired. This left 1437 retired individuals in the analysis. After deleting cases with missing values on any of the study variables (see Bender, 2004) the final sample size was 1008. A comparison of the response frequencies between the final sample and the 429 cases with missing data revealed no systematic bias in the study variables. Of the 1008 respondents, 66% (669) were male and 34% (339) were female. Approximately 89% of the respondents identified as Caucasian, 8% as African American, and 3% as Hispanic. The mean age of the respondents in 1992 was 56 (69 in 2004).

Independent and Control Variables, 1992

Self reported health. Self reported health is an important predictor of well-being in retirement (Lum & Lightfoot, 2003) and is highly correlated with objective physical and mental health indicators (Wallace & Herzog, 1995). It was measured by a single item: “Would you say your health is excellent, very good, good, fair, or poor?” Scores were rated on a five-point scale ranging from “very good” (1) to “poor” (5).
Psychological health. For the first wave of data, the HRS utilised a shortened, eleven-item version of the Centre for Epidemiological Studies Depression (CES-D) scale (Radloff, 1977) that was later developed for the established Populations for Epidemiologic Study of the Elderly (Wallace & Herzog, 1995). This measure is especially relevant for large-scale surveys (Kohout et al., 1993). Responses were scored on a four-point scale ranging from zero to three (inverted for three items) and were summed to form a depression index ranging from 0 to 33, with higher scores representing poorer psychological health (Turvey, Wallace, & Herzog, 1999). Previous research suggests that scores of nine or above may be indicative of severe depression (Kohout et al., 1993; Radloff, 1977). Those scoring below nine were further categorised into two categories: Those whose summed scores ranged from zero to three and those whose scores ranged from four to eight. Psychological health in 1992 was therefore represented by three ordered categories.

Household income. Pre-retirement household income was reported by one financial respondent in each household. It includes gross income from all sources for both spouses.

Reason for retirement. Respondents were asked, “thinking back to the time you (partly/completely) retired, was that something you wanted to do or something you felt you were forced into?” Respondents stated that they either wanted to retire, were forced into retirement, or were partly forced and partly voluntary. For the purposes of this analysis, those who stated partly forced were included in the forced into retirement group to account for the effects of any force.

Psychosocial planning. The HRS operationally defines non-financial retirement planning with four items that ask respondents how often they had thought about retirement, how often
they had talked to their friends about retirement, how often they had discussed retirement with their spouse, and if they had attended any formal pre-retirement planning meetings. The first three items were scored on a four-point ordinal scale from 1 (‘a lot’) to 4 (‘not at all’). Attendance at planning meetings was coded ‘not attended’ or ‘had attended’.

Financial planning. Respondents were asked if they were part of a superannuation or tax deferred retirement scheme including basic retirement plans, thrift, 401k, deferred profit-sharing, stock ownership plans, or a personal savings plan. Those who participated in any type of financial planning in 1992 were coded 1 for ‘superannuation plan’ and 5 for ‘no superannuation plan’.

Control variables. Variables measured in 1992 and used to control for potential confounding were sex, ethnicity, age, education, job satisfaction, and marital satisfaction. Education was divided into six categories: no formal education, grade school only, high school only, some college, college degree, and post-college degree. Job and marital satisfaction were measured on a five-point scale from very satisfied (1) to very unsatisfied (5).

Dependent Variables – Well-Being in 2004

Retirement satisfaction. Respondents were asked to respond on an ordinal scale to: “all in all, would you say that your retirement has turned out to be either: ‘very satisfying’, ‘moderately satisfying’, or ‘not at all satisfying?”.

Psychological health. In 2004, The HRS utilised a shortened, eight-item version of the Centre for Epidemiological Studies Depression (CES-D) scale (Radloff, 1977). Responses were either yes (1) or no (0) (inverted for two items) and were summed to form a depression index ranging from zero to eight with higher scores representing poorer psychological health (Turvey, Wallace, & Herzog, 1999). On this scale, scores of four or above may be indicative of clinical depression (Radloff, 1977; Turvey, 1999). Those scoring below this point were further categorised into two groups: those with summed scores of zero or one and those with summed scores of two or three. Psychological health in 2004 was therefore represented by three ordered categories.

For interpretative purposes, scores on the three dependent variables (and physical and psychological health in 1992) were inverted such that lower scores reflect lower levels of retirement satisfaction, physical health, and psychological health.

Statistical Model

Ordinal regression was chosen to “determine the nature of the relationship between each predictor and the ordinal nature of the categorical outcome” (Chan, 2005, p.263). The equation for an ordinal regression model with a single independent variable is

\[
\ln(\theta_j) = \alpha_j - \beta X
\]

The term on the left of the equation is the logit, the log of the probability of being in a particular category divided by the probability of not being in that category (Norusis, 2006). To conduct multiple ordinal regression, the Statistical Package for the Social Sciences (SPSS) using a Polytomus Universal Model with a logit link was used. Three ordinal regression
models with physical health, psychological health, and retirement satisfaction as the
dependent variable in each equation were tested. The nominal and ordinal independent
variables were entered into the equation as factors, while continuous independent variables
were entered as covariates.

A Wald statistic was used to test the significance of the predictor variables. This value is the
square of the coefficient estimate divided by its standard error. The estimated coefficient was
then used to calculate the odds ratio (see Chan, 2005; Norusis, 2006; O’Connell, 2006). A
statistical test for parallel lines confirmed that for each of the three dependent variables
“…the relationships between the independent variables and the logits are the same for all the
logits” (Norusis, 2006, p.74).

Results
Response frequencies for independent and dependent variables are found in Table 1. The
household mean and median income was $46,282 and $38,000 respectively with a range of
$1,250,000.
Table 1

*Response Frequencies of Independent and Dependent Variables*

<table>
<thead>
<tr>
<th>1992 Variables</th>
<th>%</th>
<th>2004 Variables</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>27.4</td>
<td>Very satisfied</td>
<td>63.2</td>
</tr>
<tr>
<td>Very good</td>
<td>33.9</td>
<td>Moderately satisfied</td>
<td>31.3</td>
</tr>
<tr>
<td>Good</td>
<td>28.0</td>
<td>Not at all satisfied</td>
<td>5.5</td>
</tr>
<tr>
<td>Fair</td>
<td>9.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>1.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>57.0</td>
<td>Excellent</td>
<td>12.1</td>
</tr>
<tr>
<td>Female</td>
<td>43.0</td>
<td>Very good</td>
<td>31.1</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td>Good</td>
<td>33.8</td>
</tr>
<tr>
<td>Caucasian</td>
<td>89.5</td>
<td>Fair</td>
<td>16.6</td>
</tr>
<tr>
<td>African American</td>
<td>8.2</td>
<td>Poor</td>
<td>6.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reason Retired</td>
<td></td>
<td>Psychological Health (2004)</td>
<td></td>
</tr>
<tr>
<td>Felt forced</td>
<td>29.3</td>
<td>0-2</td>
<td>79.0</td>
</tr>
<tr>
<td>Own choice</td>
<td>70.7</td>
<td>3-5</td>
<td>16.1</td>
</tr>
<tr>
<td>Pension Plan</td>
<td></td>
<td>6-8</td>
<td>4.9</td>
</tr>
<tr>
<td>Yes</td>
<td>73.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>26.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thought About Retirement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A lot</td>
<td>34.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some</td>
<td>30.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A little</td>
<td>14.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardly at all</td>
<td>20.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talked With Spouse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A lot</td>
<td>26.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some</td>
<td>33.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A little</td>
<td>18.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardly at all</td>
<td>20.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talked With Friend</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A lot</td>
<td>12.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some</td>
<td>26.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A little</td>
<td>19.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardly at all</td>
<td>41.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attended Meetings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>22.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>77.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest Degree Of Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No degree</td>
<td>21.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GED</td>
<td>5.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school diploma</td>
<td>51.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two year college degree</td>
<td>3.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four year college degree</td>
<td>10.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master degree</td>
<td>6.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional degree</td>
<td>2.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bivariate correlations for the planning variables and dependent variables are displayed in Table 2. For these correlations, the ethnicity variable was dichotomised such that those of Caucasian or “other” descent were combined and compared to those of African American descent.

Table 2
*Bivariate Correlations (Spearman’s Rho) Between Planning Variables and Dependent Variables*

<table>
<thead>
<tr>
<th>Think</th>
<th>Spouse</th>
<th>Friend</th>
<th>Meetings</th>
<th>Pension</th>
<th>Satisfaction</th>
<th>Physical Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Think</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Friend</td>
<td>.77**</td>
<td>.17**</td>
<td>.17**</td>
<td>.11**</td>
<td>.11**</td>
<td>.11**</td>
</tr>
<tr>
<td>Spouse</td>
<td>.51**</td>
<td>.19**</td>
<td>.19**</td>
<td>.13**</td>
<td>.13**</td>
<td>.13**</td>
</tr>
<tr>
<td>Meetings</td>
<td>.54**</td>
<td>.16**</td>
<td>.20**</td>
<td>.20**</td>
<td>.20**</td>
<td>.20**</td>
</tr>
<tr>
<td>Pension</td>
<td>.16**</td>
<td>.11**</td>
<td>.11**</td>
<td>.11**</td>
<td>.11**</td>
<td>.11**</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.11**</td>
<td>.15**</td>
<td>.20**</td>
<td>.10**</td>
<td>.10**</td>
<td>.10**</td>
</tr>
<tr>
<td>Physical Health</td>
<td>.04</td>
<td>.09**</td>
<td>.02</td>
<td>.13**</td>
<td>.11**</td>
<td>.34**</td>
</tr>
<tr>
<td>Psych Health</td>
<td>-.05</td>
<td>.03</td>
<td>.04</td>
<td>.09*</td>
<td>.09*</td>
<td>.29**</td>
</tr>
</tbody>
</table>

Note *p<.05, **p<.01

Results of the multivariate ordinal regression analysis (see Table 3) showed that after controlling for all other variables, health status in 1992 remained a significant predictor of retirement satisfaction, physical health, and psychological health after retirement. The odds ratios presented in Table 3 indicate that the poorer one’s health in 1992 the more likely one was to report lower levels of well-being in 2004.

Psychological health status in 1992 was a significant predictor of retirement satisfaction, physical health, and psychological health in 2004. The odds ratios in Table 3 indicate that those with poorer psychological health in 1992 tended to report poorer well-being in retirement.
Household income was a significant predictor of retirement satisfaction (OR=1.13 [1.07-1.20]) and physical health (OR=1.06 [1.03-1.10]). An increase in 1992 household income was related to an increase in 2004 health status and retirement satisfaction. There was no relationship between household income and psychological health.

Reason for retirement was related to retirement satisfaction (OR= 2.69 [1.9-3.81]), physical health (OR= 1.75 [1.35-2.27]), and psychological health (OR=1.95 [1.43-2.64]). These relatively large ratios indicate a positive relationship and suggest that those respondents who chose to leave the workforce were more likely to report greater well-being than those who felt forced into retirement.

Of the six control variables, only gender was found to be predictive of psychological health (OR=1.58 [1.17-2.13]). These results indicate that men tended to report better psychological health than women. Education, ethnicity, age, job satisfaction, and marital satisfaction were not predictive of well-being and were removed from the equations.

Having a superannuation or savings plan was predictive of retirement satisfaction (OR=1.45 [0.88-2.04]) and physical health (OR=1.24 [1.01-1.53]), when the ‘spouse talk’ variable was not in the equation. Those people who had a formal superannuation or savings plan were approximately 45% \([100(1-\text{OR})]\) more likely to rate their retirement as very satisfactory and 24% more likely to rate their psychological health as excellent. However, having a superannuation plan did not uniquely predict well-being when the effects of talking to one’s spouse about retirement were controlled for.
Initial analyses indicated that the effect of spousal discussions on well-being were only evident for those who talked to their spouse a lot about retirement. For this reason the spouse talk variable was collapsed into two categories such that individuals either talked to their spouse “a lot” versus “some”, “a little”, or “hardly at all”. Dichotomising the variable in this way strengthened the overall model by narrowing the confidence intervals but had no influence on the odds ratios. Talking a lot with one’s spouse was positively related to retirement satisfaction, physical health, and psychological health (OR=1.82 [1.10-3.02], OR= 1.88 [1.32-2.68], OR= 1.97 [1.28-3.05]). Those who had talked a lot with their spouse were on average 89% more likely to report greater well-being. Also, those who attended retirement planning seminars were more likely to report greater psychological health (OR=1.60 [1.17-2.13]) while having thought about retirement was negatively related to psychological health (OR= 0.39 [0.23-0.66]). The planning variable ‘talked to friends’ was not predictive of well-being.
Table 3

**Ordinal Regression Analysis Showing Odds Ratios and 95% Confidence Intervals**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Retirement Satisfaction</th>
<th>Physical Health</th>
<th>Psychological Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income 1992 Health</td>
<td>1.05[1.01-1.08]**</td>
<td>1.05[1.00-1.10]**</td>
<td>ns</td>
</tr>
<tr>
<td>Sex Male</td>
<td>ns</td>
<td>ns</td>
<td>1.70[1.31-2.21]****</td>
</tr>
<tr>
<td>Reason Retired Choice Yes</td>
<td>3.39[2.46-4.67]**</td>
<td>2.08[1.56-2.77]****</td>
<td>2.30[1.73-3.05]****</td>
</tr>
<tr>
<td>Pension Plan Yes</td>
<td>1.55[1.10-2.17]**</td>
<td>1.43[1.07-1.92]**</td>
<td>ns</td>
</tr>
<tr>
<td>Spouse Talk A lot</td>
<td>1.95[1.02-3.73]**</td>
<td>1.72[0.98-3.00]**</td>
<td>1.97[1.12-3.47]**</td>
</tr>
<tr>
<td>Think About A lot</td>
<td>0.36[0.20-0.62]**</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Nagelkerke R²</td>
<td>0.23</td>
<td>0.35</td>
<td>0.20</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < 0.001, **** p < .0001

Discussion

The results of this study support previous findings that those who experience good physical and mental health, choose to leave the workforce, and have higher household incomes, are most likely to report greater levels of satisfaction, and physical and psychological health following retirement. These results also support the hypothesis that individuals who plan for retirement both financially and psychosocially, will report greater self reported health and satisfaction with their retirement. However, any association between financial planning and well-being must also consider the influence that planning within the spousal relationship has on this relationship. After controlling for health, income, and the reason for retirement, those who had a superannuation plan were approximately 45% more likely to be very satisfied with their retirement and 24% more likely to rate their physical health as excellent. After controlling for all other variables, those respondents who had talked to their spouse a lot...
about their forthcoming retirement were 86% to 96% more likely to report greater levels of satisfaction, and physical and psychological health. The implications of these findings will be discussed below.

*Retirement Planning and Well-Being*

These findings support previous research showing that, after taking health status, the reason for retirement, and income into account, the two largest contributors to satisfaction and health in retirement are financial and psychosocial planning (C. Anderson & Weber, 1993; Dorfman, 1989; Elder & Rudolph, 1999; Quick & Moen, 1998; Schellenberg et al., 2005; Sharpley & Layton, 1998; Zhu-Sams, 2004). In regard to financial planning, the present study showed that after controlling for household wealth, being involved in a superannuation plan was predictive of satisfaction in retirement as found by Panis (2003). Even those on lower incomes who had a superannuation or savings plan reported greater retirement satisfaction and physical health than those on similar incomes who did not have a superannuation plan. However, financial planning did not uniquely predict well-being when spousal discussions about retirement were also considered. One explanation for this finding is that the decision to contribute to a superannuation plan is made between spouses and may fall within the broader context of couples’ retirement planning. More research is needed to determine how psychosocial planning in general can influence one’s propensity to plan financially. Here, contributing to a savings or superannuation scheme was used as a proxy for financial planning. One limitation with this measure was the assumption that those who answered ‘no’ to this question were not preparing financially. However, it is quite possible that those who did not have a formal superannuation scheme or personal savings plan, were preparing financially in other ways. For these reasons the results regarding financial planning remain
inconclusive and more careful measurement of this important variable should be considered in future research.

Much of the recent research has identified the importance of psychosocial factors such as planning where to live, how to allocate time for new retirement activities, and preparing for changes in social status or identity following retirement. However, few studies have examined how spousal discussions, that potentially encompass all of these aspects of preparation, can influence well-being in retirement. For example, spousal discussions may help couples adjust to their future retirement, yet there is no empirical evidence to suggest how this may occur. By identifying the importance of talking to one’s spouse about retirement, this study has taken an important first step towards understanding the contribution of dynamics within important personal relationships.

Further interpretation of these results is problematic as it still remains unclear exactly which aspects of retirement were being discussed. One explanation that has been dismissed is that spousal discussions are simply a proxy for marital satisfaction. Multivariate analysis revealed that marital satisfaction was not related to either spousal discussions about retirement or well-being and did not influence the relationship between the two. Although these findings indicate that spousal discussions, rather than marital satisfaction, predict well-being, more developed measures are needed to further understand the dynamics of planning within the spousal relationship.

Finally, those who thought a lot about retirement tended to have poorer psychological health in the regression model. This relationship is not apparent in the bivariate correlations, which signals a possible suppressor effect by other variables (Tabachnic & Fidell, 2001). Further
examination of the data showed that when spouse-talk and friends-talk were removed from the equation there was no relationship between thinking about retirement and psychological health. An explanation for this finding is that ruminating or worrying about retirement may be detrimental for psychological health, only if retirement related issues are not also discussed with another person. This argument is supported by the finding that spousal discussions and talking with friends both acted as suppressors and were both positively correlated with thinking about retirement. Thus, talking to a spouse or friend is related to the positive, action oriented aspects of thinking about retirement. When this shared variance was accounted for in the regression model, the negative effects of only thinking about retirement were revealed. Clearly more research is needed to identify the influential aspects of spousal discussions.

The Importance of Longitudinal Studies

This study has overcome a number of the short-comings of previous research by using a prospective design and by examining a wider range of pre-retirement planning activities. Firstly, the direction of the relationships is clarified. Although it could be argued that greater well-being can enhance an individual’s ability to plan for their retirement, this study has shown that, even after controlling for earlier health and income, having a plan and discussing retirement with one’s spouse were related to later well-being in retirement. Therefore, we can be more confident that pre-retirement planning does predict well-being, an assumption that could not be made under a cross-sectional design. Secondly, this study has eliminated the possibility of self-selection, a major problem for retrospective analyses. Self-selection is not evident in a longitudinal design simply because respondents’ reports of well-being in 2004 cannot influence reported levels of retirement planning made in the past.
The importance of a prospective design becomes apparent when comparing Elder and Rudolf’s (1999) retrospective and cross-sectional analysis of HRS data with the results of the current study. Firstly, both studies examined HRS data from 1992 and both used the same measures of pre-retirement psychosocial planning. However, Elder and Rudolf (1999) examined pre-retirement preparation for those who were already retired in 1992 whilst the current study was concerned with the pre-retirement preparation of those still in the workforce. One major finding of the Elder and Rudolf study was that retrospective reports of having thought about retirement and having attended retirement meetings were both positively related to satisfaction with retirement. However, in the current study, having attended a planning seminar and having thought about retirement were not predictive of retirement satisfaction. Furthermore, talking to one’s spouse about retirement was a significant predictor in the current study but not for those providing retrospective reports. Because these two studies may be examining different cohorts, it would be unwise to suggest the accuracy of one study over the other. However, the discrepancy in the results, using exactly the same variables, highlights the possibility of self-selection in retrospective reports and the importance of prospective designs to overcome this problem.

In accordance with Panis’ (2003) earlier longitudinal analysis of HRS data, these findings illustrated a positive relationship between financial planning and retirement satisfaction. Nevertheless, the current findings build on this earlier research in four ways. Firstly, the current study considered a broader range of retirement planning activities, which included both financial and psychosocial planning. Secondly, this study analysed the relationship between retirement planning and well-being over a longer period, further illustrating the robustness of this relationship over time. Thirdly, this analysis examined the relationship between planning and well-being after controlling for household income plus additional
factors identified in previous research. These factors were the reason for retirement and marital satisfaction, which have been shown to independently predict retirement well-being. Finally, this study utilised three distinct but related measures of well-being in retirement: retirement satisfaction; physical health; and psychological health. Examining both modes of retirement planning in conjunction with three dependent measures uncovered the importance of both financial and psychosocial planning, but in different ways. For example, this multidimensional approach suggested that financial planning was only related to retirement satisfaction and physical health, whereas discussing retirement issues with one’s spouse was positively related to all three outcome measures. Few longitudinal studies examining retirement planning have taken a multidimensional approach however, more in-depth research is necessary.

One problem often associated with longitudinal research is the effect of subject attrition on the model results. However, the effects of attrition in this study are minimal. Statistical tests showed no significant differences on all 1992 study variables between those who died before 2004 and those who remained in the analysis. Furthermore, subject attrition did not restrict the variance in the 2004 study variables (see Goodman & Blum, 1996).

Limitations of the Sample and Measures

Owing to statistical assumptions that were the basis of the present analysis, only the financial respondent of each couple was included in the analysis. Although similar numbers of men and women identified as the financial respondent, partners who were not considered the most knowledgeable of household finances are not represented by these results. Previous research has identified widowed women as the most at risk of poor outcomes in retirement, especially those who previously had no contact with household finances (Butler, 1989; Holden &
Smock, 1991). Owing to the inclusion of the ‘spouse talk’ variable, those who were either never married, divorced, or widowed, a group comprising mainly of women, were also not represented by these results. Because these groups are the most likely to benefit from this type of research, future analyses should include a wider range of statuses, both married and single and in or out of the paid workforce.

The selection process also lead to the exclusion of people who were unable to work due to illness or disability in 1992. Accordingly, the results of this study do not apply to this particular group. However, this study did identify the negative effect of a forced retirement on future well-being. Thus, future research needs to focus on those who may find retirement planning the most difficult, yet could potentially benefit the most from its early implementation.

The results are consistent with previous findings, yet the significant relationships shown are weak. An important issue here is that the measures of planning used in the HRS are relatively undeveloped, and only provide a broad-brush picture of pre-retirement planning and its relationship to well-being in later life. The results suggest that there are indeed important relationships between planning and outcomes. In particular, the importance of spousal discussions about the choices to be made has been highlighted. Given that the measures may be proxies for more specific planning activities, and may be missing much of the purposeful activities undertaken as people consider retirement, it is important to develop the measures of these factors. In undertaking this more focussed development of the constructs under consideration and their assessment, good theory about the nature of retirement planning and its relations to future well-being is essential.
Several authors (Quick & Moen, 1998; Richardson & Kilty, 1991; Shaw et al., 1998) have used continuity theory (Atchley, 1999; 2003) to explain the importance of the relationship between pre-retirement planning and well-being in later life. Shaw et al. (1998) suggest that people plan for their retirement in order to minimise the impact of retirement on both financial and lifestyle changes. For example, the development of a savings plan is argued to offset financial losses associated with termination of paid employment and therefore enables lifestyle continuity, whilst active planning between spouses may reduce the possible friction surrounding role change and social functioning (Shaw et al., 1998). In this sense, any evidence for a positive relationship between pre-retirement planning and well-being in later life has been seen as supportive of continuity theory. Continuity theory could well be used to develop specific measures of planning activities for future studies. These measures could be used to test hypotheses about which specific aspects of retirement planning are beneficial and why.

Conclusions

There is practical import for the ageing population in developing our understandings of how to plan effectively for retirement. This analysis of prospective data has demonstrated the importance of two basic activities: talking to one’s spouse about retirement plans, and financial planning through superannuation and private savings. However, these are only indications of the nature of the activities that may be important to well-being and satisfaction after retirement. Overall, these findings support the continuing development of our understandings of these issues. The most important outcome of this study is to point us toward a more focussed consideration of planning for retirement, the need for the development of theory-based measurement, and the use of appropriate study designs.
References


Study One: Retirement planning and well-being.


Study One: Retirement planning and well-being.


**Personal Reflections**

The results from Study One have illustrated the benefits of retirement planning for American retirees. However, I wanted to situate the research within a New Zealand context. Some of the factors I identify in Study Two were also in the HRS database, but there was no guarantee that the factors related to Americans’ retirement plans would necessarily be the same for New Zealanders’ plans. Accordingly, I drew on New Zealand data from the Health, Work, and Retirement study to theorise and model the causal effects of psychological, socioeconomic, and demographic factors on financial retirement planning.

Study One highlighted the importance of talking to one’s spouse about retirement. Therefore, this variable was originally included in Study Two. However, this excluded 500 people without partners from the analysis. Given that people without partners tend to have fewer financial resources, I felt that it would be inappropriate to exclude them from further study. Therefore, I decided to abandon research into spousal discussions, as it is those without partners who could potentially benefit the most from retirement planning.

After completing Study One, I became acutely aware that the measures being utilised in the literature were not capturing the retirement planning construct. For example, in Study One I conceptualised the three variables assessing retirement thoughts, spousal discussions, and discussion with friends as ‘psychosocial panning’. This was because of the medium in which these activities were performed. For example, talking to a spouse or friend is a social behaviour, whereas thinking about retirement planning is psychological in nature. However, it was not until later that I realised that psychosocial planning was much more complicated than this and that these three variables tell us little about people’s psychosocial planning.
Having realised the limitations of the current planning measures, Study Two reflects the first advancement in my understanding of retirement planning. It was around this time that I discovered Friedman and Scholnich’s (1997) process theory and I wanted to incorporate their perspective into Study Two. They state that people go through a series of stages as they plan for an event and I have argued that “thinking about retirement” reflects the first stage of the process. In other words, thinking about retirement is one way of developing a mental representation of retirement. The HWR also included a number of specific financial planning variables including home ownership, savings, and superannuation. I conceptualised these as the final stage of the process as I felt these reflected the behaviours that people undertake to fulfil financial goals. Unfortunately, measures of lifestyle, health, and psychosocial planning measures were not utilised in the HWR at that point in time.
Study Two: Do men and women differ in their retirement planning? Testing a theoretical model of gendered pathways to retirement preparation.


Abstract

Previous literature has situated retirement and retirement planning within the male’s domain by positioning women as unconcerned and therefore ill-prepared for retirement. However, women’s increasing representation in the workforce requires a re-examination of their retirement plans and of the factors that affect their planning. In this study, a sub-sample of 2277 working men and women from the New Zealand Health, Work, and Retirement survey, provides the basis for a structural equation model examining the effects of SES, work involvement, and retirement perceptions on retirement planning. This model also tests for gender differences to assess the extent to which women are disadvantaged in terms of their retirement planning and the factors that may affect retirement plans. Results indicated that perceptions of retirement and economic living standards were associated with financial preparedness. However, women were still economically disadvantaged compared to men and this impacted negatively on their financial preparations. Retirement and retirement planning is now of greater concern for women. Future promotional initiatives should be aimed at these groups in order to assist their financial preparations for the future.
New Zealand pre-retirees, along with many in the Western world, face increased living costs and longer periods of time in retirement. Given the increasing onus on the individual to prepare for retirement (Rowlingson, 2002) and the advancement of Post World War II “Baby Boomers” towards retirement age, it is not surprising that the retirement planning literature has grown appreciably in the last decade. One branch of this literature has shown that retirement planning leads to greater well-being including better mental and physical health after retirement (Noone, Stephens, & Alpass, 2009; Schellenberg, Turcotte, & Ram, 2005). However, women are more likely to suffer poverty and poorer well-being in old age (Lee, 2003). Gendered factors such as socioeconomic status (SES), work involvement, and perceptions of retirement, have been used to explain these differences (Block, 1984; Henretta, 1994; Newman, 1982). However, the theoretical relationships between these factors and retirement planning are seldom modelled in this literature. Therefore, the aim of this study is to test for gender differences in retirement planning, perceptions of retirement, workforce involvement, and SES within a model that theorises their relationships. The following review will examine each of these factors before introducing the model.

Retirement Planning and Gender Differences

The measurement of financial retirement planning may be seen as falling into two broad categories: financial preparedness and, less formal, retirement thoughts and planning behaviours. Financial preparedness is typically assessed by pension wealth and/or the ownership of other investments such as property, shares, and personal savings (see Clare, 2004). Informal planning is assessed through the use of educational material and the extent to which individuals have thought about retirement and discussed it with others (see Moen et al., 2000). Both elements of retirement planning have been examined alongside demographic and
psychological variables and health outcomes in later life (Glass & Kilpatrick, 1998; Hershey & Mowen, 2000; Noone, Stephens & Alpass, 2009).

Research focus on gender differences in retirement planning has changed markedly across the last century as Western society has seen a shift in gender roles with respect to work and retirement (Brewster & Padavic, 2000; Inglehart & Norris, 2003). Traditional gender roles placed work and retirement firmly in the male’s domain while any research with women considered only their husbands’ retirement. Despite women’s increasing presence in the workforce since World War II, research into women’s retirement, including their preparatory behaviours, did not begin in earnest until 1976 (Slevin & Wingrove, 1995). Research over the following two decades consistently showed that women, in general, did less retirement planning than men (Atchley, 1982; Kilty & Behling, 1985).

During this time, women’s lack of retirement planning was largely theorised in terms of traditional gender role ideology (e.g., Block, 1984). In 1995, Perkins argued that women still considered retirement planning to be their husbands’ responsibility and that their over-representation in lower paid and non-unionised occupations impacted negatively on their retirement plans (see also O’Rand & Henretta, 1982). Yet research now suggests that traditional gender roles are becoming less defined and more egalitarian over time (Brewster & Padavic, 2000; Inglehart & Norris, 2003). Therefore, research is needed to determine if traditional conceptualisations of gender, retirement, and retirement planning are still appropriate for contemporary pre-retirees. A review of the current literature suggested that this may not be the case.

From 1995 onwards, the findings regarding gender differences in informal planning have been divided between those which suggest that men remain more likely to focus on
retirement, and those that show no gender differences. For example, a number of studies have found that men think more about their future life in retirement (Jacobs-Lawson, Hershey, & Neukam, 2004; Quick & Moen, 1998); their future finances (Moen et al., 2000); and are more likely to discuss retirement with friends, relatives, and co-workers (Moen et al., 2000). However, in a number of these studies, the differences were statistically significant, but relatively small (Jacobs-Lawson et al., 2004; Moen et al., 2000), or no gender differences were found (Reitzes & Mutran, 2004; Schellenberg et al., 2005).

Since 1995 the differences found in men’s and women’s financial preparedness are also inconclusive. Certain studies have shown that women have lower levels of personal savings, superannuation, and retirement investments (Clare, 2004; Glass & Kilpatrick, 1998). However, other research has found no gender differences in financial preparedness (Greenwald, 1999; Hershey & Mowen, 2000; Rosenkoetter & Garris, 2001). Inconsistencies and contradictory findings in the current literature suggest that women are less disadvantaged in terms of retirement planning compared to two decades ago. Results from an Australian national survey lead Wolcott (1998) to argue that women’s attitudes towards retirement have changed. With this in mind, a closer examination of the major factors that are argued to differentiate retirement planning for men and women is warranted. The following section reviews the literature linking perceptions of retirement, workforce involvement, and SES to retirement planning.

Perceptions of Retirement

Numerous studies have identified a positive relationship between retirement planning and perceptions of retirement, including retirement expectations (Kilty & Behling, 1985; Taylor-Carter, Cook, & Weinberg, 1999), retirement confidence (Joo & Grable, 2001), and attitudes
Study Two: Gender differences in retirement planning

Towards retirement (Gordon, 1994; Reitzes & Mutran, 2004; Turner, Bailey, & Scott, 1994). Topa et al.’s (in press) recent meta-analysis has illustrated the small but positive impact of attitudes towards retirement on retirement planning.

Previous literature suggested that women had more negative perceptions of retirement than men (Lopata & Steinhart, 1971), yet contradictory findings are plentiful (see Slevin & Wingrove, 1995 for a review). Research at the time suggested that women’s negative attitudes were a result of a number of factors including their generally lower SES and interrupted careers (Block, 1984). Newman (1982) argued that because women hold more negative attitudes they are less likely to plan because they “… simply do not allow themselves to think about what they regard as an unpleasant topic” (p. 117). However, more recent research, with notable exceptions (Hatch, 1992; Panis, 2003), shows no gender differences in perceptions of retirement (Gee & Baillie, 1999; Joo & Grable, 2001; MacEwen et al., 1995; Reitzes & Mutran, 2004).

Involvement with Work

Research indicates that higher levels of workforce involvement can lead to negative perceptions of retirement (Erdner & Guy, 1990; Fletcher & Hansson, 1991; Gordon, 1994). According to theory, involved workers expect retirement will lead to a loss of identity and as a result they form negative perceptions of retirement and postpone their retirement date (Adams, Prescher, Beehr, & Lepisto, 2002; Carter & Cook, 1995).

Research has suggested that women may be less involved in paid work because they spend relatively less time in the workforce due to child bearing and care giving demands (Han & Moen, 1999; Jacobs, 1999). In turn, this can disadvantage women with respect to their
income, promotional opportunities, and access to superannuation (Block, 1984; Henretta, 1994). However, Western society’s shift towards educational and occupational equality suggests that gendered distinctions in workforce involvement may be less apparent now than in the past.

Although women’s work histories are still disadvantageous in regard to financial preparedness, compared to previous cohorts, more mid-aged women are in paid employment, are spending more time in paid work, and are in higher status occupations (Blau, Simpson, & Anderson, 1998; Hill & O’Neill, 1990; Statistics New Zealand, 2009). Furthermore, current research identifies no gender differences in work involvement (Elloy, Everett & Flynn, 1991; Singh, Finn & Goulet, 2005) or other facets of work orientation including career commitment (Rozier, 1996; Rozier & Hersh-Cochrane, 1996) or job satisfaction (Smith, Smits & Hoy, 1998; Russ & McNeilly, 1995).

**Socio-Economic Status**

Research suggests that aspects of SES such as education, occupational status, and income are positively related to retirement planning (Lee, 2003; Schellenberg et al., 2005). Those who are more educated tend to work in higher status occupations, earn more, and can therefore make more financial provisions for retirement. However, the relationship between gender and SES is less clear. Early research has shown that women’s generally lower SES, rather than their sex per se, impacted negatively on their retirement planning (Block, 1984). For example, the relatively few women working in professional occupations and rural settings showed equivalent rates of planning to men (Dobson & Morrow, 1984; Dorfman, 1989; Newman, Sherman, & Higgins, 1982). More recent studies suggest that gendered disparities
in SES are closing (Joo & Grable, 2001; Jaumotte, 2003; Schellenberg et al., 2005) but New Zealand women are still earning considerably less than men (New Zealand Statistics, 2006).

Women may be further disadvantaged by lower rates of cohabitation than men. A lower rate of pay coupled with the absence of an earning partner suggests that single women may be particularly disadvantaged in terms of their financial resources and therefore their ability to prepare financially (Gee et al., 2002). It is also likely that, compared to partnered women, single women may have more negative perceptions of retirement due to perceived financial difficulties. Thus, aspects of SES, such as marital status, may impact on retirement planning and perceptions of retirement (Murtran, Reitzes & Fernandez, 1997).

**A Model for Research**

According to the early literature (Block, 1984; Lopata & Steinhart, 1971; Newman 1982; O’Rand & Henretta, 1982), women were less educated, worked in lower status occupations, and were less involved in the workforce. As a result, it was argued that women did less retirement planning than men because they had less to plan for. However, current research suggests that traditional gender roles may be less relevant in today’s society. This evidence gives rise to a number of questions. Does the current cohort of female pre-retirees undertake less planning than men? Are they still disadvantaged in terms of their SES? Are contemporary female employees less personally involved in paid employment than men? Do they have the same perceptions of retirement as men? How do women without partners compare to partnered women with respect to their retirement planning, SES, and perceptions of retirement?
In regard to the set of relationships suggested by these research questions, Dobson and Morrow (1984) have provided a model which predicts that workforce involvement will have an indirect effect on both aspects of retirement planning (informal planning and financial preparedness) through perceptions of retirement (see Figure 2). This model was expanded to include additional relationships as suggested in the empirical findings summarised above and to control for expected differences in retirement planning resulting from time until expected retirement (Moen et al., 2000). The following summarises the theoretical foundations for the predicted form of the relationships.

Some theorists suggest that work involvement may impact negatively on retirement perceptions (Adams, Prescher, Beehr, & Lepisto, 2002). Those who are heavily involved in paid employment perceive retirement in terms of the loss of an important worker identity and form negative perceptions of retirement as a result. Conversely, those who are less involved in paid employment perceive retirement more positively as they do not anticipate the same level of identity loss. To reflect this theoretical pathway, direct effects from work involvement to perceptions of retirement were added to the model.

Perceptions of retirement may impact positively on retirement planning. Newman (1982) suggested that those who hold negative views of retirement may not want to think about or prepare for a perceived negative event. In contrast, those with positive perceptions of retirement may do more planning in order to fulfil their expectations. In light of these explanations, direct effects from perceptions of retirement to informal planning and financial preparedness were added to the model.
SES may impact positively on retirement planning (Lee, 2003; Schellenberg et al., 2005). Those with fewer resources do not have the means to prepare financially and may also do less informal planning because retirement is not perceived as a viable financial option. Direct effects from SES to informal planning and financial preparedness were added to test these explanations.

SES may also impact positively on retirement perceptions (Mutran et al., 1997; Joo & Pauwels, 2002. Those with fewer economic resources may hold more negative perceptions of retirement because they do not have the funds to support a retirement lifestyle or because they cannot afford to retire. Therefore, a lack of resources may lead to fears of poverty in retirement rather than freedom. Direct effects from the socioeconomic variables to perceptions of retirement were added to the model.

Although seldom examined to date, we additionally predict that informal planning will have a positive effect on financial preparedness. According to Scholnich and Friedman’s (1993) theory of planning, people develop mental representations of a future event (such as retirement) before undertaking preparatory behaviours. We suggest that informal planning is one way of developing a mental representation of retirement which precedes financial preparedness. Therefore, a direct effect from informal planning to financial preparedness is added to account for this theoretical pathway.
Methods

Participants

The New Zealand Health, Work, and Retirement Study (Alpass et al., 2006) follows a sample of 55 to 70 year-olds as they progress from work to retirement. One aim of this longitudinal study is to identify and examine the factors that predict well-being in retirement. 12,567 individuals were randomly selected from the electoral role (a compulsory voting register for all those aged 18 and over) and 6,662 postal questionnaires were returned (53%). Those of Māori ethnicity (the indigenous people of New Zealand) were over-sampled to increase their representation in the analysis and the data were weighted accordingly. Comparisons with population estimates from national census data, suggests that this sample is reasonably representative of the population. The present study used data from the first survey wave...
(2006) and was concerned with the retirement planning activities of those still in the workforce and born during the Post-World War II “Baby Boom”. Those who identified as retired were removed from the sample (N=1,456) as were those who were born before 1946 (N=1,988). Those who identified as homemakers or not otherwise working for pay (N=526) were also removed. This left 2692 cases for analysis. Those with missing data on all indicators that comprised the work involvement, anticipated retirement adjustment, and anticipated finances scales (N=112) and on demographic variables (N=303) were removed. Statistical tests showed that those with missing data on these variables did not differ appreciably on the study variables and were therefore considered missing completely at random. This left 2,277 cases for the final analysis. A sub-sample of 1,126 was used for comparisons between women with (N=796) and without partners (N=330).

Measures

Retirement Planning

Informal planning. A single observed variable was used to assess Informal Planning. Participants responded to the question “how much have you thought about retirement?” on a four-point scale ranging from “hardly at all” to “a lot” (M=2.33, SD=1.06). This item was originally developed by Lusardi (1999) and was used in the first wave of the Health and Retirement Study.

Financial preparedness. Financial Preparedness was a latent variable with five dichotomous indicators: whether or not respondents owned their own home, a rental property, personal savings, private pension, or either managed funds or shares. The ownership of these assets features in the retirement plans of many people (Hershey et al., 2001). A score of “1” indicates the asset is not owned while a score of “2” indicates ownership.
Study Two: Gender differences in retirement planning

Involvement with Work

Kanungo’s (1982) six-item Work Involvement scale assessed the extent to which life revolves around work. Responses were scored on a five-point scale ranging from “strongly disagree” to “strongly agree”. Higher scores on this latent variable reflect greater personal involvement with paid work.

Perceptions of Retirement

Perceptions of retirement were measured by two latent variables: Anticipated Adjustment to Retirement and Anticipated Retirement Finances.

Anticipated adjustment to retirement. The Anticipated Adjustment to Retirement scale (Taylor & Shore, 1995) measured the extent to which one expects to adapt to and enjoy retirement. Responses to four statements were scored on a five-point-scale ranging from “strongly disagree” to “strongly agree”. Higher scores on this latent variable reflect more positive perceptions of one’s future adjustment.

Anticipated finances in retirement. The Anticipated Finances scale (Adams & Beehr, 1998) comprises five items which assessed anticipated financial position in retirement. Three items were scored on a five-point scale ranging from “strongly disagree” to “strongly agree”. Two items were scored on a seven-point scale with the same anchors. Higher scores on this latent variable reflected more positive perceptions of one’s future finances.

Socioeconomic Status (SES)

Educational qualifications and scores on the Economic Living Standards Index (ELSI) were observed variables used as proxies for SES.
**Economic living standards.** The ELSI-short form (Jenson, Spittal, & Krishnan, 2005) was an observed variable which measured restrictions in the ownership of household items (eight items), restrictions in social participation (six items), the extent to which respondents economised to keep living costs down (eight items), and three self-rated indicators of living standards. In summary, the ELSI scale measures levels of consumption, social activity, and the ownership of household items, rather than calculating the economic resources that enable them (Jenson et al., 2005). Scores on each of the ELSI items were combined and range from 0 to 31 with higher scores reflecting greater economic living standards (M=24.69, SD=4.88).

**Education.** A nine-point nominal scale indicated the highest formal educational qualification. This scale was collapsed into a dichotomy reflecting either no formal secondary schooling (20.4%) or a secondary qualification or higher (79.6%).

**Expected Time to Retirement**

The closer an individual is to retirement the more likely they are to be undertaking preparatory activities (Moen et al., 2000). Current age was subtracted from expected retirement age to reflect perceived number of years before retirement (M=9.32, SD=5.60).

**Gender** (male [1] or female [2]) and **Marital Status** (partnered [1] or single [2]) were assessed with two dichotomous items. 52.5% of the sample were male and 79% were living with a partner.

**Analysis**

Two structural equation models were used to analyse the data using MPlus 5.1. The basis for an adequately fitted model was a chi square/df ratio less than three, TLI and CFI values
greater than 0.95 (Hu & Bentler, 1999), and RMSEA values less than 0.05 (Browne & Cudeck, 1993). A Mean and Variance adjusted Weighted Least Squares (WLSMV) estimator was used for the analyses. This estimator is appropriate when the data are not normally distributed, when missing data are to be estimated, and when factor indicators are a mixture of categorical, ordered, or interval variables.

The first model tested the relationships outlined in Figure 3 (p. 62). In addition, a number of variables were allowed to correlate. Those more personally involved in their work were expected to perceive retirement further away, as were those with fewer financial resources. Perceptions of adequate finances may lead to more positive perceptions of retirement adjustment or vice versa. The first model also tested for mean gender differences by adding a direct effect between gender (see Figure 3) and each of the latent and observed variables (Kline, 2005).

The second SEM also tested the relationships outlined in Figure 3, but for a sub-sample containing only women (N=1,126). There were two reasons for selecting women only. Firstly, women are more likely than men to live alone and this proportion continues to increase with age (Gaymu, Delbés, Springer, Binet, Desesquelles, Kalogirou, & Ziegler, 2006; Martikainen, Nihtila, & Moustgaard, 2008). This at risk group is under-studied in the literature and therefore requires focused research attention. Secondly, there were insufficient single men (N=172 compared to N=315 women) for statistical analyses. This model tested for mean differences across marital status by adding a direct effect between marital status and each of the factor and observed variable means (see Figure 4, p. 63).
Missing Data

There were substantial missing data on the savings (31%), shares or managed funds (40%), and rental property ownership variables (46%). Statistical tests showed that those with missing data on the savings variables had lower scores on the ELSI scale ($p<.001$). Therefore, these cases should not be removed from the analyses (Schafer & Graham, 2002). It is likely that these responses are either Missing at Random (MAR) or that their missingness is a function of the variables themselves (Missing Not At Random, MNAR). Schaffer and Graham (2002; see also Collins, 2001) argue that, in most cases, Maximum Likelihood Estimation (MLE) will not overly bias the parameter estimates when data is MNAR. This method was used in the current study. However, differences between the parameter estimates using MLE and listwise deletion (N=713) are considered in the results section.

Results

SEM 1

Initial fit statistics for the measurement model indicated a poor model fit ($\chi^2= 201.19$, $df=50$, $p<.001$, CFI=.85, TLI=.92, RMSEA=.04). After removing one of the five indicators of financial preparedness (superannuation), one of the four indicators of anticipated retirement adjustment, two of the six indicators of work involvement, and two of the five indicators of anticipated retirement finances, the model showed adequate fit to the data ($\chi^2= 61.89$, $df=29$, $p<.001$, CFI=.96, TLI=.97, RMSEA=.02). Measurement invariance was confirmed for all intercepts across gender. However, there was non-invariance on the threshold of the home ownership indicator. A direct effect between gender and home ownership was added ($r=.17$, SE=.05, $p=.001$) to account for this, and partial measurement invariance was assumed. The full structural model (Figure 3) showed adequate fit to the data when all non-significant
pathways were removed ($\chi^2 = 72.55$, $d.f=38$, $p<.001$, CFI=.97, TLI=.97, RMSEA=.02). Table 4 displays the items used in the analysis, their respective factor loadings, the standard errors, and alpha coefficients.

Table 4

*Cronbach’s Alpha, Standardised Factor Loadings, and Standard Errors for the Latent Variable Indicators*

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Alpha</th>
<th>Factor loadings</th>
<th>Standard errors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial Planning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owns savings</td>
<td>.61</td>
<td>0.79</td>
<td>0.03</td>
</tr>
<tr>
<td>Owns shares or managed funds</td>
<td></td>
<td>0.82</td>
<td>0.01</td>
</tr>
<tr>
<td>Owns rental property</td>
<td></td>
<td>0.74</td>
<td>0.05</td>
</tr>
<tr>
<td>Owns home</td>
<td></td>
<td>0.63</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>Work Involvement</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work is something people should get involved in most of the time</td>
<td>.79</td>
<td>0.50</td>
<td>0.03</td>
</tr>
<tr>
<td>Work should be considered central to life</td>
<td></td>
<td>0.67</td>
<td>0.02</td>
</tr>
<tr>
<td>In my view, an individual’s personal life goals should be work-orientated</td>
<td></td>
<td>0.78</td>
<td>0.02</td>
</tr>
<tr>
<td>Life is worth living only when people get absorbed in work</td>
<td></td>
<td>0.68</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Anticipated Retirement Adjustment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am confident that I will easily adjust to retirement</td>
<td>.89</td>
<td>0.88</td>
<td>0.02</td>
</tr>
<tr>
<td>I don’t think I will have any trouble handling retirement</td>
<td></td>
<td>0.86</td>
<td>0.01</td>
</tr>
<tr>
<td>I expect to enjoy retirement</td>
<td></td>
<td>0.75</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Anticipated Finances in Retirement</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I worry about having enough income in retirement</td>
<td>.81</td>
<td>0.80</td>
<td>0.02</td>
</tr>
<tr>
<td>I worry about the standard of living I will have in retirement</td>
<td></td>
<td>0.86</td>
<td>0.02</td>
</tr>
<tr>
<td>I am satisfied with what my family income will be in retirement</td>
<td></td>
<td>0.88</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Dobson and Morrow’s (1984) structural model was partly supported by the data (see Figure 3). Involvement with work had a direct negative effect on anticipated retirement adjustment ($p<.001$), but the addition of direct effects between involvement and the retirement planning variables did not improve the model fit. These results indicate that, as predicted, work involvement had only an indirect effect on retirement thoughts, but not on financial preparedness. Anticipated retirement adjustment was positively associated with thinking about retirement ($p<.001$) but was not associated with financial preparedness. Anticipated finances was positively associated with financial preparedness ($p=.02$), but negatively associated with thinking about retirement ($p<.001$). Economic living standards had the expected effect on financial preparedness, anticipated finances, and anticipated retirement
adjustment ($p<.001$). However, scores on the ELSI were not associated with thinking about retirement. Expected time to retirement was, as expected, negatively associated with retirement thoughts ($p<.001$) but was not associated with financial preparedness. Finally, thinking about retirement was positively associated with financial preparedness ($p<.001$).

The negative relationship between gender and financial preparedness ($r=-.10$, $SE=.05$, $p=.05$) indicates that factor means were lower for women. Factor means on the work involvement factor were also lower for women ($r=-.17$, $SE=.04$, $p<.001$) as were their reported living standards ($r=-.09$, $SE=.04$, $p=.02$). Non-significant pathways from gender to perceived retirement adjustment, perceived finances, and thinking about retirement were removed from the model.

Figure 3. SEM showing the significant parameter estimates and standard errors for the full sample when the direct effects of sex were added.
SEM 2

The structural model outlined above also showed adequate fit for the female-only sub-sample when a direct effect between marital status and the observed and latent variables was added ($\chi^2 = 39.88$, $df=32$, $p=.16$, CFI=.98, TLI=.99, RMSEA=.02) (see Figure 4). Measurement invariance for all intercepts and thresholds was confirmed across marital status.

Factor means for financial preparedness were lower for women without partners compared to partnered women ($r=-.13$, SE=.06, $p=.02$). Women without partners also reported poorer economic living standards ($r=-.29$, SE=.05, $p<.001$) but did not differ in levels of informal planning. Non-significant pathways from marital status to work involvement, perceived adjustment, and perceived finances were removed from the model.

![Figure 4. SEM showing the significant parameter estimates and standard errors for the female only sub-sample when the direct effects of marital status were added.](image)
Table 5 shows the Mplus estimated correlation coefficients between the study variables according to gender. These results indicate the relationship between anticipated finances and financial preparedness was stronger for women than men (p<.001) as was the relationship between anticipated finances and financial preparedness (p<.05). Conversely the relationship between informal planning and financial preparedness was stronger for men (p<.01). For women, being single was more strongly correlated with economic living standards (p<.001) and anticipated finances (p<.01).

### Table 5

*Estimated Correlations Between the Study Variables According to Gender*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
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<tbody>
<tr>
<td>Work Involvement</td>
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<td>Male</td>
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<tr>
<td>Anticipated Finances</td>
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<tr>
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<tr>
<td>Financial Preparedness</td>
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<td>Informal Planning</td>
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<tr>
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<td>.09</td>
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<td>.16</td>
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<td>Time to Retirement</td>
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<td>.14</td>
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<td>.56</td>
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<td>.18</td>
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<td>.20</td>
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<td>.56</td>
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<td>.18</td>
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<td>.04</td>
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<td>.08</td>
<td>.00</td>
<td>.09</td>
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<tr>
<td>Male</td>
<td></td>
<td>.00</td>
<td>.07</td>
<td>.28</td>
<td>.03</td>
<td>.08</td>
<td>.28</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>.00</td>
<td>.07</td>
<td>.28</td>
<td>.03</td>
<td>.08</td>
<td>.28</td>
<td></td>
</tr>
</tbody>
</table>

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

In general, the parameter estimates did not differ appreciably when listwise deletion was used. However, the relationship between the ELSI and the financial preparations factor appeared slightly stronger for this group ($r=.59$, SE=.06) compared to the full sample ($r=.45$, SE=.05). The strength of this relationship was therefore more conservative when missing data was estimated.

Discussion

In general, more positive perceptions of retirement, higher levels of informal planning, and greater economic living standards were associated with higher levels of financial preparedness. Conversely, involvement with work was only indirectly associated with informal planning. Women, in general, did not differ from men in their retirement perceptions or their informal planning. However, they were less financially prepared for retirement, reported lower living standards, and were less involved in paid work. Further examination showed that women without partners were particularly disadvantaged in terms of their living standards and financial preparations. The following discusses these differences and the social and economic factors that this model has revealed as explanations for gendered differences in retirement preparation.

In regard to workforce involvement, men continue to place greater importance on paid employment, despite recent research suggesting women are equally involved with the workforce (Rozier 1996; Rozier & Hersh-Cochrane, 1996; Russ & McNeilly, 1995; Singh, Finn & Goulet, 2005; Smith, Smits & Hoy, 1998). Nevertheless, involvement with work was not directly related to retirement planning and only showed a very weak indirect effect via retirement perceptions. This finding, therefore, has no explicit implications for women’s retirement planning, but questions the assumption that career orientated individuals are
reluctant to prepare for retirement. This is not a unique finding. Atchley’s (1982) early research showed that attitudes towards work and retirement were uncorrelated but predictive of planned retirement age. Gee and Bailee’s (1999) research suggests that involvement with the actual job, rather than work in general, is a stronger predictor of retirement perceptions. Thus, a strong work ethic can be transferred into retirement.

Equivalent perceptions of retirement for men and women do support suggestions of social change. Research with previous cohorts has suggested that lower levels of retirement planning in women were the result of more negative perceptions of retirement (Hatch, 1992; Panis, 2003). There is no evidence from this study to support this. The present study shows that men and women perceive their future finances in the same way and expect to adjust equally well to life in retirement. However, perceptions of retirement appear to do little to influence financial preparations and therefore the long-term well-being of women approaching retirement.

The results from this study suggest that women are disadvantaged in certain areas of retirement planning but not in others. First, men and women reported the same levels of informal planning. This is consistent with much of the current research (MacEwen et al., 1995; Onyx & Baker, 2006; Reitzes & Mutran, 2004; Schellenberg et al., 2005; Turner et al., 1994) and provides evidence for a shift away from the traditional gender roles, which positioned women as uninterested in retirement issues. Furthermore, informal planning had a significant impact on financial preparedness after controlling for living standards, anticipated finances, and gender. This suggests that financial preparedness is a function of both SES and prior planning mechanisms.
These pathways provide an explanation for the second observation that women reported significantly lower levels of financial preparation, despite thinking as much about retirement. Women had lower levels of economic living standards and this was especially evident for women without partners. Thus, although women’s perceptions of retirement may have changed in recent times, their financial circumstances have not changed to the same degree. Much of the recent research has failed to consider how financial preparations can be influenced by marital status (Hershey & Mowen, 2000; Lee, 2003; Reitzes & Mutran, 2004; Rosenkoetter & Garris, 2001; Taylor-Carter et al., 1999). Notable exceptions (Greenwald, 1999; Turner et al., 1994) have found that married individuals had talked about retirement more and felt they had done a better job preparing financially. For individuals with a working partner, household income and economic living standards are a product of both parties. Thus, partnered couples will have more resources to enable them to prepare financially for the future. Higher rates of widowhood, coupled with generally lower incomes and superannuation holdings (Clare, 2004) means that single women are particularly disadvantaged in terms of their ability to prepare financially for the future.

Although these findings suggest that retirement is an important psychological issue for both men and women, the single measure of informal planning remains problematic. Using the existing informal planning measure, one cannot be sure what aspects of retirement individuals are actually thinking about or the extent to which they understand the issues surrounding retirement. Furthermore, the negative relationship between anticipated finances and informal planning, suggests that this variable may be assessing worry over retirement finances rather than more proactive planning mechanisms (see Noone et al., 2009). There is also evidence to suggest informal planning is a stronger indicator of worry for women.
Data from Table 5 indicates the relationship between informal planning and financial preparedness is weaker for women (r=.09 versus r=.21 for men). One interpretation is that, for women, informal planning reflects maladaptive thoughts that have little impact on financial preparedness. Conversely, the stronger correlation for men suggests these are proactive mechanisms that impact positively on financial preparedness. However, future research must develop measures of informal retirement planning that are more specific and that allow for the control of factors such as retirement worry, in order to examine these relationships more thoroughly.

According to Dobson and Morrow (1984), negative retirement perceptions lead to lower levels of planning because individuals are less likely to think about and prepare for something they do not look forward to. However, it is plausible that retirement planning may influence retirement attitudes. For example, those who are preparing financially for the future may have more positive perceptions of retirement because their financial future may feel more secure. Although the causal direction of this relationship is unconfirmed, the importance of gender and socioeconomic status for retirement planning remains unchanged.

Current research links women’s poverty in later life with lower levels of retirement planning. The results of our study add to this literature by highlighting the structural effects of SES and women’s marital status on this relationship. Based on the findings from this study, we argue that retirement and retirement planning are now of equal, if not greater, concern for women. We found that men and women held similar perceptions of retirement and were thinking about retirement to the same extent. Research such as Newman’s (1982) study, which suggested that women did not want to think about retirement, is therefore less relevant today. Nevertheless, prevailing inequalities in SES means that women are still disadvantaged in
terms of their financial preparations for retirement. This may be particularly problematic for those women who may be forced into an early retirement due to poor health or redundancy, yet are too young to receive government provided superannuation. Single women who do not have the resources to prepare financially may be particularly vulnerable to increasing health costs and the increasing cost of living. The implications of this research for social policy are clear. Any promotional initiatives or policy change must be aimed at enabling the financially strained to plan for the future as well as strengthen the structures which support these groups in later life.
References


In Study One I argued that continuity theory could be the basis for developing a new retirement planning measure. However, further analysis of the theory led me away from this path. Atchley (1989; 1999) argues that people use the same methods of problem solving throughout their lives. Thus, when people approach retirement they use the same methods of adapting to new situations that they have used across the lifespan. However, Atchley (1989; 1999) suggests that not all people will approach retirement in this way nor will using the same coping mechanisms necessarily result in positive outcomes. While this theory may be tested when people move into retirement and beyond, it is difficult to conceptualise how continuity theory could be used to generate planning measures. I decided instead to focus on Friedman and Scholnich’s (1997) process theory and role theory as I perceived these to be more informative for developing the planning measures.

The decision to focus on retirement roles was also a pragmatic one. Initially I began to conceptualise psychosocial planning in terms of identity, or more specifically, changes to identity following retirement. After attempting to develop items to assess planning for identity change, I quickly realised that the construct was far too complicated to be operationalised in this way. Social roles, on the other hand, are much more familiar to the general public and are therefore much easier to assess in questionnaire form. I believe this was evidenced by the low rate of missing data across the psychosocial planning items.

Household income could have been used as an indicator of SES in Study Two. Unfortunately, I detected serious errors in the way that the participants had responded to this question. Participants were asked to note down a) their personal income and b) the
income of all others in the household. Household income was to be calculated by adding these two values together. However, numerous people entered their total household income instead of the income of all others. It was impossible to determine who had made this error and who had not. Therefore, this variable was not used in Study Two. Despite using a different response format, the respondents made the same error when I collected my own data for Study Three. Fortunately, scores of the ELSI have been shown to be strongly correlated with household income. Furthermore, the ELSI typically exhibits lower rates of missing data.

Study Three reflects the final stage in my conceptualisation of retirement planning. I began this process with vague measures, not out of choice, but because these were the only measures available for public use. However, I needed to use these measures in order to provide a rationale for the development of more detailed measures, to put the research into a New Zealand context, and to identify the variables I needed to examine alongside the Process of Retirement Planning Scale. But looking back, it was the use of these vague measures that encouraged me to think more critically about retirement planning and to develop a more sophisticated assessment tool. Therefore, although my critique of the current planning measures in the next study includes my own research, this research was necessary for the development of a more suitable measure of retirement planning.


Abstract

Although a substantial proportion of the Western population is approaching retirement age, little is known about how they are preparing for the future. Much attention has been paid to the consumption of educational material and retirement wealth in the current literature, but the process of retirement planning has been ignored. Scholnick and Friedman’s (1997) theoretical model provided the basis for a comprehensive measure of retirement planning. According to their process theory, individuals develop an understanding of the problem, set goals, make a decision to start preparing, and finally undertake the behaviours needed to fulfil their goals. Fifty two items were developed to assess each stage of the planning process for financial, health, lifestyle, and psychosocial retirement planning. These were tested on a population sample of 1,449 New Zealanders aged 49 to 60. Confirmatory factor analysis, bivariate correlations, and hierarchical regression provided support for the valid use of the measure. Necessary antecedents such as the tendency to look to the future and locus of control were significantly related to the Process of Retirement Planning Scale (PRePS). The PRePS also outperformed retirement planning measures used in the American Health and Retirement Study after controlling for socioeconomic and psychological variables. This measure will enable social policy makers to determine which stages of retirement planning require support and intervention. The PRePS will also help to determine which domains of retirement planning predict well-being in later life and the factors which differentiate those who are planning from those who are not.
Psychological, social, and economic research closely follows the post-World War II “Baby Boomers” (those born between 1946 and 1964) as they approach retirement age. Within this literature, a small body of research examines the status of retirement plans and the factors which differentiate those who plan from those who do not. Much of this research is directed at social policy makers and interventions which seek to enhance or enable effective retirement planning. The key assumption underpinning this research is that retirement planning leads to positive outcomes in later life.

Until recently, cross-sectional research and retirement planning workshops provided the only tentative evidence for the efficacy of retirement planning (Elder & Rudolph, 1999; Hershey, Mowen, & Jacobs-Lawson, 2003; Zhu-Sams, 2004). However, these cross-sectional research designs relied on the recall of retirees’ previous behaviours while relatively few people take part in planning workshops and seminars. More recently, three longitudinal studies showed that retirement planning predicted greater well-being in later life (Noone, Stephens, & Alpass, 2009a; Panis, 2003; Reitzes & Mutran, 2004). For example, Noone et al.’s (2009a) analysis of data from the American Health and Retirement Study (HRS) showed that pre-retirement spousal discussion predicted greater retirement satisfaction, physical health, and mental health, 12 years later. Although these results cannot confirm the planning/outcomes relationship, they drive ongoing theorising and enquiry regarding the factors that facilitate and impede retirement plans.

Research over the last three decades has examined the psychological, socioeconomic, and personal factors which differentiate planners from non-planners. For example, Hershey and Mowen’s research (2000) with Future Time Perspective (FTP) has shown that a tendency to look to the future is associated with higher levels of financial preparedness.
Locus of control (LOC) has also been positively associated with planning (McKenna & Nickols, 1986). Financial planning and expected retirement wealth have been widely linked to Socio-Economic Status (SES) in the economic literature (Lusardi & Mitchell, 2007; Clare, 2004; Zhan & Pandey, 2002). For example, Clare’s (2004) Australian study showed 55 to 64 year olds with higher incomes were more financially prepared for retirement. Other research has shown that planning predicts retirement wealth regardless of income (Panis, 2003). Finally, personal factors such as poor health have also been associated with lower levels of retirement planning (Lum & Lightfoot, 2003), possibly due to financial strain, premature workforce exit, or both. Although this literature has the potential to influence educational initiatives and social policy, there is a major weakness in the way that retirement planning has been measured.

Despite the growing evidence for the efficacy of retirement planning, the literature is dominated by broad and ambiguous measures (Elder & Rudolph, 1999; Noone et al., 2009a; Quick & Moen, 1998). For example, the HRS, one the world’s largest ageing research projects, assessed non-financial or informal retirement planning with three items: How much have you thought about retirement; how much have you discussed it with your spouse; and how much have you discussed it with your friends or colleagues? Quick and Moen’s (1998) analysis of the Cornell Retirement and Well-Being data used a single three level indicator to assess how much planning has been undertaken. Despite their widespread usage, these broad measures do not reveal which aspects of retirement people are thinking or talking about, what their planning actually entails, or which domains of planning lead to greater well-being. The development of more detailed conceptualisations of planning was the first step towards alleviating some of these problems (e.g., Denis, 1984; Hunter, 1976). More recently, researchers have identified and measured four
domains of retirement planning, which may be broadly labelled: financial, health, lifestyle, and psychosocial planning. The following details each of these domains and briefly describes their measurement in the current literature.

The measurement of financial planning can be divided into two broad categories: pension, savings, or retirement wealth; and more informal modes, such as financial advice seeking and the consumption of educational material. The measurement of the former has been well covered in the economic literature (Bernheim, Skinner, & Weinberg, 2001; Gustman & Steinmeier, 1999) and is not considered in detail here. To assess informal financial planning, Lee and Law (2004) used five dichotomous items to determine if individuals were saving for retirement, if they had bought stocks or bonds, insurance, or a rental property. Petkoska and Earl’s (2009) study used additional dichotomous items to determine if individuals had sought financial advice, calculated their net worth, or accessed educational material about retirement finances from the internet, books or pamphlets, or television.

Health planning and its measurement is relatively novel in the retirement literature (Lee & Law, 2004; Petkoska & Earl, 2009; Wiggins & Henderson, 1996). However, given the importance of health to older people (Dorfman, 1995; Reitzes & Mutran, 2004), it is reasonable to expect that mid-life individuals would alter their health behaviours with long term health status in mind (Prochaska & Velicer, 1997). Lee and Law’s (2004) Hong Kong study assessed health planning with four dichotomous items indicating ownership of medical insurance, regular exercise, regular medical checkups, and plans to give up a hazardous health habit. Petkoska and Earl (2009) used additional items to assess the consumption of health related media.
Lifestyle planning concerns time allocation in the absence of work. Moen, Huang, Plassmann and Dentinger (2006) used four items to measure levels of planning for post-retirement employment, housing arrangements, volunteer work, and hobbies. Lee and Law (2004) and Petroska and Earl (2009) used several items to determine if individuals had viewed educational material regarding retirement lifestyles and if they had recently joined an organisation such as a sports team or social club.

With respect to psychosocial planning, Reitzes and Mutran (2004) proposed that anticipatory socialisation with future roles can ease the transition from “worker” to “retiree”. They suggested socialisation could be achieved through retirement planning. In this study, Reitzes and Mutran used five items to assess retirement planning: a four-point, general planning item; and dichotomous items to assess financial planning, educational attendance, and plans for retirement activities. Lee and Law (2004) used seven dichotomous items to measure psychosocial planning. These assessed reading or watching television programmes about retirement or discussing it with others.

Although this body of research is an improvement on the previous planning measures, there are still a number of problems at the item and conceptual levels. Firstly, dichotomous items lack discriminatory power. For example, indicating the ownership of personal savings explains nothing about their perceived adequacy. Secondly, the additive nature of these measures does not assess the different ways in which people plan. For example, some may consult the internet or read books about retirement lifestyles while others focus on developing non-work interests. Thirdly, the items assessing psychosocial planning do not assess the complexity of preparing for psychological and social change following retirement. At the broadest level, many will experience role change from
worker to retiree and the potential loss of social status. But roles can also change within the family and within the community. For example, retirees may take on grand-parenting roles, while others choose volunteer work. We propose that people can prepare for role change by developing new roles as well as strengthening those that already exist.

Over and above these shortcomings, the foremost problem in the planning literature is the absence of theory to guide the proliferation of retirement planning measures. Although previous research has drawn on role theory (Dorfman, 1989; Reitzes & Mutran, 2004) and Atchley’s (1989) continuity theory (Quick & Moen, 1998), none of the planning measures utilised in the studies cited above were developed to directly test the theories. In order to address these shortcomings we aimed to develop a coherent measure of the different domains of retirement planning based on a psychological theory of the planning process. Friedman and Scholnick’s (1997) process model of general planning was selected as the basis for this development. The aim of the present paper is to report on the development of our new measure by describing the item development and the validation study conducted with a population sample.

A Process Theory of Planning

Friedman and Scholnick (1997) argue that planning is a process. The first stage in preparing for a future event is to develop a mental representation of the problem space. Once a cognitive understanding of the subject has been developed, goals for the future are established. At the next step, individuals make a decision to start preparing or undertaking the behaviours necessary to fulfil their goals. This decision is based on issues of timing and the perceived efficacy of preparatory behaviours. They then formulate a plan or a strategy to fulfil their goals. Finally, plans are implemented and revised if
necessary. We have drawn on this theory to predict key aspects of the process of retirement planning. Friedman and Scholnick’s process model was condensed into four main stages: retirement representations, retirement goals, the decision to prepare, and preparedness. The final stage of preparedness was reconceptualised to broadly include Friedman and Scholnick’s more detailed formulation of plans, plan implementation, and revision. Due to the relatively unstructured nature of retirement planning, the final stages of the planning process may not be readily distinguishable compared to other tasks such as planning a work schedule. For example, an individual may write a list to structure their working week (formulation of plans) and adjust it if necessary (revision), but it is unlikely they would apply the same structured techniques to protecting their long term health. Therefore, rather than attempting to measure plan formulation, implementation, and revision, we assessed levels of preparedness in order to capture goal directed thoughts and behaviours. This enabled us to develop a relatively brief scale which is likely to be of benefit to research and social policy alike.

The four domains highlighted in the literature (financial, health, lifestyle, and psychosocial) were chosen as the important aspects of retirement planning. Retirement planning was therefore defined as: The goal directed thoughts and behaviours that promote good health and provide financial security, fulfilling lifestyles, and rewarding roles in retirement. A series of items were developed to capture each of the planning stages across the four domains.

*Retirement representations.* According to Scholnick and Friedman (1997), individuals use prior knowledge and comparisons of their present and desired future to develop a representation of their environment. Twenty two items assessed the strength of these
mental representations for retirement finances, lifestyles, roles, and future health (e.g., “I have a clear understanding of financial issues for retired people”).

Retirement goals. Retirement goal clarity was assessed with a single item for each of the four domains of planning (e.g., “I have specific goals regarding how I want to spend my time in retirement”). We chose to assess goal clarity rather than the number of goals as it is the former which is more likely to drive further preparation. For example, some people may have numerous yet undeveloped financial goals compared to a single highly developed goal.

The decision to prepare. Scholnick and Friedman (1997) state that before individuals undertake goal related behaviour they must make a decision about the efficacy and timing of these behaviours. For example, individuals may have developed a representation of retirement and set clear goals for the future, but have other priorities which supersede retirement preparations. Goodnow (1997) has also suggested that the decision to start preparing is dependent on social acceptability or social norms. Therefore, individuals may start preparing for retirement if they perceive that their peers are doing the same. Four items for each domain of planning assessed the extent to which individuals perceived planning to be worthwhile, whether they thought people their age were preparing for retirement, if they preferred to start planning closer to retirement, and if they thought it was too early to start preparing (e.g., “It’s too early for me to consider my long term health”).

Preparing for retirement. Data for developing the preparedness items came from 60 interviews that were undertaken as part of the New Zealand Health, Work, and
Retirement study (Alpass et al., 2007). Interviewees were asked about their current health, work status, and plans for retirement. The content of the interviews confirmed that the four domains of retirement planning were relevant for this sample. However, a number of items used in other measures did not feature widely in these interviews. Very few participants mentioned educational material from the internet, television, or brochures. The consumption of educational material may reflect personal preferences or socioeconomic status rather than serving as a global measure of retirement planning and these items were not included. The development of the preparedness items is described below.

Twenty one items were developed to measure financial, health, lifestyle, and psychosocial preparedness. Seven financial items assessed the ‘sufficiency’ (to account for differences in household income and aspirations) of investments and savings, the ability to cope if retirement was forced immediately or at age 65, and the likelihood of owning a home without a mortgage before retirement. Five health preparedness items assessed the undertaking of healthy and unhealthy behaviours (e.g., “I avoid all unhealthy behaviours”) and the utilisation of medical services. These items were based on previous research (Lee & Law, 2004) as well as the interview data. Lifestyle preparedness was assessed with five items. These included three broad measures (e.g., “I have many interests outside of work that I would like to pursue”) and two which were more specific. Finally, we focused on the concept of roles for psychosocial preparedness as these were often referred to by the interviewees. A single item was developed to test Reitzes and Mutran’s (2004) suggestion that speaking to retired people about their experiences is a means of anticipatory socialisation with retirement roles. Three further items determined if people were separating themselves from their work, reducing their work hours, or were
planning to take on another job before they left the workforce completely (e.g., “I plan to undertake some other kind of paid job before I retire”).

_Pilot Study One_

To assess the face validity of the 60 retirement planning items, questionnaires were distributed to general and academic staff in the School of Psychology and to acquaintances and family of the authors. Participants over 40 years of age were eligible to take part and 52 returned their questionnaires. Respondents were invited to comment on individual items and to note any difficulties they had with answering individual questions. The major revision that came from this pilot study was changing the anchors of the 5-point Likert scale from “strongly disagree” to “strongly agree” to “definitely not true for me” to “definitely true for me” with no intermediate anchors. This was more semantically appropriate for the mixture of cognitive, attitudinal, and behavioural items. Some minor wording changes were also made. Overall, the face validity of the items was considered to be acceptable.

_Pilot Study Two_

A sample (15) of the retirement preparedness items was then piloted in the second wave of the New Zealand Health Work and Retirement survey to test the appropriateness of the response scale and to ensure sufficient variation in the responses. Of the 2,493 people in the sample, 1,391 people were eligible to answer the retirement planning questions (those still in the paid workforce). The favourable responses to these items indicated that the respondents had few problems answering the preparedness items, and that the response scale was appropriate. While responses to some of the items were skewed, there was sufficient variability within these items to keep them in the item pool. Principal Axis
Factoring (PAF) using Promax rotation revealed a five factor solution rather than the expected four. The five factors explained 55% of the variance in the 15 items (Kaiser-Meyer-Olkin measure of sampling adequacy = .66, Bartlett’s Test of Specificity = p < .001). The financial, lifestyle, and psychosocial preparatory items loaded onto interpretable factors, but the health items loaded onto two factors. One factor reflected medical health care (medical checkups, disease screening) while the other factor reflected lifestyle behaviours (eating well, avoiding unhealthy behaviours, physical exercise, undertaking healthy behaviours). These items were retained in order to explore potential differences between these two forms of health preparedness.

All items were combined to form a multi-dimensional measure named the Process of Retirement Planning Scale (PRePS). A study to validate this measure is described in detail below.

**Method**

**Participants and Procedures**

A representative sample of New Zealanders aged between 49 and 60 years (N = 3,000) was randomly selected from the New Zealand electoral roll (a mandatory register which captures 98% of the population over 18 years old). This age group was selected in order to capture different levels of retirement planning in those who have not already retired. Participants were surveyed by postal questionnaire using Dillman’s (2002) multiple contact techniques (See Appendices A to D) and entry into a draw for a fuel voucher to increase response rates (53%, N=1,532). Individuals who were already retired (80) and three univariate outliers were removed. The average age of the sample was 53.4 (SD=2.89) and 55% were female. In regard to ethnicity, those of Māori descent were
oversampled to ensure their statistical representation in the analysis. Based on Statistics New Zealand categorisations, 80.8% of the sample identified as European or “Other” (including “New Zealander”), 16.1% identified as Māori, and 3.2% identified as Pasifika, Asian, or Middle Eastern/Latin American/African. This compares to 77.2%, 10%, and 12.7% in the target population respectively (Statistics New Zealand, 2009a). When compared to the New Zealand census data for 2006 (Statistics New Zealand, 2009b), levels of education were slightly higher than national levels for this age group. 24.5% of the sample had no secondary qualification, 25% had a secondary school qualification, and 50.5% had a tertiary qualification. This compares to 32%, 30%, and 37% in the target population respectively. The categorisation of ELSI scores into seven levels of hardship (5% [severe hardship], 4%, 7%, 12%, 20%, 34%, and 18% [Very good standard of living]) closely matched the distribution found in the population aged 45 to 64 (5%, 5%, 7%, 11%, 23%, 35%, and 14% respectively) (Jenson et al., 2004).

**Measures**

All measures were included in one questionnaire (see Appendix E). To acknowledge that the meaning of retirement will differ across individuals, participants were initially asked to define retirement by forced choice from five options (“turning 65 and becoming eligible for New Zealand Superannuation”, “complete withdrawal from paid work”, “retiring from a career job but continuing some paid work”, “when my partner retires”, and “not applicable – I do not intend to retire”) plus an option to describe “other”.

*The Process of Retirement Planning Scale (PRePS).* Factor scores for the PRePS were calculated according to the domains of retirement planning using Exploratory Factor Analysis (EFA) in SPSS 17 (PAF with Promax rotation). Although the model was tested with Confirmatory Factor Analysis (CFA), factor scores produced by this method have
smaller distributions compared to EFA methods and different relationships to other variables (Skrondal & Laake, 2001; Tucker, 1971). These subscales ($M = 0$, $SD=1$) corresponded to the retirement representations, the decision to retire, and the preparedness stages of the process model for financial, health, lifestyle, and psychosocial planning. As retirement goals were assessed with a single variable for each planning domain, factor scores were not calculated. Instead the retirement goals subscales are the mean scores for the individual variables. For example, the ‘Financial Representations’, ‘Financial Timing Decisions’, ‘Financial Efficacy Decisions’, and ‘Financial Preparedness’ subscales were derived from the 14 items assessing these stages, while the ‘Financial Goals’ subscale is the mean score for the item: “I have specific goals regarding the financial position I want in retirement”. Means, standard deviations, and alpha coefficients for the PRePS items are presented in Tables 6 and 7 (p. 98).

**HRS retirement planning variables.** The HRS uses three broad measures of retirement planning (see Lusardi, 1999). These assess how much individuals had thought about retirement and how much they had discussed retirement with their spouse and with their friends or colleagues. The three items were summed and averaged with higher scores representing greater levels of planning. Those who did not have a spouse were excluded (N=108, $M= 2.18$, $SD = .87$, Alpha = .71).

**Future Time Perspective (FTP).** Four indicators of FTP from Hershey and Mowen (2000) were used. These items were summed and averaged to form a composite score. Higher scores reflected a greater propensity to look to the future ($M = 3.28$, $SD = .85$ Alpha = .73).
Locus of Control (LOC). LOC was measured by a shortened (nine item) version of Levenson’s (1973) scale. Items were summed and averaged with higher scores representing stronger perceptions of control ($M=3.68$, $SD=.66$, $\text{Alpha} = .79$).

Age and time to retirement. People tend to plan more as they approach their expected retirement age (Noone, Stephens, & Alpass, 2009b). To control for time to retirement, respondents were asked the age at which they expected to retire. Their current age was then subtracted from their perceived retirement age to show the expected ‘Time to Retirement’. The mean age was 53.4 ($SD=2.9$) and the mean for Time to Retirement was 10.8 years ($SD=4.91$).

Economic Living Standards Index (ELSI). The ELSI Short Form was chosen as a proxy for SES due to low levels of missing data and high correlations with household income (Jensen, Sathiyandra, & Matangi-Want, 2007). The ELSI-short form (Jenson, Spittal, & Krishnan, 2005) assesses restrictions in the ownership of household items (eight items), restrictions in social participation (six items), the extent to which respondents economised to keep living costs down (eight items), and three self-rated indicators of living standards. Combined scores on these sub-scales range from 0 to 31 with higher scores reflecting greater economic living standards ($M=24.69$, $SD=4.88$).

Education. Education was measured by a three-point ordinal scale. Participants indicated whether they had no secondary school qualification, a secondary school qualification, or a tertiary qualification including trade certificates. This variable was collapsed into two dichotomous variables: no secondary education versus a secondary qualification or higher, and a tertiary qualification versus a secondary qualification or lower.
Health. Health was measured by the Social Functioning (Short-Form) scale (Ware, Kosinski, Turner-Bowker, & Gandek, 2002). This is a 12-item scale (v2) which forms two summary scores representing physical health ($M=49.75$, $SD=9.48$) and mental health ($M=50.6$, $SD=8.92$). Higher scores represent greater self-rated health.

Analysis

Missing data. Missing data were less than five percent for the majority of the items. However, 39% of the sample did not respond to the Time to Retirement question. These missing cases differed significantly on the other study variables and therefore should not be removed from the dataset. Schaffer and Graham (2002; see also Collins, 2001; Muthén, Kaplan, & Hollis, 1987) argue that, in most cases, Maximum Likelihood Estimation (MLE) will not overly bias the parameter estimates when data is Missing Not At Random. This technique was used in the current study.

Factor analysis. Four CFAs corresponding to the domains of retirement planning were performed to test the factor structure of the process model and its consistency across financial, health, lifestyle, and psychosocial planning. Although Chi-Square analysis is the most widely used indicator of model fit, it tends to be over-sensitive when the sample size is large (Bollen, 1989). Therefore, we used a number of alternative indices to gauge model fit. CFI and TLI values greater than .90 (see Bentler, 1992) and RMSEA and SRMR values lower that .08 (Browne & Cudec, 1993; Hu & Bentler, 1998) were considered indicative of an adequate fit to the data. These relatively lenient cut-off points were selected due to the scarcity of confirmatory factor analytic work in the retirement planning literature, which would otherwise guide the interpretation of model fit.
CFA was used to test predictions that the items assessing each stage of the process model would load onto unique factors. For example, we expected the five items assessing Lifestyle Representations would load onto a single factor while the four items for Lifestyle Decisions and the five items for Lifestyle Preparedness would load onto their respective factors. With respect to health planning, we predicted the Health Preparedness items would load onto two factors, rather than a single factor.

*Bivariate correlations.* To test convergent and discriminant validity, we identified a number of variables which previous research has associated with retirement planning. As indicated in the planning literature, we expected to find weak relationships between age, time to retirement, education, health and the PRePS. Based on recent research (Noone et al., 2009b), we expected to find moderate positive relationships between economic living standards and the financial planning subscales. However, only weak positive correlations were expected between the ELSI and the other planning scales. While levels of financial deprivation are likely to impact directly on financial planning, they may have a lesser impact on non-financial domains of retirement planning. Stronger relationships were expected between the PRePS and the cognitive variables as these have been identified as antecedents to planning. Finally, we expected to find stronger relationships between the PRePS and the HRS which is another measure of retirement planning.

*Hierarchical regression.* The preparedness subscales for financial, health, lifestyle, and psychosocial planning were used as the dependent variables in a series of hierarchical regressions. Our rationale for using preparedness as a criterion was based on Friedman and Scholnick’s (1997) sequential model which posits that perceived preparedness is a function of prior planning. We hypothesised the first three stages of the planning process,
as measured by the PRePS, would predict a greater proportion of the variance in the preparedness stage than the HRS. For each planning domain, demographic variables identified as significant in the bivariate correlations were entered as controls at step 1. The HRS was entered at step 2, followed by the representations, goals, and decisions subscales at step 3 to determine the additional variance explained by each measure.

Results

Factor Analyses

Factor loadings and standard errors for the final models are displayed in Tables 6 and 7. The results are discussed according to the four domains of retirement planning.

The process of financial planning. Initial fit statistics for the financial planning model indicated a poor model fit ($\chi^2 = 1272.79$, $df=101$, $p<.001$, CFI=.85, TLI=.83, RMSEA=.089, SRMR=.070). The structure of the latent variables was then respecified to determine if the decision to start preparing should distinguish between issues of timing (“Deal Finances” and “Early Finances”) and efficacy (“Worth Finances” and “People Finances”). The new factors were labelled Financial Timing Decisions and Financial Efficacy Decisions respectively. The new model showed improved, but still inadequate, fit to the data ($\chi^2 = 1148.64$, $df=98$, $p<.001$, CFI=.87, TLI=.94, RMSEA=.086, SRMR=.066). One of the financial representations items (“Talk to friends about retirement finances”) and one of the financial preparedness items (“I know exactly how much money I need”) were dropped due to high correlated error variances. This resulted in an adequate model fit ($\chi^2 = 510.05$, $df=71$, $p<.001$, CFI=.93, TLI=.91, RMSEA=.065, SRMR=.051).
Study Three: Development and validation of the PRePS.

**The process of health planning.** Initial fit statistics for the health planning model indicated a poor model fit ($\chi^2=933.71$, $df=71$, $p<.001$, CFI=.81, TLI=.75, RMSEA=.092, SRMR=.066). The theoretical approach used to respecify the financial planning latent variables was then applied to the health planning model and the new factors were labelled using the same conventions. Respecification resulted in improved, but still inadequate, fit ($\chi^2=843.07$, $df=67$, $p<.001$, CFI=.83, TLI=.77, RMSEA=.089, SRMR=.062). One of the items was then removed due to correlated error variance (“Talk to friends about health”) which resulted in improved, but still inadequate, model fit ($\chi^2=363.13$, $df=55$, $p<.001$, CFI=.91, TLI=.87, RMSEA=.062, SRMR=.052). Very low reliability assessment coefficients for the scores of the two health efficacy items (Alpha = .38) lead us to delete these items and respecify the model. This resulted in adequate model fit ($\chi^2=94.92$, $df=29$, $p<.001$, CFI=.97, TLI=.96, RMSEA=.040, SRMR=.032).

**The process of lifestyle planning.** Initial fit statistics for the lifestyle planning model indicated a poor model fit ($\chi^2=1533.43$, $df=74$, $p<.001$, CFI=.75, TLI=.69, RMSEA=.117, SRMR=.085). Respecification of the “Decisions” latent variable improved the model, but the fit was still unacceptable ($\chi^2=1326$, $df=71$, $p<.001$, CFI=.78, TLI=.72, RMSEA=.110, SRMR=.079). Three items (“Talk to friends”, “Join an organisation” and “There are many things I can do with my time”) were dropped due to high correlated error variances. These modifications lead to an acceptable model fit ($\chi^2=299.38$, $df=38$, $p<.001$, CFI=.93, TLI=.90, RMSEA=.069, SRMR=.041).

**The process of psychosocial planning.** Initial fit statistics for the role planning model indicated a poor model fit ($\chi^2=1205.31$, $df=74$, $p<.001$, CFI=.81, TLI=.76, RMSEA=.10, SRMR=.067). The “Decisions” latent variable was respecified and this improved the
model fit ($\chi^2 = 915.89$, $df=71$, $p<.001$, CFI=.86, TLI=.82, RMSEA=.091, SRMR=.055). Modification indices suggested that one of the preparedness items (“Speak to retired people”) should load on the representations factor. This was considered theoretically plausible as speaking to retired people may be another way to develop mental representations of retirement roles. The “Talked to friends” item was removed due to correlated errors and the “Other job” item was removed due to multiple factor loading. These modifications resulted in an adequate fit to the data ($\chi^2 = 257.98$, $df=48$, $p<.001$, CFI=.95, TLI=.94, RMSEA=.055, SRMR=.030).
Table 6

*Factor Loadings (CFA) for the Process Model According to Financial, Lifestyle, and Psychosocial Retirement Planning*

<table>
<thead>
<tr>
<th>PRePS Items</th>
<th>M</th>
<th>SD</th>
<th>Alpha</th>
<th>Representations</th>
<th>Timing Decisions</th>
<th>Efficacy Decisions</th>
<th>Preparedness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thought finances</td>
<td>3.86</td>
<td>1.11</td>
<td>.75</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compare finances</td>
<td>3.54</td>
<td>1.22</td>
<td>.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand finances</td>
<td>3.36</td>
<td>1.18</td>
<td>.58</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family finances</td>
<td>2.34</td>
<td>1.23</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early finances</td>
<td>3.99</td>
<td>1.19</td>
<td>.66</td>
<td>.60</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Deal finances</td>
<td>3.86</td>
<td>1.23</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People finances</td>
<td>3.91</td>
<td>1.08</td>
<td>.56</td>
<td></td>
<td>.49</td>
<td></td>
<td></td>
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<tr>
<td>Worth finances</td>
<td>4.41</td>
<td>0.91</td>
<td>.81</td>
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<td></td>
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<tr>
<td>Forced today</td>
<td>1.98</td>
<td>1.24</td>
<td>.88</td>
<td></td>
<td>.65</td>
<td></td>
<td></td>
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<tr>
<td>Forced 65</td>
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<td>1.34</td>
<td>.85</td>
<td></td>
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<td></td>
<td></td>
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<td>Sufficient income</td>
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<td>1.29</td>
<td>.88</td>
<td></td>
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<tr>
<td>Savings</td>
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<td>1.40</td>
<td>.69</td>
<td></td>
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<td>House</td>
<td>4.01</td>
<td>1.48</td>
<td>.59</td>
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<td></td>
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<td>Expenses</td>
<td>3.12</td>
<td>1.30</td>
<td>.85</td>
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<td><strong>Lifestyle planning</strong></td>
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<tr>
<td>Thought time</td>
<td>3.05</td>
<td>1.34</td>
<td>.80</td>
<td>.83</td>
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<td></td>
<td></td>
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<tr>
<td>Compare time</td>
<td>3.08</td>
<td>1.31</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand time</td>
<td>3.20</td>
<td>1.22</td>
<td>.58</td>
<td></td>
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<td></td>
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<tr>
<td>Family time</td>
<td>2.18</td>
<td>1.16</td>
<td>.59</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Early time</td>
<td>3.44</td>
<td>1.34</td>
<td>.60</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deal time</td>
<td>3.17</td>
<td>1.31</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People time</td>
<td>3.16</td>
<td>1.16</td>
<td>.60</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Worth time</td>
<td>3.73</td>
<td>1.05</td>
<td>.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop</td>
<td>3.94</td>
<td>1.21</td>
<td>.66</td>
<td></td>
<td>.80</td>
<td></td>
<td></td>
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<tr>
<td>Hobbies</td>
<td>2.58</td>
<td>1.38</td>
<td>.55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interests</td>
<td>3.68</td>
<td>1.26</td>
<td>.49</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td><strong>Psychosocial planning</strong></td>
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</tr>
<tr>
<td>Roles family</td>
<td>2.51</td>
<td>1.37</td>
<td>.85</td>
<td>.80</td>
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<tr>
<td>Roles community</td>
<td>2.39</td>
<td>1.30</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand roles</td>
<td>3.40</td>
<td>1.23</td>
<td>.52</td>
<td></td>
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</tr>
<tr>
<td>Compare roles</td>
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<td>1.32</td>
<td>.70</td>
<td></td>
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<td></td>
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<tr>
<td>Talk family</td>
<td>1.96</td>
<td>1.10</td>
<td>.75</td>
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<tr>
<td>Speak</td>
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<td>1.20</td>
<td>.64</td>
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<tr>
<td>Early roles</td>
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<td>1.36</td>
<td>.70</td>
<td>.70</td>
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<tr>
<td>Deal roles</td>
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<td>.76</td>
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<tr>
<td>People roles</td>
<td>2.93</td>
<td>1.23</td>
<td>.61</td>
<td>.60</td>
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<tr>
<td>Worth roles</td>
<td>3.33</td>
<td>1.13</td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Separate</td>
<td>1.81</td>
<td>1.16</td>
<td>.67</td>
<td></td>
<td>.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce</td>
<td>1.91</td>
<td>1.30</td>
<td>.60</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Table 7

**Factor Loadings (CFA) for the Process Model According to Health Planning**

<table>
<thead>
<tr>
<th>PRePS Items</th>
<th>$M$</th>
<th>$SD$</th>
<th>Alpha</th>
<th>Representations</th>
<th>Timing Decisions</th>
<th>Behaviour Based Preparedness</th>
<th>Medical Based Preparedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thought health</td>
<td>3.58</td>
<td>1.25</td>
<td>.77</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compare health</td>
<td>3.60</td>
<td>1.24</td>
<td></td>
<td>.82</td>
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<td></td>
</tr>
<tr>
<td>Family health</td>
<td>2.82</td>
<td>1.33</td>
<td>.59</td>
<td></td>
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<td></td>
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<tr>
<td>Understand health</td>
<td>4.44</td>
<td>0.84</td>
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<td>.44</td>
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<tr>
<td>Early health</td>
<td>3.91</td>
<td>1.22</td>
<td>.52</td>
<td></td>
<td></td>
<td>.57</td>
<td></td>
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<tr>
<td>Deal health</td>
<td>3.59</td>
<td>1.38</td>
<td></td>
<td></td>
<td></td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>Good food</td>
<td>4.08</td>
<td>1.14</td>
<td>.65</td>
<td></td>
<td></td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>Keeps active</td>
<td>4.08</td>
<td>1.14</td>
<td></td>
<td></td>
<td></td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>Avoids the unhealthy</td>
<td>3.07</td>
<td>1.19</td>
<td></td>
<td></td>
<td></td>
<td>.70</td>
<td></td>
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<tr>
<td>Medical screening</td>
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<td>1.41</td>
<td>.74</td>
<td></td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check-ups</td>
<td>3.98</td>
<td>1.39</td>
<td></td>
<td></td>
<td>.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Bivariate Correlations**

In regard to measures of individual cognitions, FTP was positively associated with each of the PRePS subscales across the four domains of retirement planning (see Table 8, p. 99). These relationships were strongest for financial planning and weakest for health planning. LOC was also positively associated with the planning subscales. The correlations were weaker compared to FTP, but showed the same pattern of magnitude across the different domains. Time to Retirement was negatively associated with all of the PRePS subscales.

In regard to SES, scores on the ELSI were correlated with the financial planning subscales, but were less consistently associated with the subscales from the other domains of planning. For example, scores on the ELSI were associated with the Health Goals, Health Decisions, and Health Preparedness subscales, but were not associated with the Health Representations subscale. Education was consistently associated with the Timing Decisions subscales across the four domains of planning, but showed only weak correlations with the other subscales.
The HRS was moderately correlated with all of the PRePS subscales. These relationships tended to be stronger for the initial stage of the planning process (representations) and for the subscales related to financial planning. The HRS was more strongly related to the PRePS subscales than the socioeconomic status variables, FTP, and LOC.

Age, Physical Health, and Mental Health were not consistently correlated with the PRePS subscales. In the following regression analyses, FTP and Time to Retirement were used as control variables to predict Financial, Health, Lifestyle, and Psychosocial Preparedness. Additional variables were entered as controls if they were significantly correlated with the preparedness subscales.
| Variables                        | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 21   | 22   | 23   | 24   | 25   | 26   | 27   | 28   | 29   |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Financial Representations      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Financial Goals                | .59  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Financial Timing Decisions     | .35  | .35  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Financial Efficacy Decisions   | .40  | .37  | .36  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Financial Preparedness         | .32  | .35  | .27  | .22  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Health Representations         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Health Goals                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Health Timing Decisions        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Health Efficacy Decisions      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Health Preparedness            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Lifestyle Representations      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Lifestyle Goals                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Lifestyle Timing Decisions     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Lifestyle Efficacy Decisions   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Lifestyle Preparedness         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Psychosocial Representations   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Psychosocial Goals             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Psychosocial Timing Decisions  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Psychosocial Efficacy Decisions|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Psychosocial Preparedness      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| HRS                            | .51  | .36  | .35  | .23  | .32  | .21  | .20  | .21  | .08  | .11  | .49  | .36  | .40  | .19  | .19  | .19  | .46  | .30  | .27  | .23  | .25  | .25  | .25  | .25  | .25  | .31  | .37  | .37  | .37  |
| FTP                            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| LOC                            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Age                            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Time to Retirement            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| No Formal Education            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Tertiary Education             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Physical Health                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Mental Health                  | .05  | .10  | .14  | .11  | .27  | .05  | .06  | .09  | .14  | .05  | .06  | .08  | .05  | .18  | .04  | .05  | .08  | .01  | .08  | .06  | .31  | .38  | .09  | .09  | .40  | .12  | .09  | -.18 |

Note: Correlations over .05 are statistically significant at $p < .05$, correlations over .07 at $p < .01$, and correlations over .09 at $p < .001$. 

Table 8: Pearson’s Correlations Between the Control Variables and the PrePS Subscales
Regression Analyses

Financial Preparedness. At step 1, the control variables (FTP, LOC, Time to Retirement, ELSI, Mental Health, and Physical Health) explained 52.4% of the variance in Financial Preparedness (see Table 9, p. 103). This proportion increased by 1% when the HRS was introduced. Addition of the financial planning subscales increased the percentage of explained variance to 56.5%. The Beta values (See Table 9) indicated FTP, ELSI, Time to Retirement, Financial Representations, and Financial Goals were significant predictors of Financial Preparedness.

Health Preparedness (behavioural). FTP, LOC, Time to Retirement, ELSI, and Mental Health predicted 4.7% of the variance in behaviour-based Health Preparedness. The addition of the HRS variables did not significantly increase this proportion. The percentage of shared variance rose to 16.9% when the health planning subscales were added. Health Goals ($\beta = .31$), Time to Retirement ($\beta = -.08$), and Mental Health ($\beta = .08$) were the strongest predictors of behaviour-based Health Preparedness.

Health Preparedness (medical). FTP, LOC, Time to Retirement, ELSI, and Physical Health predicted 2.9% percent of the variance in medical-based Health Preparedness. The addition of the HRS did not significantly increase this proportion. The percentage of shared variance rose to 7.2% when the health planning subscales were added. Health Goals, Health Timing Decisions, and Time to Retirement were the only significant predictors of medical-based Health Preparedness.

Lifestyle Preparedness. FTP, LOC, Time to Retirement, ELSI, Mental Health, and Physical Health explained 15.5% of the variance in Lifestyle Preparedness. Addition of
the HRS contributed a further .5\% (p<.01). At step 3, the lifestyle planning subscales significantly increased the proportion of shared variance to 27\%. FTP, LOC, HRS, Lifestyle Representations, Lifestyle Goals, and Lifestyle Efficacy Decisions were significant predictors of Lifestyle Preparedness.

*Psychosocial Preparedness.* FTP, Time to Retirement, Mental Health, and Physical Health explained 8.4\% of the variance in Psychosocial Preparedness and the introduction of the HRS added a further 3.3\%. The psychosocial planning subscales explained a further 4.2\% of explained variance. Psychosocial Representations, Psychosocial Goals, Time to Retirement, Physical Health, Mental Health, and HRS were significant predictors of Psychosocial Preparedness.
Table 9

Summary of Hierarchical Regression of the Respective Retirement Preparedness Subscales (Finances, Health, Lifestyle, and Psychosocial) on Control Variables (Step 1), HRS (Step 2), and the PRePS Subscales (Representations, Goals, and Decisions) (Step 3)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Financial Preparedness</th>
<th>Health Preparedness (behaviours)</th>
<th>Health Preparedness (medical)</th>
<th>Lifestyle Preparedness</th>
<th>Psychosocial Preparedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTP</td>
<td>0.29***</td>
<td>0.26***</td>
<td>0.23***</td>
<td>0.31***</td>
<td>0.28***</td>
</tr>
<tr>
<td>LOC</td>
<td>0.09***</td>
<td>0.09***</td>
<td>0.08***</td>
<td>0.04**</td>
<td>0.04</td>
</tr>
<tr>
<td>Time to Retirement</td>
<td>-0.18***</td>
<td>-0.17***</td>
<td>-0.15***</td>
<td>-0.11***</td>
<td>-0.10***</td>
</tr>
<tr>
<td>ELSI</td>
<td>0.40***</td>
<td>0.39***</td>
<td>0.37***</td>
<td>0.06**</td>
<td>0.05</td>
</tr>
<tr>
<td>Mental Health</td>
<td>-0.02</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td>Physical Health</td>
<td>0.04</td>
<td>0.04*</td>
<td>0.04</td>
<td>0.06*</td>
<td>0.02</td>
</tr>
<tr>
<td>HRS</td>
<td>0.10***</td>
<td>0.01</td>
<td>0.02</td>
<td>0.06</td>
<td>0.11**</td>
</tr>
<tr>
<td>Representations</td>
<td>-0.08***</td>
<td>-0.08***</td>
<td>-0.08**</td>
<td>-0.07*</td>
<td>-0.07*</td>
</tr>
<tr>
<td>Goals</td>
<td>0.05</td>
<td>0.04*</td>
<td>0.04</td>
<td>0.15**</td>
<td>0.15**</td>
</tr>
<tr>
<td>Timing Decisions</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficacy Decisions</td>
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</tr>
<tr>
<td>$R^2$</td>
<td>0.72</td>
<td>0.73</td>
<td>0.74</td>
<td>0.40</td>
<td>0.41</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>0.52</td>
<td>0.53</td>
<td>0.57</td>
<td>0.16</td>
<td>0.16</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.57***</td>
<td>0.01***</td>
<td>0.03***</td>
<td>0.03***</td>
<td>0.01**</td>
</tr>
</tbody>
</table>

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

Results from the factor analyses supported the expected factor structure of the retirement planning process model. However, the two-factor structure for retirement decisions was not anticipated. This indicates that the influence of timing on preparatory behaviours should be considered separately to issues of perceived efficacy and the planning behaviours of other people. The consistency of this factor structure across the domains of retirement planning provides further support for this interpretation.

The relationships between FTP, LOC, and the PRePS were important for assessing theoretical validity. The results indicate those undertaking higher levels of retirement planning showed a greater tendency to look to the future and felt more in control of their lives. This is consistent with theory (Haith, 1997; Skinner, 1997) and previous research (Hershey & Mowen, 2000) which identifies these factors as necessary pre-requisites for planning.

The results of the correlations with the demographic variables also provide support for the convergent and discriminant validity of the PRePS subscale scores. As anticipated, time to retirement was more closely associated with retirement planning than age. This indicates that planning increases as expected retirement age nears, while chronological age has little influence. As in previous research (Noone et al., 2009b), economic living standards showed relatively strong relationships with the financial planning subscales, but generally weaker relationships with the other planning domains. These results suggest that financial resources, while still important, have a lesser impact on non-financial planning. This was most evident for psychosocial planning, which indicates that the development of retirement roles occurs relatively independently of SES. In general, the
weak to moderate correlations with the PRePS suggest the new measure is not a proxy for SES, mental health, or physical health. Finally, the HRS, as a measure of retirement planning, was more closely associated with the PRePS than the socioeconomic and personal variables.

In predicting preparedness, the PRePS consistently outperformed the measures used in the Health and Retirement Study. The initial stages of the process model explained 3% to 12% of unique variance in preparedness for retirement, while the variance explained by the HRS was almost entirely explained by the control variables. These results suggest that the measures used in the HRS lack the level of detail needed to capture the complexity of retirement planning.

Although economic living standards had the greatest impact on financial preparedness, beta values indicate that the initial stages of financial planning (representations, goals, and decisions) are also important for financial preparedness. These results suggest that the cognitive aspects of financial planning are related to higher levels of financial preparedness even for those with limited economic and social resources. This is particularly important considering that financial planning leads to greater well-being regardless of household income (Noone et al., 2009a; Panis, 2003). Taken together, the results from the four hierarchical regressions suggest that preparedness for retirement is a function of many factors including retirement planning, socioeconomic status, anticipated retirement age, and psychological characteristics.

The beta values also suggest that the impact of the initial planning stages on preparedness for retirement differs across the planning domains. For example, after controlling for
other variables, representations of retirement had a significant impact on financial, lifestyle, and psychosocial preparedness but did not impact on health preparedness. One reason for this result may reside in the relative immediacy of the planning domains to the individual. For some, health behaviours such as medical screening, regular exercise, and eating well, may have been undertaken or at least thought about for many years. Therefore, health goals and health timing decisions, which are perhaps more salient to the individual, appear to have a greater impact on health preparedness than retirement representations. Conversely, representations impact more on financial, lifestyle, and psychosocial preparedness because these domains of planning have entered the individual’s consciousness relatively recently.

The impact of the demographic variables on retirement preparedness is largely consistent with previous research. For example, Noone et al.’s recent study (2009b), showed greater economic living standards were related to higher levels of financial preparedness. However, the negative correlation between psychosocial preparedness and mental and physical health conflicts with previous findings (Lum & Lightfoot, 2003). Although the effect sizes were very small, this result, showing that in the present sample poor health was associated with higher levels of planning, may indicate a tendency for individuals who withdraw from work roles due to poor health to also plan for alternative roles. It is therefore important to control for factors such as health when examining the nuances of retirement planning. This is possible when retirement planning is theorised as a process that leads to a state of preparedness, rather than focusing on preparatory behaviours alone. One of the limitations of this study concerns the lack of validated planning measures in the literature. In their absence, we have relied on theory and previous research to assess convergent and discriminant validity. In general, the results from this study are supported
Study Three: Development and validation of the PRePS.

by these criteria. Furthermore, this validation study has established the predictive utility of the PRePS and has shown it is not a proxy for socioeconomic or health status.

Reliability assessment coefficients were low for the lifestyle preparedness item scores (\(\text{Alpha} = .67\)) and the health preparedness (behaviours) items (\(\text{Alpha} = .65\)). Further development is therefore required to supplement and improve on these measures. Low reliability was also evident for the retirement decisions subscale scores (\(\text{Alpha} = .52\) to .66). The two factor solution for these scales was not expected and as a result, each factor was only indicated by two variables, which has contributed to low reliability coefficients for these subscale scores. This was most apparent for the efficacy subscales which did not contribute substantially in the regression equations and were only weakly correlated with the control variables. These factors show promise in relation to the theory but require further development. Future testing and analysis will be aimed at refining the items and roles of these factors.

The PRePS will contribute to our understandings of retirement planning and to interventions to assist planners. To date, the theories explaining why people plan have been inadequately tested due to poor measurement. For example, the findings from Reitzes and Mutran’s (2004) examination of role theory are inconclusive because the measures did not capture the essence of psychosocial planning. The PRePS assesses cognitions surrounding future community and familial roles, goals for future roles, decisions about preparation for role change, and the preparatory behaviours undertaken to fulfil previous psychosocial goals. This will allow future research to test the theory that the transition to retirement can be eased by practising anticipatory socialisation with future roles.
Much of the planning literature focuses on the factors that discriminate planners from non-planners. With the use of theoretically driven and valid measures, future research can offer more specific recommendations to social policy makers and providers of educational interventions. For example, the PRePS can be used to establish which stages of the planning process different groups may be struggling with. This will allow initiatives to be tailored to those who need it most and where they need it most. If longitudinal data confirms the directionality of the process model, these initiatives may be developed with even greater levels of precision.

A small literature has shown that retirement planning predicts well-being in later life. However, the measurement of planning has been too broad to determine which domains show the greatest effect. Future research utilising the PRePS will be able to follow cohorts to determine not only whether retirement planning predicts well-being in retirement but which domains exhibit the greatest contribution. This knowledge will have important implications for planning-based policy and educational programmes.
References


Personal Reflections

The following study tests the relationships between the statistically significant variables identified in Study Two and the process of retirement planning. These variables are sex, marital status, economic living standards, and perceptions of retirement. This analysis uses the same data and analytical techniques used in Study Three. Therefore, some of the following sections are duplicated from the previous manuscript.

It is conceivable that these variables could have been included in Study Three, however this would have exceeded the word limits enforced by the publisher. Furthermore, analysing these variables separately provided the opportunity for me to demonstrate the utility of the PRePS in generating new research questions for future research to pursue. I will argue that certain groups face psychological and structural barriers to completing the financial planning process but are less disadvantaged with respect to the other planning domains.
Study Four: Examining the socioeconomic, psychological, and demographic correlates of the process of retirement planning.

Abstract

Retirement planning been recently conceptualised as a process involving a series of cognitive stages that evolve into retirement planning behaviours. However, it is not known how socioeconomic, psychological, and demographic variables are associated with the different stages of the planning process. This manuscript draws on previous research to make predictions about the relationships between these variables and the process of financial, health, lifestyle, and psychosocial planning. It is predicted that economic living standards and perceptions of retirement will be positively correlated with the stages of the financial, health, lifestyle, and psychosocial planning process. It is also predicted that women will undertake less financial, lifestyle, and psychosocial planning and more health planning compared to men. Finally, it is predicted that those living alone will undertake less retirement planning across the four domains. A population sample of 1,449 New Zealanders aged 49 to 60 provided the basis for hypothesis testing using bivariate correlations. Only partial support was provided for the hypotheses. Results indicated that the relationships between stages of the planning process and the socioeconomic, psychological, and demographic factors were not consistent across the four domains or across the different stages within each domain. These patterns were theorised in terms of barriers to completing the retirement planning process. Many people may be able to undertake the cognitive aspects of the financial retirement planning, but they face structural and psychological barriers to completing the financial planning process. In contrast, these barriers did not affect the process of health, lifestyle, and psychosocial planning to the same extent. These explanations represent a new way of thinking about retirement planning and generate research questions that have not previously been considered.
Although the correlates of financial retirement planning have been widely examined (Clare, 2004; Lusardi & Mitchell, 2007; Noone, Stephens, & Alpass, 2009a), the correlates of non-financial retirement planning have received less research attention. However, a number of important studies have emerged over the last decade and these serve as the basis for the current study (Davis, 2007; Lee, 2003; Lee & Law, 2004; Moen, et al., 2005; Petkoska & Earl, 2009; Schellenberg et al., 2005). These studies of financial and non-financial retirement planning will inform the testing of hypotheses regarding the correlates of New Zealanders’ financial and non-financial retirement planning activities. These correlates include gender, socioeconomic status, anticipated retirement adjustment, anticipated retirement finances, and marital status.

**Gender Differences in Retirement Planning**

Gender is one of the most studied variables in relation to financial planning and, to a lesser extent, the non-financial domains of retirement planning. The research suggests that women are less financially prepared for retirement than men (Clare, 2004; Glass & Kilpatrick, 1998; Noone et al., 2009a), although there are a number of exceptions (e.g., Greenwald, 1999; Hershey & Mowen, 2000; Rosenkoetter & Garris, 2001). In contrast, limited research suggests that women tend to do more health planning than men. For example, Lee’s (2003) Hong Kong study showed that women were more likely to have given up health damaging behaviours, undertaken more exercise, and they were more likely to have arranged a recent medical check-up. These results were replicated in Petkoska and Earl’s (2009) study using the same variables. Women have also been found to undertake higher levels of lifestyle and psychosocial planning (Davis, 2007; Lee, 2003; Petkoska & Earl, 2009).
Socioeconomic Differences in Retirement Planning

International research suggests that socioeconomic variables including household income and economic living standards are among the strongest predictors of financial retirement planning (Lusardi & Mitchell, 2007; Noone, Stephens, & Alpass, 2009a). There is also some evidence to suggest that socioeconomic status is also predictive of non-financial planning. For example, Schellenburg et al. (2005) found that higher income was associated with the development of physical activities. However, Petkoska and Earl (2005) found no relationship between income and health planning in their Australian study. Nevertheless, given the well established relationship between SES and health (Marmot, 2005), one would expect that those of higher income would be more likely to undertake healthy behaviours in order to protect their long-term health. With respect to the other planning domains, Moen et al. (2005) and Petkoska and Earl (2009) identified no differences in lifestyle planning according to income. In contrast, Schellenberg et al. (2005) found that higher income was related to higher levels of lifestyle planning. Likewise, Davis (2007) found that higher income was also associated with higher levels of psychological retirement planning.

Retirement Planning and Perceptions of Retirement

Numerous studies have found an association between retirement perceptions and financial retirement planning (Reitzes & Mutran, 2004; Topa et al., 2009; Turner et al., 1994). This research indicates that those with more positive perceptions of their future retirement report higher levels of retirement planning. However, comparatively little research has examined the relationships between retirement perceptions and non-financial planning. For example, Davis (2007) found that higher levels of psychological planning were positively associated with positive attitudes toward retirement.
Retirement Planning and Marital Status

Finally, those without partners tend to be less financially prepared for retirement compared to married and co-habiting couples (Lusardi & Mitchell, 2007). There is also evidence to suggest that those without partners undertake less non-financial planning. For example, Schellenberg et al.’s (2005) national survey indicated that levels of health and lifestyle planning were lower for those without partners. Davis’ (2007) research showed that levels of psychological planning were also lower for those without partners.

Measuring Retirement Planning

Although the empirical research to date provides some indications regarding these correlates of planning, the measurement of retirement planning has been inconsistent. For example, Noone et al. (2009) used four dichotomous variables (owns home, rental property, shares or managed funds, savings) to assess financial preparedness while Lusardi and Mitchell (2007) used wealth holdings as measured in the Health and Retirement Survey and Clare (2004) used total superannuation value in a large scale analysis of Australian pre-retirees. With respect to the non-financial planning domains, Davis (2007) used 30 items to assess levels of psychological planning. These measured the extent to which people had, for example, thought about how a loss of income would make them feel as a person, what they will do with their day when they are retired, and how they would view themselves when they no longer had a work title. Lee’s (2003) and Petkoska and Earl’s (2009) research used identical measures of financial, health, lifestyle, and psychological planning. These measures comprised a series of dichotomous yes/no items to assess whether people had for example, started saving for retirement, exercised regularly, cultivated any hobbies, or discussed retirement with retired people respectively. Moen et al. (2005) combined the degree to which the individual had developed hobbies
and interests, thought about a second or third career, and thought about volunteer work to form a measure of lifestyle planning. Finally, Schellenberg et al. (2005) assessed the extent to which people had developed physical activities, cultivated other leisure interests, and involved themselves in volunteer activities.

Although these studies represent the most up-to-date measures of retirement planning, they do not entirely capture the retirement planning construct. Lachmen and Burack (1993) define planning as goal-directed thoughts and behaviours, but the studies cited above have not integrated these planning components. This is important because a focus on retirement planning thoughts alone does not explain how these cognitions can evolve into planning behaviours. For example, Davis (2007) has illustrated how people think about the psychological aspects of retirement but he has not shown how these thoughts are transformed into action. In contrast, examining planning behaviours (e.g., Schellenberg et al., 2005) explains little about their cognitive motivators. In other words, retirement planning thoughts and behaviours do not fully encapsulate the planning construct when they are considered in isolation. Therefore, in order to fully capture the construct, retirement planning must be reconceptualised to integrate planning thoughts and behaviours within a theoretical framework.

The current study is based on the conceptualisation of retirement planning as a process whereby thoughts about retirement evolve into retirement planning behaviours (Noone et al., In Press). The first three stages of the retirement planning process reflect the cognitive components of Lachmen and Burack’s (1993) planning definition. The final stage of the planning process comprises the retirement planning behaviours undertaken to satisfy retirement goals. According to theory (Friedman & Scholnick, 1997; Scholnick &
Friedman, 1993), the first stage in preparing for a future event is to develop a mental representation of the problem space. Once a cognitive understanding of the subject has been developed, goals for the future are established. At the next step, individuals make a decision to start preparing or undertaking the behaviours necessary to fulfil their goals. This decision is based on issues of timing and the perceived efficacy of preparatory behaviours. They then formulate a plan or a strategy to fulfil their goals. Finally, plans are implemented and revised if necessary. Friedman and Scholnick’s (1997) process model was condensed into four main stages: retirement representations, retirement goals, the decision to prepare, and preparedness. The final stage of preparedness was reconceptualised to broadly include Friedman and Scholnick’s more detailed formulation of plans, plan implementation, and revision.

This study aims to test the relationships shown in the retirement planning research cited above. Using the results from the literature and a four-domain model of financial and non-financial retirement planning the following hypotheses will be tested:

H1: Gender will be negatively correlated with the stages of the financial planning process. That is, being female will be associated with lower levels of financial planning. Gender will be positively correlated with the non-financial planning domains.

H2: SES will be positively correlated with the stages of the financial, health, lifestyle, and psychosocial planning process.

H3: Anticipated retirement adjustment and anticipated retirement finances will be positively correlated with the stages of the financial, health, lifestyle, and psychosocial planning process.
H4: Marital status will be negatively correlated with the stages of the financial, health, lifestyle, and psychosocial planning process. That is, being single will be associated with lower levels of retirement planning.

Methods

Participants and Procedures

See page 89.

Measures

The Process of Retirement Planning Scale (PRePS).

See page 90.

Socioeconomic status.

See page 92.

Anticipated retirement adjustment. The Anticipated Adjustment to Retirement Scale (Taylor & Shore, 1995) measures the extent to which one expects to adapt to and enjoy retirement. Responses to four statements were scored on a five-point-scale ranging from “strongly disagree” to “strongly agree”. Scores were summed and averaged such that higher scores reflect more positive perceptions of one’s future adjustment.

Anticipated finances in retirement. The Anticipated Finances Scale (Adams & Beehr, 1998) comprises five items which assessed anticipated financial position in retirement. Three items were scored on a five-point scale ranging from “strongly disagree” to “strongly agree”. Two items were scored on a seven-point scale with the same anchors.
Scores were summed and averaged. Higher scores on this variable reflected more positive perceptions of one’s future finances.

*Gender and marital status.* Gender (male [1] or female [2]) and Marital Status (partnered [1] or single [2]) were assessed with two dichotomous items. 45.2% of the sample was male and 78% were living with a partner.

**Analysis**

The hypotheses were tested by comparing bivariate Pearson’s correlations between the PRePS subscales and the socioeconomic, psychological, and demographic variables.

**Results**

Gender was not significantly correlated with any of the financial planning subscales and was only marginally related to the other planning domains (see Table 10, 126). For example, Gender was only significantly correlated with the two health preparedness subscales ($r=.10$ and $r=.11$, $p<.001$), the Lifestyle Decisions subscale ($r=.10$, $p<.001$), and the Psychosocial Representations subscale ($r=.10$, $p<.001$).

Correlations between the ELSI and the financial planning subscales were all statistically significant ($p<.001$) and ranged from $r=.16$ for the Financial Representations subscale to $r=.62$ for the Financial Preparedness subscale. The ELSI was positively correlated with all but the first stage of the health planning process and all but the efficacy subscales for lifestyle and psychosocial planning.
Anticipated Retirement Adjustment and Anticipated Retirement Finances were positively associated with all but one of the financial planning subscales. For Anticipated Retirement Adjustment the significant correlations ranged from $r = .13 \ (p < .001)$ with the Financial Efficacy Decisions subscale to $r = .42 \ (p < .001)$ with the Financial Preparedness subscale. With respect to Anticipated Retirement Finances, significant correlations ranged from $r = .07 \ (p < .01)$ with the Financial Timing subscale to $r = .65 \ (p < .001)$ with the Financial Preparedness subscale. However, there were small negative relationships between these two variables and the Health Representations subscale. The two variables were associated with all but the efficacy subscales for lifestyle and psychosocial planning. The significant correlations ranged from $r = .09 \ (p < .01)$ to $r = .21 \ (p < .001)$.

The correlations between Marital Status and the financial planning subscales were all statistically significant and ranged from $r = -.07 \ (p < .01)$ with Financial Goals to $r = -.23 \ (p < .001)$ with Financial Preparedness. However, correlations with the other planning subscales were either not significant or only marginally significant. For example, Marital Status was negatively correlated with the Lifestyle Representations subscale ($r = -.10, \ p < .001$).
Table 10

Pearson’s Correlations Between the Control Variables and the PRePS Subscales

| Variables                        | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  |
|----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 Financial Representations      |     | .59 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2 Financial Goals                | .35 | .35 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 3 Financial Timing Decisions     | .40 | .37 | .36 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 4 Financial Efficacy Decisions   | .32 | .35 | .27 | .22 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 5 Health Representations         | .32 | .26 | .09 | .22 | .02 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 6 Health Goals                   | .30 | .33 | .17 | .23 | .14 | .51 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 8 Health Preparedness (behaviours)| .18 | .16 | .08 | .09 | .17 | .21 | .37 | .19 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 9 Health Preparedness (medical)  | .11 | .10 | .18 | .15 | .11 | .14 | .17 | .22 | .11 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 10 Lifestyle Representations     | .54 | .43 | .23 | .23 | .33 | .26 | .29 | .16 | .17 | .06 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 11 Lifestyle Goals               | .42 | .48 | .21 | .23 | .29 | .23 | .32 | .15 | .18 | .07 | .63 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 12 Lifestyle Timing Decisions    | .33 | .34 | .43 | .24 | .23 | .20 | .22 | .36 | .06 | .10 | .45 | .49 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 13 Lifestyle Efficacy Decisions  | .21 | .15 | .11 | .22 | .10 | .16 | .23 | .12 | .14 | .06 | .27 | .24 | .16 |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 14 Lifestyle Preparedness        | .27 | .27 | .08 | .14 | .26 | .20 | .31 | .17 | .22 | .07 | .41 | .45 | .34 | .34 |     |     |     |     |     |     |     |     |     |     |     |     |
| 15 Psychosocial Representations  | .50 | .40 | .20 | .17 | .24 | .32 | .33 | .16 | .21 | .07 | .66 | .52 | .38 | .36 | .46 |     |     |     |     |     |     |     |     |     |     |     |
| 16 Psychosocial Goals            | .37 | .40 | .17 | .14 | .22 | .22 | .33 | .13 | .19 | .04 | .53 | .56 | .37 | .26 | .47 | .65 |     |     |     |     |     |     |     |     |     |     |
| 17 Psychosocial Timing Decisions | .22 | .28 | .36 | .16 | .18 | .11 | .18 | .34 | .06 | .13 | .25 | .30 | .54 | .11 | .21 | .34 | .37 |     |     |     |     |     |     |     |     |     |
| 18 Psychosocial Efficacy Decisions| .29 | .21 | .08 | .24 | .04 | .22 | .20 | .09 | .14 | .01 | .34 | .27 | .23 | .44 | .30 | .46 | .41 | .22 |     |     |     |     |     |     |     |
| 19 Psychosocial Preparedness     | .19 | .15 | .02 | .05 | .19 | .15 | .14 | .04 | .06 | .01 | .31 | .20 | .17 | .12 | .26 | .31 | .25 | .11 | .19 |     |     |     |     |     |     |
| 20 ELSI                           | .16 | .19 | .28 | .19 | .62 | .05 | .10 | .16 | .15 | .13 | .14 | .14 | .04 | .13 | .06 | .08 | .14 | .03 | .05 |     |     |     |     |     |     |
| 21 Anticipated Retirement Adjustment| .15 | .16 | .21 | .13 | .42 | .05 | .08 | .12 | .12 | .09 | .27 | .25 | .25 | .05 | .22 | .16 | .19 | .14 | .02 | .08 | .31 |     |     |     |     |
| 22 Anticipated Retirement Finances| .11 | .12 | .07 | .03 | .65 | .04 | .07 | .07 | .16 | .00 | .19 | .15 | .13 | .01 | .19 | .16 | .15 | .12 | .03 | .21 | .42 | .38 |     |     |     |
| 23 Marital Status                 | -.12 | -.07 | -.10 | -.08 | -.23 | -.03 | .01 | -.06 | -.01 | -.06 | -.10 | -.05 | .05 | .01 | -.06 | -.03 | -.01 | .04 | -.05 | -.26 | -.08 | -.15 |     |     |     |
| 24 Gender                         | .02 | .00 | .02 | .02 | -.02 | -.04 | .05 | .04 | .10 | .11 | .08 | .04 | .00 | .10 | .06 | .10 | .06 | .04 | .01 | -.02 | .01 | .07 | -.04 | .09 |     |

Note: Correlations over .05 are statistically significant at p<.05, correlations over .07 at p<.01, and correlations over .09 at p<.001.
Discussion

Hypothesis one was not supported as gender was not reliably related to the stages of the financial, health, lifestyle, or psychosocial planning process. However, partial support was found for the second hypothesis. Those of lower SES reported lower levels of financial, health, and lifestyle planning across all the stages of the planning process. However, the correlations with psychosocial planning process were very weak. Hypothesis three was supported. Those with more negative perceptions of retirement reported lower levels of financial and non-financial planning. Finally, there was partial support for hypothesis four. Those without a partner reported lower levels of financial planning, but there was little support for a relationship between marital status and the non-financial planning domains.

Retirement planning has been identified as an important variable for promoting health and adjustment to retirement (Noone, Stephens, & Alpass, 2009b; Taylor & Doverspike, 2003). Therefore, research and policy should be directed at enabling the disadvantaged to adequately prepare for their future. One way of achieving this is by conceptualising socioeconomic, psychological, and demographic factors as barriers to retirement planning or, more specifically, barriers to completing the retirement planning process. The following section considers the relationship between gender and retirement planning. The discussion is then broadened to theorise how the socioeconomic, psychological, and demographic variables may act as barriers to completing the retirement planning process.

Re-Evaluating the Gendered Nature of Retirement Planning

Although numerous studies (Clare, 2004; Noone et al., 2009a) have identified gender differences in financial retirement planning, this was not apparent in the current study.
For example, Noone et al., (2009a) argued that retirement planning is now of greater concern for women due to their lower levels of financial preparedness and economic living standards. However, the process of financial planning and economic living standards did not vary according to gender in the current research. The following section provides two explanations for these contradictory findings. These focus on differences in measurement and in the sample characteristics between the current study and Noone et al.’s (2009a) recent analysis.

One explanation for the inconsistent results may lie in the way financial planning was measured. In Noone et al.’s (2009a) study, financial preparedness was indicated by home ownership, savings, managed funds or shares, and ownership of a rental property. However, the financial preparedness subscale in the PRePS assesses perceptions of financial preparedness as opposed to the more objective measures utilised by Noone et al. (2009a). These perceptions are proxies for the financial behaviours that people undertake to fulfil financial goals. It is possible that women’s perceptions of their financial preparedness are more optimistic than men’s despite owning fewer financial assets. This is important because higher levels of optimism may deter women from undertaking further financial provisions for retirement. This may ultimately lead to women owning fewer assets as they progress into their retirement years. However, this cannot be considered problematic until men and women's expectations of retirement are compared. For example, it is plausible that women may have lower financial expectations of retirement, but are well prepared for that eventuality. This is because levels of perceived preparedness are contingent on individuals’ expectations of retirement. Therefore, the relationship between retirement planning and retirement expectations needs to be examined before any conclusions about men and women's planning can be drawn.
Another explanation relates to the representativeness of the sample. Population research in New Zealand suggests that women have lower levels of SES (Statistics New Zealand, 2006b). This was consistent with the findings in Noone et al.’s (2009a) study which used nationally representative data from the Health, Work, and Retirement survey. However, the non-significant correlations in Study Four indicated that the men and women in this sample did not differ according to the ELSI. Although the distribution of ELSI scores in this study closely matched population estimates, it is possible that only people who were interested in retirement planning responded to the questionnaire. It may be that retirement finances are of secondary importance compared to the current financial and non-financial concerns for women of lower SES. Thus, they may not be represented in the sample.

However, there was some evidence to suggest that women were undertaking higher levels of non-financial planning than men. For example, women were more likely to be undertaking healthy behaviours compared to men and they had developed stronger representations of retirement lifestyles and psychosocial roles in retirement. This is consistent with the previous research (Davis, 2007; Lee, 2003; Schellenberg et al., 2005), but the relationships were very weak.

Although gender was not reliably correlated with the retirement planning domains, those without partners were disadvantaged in terms of their financial planning. This is important because women are more likely to live alone and this discrepancy increases with age (Statistics New Zealand, 2006a). Therefore, research should continue to focus on women without partners. However, this recommendation should be considered with caution. Although single women are an important group, future research, educational, and
Study Four: Correlates of the retirement planning process.  

retirement policy should not exclude single men. This issue is returned to in the following section where the barriers to completing the retirement planning process are considered.

Theorising Structural and Psychological Barriers to Retirement Planning

Closer examination of Table 10 (p. 125) suggests that the correlations between the socioeconomic and psychological variables differed according to the stages of the financial planning process. More specifically, the correlations were weaker for the cognitive stages of the planning process and comparatively stronger for the final, behavioural stage. In contrast, the correlations were relatively constant across the process of health, lifestyle, and psychosocial planning. To explain these patterns, I will argue that individuals face structural and psychological barriers to completing the financial planning process, but they do not face the same barriers to completing the process of health, lifestyle, or psychosocial planning.

Bivariate correlations (Table 10) may suggest that individuals are able to complete the cognitive stages of the financial planning process (financial representations, goals and decisions) relatively independently of SES. In contrast, undertaking the behaviours necessary to complete the financial planning process (i.e., the financial preparedness stage), is comparatively more dependent on levels of SES. In other words, those of lower SES may be able to undertake the initial stages of financial planning, as they only require cognitive resources, but discrepancies in social and economic resources prevents them from owning a house without a mortgage, accumulating enough money to cover expenses in retirement, or saving enough to ensure a comfortable standard of living. Furthermore, the same pattern of correlations was evident for marital status. This may be due to
disparities in SES across partnered and single individuals (Statistics New Zealand, 2009b).

The correlations between the stages of the financial planning process and the psychological variables were also stronger for the preparedness stage. This may indicate that individuals face psychological as well as structural barriers to completing the financial planning process. Those with negative perceptions of retirement may have developed a representation of retirement, albeit a negative one, and may even have certain goals. However, the undertaking of financial planning behaviours may be avoided as the financial commitment required may signal the imminence of retirement.

The relative consistency of the bivariate correlations across the stages of the health, lifestyle, and psychosocial planning processes suggests that individuals may not face the same structural and psychological barriers to completing the non-financial planning process. It may be that other factors, such as caregiving responsibilities or the presence of dependent children, prevent individuals from, for example, changing their health behaviours despite understanding the long-term benefits of a healthy lifestyle. Conversely, the process of non-financial planning may be completed relatively freely of traditional barriers. Although there are other explanations for the patterns in the data, this type of theorising represents a new way of thinking about retirement planning that is not possible with existing conceptualisations.

Current conceptualisations (e.g., Davis, 2007; Lee, 2003) do not integrate retirement planning thoughts and behaviours within a theoretical framework. This limits the development of new knowledge surrounding retirement planning and the factors that
Study Four: Correlates of the retirement planning process.

affect retirement plans. For example, Davis’ (2007) conceptualisation of psychological planning can be used to estimate levels of cognitive psychological planning in the population or to determine which factors predict psychological planning. But it cannot be used to determine how psychological plans develop or how certain factors can influence the process of psychological planning. In contrast, conceptualising retirement planning as a process provides a theoretical framework for examining the development of retirement plans and for understanding how certain factors can affect progress through the retirement planning process.

The findings from this study are exploratory and should therefore be considered with caution. Firstly, the direction of the retirement planning process needs to be established with longitudinal research before definitive conclusions can be drawn. Once this is achieved, more focused research should also consider the impact of potential confounding variables including age and expected time to retirement. Secondly, the use of cross-sectional and correlational data further restricts the conclusions that can be drawn from this study. For example, the socioeconomic and psychological variables are theorised as barriers to retirement planning, but it is plausible that retirement planning can impact on, for example, anticipated retirement adjustment.

Despite these limitations, this study has illustrated how conceptualising retirement planning as a process generates research questions that have not previously been considered. For example, what factors affect the process of retirement planning? Do socioeconomic and psychological factors differentially affect the planning process? To what extent does the failure to establish clear retirement representations impact on goals setting and levels of preparedness in the future? Do couples progress through the
retirement planning process at the same pace? Do certain events cause people to travel back through the planning process? Future research will be able to answer these questions once the direction of the retirement planning process is established. This will enable social policy makers and educational advisors to direct their initiatives to those who need it most and where they need it most.

The results from this study indicate that socioeconomic and psychological factors are related to the different stages of the financial and non-financial retirement planning process. In contrast, marital status is only related to the process of financial planning and gender is not consistently associated with any of the planning domains. Certain structural and psychological barriers may prevent some groups from completing the planning process and this appears to be most evident for financial planning. This research gives rise to new research questions and therefore has the potential to build on our current understandings of retirement planning and the factors that can affect retirement plans.
References


Discussion

This section returns to the research aims to summarise the major themes that have arisen from this research and the contribution this thesis has made to the retirement planning literature. The implications of this research are then considered and suggestions are made for further studies. The research findings are then discussed in terms of the implications for educational initiatives and retirement policy. Finally, the limitations of the research are considered.

Research Aims

To determine if retirement planning predicts well-being. The results from Study One indicated that talking to a spouse about retirement was predictive of better health and greater retirement satisfaction up to 12 years into retirement. Having a pension plan in 1992 was also predictive of greater well-being in 2004, but only when spousal discussions were not controlled for. Identifying the prospective benefits of retirement planning provided a rationale to develop a measure to assess the subject of these communications and the goal-related thoughts and behaviours which characterise retirement planning.

To develop a comprehensive and theory driven measure of retirement planning. Study Three described the development and validation of the PRePS. This scale was based on psychological theory which posits that individuals progress through a series of cognitive stages as they prepare for an event such as retirement. Factor analysis provided support for the validity of the measure by confirming that the items designed to assess each stage of the retirement planning process loaded onto their appropriate factors. The positive correlations between the planning measure and future time perspective, locus of control, and the ELSI provided further support for the validity of the PRePS.
To theorise and examine the effects of psychological, socioeconomic, and demographic variables on retirement planning. Study Two theorised and statistically modelled the effects of particular socioeconomic, psychological, and demographic variables on retirement thoughts and financial preparedness. The results from this study indicated that women, but single women in particular, were disadvantaged in terms of their financial preparedness for retirement. These differences were partly due to inequalities in social and economic resources. Despite social change in western society, women are still disadvantaged with respect to their retirement planning. Study Two concluded that financial retirement planning is therefore of primary concern for women, especially those without partners.

Study Four confirmed the importance of SES, marital status, and retirement perceptions for financial, health, lifestyle, and psychosocial planning. However, gender did not emerge as an important variable for any of the retirement planning domains. It was tentatively concluded that research and social policy should continue to focus on women’s retirement planning, but not at the expense of single men.

The results from Study Four indicated that the psychological, economic, and demographic variables were inconsistently related to the financial and non-financial planning domains. The relationships also varied according to the stage of the retirement planning process. These inconsistencies were explained as barriers to completing the retirement planning process. For example, it was theorised that individuals face structural and psychological barriers to completing the final stage of financial planning process. However these same barriers were not as evident for the non-financial domains. These explanations represent a new way of thinking about retirement planning and have
the potential to build on our current understandings by generating research questions that have not previously been considered.

_Contributions to the Retirement Planning Literature_

Study One has provided stronger evidence for the positive effects of retirement planning on well-being in later life by addressing some of the limitations in the previous research. Firstly, the prospective relationship between retirement planning and well-being was examined over a longer time-frame than previous studies (e.g., Panis, 2003; Spiegel & Shultz, 2003). This research also considered a wider range of planning activities. For instance, the planning variables included in Study One were superannuation, thinking about retirement, talking about retirement with a spouse, talking about retirement with friends, and attending a retirement planning seminar. Finally, this research utilised more outcome variables than previous research. For example, Reitzes and Mutran (2004) only considered the effects of retirement planning on future adjustment. In contrast, Study One study examined the effects of retirement planning on retirement satisfaction, physical health, and mental health.

Study Two is one of the few investigations to theorise and statistically model the effects of socioeconomic, psychological, and demographic variables on retirement planning. Topa et al.’s (2009) meta analysis is one exception, but this study did not consider the important effects of socioeconomic status or gender on retirement planning. Hershey and Mowen’s (2000) statistical analysis examined the effects of conscientiousness and emotional stability on levels of preparedness. They found that these variables indirectly affected retirement planning through levels of FTP. However, SES and gender were also not included in their research. This is important because parameter estimates can be misspecified if important exogenous variables are omitted from the equation (Kline,
Discussion

Therefore, Study Two has contributed to the planning literature by statistically modelling the causal effects of multiple independent variables, and in doing so, highlighting the importance of SES and gender for future studies of retirement planning.

Study Two is one of the few investigations to concentrate on New Zealand women’s retirement planning. One exception is Gee et al.’s (2002) small-scale analysis. They found that women were less financially prepared than men and that these differences were accounted for by gendered disparities in income. Divorced women were also disadvantaged in terms of retirement savings. However, the sample was not representative of the population and did not consider perceptions of work and retirement. Therefore, this study has advanced on the work of Gee et al. (2002) by demonstrating these disparities at the population level and by considering a wider range of independent variables.

The PRePS is, to the best of the author’s knowledge, the only published measure of retirement planning to adequately capture Lachmen and Burack’s (1993) definition of planning as goal-directed thoughts and behaviours. For instance, the “representations”, “decisions”, and “goals” stages of the planning process assess the cognitive and goal related aspects of retirement planning and the “preparedness” stage assesses the behaviours that people can undertake to fulfil their retirement goals. In contrast, the majority of the existing measures assess either the first stage (e.g., “how much have you thought about retirement?”) or the final stage (e.g., “To what extent have you saved for retirement?”) of the planning process. One exception is Hershey et al.’s (2006; 2007; 2000) incorporation of retirement goals into their planning research. However, these authors conceptualised goal setting as an antecedent rather than a component of financial
retirement planning. Furthermore, this research does not consider the non-financial domains of retirement planning.

To the best of the author’s knowledge, the PRePS is the only published measure of retirement planning that utilises a theoretical approach to item development. More specifically, it is the only measure that conceptualises retirement planning as a multi-stage process. Recent studies by Lee (2003) and Petroska and Earl (2009), should be commended for incorporating the multiple domains of retirement planning, but these studies have used planning measures that were empirically derived. The problem is that the continued use of these measures will not advance our understandings of retirement planning or of the factors that can influence planning. In contrast, conceptualising retirement planning as a process raises new research questions about the process of retirement planning and about the factors that can affect the planning process. These new understandings were considered in Study Four.

The fourth study demonstrated how conceptualising retirement planning as a process can generate new research questions. For example, it was argued that psychological and structural barriers only really began to operate at the final stage of the financial retirement planning process. In contrast, the process of health, lifestyle, and psychological planning were less influenced by these same barriers. It may be that other factors, such as care giving responsibilities and dependent children in the household, may affect progress through non-financial domains. Alternatively, people may be able to progress through health, lifestyle, and psychosocial planning processes relatively freely of these established constraints. This may be because these non-financial domains are less structured and perhaps less dependent on economic factors such as household
income. Although there are other plausible explanations, this type of theorising could not be generated using the previous measures of planning.

Implications for Retirement Planning Research

Considered together, the results from this research programme confirm that socioeconomic variables such as economic living standards and psychological variables including future time perspective, locus of control, and perceptions of retirement are important correlates of New Zealanders’ financial, health, lifestyle, and psychosocial planning. This is consistent with much of the previous New Zealand and international research (Gee et al., 2002; Joo & Grable, 2001; Noone et al., 2009a; Reitzes & Mutran, 2004; Schellenberg et al., 2005; Topa et al., 2009). Therefore, these variables should remain the focus of future retirement planning research. However, it has been argued that the continued use of the existing retirement planning measures will not advance our understandings of how these factors can influence retirement planning.

The development of retirement planning knowledge has slowed in recent times despite an increase in empirical studies. For example, research continues to examine and re-examine the factors that are related to planning (e.g., SES) but little progress seems to be made in enabling the disadvantaged to adequately prepare for the future. Furthermore, no new theories regarding retirement planning have emerged in recent times and as a result, no new hypotheses have been generated and tested. In light of this evidence, I propose that the planning research has discovered all that it can from existing conceptualisations of retirement planning and the use of empirically based measures of retirement planning.
Empirical measures of retirement planning (see Davis, 2007; Lee, 2003) typically use interview data to identify the ways in which people prepare for retirement. The data are then used to generate a set of planning items. However, these measures can only be used to determine the extent to which people are planning and to identify the factors that affect retirement plans. In contrast, the items that comprise the PRePS were theoretically derived. The 52 planning items were designed to assess each stage of Friedman and Scholnich’s (1997) process theory. The advantage is that this allows for the generation of new research questions relating to retirement planning: What factors affect the process of retirement planning? Do socioeconomic and psychological factors differentially affect the planning process? To what extent does the failure to establish clear retirement representations impact on goals setting and levels of preparedness in the future? Future research will be able to generate new understandings by answering these research questions. However, the direction of the retirement planning process needs to be tested before these questions can be answered with any rigour.

Although longitudinal research can be used to test the directionality of the retirement process, this may not be a simple task. In theory, those who have just initiated the retirement planning process may have developed a representation of retirement, but they will not have set goals, made a decision to start preparing, or started undertaking preparatory behaviours. Therefore, the key to testing directionality will be the close examination of those who have recently initiated the retirement planning process. However, Scholnich and Friedman (1997) argue that people may travel back through the process if, for example, plans fail or situations change. They also suggest that people may skip a stage as they prepare for the future. Therefore, future research may also need to consider wider societal factors such as economic crises and changes to retirement
policy to explain non-linear progressions through the planning process. For example, indications suggest that the age for receiving New Zealand Superannuation may rise from 65 to 67 in the coming years. This may cause some pre-retirees to rethink their plans and develop new retirement goals.

Conceptualising retirement planning as a process provides new avenues for further research. For example, longitudinal research will be able to identify the factors that can affect the different stages of the planning process. Cross-sectional data from Study Three and Four suggest that psychological factors such as FTP, LOC, and perceptions of retirement are more correlated with the final stage of the planning process than initial stages. However, at this point in time these relationships can only be theorised as psychological barriers to retirement preparedness. The next step is to use longitudinal analysis to answer the research questions generated from these explanations. For example, latent change modelling could be used to determine how changes to the planning stages are predicted by changes in economic living standards or perceptions of retirement. The new knowledge generated from this research would be of benefit to policy and educational initiatives to assist individuals in their preparations for retirement.

**Implications for Policy**

Once the direction of the planning process can be confirmed, future initiatives will be better informed by the factors that influence the process of retirement planning. This is important because certain groups may become stuck at specific stages of the planning process or may never start the process at all. These new understandings will allow retirement policy and education to direct its initiatives at those who need it most and
where they need it most. The following describes how the information derived from this research may inform retirement education and policy aimed at enabling pre-retirees to better prepare for the future.

*Retirement planning education.* Based on the results of this research, retirement workshops and seminars need to be relevant for those of lower SES. These are the groups most likely to benefit from retirement planning education and professional advice, and according to research, the least likely to attend these events (Joo & Grable, 2001). Educational initiatives should also be tailored to meet the demands of more specific groups such as those without partners. Future research will indicate if single men and women face the same barriers to completing the retirement planning process. This would allow for the tailoring of relevant information such as a focus on the preparedness stage of the financial planning process.

Educational initiatives may benefit from programmes tailored to the specific stages of the retirement planning. For those who have just started the planning process, the emphasis should be placed on developing a clear understanding of what retirement entails. This would provide individuals with the basis to develop retirement goals and make the decision to start preparing. In contrast, the focus should be on the preparedness stage of the planning process if the audience is nearing retirement age. For those who are ill-prepared, retirement educators may look back through the planning process in order to motivate preparatory behaviours. However, the direction of the planning process will need to be confirmed before these recommendations are undertaken.
Study Three and Four indicated that FTP, LOC, and retirement perceptions were consistently correlated with the four domains of retirement planning. However, intervention trials aiming to increase levels of FTP, LOC, and retirement perceptions are scarce, despite longstanding calls for action (Boyd & Zimbardo, 2005; Zimbardo & Boyd, 1999). Considering that these are not stable traits (Zimbardo & Boyd, 1999), future initiatives may look to increase their levels in order to promote financial, health, lifestyle, and psychosocial planning.

Retirement policy. Current New Zealand retirement policy is largely focused on retirement finances. With a significant proportion of the population leaving the workforce, further responsibility is being placed on the individual to prepare financially for retirement (Rowlingson, 2002). For example, the New Zealand Kiwisaver programme was introduced in 2007 to assist New Zealanders’ financial preparations for retirement. However, limited research suggests that the health, lifestyle, and psychosocial domains of retirement planning are also of importance. For example, Hershey et al.’s (2001) study showed that few people had undertaken non-financial planning but a significant proportion wished that they had. The results from this study suggest that New Zealanders are undertaking each of the four domains of retirement planning and this should be encouraged by social policy. However, until the positive effects of financial and non-financial planning are tested with longitudinal research, this recommendation should be considered with caution.

A one size fits all policy may not be appropriate for enabling all New Zealanders to prepare for retirement. This is because society members may face different issues as they look to exit the workforce. For example, retirement finances may not be a primary
Discussion

Concern for those of higher SES, whereas the loss of role identity following retirement may be a very important issue. However, at this point in time little policy emphasis is placed on non-financial domains of retirement planning. For those of lower SES, concerns of identity loss may fall to the background as many deal with the potential loss of income following redundancy or a forced retirement due to poor health or caregiving demands. This problem may be further compounded by structural barriers to completing the financial planning process. Therefore, future retirement policy should reflect the different issues that face New Zealand pre-retirees.

Limitations

The limitations within the four studies that comprise this research programme have been discussed in previous sections. Therefore, the following section considers the broader limitations of this thesis, beginning with the omission of important variables from the research.

A number of variables including familial commitments, expectations of retirement, and financial literacy, were not included in the data collection. These variables have been identified as important correlates of retirement planning and this research would have benefited from their inclusion. For example, those with familial commitments such as dependent children or caregiving responsibilities tend to undertake less retirement planning (Moen et al., 2005). This may be due to a lack of financial resources, or even a lack of time to plan for retirement. As noted earlier, retirement expectations may mediate the relationship between retirement planning and retirement well-being (Taylor & Doverspike, 2003). Therefore, the appropriate variables could have been used to test whether retirement planning is associated with clearer expectations of retirement. This
would have provided further support for the validity of the PRePS. Finally, a growing literature now focuses on financial literacy among pre-retirees (Feslier, 2006; Lusardi & Mitchell, 2007) and much of this research indicates that financial literacy is positively correlated with financial planning. Therefore, this would have been an important variable to study alongside the process of financial planning. However, the exclusion of these variables does not impact significantly on the development and validation of the PRePS and these variables will be included in future research.

The items assessing the psychosocial planning domain require further development. For example, the two items assessing preparedness for retirement roles (“Reducing my hours”, “Separating myself from work”) are ambiguous. The use of these items assumes that separating oneself from work is synonymous with preparing for retirement roles, which may or may not be the case. People may undertake these activities for a number of reasons including poor health, stress, to be with family, as well as to develop retirement roles. Although careful analyses may factor out these extraneous variables, measures specifically assessing the development of retirement roles would have been more appropriate.

The fact that retirement means different things to different people may have introduced inconsistency in interpretation of the retirement planning items. For example, those who never expect to retire may have interpreted the questions differently to those planning to withdraw from work completely or those who have never worked for a salary or wage. This is important because one aspect of good psychological measurement is ensuring that all participants interpret the question in the same way. Therefore, this posed a significant problem to the research. One way of reducing ambiguity would have been to
force a definition of retirement onto the participants. For example, the questionnaire could have stated that “Retirement is the complete withdrawal from paid work” at the beginning of the questionnaire. However, it is likely that this would have alienated a significant proportion of the participants (e.g., those who never expect to retire or those who have never worked for pay) and lowered the response rate. Instead, each participant was given the opportunity to indicate the meaning they attach to retirement at the beginning of the questionnaire. Although this does not solve the issue outlined above, it may introduce a different kind of consistency; each of the participants are preparing (or not) for an event that carries personal meaning to them.

This thesis would have benefited from a stronger cultural component. For example, Māori were oversampled to ensure their statistical representation in the development of the PRePS, but there were insufficient numbers for meaningful or ethical cross-cultural comparisons. The decision not to recruit a representative sample of Māori was entirely based on financial constraints. The cost of data collection for Study Three was approximately $20,000 NZD and this would have risen to approximately $30,000 due to higher rates of oversampling. Nevertheless, at this point in time, the results of this study are of little specific benefit to Māori and this is a major limitation for this thesis. Furthermore, other ethnic minorities including Pasifika Peoples, those of Asian descent, and immigrants were not represented in the development of the PRePS. Therefore, it is possible that the PRePS is not an appropriate measure of retirement planning for these important groups.

Although the socioeconomic, psychological, and demographic variables were theorised to affect retirement planning, causality cannot be determined with cross-sectional data.
For example, Study Two theorised and modelled the causal effects of retirement perceptions on retirement planning. However, it is plausible that the direction may be reversed or that the relationship is reciprocal. For example, individuals may look forward to retirement and decide to start planning in order to ensure their future enjoyment. Increasing levels of preparedness may further solidify their perceptions of retirement. Although causality cannot be confirmed, future longitudinal research may identify the direction of these relationships.

At this point in time the PRePS cannot be used to determine how much planning is ‘enough’. Longitudinal research is needed to determine firstly, which domains of retirement planning predict well-being, and secondly, the level of retirement planning needed to reach a specified criterion for well-being. For example, although the raw data from Study Three (see Table 6, p.98) suggest that people are undertaking less psychosocial planning compared to the other domains, current research cannot determine if this is problematic for pre-retirees’ future well-being. It may be that developing a representation of retirement roles is sufficient for pre-retirees and that these roles can be further developed once the individual leaves the workforce. Therefore, further longitudinal research is needed before any policy recommendations can be made regarding the extent to which New Zealanders are preparing for retirement.

**Conclusion**

The initial stages of this thesis illustrated the importance of retirement planning for future well-being and examined the effects of socioeconomic, psychological, and demographic variables on retirement plans. However, existing conceptualisations of retirement planning have not completely captured the planning construct and this has
hindered the development of new retirement planning knowledge. In response to this limitation, retirement planning was reconceptualised as a process in order to encapsulate the goal directed thoughts and behaviours that characterise planning for retirement. This involved the development of the Process of Retirement Planning Scale to assess each stage of the financial, health, lifestyle, and psychosocial planning processes. The final study examined the relationships between the socioeconomic, psychological, and demographic variables and the process of retirement planning. The patterns in these relationships were theorised as structural and psychological barriers to completing the retirement planning process. In summary, this thesis has presented a unique way of conceptualising retirement planning. It has generated new research questions and consequently, new avenues for future research. Therefore, this research serves as the basis for developing our understandings of the retirement planning process and of the factors that can affect that process. These understandings will inform retirement policy and education and may assist the next generation of retirees to prepare for retirement.
References


References


References


Appendices

Appendix A
Pre-Contact Letter

Dear <Mailing Name>

My name is Jack Noone, and I am a PhD student at Massey University. In a few days from now you will receive in the mail a request to fill out a survey for an important national research project. You have been randomly chosen, from the publicly available New Zealand electoral roll, as one of over 3,000 people to fill out this survey. You do not have to take part, but we would like you to.

As the first of the “baby boomers” approach retirement age, their future health and well-being is an increasingly important issue in New Zealand. In this study I am interested in people’s attitudes towards retirement, when or if they expect to retire, and whether they are planning for retirement. This project considers the many different ways that people can plan. For example, some people plan a retirement lifestyle while others try to look after their health or think about the types of roles they would like to hold in retirement. This research comes at a time when many households are facing difficult economic circumstances and this can also impact on people’s retirement plans. Other factors, such as people’s health and their attitudes towards work and retirement itself, can also influence planning. These factors are also a focus of this study.

I am interested in people’s thoughts and opinions whether they are currently in paid employment, not presently in paid employment, or never expect to retire.

I am writing in advance because we have found that many people like to know ahead of time that they will be contacted. If you would like additional information about this study you may call the toll free number 0800 100 134 or use the other contact details below. More information will also be provided to you when you receive the survey.

To show my appreciation of your contribution, all those who return the survey will be invited to enter into a draw for petrol vouchers to the value of $250. The winner will be drawn on December 19th and they will be notified by mail just in time for Christmas.

Thank you for your time and for considering this request.

Sincerely

Mr Jack H Noone
Research Officer and PhD candidate
School of Psychology
Massey University
Ph: 0800 100 134 Email: j.h.noone@massey.ac.nz
Appendix B
Main Cover Letter

Dear <Mailing_Name>

Information Sheet for the New Zealand Retirement Planning Survey

You are invited to take part in a research study that aims to find out more about people’s views and expectations of their future activities. You have been randomly chosen, from the publicly available New Zealand electoral roll, as one of over 3,000 people aged between 50 and 60 to fill out this questionnaire. As a post WWII “Baby Boomer”, you are part of a very important group of New Zealanders, yet very little is known about your expectations of the future and your attitudes towards retirement and retirement planning. If you choose to take part, I would ask you to complete the questionnaire enclosed with this letter. This should take about 20 - 40 minutes. Your participation is your choice.

What is this study about and who is doing it?
My name is Jack Noone and I am a Ph.D. student and Research Officer in the School of Psychology, Massey University. I welcome any questions you may have about this study, and you can find my contact details on the following page. My supervisors’ contact details are also listed below. This study is funded by Massey University, The Ministry of Social Development, and The Retirement Commission.

In this study I am interested in people’s attitudes towards retirement, when or if they expect to retire, and whether they are planning for retirement. This project considers the many different ways that people can plan. For example, some people plan a retirement lifestyle while others try to look after their health or think about the types of roles they would like to hold in retirement. This research comes at a time when many households are facing difficult economic circumstances and this can also impact on people’s retirement plans. Other factors, such as people’s health and their attitudes towards work and retirement itself, can also influence planning. These factors will also be covered in the questionnaire.

In gaining an understanding of Baby Boomers’ attitudes towards retirement and retirement planning, I will be able to offer recommendations to social policy makers and promotional initiatives, which are aimed at enhancing the future well-being of the Baby Boom generation.
What will I be asked to do?
Your participation in this research, should you choose to take part, would involve filling out the attached questionnaire. This would take about 20 – 40 minutes. You can return the questionnaire in the freepost envelope supplied. We will send you three reminders over the following nine weeks. The second reminder will include a replacement questionnaire in case you happen to misplace your original copy.

The questionnaire has a code number written on it so we can match it to your name, and take you off our re-mailing list. This is to ensure that we don’t send you a reminder to complete the questionnaire when you have already completed the questionnaire and sent it back.

The questionnaire also asks whether you wish to be included in an ongoing study, named the New Zealand Longitudinal Study of Ageing (NZLSA). This study is being undertaken by researchers at Massey University, Victoria University, and The Family Centre Social Policy Research Unit. The purpose of this research is to develop a better understanding of the transition from work to retirement and beyond. In 2006 and 2008, 3,000 New Zealanders took part in the initial phase which was named the Health, Work, and Retirement (HWR) survey. We are now looking for more participants aged between 50 and 62 to be part of this ongoing and expanded study. The study will involve completing two postal questionnaires over the following five years. If you wish to be part of this study, simply tick the box on the last page of the accompanying questionnaire. In approximately 2 years time you will receive another invitation to participate, with full information and the opportunity to decline. If you are keen to take part in further research, we would like you to nominate three people 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. Further details can be found on the last pages of the questionnaire. If you would like further information about the HWR or NZLSA now, or if you would like to withdraw from this study, please feel free to call me on 0800 100 134 or visit our website: http://hwr.massey.ac.nz/study-info.htm

For now, we would like you to complete this survey even if you do not wish to be involved in future research.

Please note that all information that you give is completely confidential, and will be used only for the purposes of this study. Nobody else will be able to see your questionnaire. It will not be possible to identify individuals in any reports of the results. Your questionnaire will be kept in a locked cabinet and will only be seen by the researcher. To ensure confidentiality, the questionnaires will be destroyed 10 years after the completion of the study. All people who participate will have the option to receive a summary of the findings. You can request a copy of the results by ticking the appropriate box on the second to last page of the questionnaire. There may be a delay of several months between data collection and publication of results.

What are my rights as a participant in this study?
You are under no obligation to accept this invitation. Completion and return of the survey implies consent. If you decide to participate, you have the right to:

4) Decline to answer any particular question;
5) Withdraw from the study at any time;
6) Ask any questions about the study at any time during participation;
7) Provide information on the understanding that your name will not be used;
8) Be given access to a summary of the project findings when it is concluded.
Who can I contact if I have further questions about this study?

Mr Jack Noone  Dr Christine Stephens  Dr Fiona Alpass  
School of Psychology  School of Psychology  School of Psychology  
Massey University  Massey University  Massey University  
P.O. Box 756  Private Bag 11-222  Private Bag 11-222  
Wellington  Palmerston North  Palmerston North  
Ph: 0800 100 134  Email: j.h.noone@massey.ac.nz  Email: c.v.stephens@massey.ac.nz  Email: f.m.alpass@massey.ac.nz

Prize draw
In order to show my appreciation, I would like to invite those who return the survey to enter a draw for petrol vouchers to the value of $250. To enter the draw, simply tick the box on the second to last page of the survey. The winner will be drawn on December 19th and they will be notified by mail just in time for Christmas.

Thank you for taking the time to read this information and consider my request for your help in this study. I really appreciate it.

Yours sincerely

Mr Jack Noone  
Research Officer and PhD candidate  
School of Psychology  
Massey University  
Wellington

“This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 08/25. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email humanethicsouthb@massey.ac.”
Appendix C
Reminder Postcards

Dear <Mailing_Name>

Recently a survey was mailed to you. This survey is part of important research to better understand people's views on their retirement and retirement planning.

If you have already returned the survey please accept our sincere thanks. If not, we would like you to know that we are still keen to receive your reply.

If you did not receive a survey, or if it was misplaced, please call us on 0800 100 134 or email us on kwr@massey.ac.nz and we will get another one in the mail to you today.

All those who return their questionnaires within the next few weeks will go into the draw for $250 worth of petrol vouchers. The draw will be held on December 19th, 2003.

Sincerely
Jack Noone

If you are 49 or 61 years old, we would still like you to fill out the questionnaire.

Dear <Mailing_Name>

Before Christmas, I sent you a questionnaire about retirement planning. This is just a final note to say we would still like to hear from you.

The project has been a great success with over half of the 3,000 people surveyed returning their questionnaires. However, the more people who respond, the more confident we can be in our results.

If you would like a replacement questionnaire or if you have already returned your questionnaire, please call me on 0800 100 134 or email me: j.h.noone@massey.ac.nz

Sincerely
Jack Noone

Return questionnaires to:
FREEPST 06
The NZEPS
School of Psychology
Massey University
Private Bag 11-222
Palmerston North
Appendices

Appendix D
Reminder Letter

Dear <Mailing Name>

Recently I sent you a survey that looks at people’s attitudes towards retirement and retirement planning, but so far I have not received a reply. I am writing to check that you have received the survey, to remind you of the survey, and to ask again for your help.

The future well-being of the Baby Boom generation is an important issue but little is known about the factors that can maintain and enhance their well-being in the future. This study will help that understanding.

I am writing to you again because we need to receive replies from as many of the people who were contacted as possible. This is to ensure that our information is representative of all New Zealanders. Even if you never expect to retire or if you are not in the paid workforce, we are still interested in your attitudes and opinions.

Perhaps you haven’t got around to answering the survey yet, or don’t have strong views on the subject. Whatever the reason, your ideas and opinions are as important as anyone else’s and will help the survey to properly represent the attitudes of all New Zealanders. I have included another survey in case you have misplaced the one sent previously.

In order to show my appreciation, all those who complete and return the survey will be entered into a draw for petrol vouchers to the value of $250. The winner will be drawn on December 19th and they will be notified by mail just before Christmas.

Thank you again for your consideration of this important issue.

Yours sincerely

Mr Jack Noone
PhD candidate and Research Officer
School of Psychology
Massey University
Wellington
Ph: 0800 100 134
Appendix E
Postal Questionnaire

How to complete this survey

• There are no right or wrong answers; we want the response that is best for you.
• We are sorry that some questions seem repetitive, but please answer all questions that apply to you.
• Although you may feel that some questions are not relevant to you, we are still interested in your thoughts and opinions. In these cases please provide the answer that best reflects how you feel.
• Completion and return of this survey implies consent to take part in the study.
• All the information you give us is in confidence and will be used only for the purposes of this study.

EXAMPLE:
These are statements that some people make about how they spend their time, or would like to spend their time when or if they retire. Please indicate how true these statements are for you.

I’ve thought a lot about how I will spend my time when or if I retire

Not true for me at all
☐
☒
☐
☐

Definitely true for me

If you return the questionnaire before December 19\textsuperscript{th}, you will go into the draw to win $250 dollars worth of petrol vouchers. You can enter the draw by ticking the box at the end of the questionnaire.

Thank you for taking the time to complete this survey.

If you need help to answer any questions, please contact me either by toll-free phone or via email at:

Phone: 0800 100 134
Email: j.h.noone@massey.ac.nz
Q 1  For me, retirement means….
(Please tick the box that best reflects what retirement means to you)
- turning 65 and becoming eligible for NZ Super
- complete withdrawal from paid work
- retiring from a career job but continuing some paid work
- when my partner retires
- Not applicable - I don’t intend to retire (tick and go to Q 3)
- other

Please specify: ________________________________

Q 2  Based on your answer to Q 1, at what age do you think you will retire?
- I think I will retire at age: ____________________
- I’m retired now
- I don’t know

Q 3  If you are already retired, please skip to Q 5

(a) How much have you thought about retirement?
- Hardly at all
- A little
- Some
- A lot
- Not Applic.

(b) How much have you discussed retirement with your spouse or partner?
- A little
- Some
- A lot
- Not Applic.

(c) How much have you discussed retirement with your friends and co-workers?
- A little
- Some
- A lot
- Not Applic.

Q 4  To what extent do you agree with the following statements?
(Please tick one box per line)

(a) I can financially afford to retire now.
- Strongly disagree
- Moderately disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree
- N/A

(b) One reason I continue to work is because I cannot afford to retire
- Somewhat agree
- Neither agree nor disagree
- Moderately agree
- Strongly disagree
- Strongly agree
- N/A

(c) When I imagine what retirement will be like, I feel depressed
- Somewhat agree
- Neither agree nor disagree
- Moderately agree
- Strongly disagree
- Strongly agree
- N/A
To what extent do you agree with the following statements?

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>I feel uncertain about how economic trends will affect my life in retirement</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(b)</td>
<td>I feel secure that the government will financially support me in retirement</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>(c)</td>
<td>I worry about the standard of living I will have in retirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d)</td>
<td>I worry about having enough income in retirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e)</td>
<td>I am satisfied with what my family income will be in retirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f)</td>
<td>I am confident that I will easily adjust to retirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(g)</td>
<td>I don't think I will have any trouble handling retirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(h)</td>
<td>I expect to enjoy retirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(j)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(k)</td>
<td>I have established long-term goals and am working to fulfil them</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(l)</td>
<td>It is very hard for me to visualise the kind of person I will be in the future</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(m)</td>
<td>The future seems very vague and uncertain to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n)</td>
<td>I pretty much live on a day to day basis.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(o)</td>
<td>My life is determined by my own actions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(p)</td>
<td>To a great extent, my life is controlled by accidental happenings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(q)</td>
<td>My life is chiefly controlled by powerful others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(r)</td>
<td>I am usually able to protect my personal interests.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(s)</td>
<td>When I get what I want, it's usually because I'm lucky.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(t)</td>
<td>I can pretty much determine what will happen in my life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(u)</td>
<td>Often there is no chance of protecting my personal interest from bad luck happening.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(v)</td>
<td>I feel like what happens in my life is mostly determined by powerful people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(w)</td>
<td>People like myself have very little chance of protecting our personal interests where they conflict with those of strong pressure groups.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This section asks about three different aspects of retirement planning: retirement finances, retirement lifestyles, and retirement roles. Please respond to these statements even if you never expect to retire or if you are not working for pay. We are sorry that some questions seem repetitive, but it is important that you answer all the questions that apply to you.

If you are already retired, please skip to Q 10 on page 9

Finances

Q 6  The following are statements that some people make about their future finances. Please indicate how true these statements are for you. (Please tick one box per line)

| (a) | I’ve thought a lot about my future finances |
| (b) | I often compare my current financial position with the financial position I would like to have in retirement |
| (c) | I have a clear understanding of financial issues for retired people |
| (d) | I often talk to my family about financial issues for retired people |
| (e) | I often talk to my friends about financial issues for retired people |
| (f) | I worry about my future finances |
| (g) | I have specific goals regarding the financial position I want in retirement |
| (h) | It’s too early for me to start thinking about my retirement finances |
| (i) | I know that people in my age group are making financial preparations for retirement |
| (j) | It’s worthwhile to make financial provisions for retirement |
| (k) | I’d rather deal with any financial issues closer to retirement, rather than making financial provisions now |
Q 6
Cont.

(l) If I was forced to retire today I would have enough money to cope well with retirement

(m) If I was forced to retire at age 65 I would have enough money to cope well with retirement

(n) Members of my household are able to put aside or invest a sufficient proportion of our income

(o) By the time I retire, I will have sufficient income to ensure the standard of living I want in retirement

(p) By the time I retire, I will own a house without a mortgage

(q) By the time I retire, I will have enough money to pay for any unexpected expenses

(r) I know exactly how much money I will need to ensure the standard of living I want in retirement

Q 7

These are statements that some people make about how they spend their time, or would like to spend their time, when or if they retire. Please indicate how true these statements are for you. (Please tick one box per line)

(a) I've thought a lot about how I will spend my time in retirement

(b) I've thought a lot about where I will live when I retire

(c) I often compare how I spend my time now with how I would like to spend my time in retirement

(d) I have a clear understanding of how retired people spend their time

(e) I often talk to my family about how retired people spend their time

(f) I often talk to my friends about how retired people spend their time

(g) I worry about how I will spend my time in retirement

(h) I worry about where I will live when I retire
Q 7 Cont.

(i) I have specific goals regarding how I want to spend my time in retirement

(j) It’s too early for me to start thinking about how I will spend my time in retirement

(k) It’s too early for me to start thinking about where I will live in retirement

(l) I know that people in my age group are developing new ways to spend their time

(m) It’s worthwhile to develop new activities for retirement

(n) I’d rather decide what to do with my time once I retire, rather than think about it now

(o) I know exactly where I want to live in retirement

(p) I am actively developing ways to spend my time in retirement

(q) There are many things I could do with my time if I was forced to retire today

(r) I have recently taken up new interests, activities, or hobbies

(s) I have many interests outside of work that I would like to pursue

(t) I have recently joined or intend to join an organisation or club

Retirement roles

Q 8 The following are statements that some people make about the roles they hold within their family and within the general community. Please indicate how true these statements are for you. (Please tick one box per line)
Q 8
Cont.

Not true for me at all

Definitely true for me

(d) I often compare my current roles with the roles I would like to have as a retired person

(e) I often talk to my family about the roles of retired people

(f) I often talk to my friends about the roles of retired people

(g) I worry about the roles I would hold as a retired person

(h) I have specific goals regarding the future roles I would like to hold as a retiree

(i) It’s too early for me to consider my roles as a retired person

(j) I’d rather deal with any issues regarding my future roles when they arise, rather than prepare for them now

(k) I know that people in my age group are preparing for changes to their roles

(l) It’s worthwhile to prepare for changes to my roles as a retired person

(m) I often speak to retired people about what it’s like to be retired

(n) I’m starting to separate myself from my work

(o) I plan to undertake some other kind of paid job before I retire

(p) I am reducing or will soon reduce my work hours
The following questions apply only to those who are living with their spouse or partner. If you do not have a spouse or partner please skip past Q 9.

**Q 9** The following are statements that some people make about planning with their spouse or partner. Please indicate how true these statements are for you. (please tick one box per line)

- **(a)** My partner and I often talk about our future health
- **(b)** My partner and I often talk about the roles we would like to have in retirement
- **(c)** My partner and I often talk about how we would like to spend our time in retirement
- **(d)** My partner and I often talk about where we would like to live in retirement
- **(e)** My partner and I make all our financial decisions about retirement together

---

You are half way through. Time for a cuppa?

The following sections ask about your general health and your standard of living. Both of these are linked to retirement planning and the decision to retire.

We will also ask you some questions about your background.

You may like to take a break now and do the second part later.
We would now like to ask you some questions about your health (which is known to be strongly related to retirement planning). For each of the following questions, please tick the box that best describes your answer.

**Q 10** In general, would you say your health is:
(Please tick one box)

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Very good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
</table>

**Q 11** The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?
(Please tick one box on each line)

<table>
<thead>
<tr>
<th>Activities</th>
<th>Yes, limited a lot</th>
<th>Yes, limited a little</th>
<th>Not limited at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Climbing several flights of stairs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Q 12** 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)

<table>
<thead>
<tr>
<th>(a) Accomplished less than you would like</th>
<th>All of the time</th>
<th>Most of the time</th>
<th>Some of the time</th>
<th>A little of the time</th>
<th>None of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b) Were limited in the kind of work or other activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q 13  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)

<table>
<thead>
<tr>
<th></th>
<th>All of the time</th>
<th>Most of the time</th>
<th>Some of the time</th>
<th>A little of the time</th>
<th>None of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Accomplished less than you would like</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>(b) Did work or activities less carefully than usual</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Q 14  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)

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Q 15 During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives etc.)?  
(Please tick one box)

<table>
<thead>
<tr>
<th></th>
<th>All of the time</th>
<th>Most of the time</th>
<th>Some of the time</th>
<th>A little of the time</th>
<th>None of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Q 16 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 of the time during the past 4 weeks…  
(Please tick one box on each line)

<table>
<thead>
<tr>
<th></th>
<th>All of the time</th>
<th>Most of the time</th>
<th>Some of the time</th>
<th>A little of the time</th>
<th>None of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Have you felt calm and peaceful?</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>(b) Did you have a lot of energy?</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>(c) Have you felt downhearted and depressed?</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>
Q 17 The following are statements that some people make about their health. Please indicate how true these statements are for you.
(Please tick one box per line)

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>I think a lot about my long-term health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>I often compare my current health with how I would like it to be in the future</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>I have a clear understanding of the importance of health for older people</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d)</td>
<td>I often talk to my family about our future health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e)</td>
<td>I often talk to my friends about our future health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f)</td>
<td>I worry about my future health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(g)</td>
<td>I have specific goals for my long-term health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(h)</td>
<td>It’s too early for me to consider my long-term health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td>I know that people in my age group are taking steps to ensure their future health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(j)</td>
<td>It’s worthwhile to keep healthy now, so that my future health will be good</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(k)</td>
<td>I’d rather deal with any health issues when they arise rather than prepare for them now</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(l)</td>
<td>I only eat foods that will benefit my long-term health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(m)</td>
<td>I never get medical screening for diseases such as cancer, diabetes, and heart disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n)</td>
<td>I never have general medical check-ups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(o)</td>
<td>I try to keep physically active (e.g. by taking regular walks, playing sport, or doing yoga etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(p)</td>
<td>I avoid all unhealthy behaviours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The following questions ask about your general standard of living, which includes your ownership of household and personal items and your consumption of goods and services. Economic living standards are linked with both retirement planning and the decision to retire.

Q 18 For the following questions, please indicate whether or not you have (or have access to) the item by ticking one of the boxes.

Tick the first box if you have the item or have access to it.
Tick the second box if you don’t have the item because you don’t want it.
Tick the third box if you don’t have the item because of the cost.
Tick the fourth box if you don’t have the item for some other reason.

<table>
<thead>
<tr>
<th></th>
<th>Item</th>
<th>Yes I have it</th>
<th>No because I don’t want it</th>
<th>No because of the cost</th>
<th>No for some other reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Telephone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>Washing machine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>Heating available in all main rooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d)</td>
<td>A good pair of shoes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e)</td>
<td>A best outfit for special occasions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f)</td>
<td>Personal computer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(g)</td>
<td>Home contents insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(h)</td>
<td>Enough room for family to stay the night</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q 19 For the following questions, please indicate whether or not you do the activity by ticking one of the boxes.

<table>
<thead>
<tr>
<th></th>
<th>Activity</th>
<th>Yes I do it</th>
<th>No because I don’t want to</th>
<th>No because of the cost</th>
<th>No for some other reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Give presents to family or friends on birthdays, Christmas or other special occasions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>Visit the hairdresser at least once every three months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>Have holidays away from home every year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d)</td>
<td>Have a holiday overseas at least every three years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e)</td>
<td>Have a night out at least once a month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f)</td>
<td>Have family or friends over for a meal at least once a month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q 20 The following questions are about your material standard of living – the things that money can buy (this does not include your health or capacity to enjoy life). Tick the answer that best applies to you.

(a) Generally, how would you rate your material standard of living?

<table>
<thead>
<tr>
<th>Standard of Living</th>
<th>Ticks</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Fairly high</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Fairly low</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>

(b) Generally, how satisfied are you with your current material standard of living?

<table>
<thead>
<tr>
<th>Satisfaction Level</th>
<th>Ticks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td></td>
</tr>
<tr>
<td>Satisfied</td>
<td></td>
</tr>
<tr>
<td>Neither satisfied nor dissatisfied</td>
<td></td>
</tr>
<tr>
<td>Dissatisfied</td>
<td></td>
</tr>
<tr>
<td>Very dissatisfied</td>
<td></td>
</tr>
</tbody>
</table>

(c) How well does your total income meet your everyday needs for such things as accommodation, food, clothing and other necessities?

<table>
<thead>
<tr>
<th>Income Adequacy</th>
<th>Ticks</th>
</tr>
</thead>
<tbody>
<tr>
<td>My income is not enough</td>
<td></td>
</tr>
<tr>
<td>My income is just enough</td>
<td></td>
</tr>
<tr>
<td>My income is enough</td>
<td></td>
</tr>
<tr>
<td>My income is more than enough</td>
<td></td>
</tr>
</tbody>
</table>

Q 21 The following are a list of things some people do to help keep costs down. In the last 12 months, how often have you done any of these things? Tick the box that best applies to you.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not at all</th>
<th>A little</th>
<th>A lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Gone without fresh fruit and vegetables to keep down costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Continued wearing clothing that was worn out because you couldn’t afford a replacement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Put off buying clothes for as long as possible to help keep down costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Stayed in bed longer to save on heating costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Postponed or put off visits to the doctor to help keep down costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) NOT picked up a prescription to help keep down costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(g) Spent less on hobbies than you would like to keep down costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(h) Done without or cut back on trips to the shops or other local places to help keep down costs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q 22  What would be the total income that you yourself received BEFORE tax in the last 12 months?  
(Please tick one box below)

<table>
<thead>
<tr>
<th>Loss</th>
<th>Zero Income</th>
<th>$1 - $5,000</th>
<th>$5,001 - $10,000</th>
<th>$10,001 - $15,000</th>
<th>$15,001 - $20,000</th>
<th>$20,001 - $25,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>$25,001 - $30,000</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>$30,001 - $35,000</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>$35,001 - $40,000</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>$40,001 - $45,000</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>$45,001 - $50,000</td>
<td>31</td>
<td>32</td>
<td>33</td>
<td>34</td>
<td>35</td>
<td>36</td>
</tr>
</tbody>
</table>

Q 23  Article I.  What would be the combined income that every other member of your household received BEFORE tax in the last 12 months?  

<table>
<thead>
<tr>
<th>Loss</th>
<th>Zero Income</th>
<th>$1 - $5,000</th>
<th>$5,001 - $10,000</th>
<th>$10,001 - $15,000</th>
<th>$15,001 - $20,000</th>
<th>$20,001 - $25,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>$25,001 - $30,000</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>$30,001 - $35,000</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>$35,001 - $40,000</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>$40,001 - $45,000</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>$45,001 - $50,000</td>
<td>31</td>
<td>32</td>
<td>33</td>
<td>34</td>
<td>35</td>
<td>36</td>
</tr>
</tbody>
</table>

Q 24  
(a) Aside from New Zealand Super, do you belong to a superannuation or pension programme?  

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

(b) If yes, tick all that apply:

- Kiwisaver
- Overseas superannuation or pension
- Other pension or superannuation

Q 25  
(a) Do you have personal health insurance?  

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Finally, we would like to ask you for some general background information. Please place a tick next to the answer that you believe gives an accurate indication of your CURRENT situation, or write details in the spaces provided.

### Q 26
**Are you**

(Please tick one box)

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Q 27
**When were you born?**

<table>
<thead>
<tr>
<th>Day</th>
<th>Month</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

### Q 28
**Which ethnic group(s) do you belong to?**

(Please tick all the boxes that apply to you)

- Pakeha / New Zealander of European descent
- Māori
- Samoan
- Cook Island Māori
- Tongan
- Niuean
- Chinese
- Indian
- Other

Please specify: ____________________________

### Q 29
**What is your current employment status?**

Please tick as many boxes as apply.

- Full-time paid employment, including self employment (35 or more hours per week)
- Full-time student
- Part-time paid work, including self employment (less than 35 hours per week)
- Unable to work due to health or disability issue
- Full-time homemaker
- Unemployed and seeking work
- Retired, no paid work
- Other (please specify: ____________________________)

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Q 30 If in paid employment, what is your occupation in your main job? (Try to be as specific as you can. For example: Primary School Teacher, Clothing Machinist, Motel Manager, Word Processor Operator).

Q 31 Which one of these statements is true about your legal marital status? (If you have been married more than once, answer for your most recent marriage)

- I am legally married
- I am in a civil union/de facto/partnered relationship
- I am permanently separated from my legal husband or wife
- I am divorced or my marriage has been dissolved
- I am a widow or widower
- I have never been legally married

Q 32 Which statement best describes your educational qualifications? (Please tick one box)

- I have no secondary school qualifications
- I have a secondary school qualification (e.g. 5th Form Cert, 6th Form Cert, University Entrance)
- I have a tertiary qualification (e.g. Trade Certificate, Diploma, Degree)

Thank you for taking the time to complete this survey

Please turn the page
If you would like to enter the prize draw for $250 worth of petrol vouchers, please tick the box and complete your name and contact details below.

If you would like to receive a summary of the results from this study, please tick the box and complete your name and contact details below.

I would like to invite you to take part in an ongoing project called the New Zealand Longitudinal Study of Ageing (NZLSA). The purpose of this research is to develop a better understanding of the transition from work to retirement and beyond. This would involve completing further surveys in the future. You are under no obligation to take part in future research.

If you would like to be contacted about future research, please tick the box and complete your name and contact details below.

Please note: You are only providing your details for the options you have ticked above. This page with your contact details will be removed from the questionnaire as soon as it is received and will not be used for any other purpose.

Name: ____________________________________________

Address: ____________________________________________

__________________________________________

__________________________________________

__________________________________________

Phone: ____________________________________________

Email: ____________________________________________

Please turn the page
If you are keen to take part in further research, we would like you to nominate three people 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 those you name are happy to act as contact people. We will only contact these people in the event that we cannot locate you.

<table>
<thead>
<tr>
<th><strong>Contact Person Number 1</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong></td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td>Surname</td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td>First Name</td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td><strong>Address:</strong></td>
</tr>
<tr>
<td>___________________________</td>
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<tr>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td><strong>Phone:</strong></td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td><strong>Email:</strong></td>
</tr>
<tr>
<td>___________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Contact Person Number 2</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong></td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td>Surname</td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td>First Name</td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td><strong>Address:</strong></td>
</tr>
<tr>
<td>___________________________</td>
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<tr>
<td>___________________________</td>
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<tr>
<td><strong>Phone:</strong></td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td><strong>Email:</strong></td>
</tr>
<tr>
<td>___________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Contact Person Number 3</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong></td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td>Surname</td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td>First Name</td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td><strong>Address:</strong></td>
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<td>___________________________</td>
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<tr>
<td>___________________________</td>
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<tr>
<td><strong>Phone:</strong></td>
</tr>
<tr>
<td>___________________________</td>
</tr>
<tr>
<td><strong>Email:</strong></td>
</tr>
<tr>
<td>___________________________</td>
</tr>
</tbody>
</table>
Have we missed anything?

If there is anything else you would like to tell us about your retirement plans, please use the space below.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Before you place the completed survey in the addressed, FREEPOST envelope, please make sure you have entered ALL the information that you intended to.

Thank you for completing this survey 😊
### Appendix F.

Items Comprising the PRePS According to the Stage of the Process Model.

<table>
<thead>
<tr>
<th>Retirement Representations</th>
<th>The Decision to Prepare for Retirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’ve thought a lot about my future finances</td>
<td>It’s too early for me to start thinking about my retirement finances</td>
</tr>
<tr>
<td>I often compare my current financial position with the financial position I would like to have in retirement</td>
<td>I’d rather deal with any financial issues closer to retirement, rather than making financial provisions now</td>
</tr>
<tr>
<td>I have a clear understanding of financial issues for retired people</td>
<td>I know that people in my age group are making financial preparations for retirement</td>
</tr>
<tr>
<td>I often talk to my family about financial issues for retired people</td>
<td>It’s worthwhile to make financial provisions for retirement</td>
</tr>
<tr>
<td>I think a lot about my long-term health</td>
<td>It’s too early for me to consider my long-term health</td>
</tr>
<tr>
<td>I often compare my current health with how I would like it to be in the future</td>
<td>I’d rather deal with any health issues when they arise rather than prepare for them now</td>
</tr>
<tr>
<td>I have a clear understanding of the importance of health for older people</td>
<td>It’s too early for me to start thinking about how I will spend my time in retirement</td>
</tr>
<tr>
<td>I often talk to my family about our future health</td>
<td>I’d rather decide what to do with my time once I retire, rather than think about it now</td>
</tr>
<tr>
<td>I’ve thought a lot about how I will spend my time in retirement</td>
<td>I know that people in my age group are developing new ways to spend their time</td>
</tr>
<tr>
<td>I often compare how I spend my time now with how I would like to spend my time in retirement</td>
<td>It’s worthwhile to develop new activities for retirement</td>
</tr>
<tr>
<td>I have a clear understanding of how retired people spend their time</td>
<td>It’s too early for me to consider my roles as a retired person</td>
</tr>
<tr>
<td>I often talk to my family about how retired people spend their time</td>
<td>I’d rather deal with any issues regarding my future roles when they arise, rather than prepare for them now</td>
</tr>
<tr>
<td>I’ve thought a lot about my roles as a retired person within my family</td>
<td>I know that people in my age group are preparing for changes to their roles</td>
</tr>
<tr>
<td>I’ve thought a lot about my roles as a retired person within my community</td>
<td>It’s worthwhile to prepare for changes to my roles as a retired person</td>
</tr>
<tr>
<td>I have a clear understanding of how people’s roles can change when they retire</td>
<td>Preparedness</td>
</tr>
<tr>
<td>I often compare my current roles with the roles I would like to have as a retired person</td>
<td>If I was forced to retire today I would have enough money to cope well with retirement</td>
</tr>
<tr>
<td>I often talk to my family about the roles of retired people</td>
<td>If I was forced to retire at age 65 I would have enough money to cope well with retirement</td>
</tr>
<tr>
<td>I often speak to retired people about what it’s like to be retired</td>
<td>Members of my household are able to put aside or invest a sufficient proportion of our income</td>
</tr>
<tr>
<td>Retirement Goals</td>
<td>By the time I retire, I will have sufficient income to ensure the standard of living I want in retirement</td>
</tr>
<tr>
<td>I have specific goals regarding the financial position I want in retirement</td>
<td>By the time I retire, I will own a house without a mortgage</td>
</tr>
<tr>
<td>I have specific goals for my long-term health</td>
<td>By the time I retire, I will have enough money to pay for any unexpected expenses</td>
</tr>
<tr>
<td>I have specific goals regarding how I want to spend my time in retirement</td>
<td>I only eat foods that will benefit my long-term health</td>
</tr>
<tr>
<td>I have specific goals regarding the future roles I would like to hold as a retiree</td>
<td>I avoid all unhealthy behaviours</td>
</tr>
<tr>
<td></td>
<td>I try to keep physically active (e.g. by taking regular walks, playing sport, or doing yoga etc)</td>
</tr>
<tr>
<td></td>
<td>I never get medical screening for diseases such as cancer, diabetes, and heart disease</td>
</tr>
<tr>
<td></td>
<td>I never have general medical check-ups</td>
</tr>
<tr>
<td></td>
<td>There are many things I could do with my time if I was forced to retire today</td>
</tr>
<tr>
<td></td>
<td>I have recently taken up new interests, activities, or hobbies</td>
</tr>
<tr>
<td></td>
<td>I have many interests outside of work that I would like to pursue</td>
</tr>
<tr>
<td></td>
<td>I’m starting to separate myself from my work</td>
</tr>
<tr>
<td></td>
<td>I am reducing or will soon reduce my work hours</td>
</tr>
</tbody>
</table>