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**Attitudes and intentions towards mental health assistance by New
Zealand's baby boomers**

**A thesis presented in partial fulfilment of the requirements for the degree of
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ABSTRACT

Little information exists regarding baby boomers' attitudes and intentions towards mental health help-seeking. This is surprising considering this generation, known for its size and living through the most influential period of social change in history, is associated with increased rates of certain mental health disorders. As this cohort age over 65, information about intentions or attitudes towards help-seeking for increasingly common disorders in older age (depression, anxiety, the dementias and substance abuse) is crucial. This research examined this subject by: investigating any intention or attitude differences relating to age; examining intention towards professional and preventive help for the four mental health concerns outlined above; and determining the association between and contribution of relevant variables towards the baby boomers' stated help-seeking intentions within the framework of a social cognitive model of help-seeking: the Theory of Planned Behaviour (TPB).

Participants were a convenience sample of 256 New Zealand baby boomers (aged 49-69), who completed an anonymous, self-report questionnaire measuring demographic variables, intention towards professional and preventive help for four disorders, attitudes towards help-seeking, emotional distress and a previous professional help rating.

Attitudes towards seeking psychological help and intentions towards seeking professional and preventive help showed no significant differences with relation to age. The cohort were generally positive about seeking both preventive and professional help, and attitude towards seeking help for mental health problems was also positive.

Intention towards professional help was higher for depression and substance abuse than for anxiety and forgetfulness (the dementias). For preventive help, intentions were uniformly high across all four disorders.

Within the TPB model, support was achieved for the TPB variables Psychological Openness (PO) and to an extent Perceived Behavioural Control (PBC) as significant predictors of professional help-seeking behaviour and their contribution in explaining help-seeking behaviour in this cohort. PO and PBC associated significantly with professional and preventive intent across most disorders investigated. The implications of these findings and directions for future research are discussed.

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TABLE OF CONTENTS

CHAPTER ONE	1
Rationale and Research Aims	1
CHAPTER TWO: THE BABY BOOMERS	4
The Baby Boom	4
New Zealand’s Baby Boomers.....	7
Events That Shaped A Generation	13
CHAPTER THREE: BABY BOOMER’S MENTAL HEALTH AND THE SERVICES AVAILABLE.....	21
New Zealand Baby Boomers And Their Mental Health	21
Future Mental Health for Baby Boomers in Older Age	24
Mental Health Services Available In New Zealand	35
Preventive Strategies For Mental Health	41
CHAPTER FOUR: HELP-SEEKING AND THE THEORY OF PLANNED BEHAVIOUR	53
Help-seeking.....	54
Help-seeking Models.....	58
Theory Of Planned Behaviour (TPB).....	60
The Current Study	79
CHAPTER FIVE: METHODOLOGY	84
Procedure For Obtaining Participants And Data Collection	84
Ethical Considerations.....	89

Measures And Their Connection To The TPB Model/Help-Seeking	90
Design Strategy	96
Data Screening	98
CHAPTER SIX: RESULTS - UNIVARIATE	100
Univariate Descriptive Statistics, Correlation And Parametric <i>t</i> -tests For Continuous Variables For The Whole Sample	100
Differences Between Males And Females	105
Differences Between Those Who Had Received Professional Help Or Not	106
Univariate Statistics For Non-Continuous Variables	109
Qualitative Information For Open-Ended Text.....	112
CHAPTER SEVEN: RESULTS - DETERMINANTS OF INTENTIONS TO SEEK PROFESSIONAL HELP FOR: DEPRESSION, ANXIETY, FORGETFULNESS AND SUBSTANCE ABUSE	116
Bivariate Relationships	116
Multiple Regression Analysis	119
CHAPTER EIGHT: RESULTS - LEADING-EDGE VERSUS TAIL-ENDERS	123
Comparing Non-Continuous Data Between The Tail-Enders And Leading-Edge	124
CHAPTER NINE: DISCUSSION	127
Current Findings' Summary..	127
Current Research In Comparison To Existing Research.....	129
Study Limitations	154
Directions For Further Research	160

CHAPTER TEN: CONCLUSION.....	164
APPENDICES	167
Appendix A: Online Version Of Participant Questionnaire	168
Appendix B: Paper Version Of Participant Questionnaire.....	195
Appendix C: Raw Data Frequency Tables	209
Appendix D: Independent <i>t</i> -tests, hierarchical multiple regression and multivariate tests	213
References.....	216

LIST OF FIGURES

Figure 1. The Theory of Planned Behaviour.

Figure 2. An edited Theory of Planned Behaviour and additional variables.

Figure 3. Previous psychological problems recorded by participants.

Figure 4. Preventive options selected by participants.

Figure 5. Comparing tail-end and leading-edge responses for preventive options.

LIST OF TABLES

Table 1. Demographic characteristics of sample comparing leading-edge and tail-end baby boomers.

Table 2. Descriptive statistics for all continuous variables.

Table 3. Paired *t*-tests for intention towards professional help.

Table 4. Paired *t*-tests for intention towards professional help and preventive help.

Table 5. Preventive course considered between male and female.

Table 6. Descriptive statistics of those who had sought professional help and those that had not, and independent *t*-tests between them.

Table 7. Simple correlations amongst determinants for intention to professional and preventive help for depression, anxiety, forgetfulness and substance abuse.

Table 8. Results from the hierarchical regression analysis of intentions towards professional help for depression on specific TPB variables and other variables.

Table 9. Results from the hierarchical regression analysis of intentions towards professional help for anxiety on specific TPB variables and other variables.

Table 10. Descriptive statistics of key measures comparing leading-edge and tail-end groups.

GLOSSARY

ATSPPHS-SF: Attitudes Towards Seeking Professional Psychological Help Scale-Short Form

CBT: Cognitive Behaviour Therapy

DHB: District Health Board

DSM-IV: Diagnostic and Statistical Manual of Mental Disorders – 4th Edition

DSM-V: Diagnostic and Statistical Manual of Mental Disorders – 5th Edition

HBM: Health Belief Model

HCL-21: Hopkins Checklist 21

IS: Indifference to Stigma

Leading-edge: Baby boomers born between 1946 and 1955

PO: Psychological Openness

PBC: Perceived Behavioural Control

PHO: Primary Health Organisation

RCT: Randomised Controlled Trial

SUD: Substance Use Disorder

Tail-enders: Baby boomers born between 1956 and 1965

TRA: Theory of Reasoned Action

TFR: Total Fertility Rate - the measure demographers use to define a baby boom and the average number of children born to a woman over her lifetime

TPB: Theory of Planned Behaviour

VaD: Vascular Dementia

CHAPTER ONE

Rationale and Research Aims

Vast numbers of ‘baby boomers’ (the name of the generation born between 1946 and 1965) are reaching 65 years of age and over. For example, in 2009 the numbers of those classed as officially ‘elderly’ in New Zealand was 550,000, and this is expected to increase to one million by the late 2020s (Statistics NZ, 2009). Despite their size and the increasing prevalence of mental health disorders including depression (Wells, 2006a), anxiety (Byers, Yaffe, Covinsky, Friedman, & Bruce, 2010), the dementias (Alzheimer's New Zealand, 2012), and substance abuse (M. Johnston, 2013) associated with this age group, baby boomers are a population about which little is known of their attitudes and intentions towards mental health help-seeking. This knowledge shortfall exists despite the future strain on the mental health system that this cohort denotes. An aim of the current study is to address this research gap and understand help-seeking intention and attitude by this cohort towards the most common disorders now faced in later life. Additionally, when considering the baby boomers’ size and the fact that even when performing optimally only 60 percent of the burden of mental health illness is averted through a mental health system (Andrews, Issakidis, Sanderson, Corry, & Lapsley, 2004) the current research sought to broaden help-seeking options to include both professional and preventive options. An aim of this study is to investigate what level of inclination baby boomers will demonstrate towards prevention as preventive approaches have the potential to not only maximise health outcomes but minimise health care costs among older adults, complementing the current system and potentially reducing the anticipated strain.

Due to the twenty year time-frame baby boomers come from and the vastly different life events they have experienced, another aim of the current research was to identify whether

age sub-cohorts could be found within the cohort. Theorists suggests that two distinct sub-cohorts exist: tail-enders (aged 49-58) and leading-edge (aged 59-69) (Riggs & Turner, 2000). Furthermore, extant research suggests differences in attitude can be expected across a generation when considering the life events experienced (Whitbourne, Sneed, & Sayer, 2009). Therefore the current study will give an indication of whether different attitudes towards help-seeking linked to age would be found within the cohort and whether these would be associated with help-seeking intention.

Another aim of the current study was to capture and explain baby boomers' help-seeking intentions, if they were to experience problems, with a social cognitive model of help-seeking, the Theory of Planned Behaviour (TPB, Ajzen, 1991). This thesis proposes that the process of help-seeking includes cognitive factors such as attitude which may act as determinants of the intention to seek help, featured alongside the construct of perceived behavioural control which covers possible constraints on help-seeking applicable to baby boomers. Considering the size and unique experiences of this cohort, the present study used an altered and extended version of the model which included attitude measurements of psychological openness and perceived behavioural control (as identified above), alongside possible predictor variables of age, gender, ethnicity, living with or not living with a partner, level of emotional distress and perceived helpfulness of prior contact with a mental health professional. Existing research connects these variables to intentions to seek help (Cairney, Corna, & Streiner, 2010; Jagdeo, Cox, Stein, & Sareen, 2009; Mackenzie, Knox, Gekoski, & Macaulay, 2004; Pescosolido & Boyer, 1999; Vogel, Wade, Wester, Larson, & Hackler, 2007), therefore the aim of this research was to identify whether for baby boomers these variables would also be associated with help-seeking intentions and attitudes, and to assess the contributory role of all constructs in explaining help-seeking intention. Drawing on these

findings it was also envisaged that an assessment of the utility of the TPB model in explaining help-seeking with this cohort could also be achieved.

In view of the lack of information available on help-seeking by baby boomers, and in order to deliver the stated aims of the current research, an empirically designed study was created which: investigated the level of intention this cohort has towards professional and preventive help for mental health concerns; determined the association between and contribution of relevant variables and constructs towards the baby boomers' stated help-seeking intentions; and specifically examined any intention or attitude differences within the cohort relating to age. These aims were delivered by the creation of a survey which was distributed to a cohort of community dwelling baby boomers. The survey was an anonymous, self-report questionnaire based on a questionnaire developed by Westerhof et al. (2008), altered to reflect the specific New Zealand population under focus.

Structure of the report. Due to their complexity as a cohort, the baby boomers are described both from a demographical and historical perspective in Chapter Two, as it is through experiencing these life events at poignant times that differences in attitudes can be expected. Chapter Three covers the current and predicted mental health status of baby boomers in older age, alongside the various preventive and professional mental health help options available in New Zealand. Chapter Four covers various theoretical models of help-seeking, comparing and contrasting specific social cognitive models and culminating in a focus on the Theory of Planned Behaviour. Methodology is described in Chapter Five and Results in Chapters Six (whole cohort focus), Seven (TPB focus) and Eight (Leading-edge versus Tail-ender focus). Chapter Nine delivers a discussion of the results, incorporating study limitations and ideas for future research directions. The conclusion is presented in Chapter Ten.

CHAPTER TWO: THE BABY BOOMERS

In this section the “baby boom” is defined. A case is then made to conduct this research with a sample of baby boomers using the Life Course Theory (Ryder, 1965) to explain the attitudinal differences anticipated within this cohort. It will be argued that this approach is adopted due to the unique and diverse experiences this cohort have lived through and therefore they should be acknowledged, so too the cumulative effects of these experiences on attitude formation. Extending this position, an argument is made to focus on events experienced earlier in life because of the heightened influence on attitude-formation such events have been found to have, compared to events in later developmental stages.

The Baby Boom

The baby boom occurred between 1946 and 1964: a four-nation phenomenon brought about by post World War II social and economic prosperity. A definition of the years in which an unprecedented number of babies were born is not consistent between nations however. Because this research is New Zealand-focused, the Statistics New Zealand definition, extending the generation by one year from 1946 to 1965, will be used (Statistics NZ, 2009). As the name suggests the boom in births followed the end of World War II in 1945, as thousands of soldiers across the world returned home to New Zealand, Canada, Australia and the United States from a long war. The increase in childbearing over this twenty year period peaked in the early 1960s at an average of around four births per woman in New Zealand, doubling the existing rate of just over two children born per woman between 1900 and 1945 (Statistics NZ, 1998). Officially the baby boom phenomenon in New Zealand was an entirely Pākehā matter (Pool, 2007), as Māori total fertility rates (TFR: the measure demographers use to define a baby boom and the average number of children born to a woman over her lifetime) were consistently much higher than Pākehās. Despite Māori fertility being consistently high the overall number of births was not impacted (Pool, 2007).

This research is concerned with explaining the baby boomer cohort's attitudes and intentions towards seeking help for psychological concerns. The term 'cohort' can be operationalised in a number of ways, and depending on the choice made, consequences arise for how research is conducted and how the sample of participants is chosen.

Defining a cohort. Defining a generation by the historical event of World War II ending and their birth years (1946-1965) has meant baby boomers are often depicted as a homogenous group. Yet this misleads, as a number of other elements contribute to a generation's development and attitude formation. This research will adopt the position of accepting that a generation is defined by birth years, but also that shared events and the responses to them greatly influence the way people think and consequently may view seeking help for mental health concerns.

Demographic theorists and economists define a generation by the years they were born and the life stages and milestones they share: going to school, starting families and retiring, as examples. Leading sociologist Mannheim's (1952) seminal work *On the Problem with Generations* described a generational cohort as born and raised against the same historical, social and chronological context. The commonalities found within the cohort are the result of shared common experiences and events, making each generation a social construction. Building on this position, the 'life course effect' can be evidenced in the response of a generation to social change and in the cumulative effects of formative experiences (Ryder, 1965; Suzuki, 2012). Therefore, this effect describes how a population responds to life stages and events (Suzuki, 2012). To truly understand how baby boomers may have developed attitudes, it is crucial to acknowledge the differing experiences this cohort have shared and their distinctive responses to them.

Building on Mannheim's theory, Ryder's (1965) proposition emphasises individuals are particularly impressionable early in life. He states the significance of when the events

take place - particularly late childhood, adolescence and early adulthood - is profound. Adopting his approach with this research is relevant, because this cohort reached developmental milestones during twenty of the most socially progressive years in world history. Smith and Clurman (2007) suggest it is within this context that baby boomers have learned what is possible and valuable and what it takes to get things done. Using this approach a number of studies with baby boomers have identified intra-cohort differences between: values systems, attitudes and relationship qualities and dynamics (Whitbourne et al., 2009); attitudes towards carer roles (Gale, 2013); and definitions of events pertinent to their generation (Schuman & Scott, 1989). Stewart and Healy (1989) have proposed more specifically, that social events in childhood shape people's fundamental values and expectations for the future, while experiences in late adolescence and early adulthood shape identity. Illustrating this, the Civil Rights movements of the 1960s and 1970s shaped the early boomers' expectations for the future, whereas later boomers' influence was instead linked to identity and subsequent political views in association with the end of the Vietnam War and calming international relations which were still underpinned by nuclear armament and a tightening domestic economy. These varying experiences highlight how strongly an individual identifies with their generation: the early boomers formed their identities living through highly politicised events - experiences which powerfully enhanced the connection to their generational cohort - whereas tail-end boomers formed their identities amidst a calming international environment, an ingrained civil movement and a weakening economic climate. Early boomers therefore identified more strongly with a generational conviction to support social change behaviour and to reject the status quo, compared to their parents' values and beliefs (Stewart & Healy Jr, 1989).

As time has progressed, rapid social change has created a crucial weakness in the theories of Ryder and Mannheim: globalisation has produced unprecedented migration and

immigration levels in New Zealand. Therefore the research sample that will be obtained is unlikely to contain a sample of people that have experienced the same events within New Zealand during the 1960s to the 1980s. By accepting this position, perhaps the cumulative impact on attitudes inherent in the Life Course Theory will be impacted within this sample. What will be consistent across the cohort however, regardless of where the participants grew up, are key developmental experiences related to significant global events. Accepting New Zealand's diverse population will have varied experiences to draw upon as they make value and attitudinal decisions in later life, this research will focus on baby boomers born between 1946 and 1965, but will also take into consideration the different socioeconomic and historical contexts the cohort matured into.

New Zealand's Baby Boomers

New Zealand's baby boomers are now described in terms of key demographics including: population and age-spread, economic position, relationship status, family status and ethnicity. These variables are important considerations when looking to understand a generation, furthermore each is considered a variable of interest within the context of the research question. This cohort's physical health status will also be briefly outlined, including emerging illnesses of significance, given their potential as risk factors for mental ill health.

Population and age-spread. Part of what makes the baby boomer generation interesting is its sheer size. Between 1946 and 1965, 1.125 million babies were born in New Zealand, almost doubling the population. In the 2013 New Zealand Census they made up 25% of the population (1,079,265) (Statistics NZ, 2013a). By the late 2020s the population of those aged over 65 will rise to 1 million from 550,000 in 2009 (Statistics NZ, 2009). Furthermore, as of 2015, this cohort will be aged between 49 and 69 years, meaning a greater number than ever before will be at or near retirement age. For a generation that has been

defined by youth with “baby” in their moniker, they are deep into – with some beyond - middle age.

The present research aims to analyse whether age plays a role in explaining help-seeking attitudes and intent towards mental health help-seeking. There is empirical support for attitudinally distinct sub-cohorts within the baby boom, the most significant being younger boomers or tail-enders currently aged between 49 and 58, compared to an older group - the leading-edge - aged between 59 and 69 (Riggs & Turner, 2000).

Demographically, the first agreed baby boom, or what is aligned to the ‘leading-edge’ occurred immediately after World War II. Driven by the catch-up of delayed marriages and parenting due to the war, babies born during this period had, on average, older parents (Frey, 2010). A spike in births occurred one to two years later in 1947 or 1948 to parents who were slightly younger at marriage and childbearing. But the real baby boom was at the tail-end of the stated cohort years, from 1960 onwards where TFRs numbered 4.3 births per woman across all ethnicities (Jacobsen, Fursman, Bryant, Claridge, & Jensen, 2004). In comparison to leading-edge boomers, tail-enders’ parents were often younger and motivated to have children due to the flourishing Welfare State established in New Zealand during the 1960s (Pool, 2007). It is hypothesised that two sub-groups will emerge from the research participants and that due to the differing experiences they have lived through, their attitudes and intentions towards seeking help for mental health will differ.

Economic. The unprecedented economic prosperity enjoyed by baby boomers following World War II has not been repeated. Yet research suggests New Zealand’s baby boomers are not as economically secure as should be expected. Davis, McPherson and Wheldon et al. (2012) monitored various New Zealand cohorts on four indicators of socio-demographic risk crucial to family wellbeing including income, employment, education and housing. They found baby boomers did not enjoy an unqualified advantage over others. The

findings of the 2004 Living Standards survey suggested that 85% of older (65+) New Zealanders were managing only adequately on their current incomes (Fergusson et al. 2001) and the 2008 Living Standards survey showed that for the 45-64 age group, economic hardship rose, particularly among households without children and with low-to-middle incomes (Perry, 2009). A relatively new phenomenon unique to the tail-end baby boomers, who were born to younger parents and had children relatively young themselves, is that of the 'sandwich' phase of life. While there is little research on this phenomenon in New Zealand, a 2005 Pew Research Center survey found half of all boomers in the United States were raising children and providing financial assistance to an adult child. Furthermore, one fifth was providing financial support to a parent. To elaborate, in response to weakening labour market conditions tail-end baby boomers have had fewer children and more women are working, greatly reducing the empty-nest phase of life (Uhlenberg, 1996). Where earlier boomers have generally enjoyed an extended period without dependents in the home, for younger baby boomers the 'sandwich' phase may account for some of the adverse impact on their ability to enjoy financial freedom and could explain why the expected economic advantage they received earlier in life has eroded for some (Taylor, Funk, & Kennedy, 2005). Regarding economic support after retirement, New Zealand's Superannuation Fund, is available to all citizens at age 65 as a non-contributory universal payment, allowing for greater income certainty once retired compared with many other countries. For those on average to low incomes in New Zealand it provides a moderate to high replacement income (Periodic Report Group, 2003). Yet despite this apparent security, baby boomers are planning on working longer. Whether this intention is driven by fiscal need, or whether the retirement age of 65 is perceived as too early, is clarified by a range of New Zealand longitudinal and applied social research. The consistent finding is that for the majority of baby boomers still in work, financial concerns about retirement affect their ability to retire (Alpass, 2008; EEO Trust,

2006; Winston & Barnes, 2007). However while income has been captured as a demographic variable to better understand and describe the research participants, it is not predicted to influence the results of this research. The main reason for this is the relatively low user cost of mental health services in New Zealand, and the way in which professional and preventive interventions are accessed. To illustrate this point, the mental health system and potential barriers to access, including finances, are outlined in the next chapter.

Ethnicity. 2015 sees New Zealand at its most ethnically diverse and vastly different to what it was during the baby boom years. Figures obtained from the 1967 Official Yearbook of New Zealand (featuring population statistics from 1965) show that: Pacific Islanders made up less than 1% of New Zealand's population, Māori 7.5%, and the 'Register of Aliens': foreigners with New Zealand residency, comprised 1% of New Zealand's population (Statistics NZ, 1967). The countries featuring most prominently on this list included the Netherlands, Yugoslavia, Greece and China. In 2013, by comparison, the major contributing nations to immigration are Asian with approximately 9% of the population from China, the Philippines, Korea, Thailand, Cambodia, Japan, India and Vietnam. New Zealand residents from Pacific Islands make up over 5% of the population, Māori over 12% and in the most dramatic change, the remainder of New Zealand's population, nearly one in five (18%) are from a variety of other countries. Those classing themselves New Zealand European have dropped from nearly 90% in 1965 to just over 56% today (Statistics NZ, 2013a). Statistics New Zealand (1995a) advises that the baby boomer population profile closely follows that of the general New Zealand population, indicating the cohort's diverse ethnicity. And as research convention states, baby boomers who reside in New Zealand and who fall within the prescribed age range are classed as baby boomers of their country of residence. As noted earlier this research is adopting an age and cohort approach to the baby boomers, meaning any New Zealand residents within the age range are eligible to participate.

Relationship status. Access to education, liberation within the labour market, changing societal expectations of the traditional family and availability of contraception are some of the reasons marriage, births and relationship status for baby boomers are markedly different to the generations preceding them. Like their parents who chartered new territory with regards to divorce, baby boomers have divorced more and married later (or not at all) (Pool & Dharmalingam, 2006), remarried in increasing numbers (Statistics New Zealand 2007a) and are more likely to live in de-facto relationships, with rates of all of these increasing the later people are born into the cohort. Furthermore, baby boomers marry less with one in five women in 2001 aged 35-39 registered as never married, compared to only 5% in 1971 (Statistics NZ, 2005). Leading-edge boomers by comparison, married earlier and more often (Dharmalingam et al. 2007) and the likelihood of single-parenting increases for tail-enders (Pool, Dharmalingam, & Sceats, 2007). What these statistics highlight is that rates of divorce are much higher across the entire cohort than ever before and that there is also a much higher likelihood of boomers born later in the cohort being single, or living in a de-facto relationship.

Age of childbearing varies throughout the cohort with tail-end boomers recording an earlier age than leading-edge (Pool, 2007). On average however those born within the cohort are more likely to have had their children later than their parents. As economic issues became more pressing in the 1970s and particularly 1980s a conservative reaction can be noted in the family habits of later boomers as they chose to have fewer children at a younger age (Easterlin, 2006). As outlined above, baby boomers are increasingly less likely to be living with a partner. Due to this increased likelihood of living alone, some baby boomers are increasingly vulnerable as they approach retirement age due to lack of spousal and familial support and informal care networks (Ryan, Smith, Antonucci, & Jackson, 2012). Due to this

reason a hypothesis being tested in this research is that living with a partner or not will significantly predict intentions to seek help.

Physical health. Since the middle of the twentieth century, life-expectancy has gradually improved: 67.2 years between 1950-52 increasing to 79.3 years in 2010-12 (Statistics NZ, 2013c). Substantial advancements in medical care have enabled a better standard of living and education, and baby boomers will live longer than their predecessors. However, it is a misconception to associate this increased life expectancy with better health for this cohort. In fact, baby boomers are entering their elderly years in worse physical shape than any generation before them. Compared with the previous cohort, baby boomers do report fewer musculoskeletal conditions, but increased cardiovascular disease, lung problems and diabetes (Martin, Freedman, Schoeni, & Andreski, 2009). Furthermore, a risk factor for heart disease, some forms of cancer and type-2 diabetes is obesity and baby boomers are second (the 55-64 year old bracket) and fourth (45-54 year old bracket) highest for rates of obesity in New Zealand, corresponding with an increase in the number of diagnoses of diabetes in older adults (Ministry of Health, 2012). Sexually transmitted infections in the over 60s are reportedly 'soaring' (von Simson & Kulasegaram, 2012). A life cohort effect of growing up in the 1960s as birth control options were introduced is that this generation has rarely or never used condoms. However baby boomers self-report as being the most physically active cohort across all generations, only beaten on this measure by the 15-24 age-group (MOH, 2012). This information is in contrast to research which shows this cohort is not as physically active as these self-reports indicate, (Jones & Wakefield, 2012) and even when faced with physical conditions like hypertension and accepting its seriousness as a threat to their health, baby boomers have been found to be non-adherent to treatment and non-compliant with suggested lifestyle changes as they age, including maintaining a healthy weight, exercising or quitting smoking (Miller, Berra, & Long, 2010). Despite the reported

socio-economic, medical and public health advantages baby boomers have been able to access, health looms as a significant concern. This is significant for mental health as the evidence is now clear that comorbidity exists between mental health disorders and cardiovascular illnesses and conditions like obesity and type-2 diabetes (Anderson, Freedland, Clouse, & Lustman, 2001; Barnett, Hachinski, & Blackwell, 2013; Beydoun, Beydoun, & Wang, 2008; Valkanova & Ebmeier, 2013).

To summarise, demographical information including age, economic, relationship status and ethnicity all contribute to understanding this generation and ancillary factors like age of child-bearing and increased migration and immigration information all contribute as potential influencing variables within the present research question. However the key demographic variable this research will focus on is age. A hypothesis to be tested is that there will be attitudinal and intention differences within the baby boomer cohort, and in particular two distinct groups will emerge – leading-edge (59-69) and tail-end (49-58). Another demographical variable – gender, has been identified as a potential variable of interest in association with attitude and intention to seek help and more will feature on its inclusion in an upcoming chapter.

Events That Shaped A Generation

Living through events, whether they are wars, economic upheaval, or civil movements can shape a generation's values and subsequent behaviours (Rosenfeld, Bartlam, & Smith, 2012). The years the baby boomers matured into adulthood featured significant national and global events that changed the way people thought and behaved. The next section outlines key events under the headings of economic, counter-culture, gender, war and technology. As socialisation is thought to be most prevalent during childhood, adolescence and early adulthood (Ryder, 1965) events occurring at these stages for each sub-cohort will be given most attention. The case is made that right across the cohort different events have been

experienced at key developmental periods and therefore the attitudes that have formed in response will be equally diverse. As attitudes are connected to behaviours, like help-seeking, it is important these events are considered for their contributory role in influencing attitudes and intentions for sub-cohorts of baby boomers.

Economic. The Great Depression of 1932 saw mass unemployment and major wage cuts, forcing many to accept charity and/or adopt a mind-set of making do or doing it yourself. For the leading-edge boomers therefore, the values instilled by their parents as a result of living through this tumultuous time were of hard work and saving. The Depression set the agenda for New Zealand's Welfare State, introduced by the Labour Party's Michael Joseph Savage between 1935 and 1949. Its aim was to protect New Zealanders from such economic hardship and provide citizens with a reasonable standard of living. Jobs were protected by insulating the local economy from international price changes. State housing was provided, replacing inner-city slums. Thus, in the 1950s and 1960s, leading-edge and mid-cohort baby boomers experienced some of the best living conditions in the world. Unemployment was almost non-existent. From 1946 onwards married mothers were entitled to a family benefit to help feed and clothe their children. The Welfare State created a welcoming environment for children to be born into, hence the baby boom.

As the cohort has aged however, this economic environment came under heavy fire from opposition parties and New Zealanders who felt the state was giving a hand out, not necessarily a hand up. It was dismantled in 1984 and in the late 1980s and 1990s, amid volatile global economic conditions, New Zealand's economy suffered. Middle to tail-end boomers leaving school were faced with a job market with rising unemployment and leading-edge boomers experienced redundancy for the first time in their lives. Meanwhile, some boomers reaped the benefits of deregulation, benefiting from a free market with fewer economic controls. For those benefitting, it was an era of consumption, excess and spending.

In the 80s the term 'yuppie' (young upwardly-mobile professional) was coined for those in their 20s and 30s pursuing mass consumption and social status. As Metz and Underwood (2005) assert, this tail-end of the baby boom generation was the first to experience the age of affluence: they came to expect that their needs and wants were to be satisfied. Gilleard and Higgs (2005) posit that as the generation of young adults born in the 1960s have aged they have retained the value and status of material items that comes with youth culture. Self-fulfilment is a value core to consumer capitalism and tail-end baby boomers more than leading-edge baby boomers are driven by it in both their approach to personal finances and to life. As trailing boomers developed their identities they turned inwards, compared to the collectivist ideology of older boomers. It is hypothesised that these individually-led attitudes may be evidenced in a difference in help-seeking intention between older and younger boomers, with younger boomers choosing to define themselves by their right to seek help for mental health concerns with a higher intention to seek professional help.

Counter-culture. As the leading-edge baby boomers left high school in the 1960s a counter-culture flourished, bringing rapid change. From the American Civil Rights movement and the US government's intervention in Vietnam, New Zealand's leading-edge boomers were the country's most prolific protestors. In *Bullshit and Jellybeans*, leading-edge boomer, activist and well-known New Zealander Tim Shadbolt (born 1947), captures the spirit alive in this generation: "Protest is a rejection of all social prejudices...We protest because we have no choice, our society should be changing. But everything has seized up" (Shadbolt, 1971, p. 37). Shadbolt's position encapsulated that of a growing number of young New Zealanders who were comparatively wealthy and disenchanted and looking to change the way society operated in the 1960s. Some of the other issues that ignited protests and divided generations included modes of authority or communism, racial inequality between Māori and Pākehā, sexual liberties and women's rights. Furthermore, this dramatic social change was

accompanied by music as a powerful expression of generational identity and in particular the 1960s saw the emergence of music as an instrument of protest and a core feature of the Hippy Movement. Artists like Bob Dylan, Cat Stevens and The Mamas & The Papas cared about social justice and inspired younger generations to join mass protests around the world. Simultaneously, music was used to challenge the sentimental pop, and to a lesser extent rock n' roll, popular during the 1940s and 1950s. Rolling Stones, Led Zepplin and later, ACDC were keenly followed by leading-edge members of this cohort: the more shocking the lyrics and performance, the better. This 'shocking' music contributed to the revolution against New Zealand's perceived political hypocrisies, like its involvement in the Vietnam War. In Buckland's (2009) comparative analysis, two characteristics of New Zealand's baby boomers were unearthed - vitality and responsibility. The study surveyed a sample of New Zealand baby boomers, finding them less interested in rule-breaking and more likely to assume rules do not apply to them. Also, they were found to be likely to use their Kiwi ingenuity to find new ways to get what they want, letting the status quo change as a result. These attitudes and experiences may affect attitudes towards help-seeking for mental health through a disregard for professional services (the status quo system) by leading-edge boomers, and an increased intent for preventive methods under the volitional control of the individual.

Gender rights. In 1960s New Zealand, as it was globally, a woman's role in society was confined to the home. As the leading-edge female boomers left school in the early 1960s it was rare for them to seek further education. However this changed as the global feminist movement challenged social attitudes towards women. Over the late 1960s and especially 1970s the women's movement fought for equal rights, political power, professional equality and sexual liberty. A key development in the 1960s was the introduction of the contraceptive pill, giving a generation of women greater control over their fertility than ever before and changing the way women thought about their position in society. Utz (2011) interviewed

leading-edge boomers and their mothers about menopause and found baby boomers were much more likely to adopt a 'fighting position' against menopause, compared to their mothers. It is hypothesised that this self-efficacious attitude will be seen in female participants in this research as they show increased intent to seek preventive and professional help for psychological problems and more positive attitudes towards help-seeking in general. Another key development for women over this period was policy change mandating better pay parity between males and females. Unsurprisingly, by the 1970s, more women than ever before had joined the work-force and this number has continued to proportionally rise. But while these advances were hard-fought and welcomed, recent research has found that boomer women are confronted with intensified demands as they manage competing roles at home and work. In a longitudinal study of five cohorts of women, Putney and Bengston (2005) found that boomer women were significantly more depressed and had lower self-esteem despite being better off economically than other cohorts.

War. The baby boomers at each end of the age spectrum matured during a time of uneasy global relations between Eastern and Western Bloc countries. New Zealanders were aware that whilst no direct fighting ensued, the United States and the U.S.S.R. were heavily armed with nuclear weapons. The Cold War (1947-1991) was the catalyst for a number of noteworthy international incidents, most significantly for New Zealand the Vietnam War (1956 - 1973). New Zealand's contribution to this war was initially minimal, but under pressure from the United States to make good on its ANZUS alliance commitments and under pressure to maintain its anti-communist stance, New Zealand contributed military assistance in 1964 meaning many leading-edge boomers were threatened with conscription. While no conscripts were ever sent to Vietnam, many leading-edge boomers faced the ominous decision of imprisonment if they refused to comply, or participating in a war they vehemently protested against. For tail-end boomers their late adolescence and early adult years were

marked by tension between the Soviet Union and the United States and the threat of nuclear warfare. In contrast to leading-edge boomers, this backdrop meant tail-end boomers connected less with their generational cohort in defying the status quo but looked inward towards relational opportunities and stability (Muller, 1997). For this reason and because mental health services in New Zealand are usually delivered through the public health system, it is hypothesised tail-end boomers will display a higher intention to seek professional help than older members of the cohort.

Technology. Aside from the advent of television, technology changes made the biggest impact on boomers at the tail-end of the cohort: they had better access to entertainment and information than previous generations. Their young adulthood in the 1980s coincided with the emergence of the personal computer. The increased likelihood of tail-end boomers using computers is highlighted by the 2013 World Internet Project (WIP) report into New Zealand's internet usage which shows the younger end of the cohort has a higher internet usage index and that this gradually drops for every five years of the cohort (Gibson, Miller, Smith, Bell, & Crothers, 2013). However, technological intent is present across the entire cohort as Buckland (2009) found more than 97% of the entire New Zealand baby boomer cohort agree the possibilities afforded to them by technology will continue to grow and 93% agree they know how to use technology to make their lives more interesting. Furthermore, the *Household Use of Information and Communication Technology (ICT) Survey* (Statistics NZ, 2012) showed that in New Zealand both younger and older baby boomers' use of social networking doubled from 25% to 57% for the 45-54 year old age group, and from 20% to 41% for the 55-64 age group. In the United Kingdom, the leading-edge boomers are reportedly the fastest growing age group on social media, including sites like Facebook, with numbers registered growing by 80% between 2010 and 2011 (Williamson, 2013). Analytics of internet usage in the UK shows that of the three quarters of

baby boomers using the internet, two thirds use it for online shopping, half for online banking and the over 50s represent a sizeable contingent of online gamers. In terms of how this technology intent and uptake relates to help-seeking behaviours for mental health however, research is scarce. What is known is baby boomers of all ages are interested in utilising online resources and internet tools in connection to health in general, lifestyle changes and medication adherence (Miller et al., 2010). Baby boomers across the cohort have witnessed the rise of technology and embraced the benefits of computers and mobile devices. If the hypothesis that baby boomers will show a positive intent towards professional and preventive psychological help is supported, there may be an opportunity for technology in the delivery of preventive and professional mental health support for baby boomers.

In summary, when generations or cohorts are analysed consequential variations within generations are brought to light (Leach, Phillipson, Biggs, & Money, 2013). Within the 20 years baby boomers were born, the national and global political, economic, counter-cultural and civil rights landscape changed, shaping communities within nations. Baby boomers are significant for more than their numbers and as evidenced previously, different attitudes and behaviours have been driven by their lived experiences. From the information presented in this chapter hypotheses to be tested in the current research have emerged including: that the baby boomer cohort will show a positive intent towards professional and preventive psychological help; that two sub-groups by age will emerge - leading-edge (59-69) and tail-end (49-58) and that each group will be associated with differences in attitude and intent towards help-seeking, specifically, tail-end boomers will have a higher intent towards professional help and leading-edge boomers will have a higher intent towards preventive measures (more on the attitudinal differences driving these intention hypotheses will appear in an upcoming chapter); living with a partner or not will significantly predict intentions to seek help and that females will display an increased intent to seek preventive and professional

help for psychological problems and more positive attitudes towards help-seeking in general. These hypotheses will be further elucidated shortly, in relation to the help-seeking theoretical model constructs chosen for use in this research.

CHAPTER THREE: BABY BOOMER'S MENTAL HEALTH AND THE SERVICES

AVAILABLE

Despite increases in the standard of living, baby boomers have prevalence rates of mental disorder and substance abuse greater than any preceding generation. Combined with increased rates of comorbid physical and medical illnesses and due to their sheer numbers, baby boomers' mental health treatment needs are significant. Given the rate at which they are entering old age, cases of mental illness like various forms of dementia will reach record numbers (Karel, Gatz, & Smyer, 2012). Therefore, this research has been designed to identify not only the intent towards help-seeking from this cohort, but the attitudinal drivers that may explain why individuals do or do not want to seek help for mental health needs. A top-level summary of the baby boomers' mental health will follow, including information on substance abuse and suicide, two areas of increasing concern with this cohort. This section will conclude with the mental health challenges facing baby boomers as they become elderly, in particular the four diagnoses most prevalent in those aged 65 or over: depression, anxiety, dementia and substance abuse, and how baby boomers are uniquely positioned to deal with these disorders.

New Zealand Baby Boomers And Their Mental Health

Te Rau Hinengaro: The New Zealand Mental Health Survey (2006), published by the Ministry of Health, is a landmark survey of nearly 13,000 New Zealand households, describing for the first time in New Zealand the one-month, 12-month and lifetime prevalence of major adult mental disorders (Wells et al., 2006). For the purposes of understanding the baby boomer cohort's mental health, the survey's 45-64 age bracket is the closest fit. Despite the fact five years of the tail-end of the cohort is captured in the previous age bracket, where *Te Rau Hinengaro* statistics are cited, it will be this age group being referred to as the best match.

Te Rau Hinengaro (2006) reports that 12-month prevalence for those aged 45 – 64 for the following mental disorders is: 13.2% anxiety disorder, 6.8% mood disorder, 1.2% a substance disorder, and .3% eating disorder. While experiencing a mental disorder is a relatively common experience in New Zealand (39.5% of the population met the criteria for a *Diagnostic Statistical Manual, fourth edition (DSM-IV)* mental disorder at some time in their life prior to being interviewed) prevalence declines over 12 months for all disorders as age increases. Overall prevalence for any 12 month disorder is higher for females than for males, but this varies markedly across all disorders (Wells, 2006b). Compared to other nations where a baby boom took place, New Zealand data across this age group is similar to that of the United States (Kessler & Ustun, 2004), Australia (Australian Bureau of Statistics, 2007), Canada (Statistics Canada, 2013) and the United Kingdom (Singleton, Bumpstead, O'Brien, Lee, & Meltzer, 2003). Across the world, baby boomers becoming elderly have universally higher rates of depression, anxiety, and substance abuse compared to all of the cohorts that have preceded them (Byers, Arean, & Yaffe, 2012).

New Zealand's suicide rate is amongst the highest in the world (Oakley Browne, Wells, Scott, & McGee, 2006) and is usually considered a youth problem however the current statistics tell a different story. In provisional figures released by the Chief Coroner Judge Neil MacLean in August 2014, the number of suicides by the elderly (aged over 60) increased from 75 in the previous two years, to 97 in the latest year, which is on track to equal youth suicide numbers (Collins, 2014). This result is predated by a matching trend in increasing rates of suicide by those in the baby boomer cohort. For example, in 2008, 35% of the total number of suicides in New Zealand came from the 40-60 year old age group (MOH, 2010c). In 2008, the two age brackets (youth and the nearest to baby boomer) had near identical rates, indicating that the baby boomers who make up a key proportion of the group on the rise are committing suicide more than the generation after them. For these reasons and the fact that

later life is a period of increased risk for suicide, this is a key area of concern for the baby boomer cohort (Van Orden & Conwell, 2011).

Despite the 12-month prevalence for any substance use disorder in New Zealand for 45 to 64 year olds being low at 1.2% and the age group below also relatively low at 4.2%, baby boomers are still participating in substance abuse behaviours that if carried through to older age, will present major problems to health service providers (Wells, 2006b). For example the *2007/08 New Zealand Alcohol and Drug Use Survey* found that one in ten males in the 45-64 age reported that they had consumed a large amount of alcohol at least weekly in the last 12 months. Furthermore, 9.3% of males aged between 45 and 54 reported they had experienced harmful effects from their drinking such as financial issues which impacted on home or family or social life. In the United States predictions are that in 2020 the number of adults aged 50 or over with substance use disorder (SUD) (alcohol) with a 12-month prevalence will double (Colliver, Compton, Gfroerer, & Condon, 2006) and women's rates of SUD (alcohol) are also expected to increase over the next 20 years (Epstein, Fischer-Elber, & Al-Otaiba, 2007). Based on new criteria in the Diagnostic Statistical Manual – fifth edition (DSM-V) which combines alcohol abuse and dependency for the first time, a leading addiction specialist estimates that one in ten New Zealanders meet the criteria for at least a mild case of alcohol use disorder (M. Johnston, 2013).

According to the *2007/08 New Zealand Alcohol and Drug Use Survey*, one in seven New Zealanders between the ages of 16 and 64 were daily cannabis users. In the only figures available which carry specific age groups the survey showed that the highest percentage of “at least weekly” cannabis use in the last 12 months came from the 45-54 age group males, at 51.4% (MOH, 2010a). In comparison females in this age group reported higher usage than the 16-17 and 25-34 age groups (29.1%). Greater lifetime rates of drug use among the baby boom generation, combined with the scale of people in the cohort suggest that the number of

elderly either using drugs or presenting with effects of drug use will only increase as the baby boomers age (Colliver et al., 2006).

Beyond DSM diagnoses, generic mental health research in New Zealand indicates that residents are generally satisfied with their lives (86%) but that the age group that is less likely to report feeling satisfied with life are the tail-end baby boomers, or those aged between 45–54 years (baby boomers were aged between 45–65 at the time the report was written) (Mental Health Commission, 2011). While most countries' data supports New Zealand's findings - that mental disorders decline with age, other studies report that middle age is when people are at their unhappiest (Blanchflower & Oswald, 2008; Easterlin, 2006). In longitudinal research Chen, Cohen and Kasen (2007) found that baby boomer women reported lower self-rated health and a more rapid decline per year than pre-boomer women at the same age. It is hypothesised that emotional distress will have an impact on the results in this research and the case will be put forward shortly that emotional distress is added to the theoretical model underpinning this research. It is important to note at this stage that owing to the objectives and general sampling methods used in the present research and reflecting the severity of disorders experienced by the general public (Bushnell et al., 2003), the focus of this research centres on help-seeking for general psychological distress, not debilitating psychiatric conditions such as schizophrenia or bipolar disorder. However, what is clear is that mental health interventions and support are greatly needed now and in the future by the baby boomer cohort, as there is an unprecedented level of disorder and distress at the mild to moderate level evidenced by the current statistics and research linked to this age group.

Future Mental Health for Baby Boomers in Older Age

In psychology, old age has traditionally been associated with lower prevalence rates of most mental disorders and despite the increased burden of loss this age group encounters, the majority of elderly report greater levels of contentment than at any other life-stage (Fisher

& Zeiss, 2001). Often characterised as a time of decline, distinctive strengths are often displayed during this time including self-regulation of emotional functioning and greater resilience (Charles & Carstensen, 2010). However as previously outlined baby boomers will enter old age with the highest rates of mental disorder diagnoses ever seen and will encounter the usual life experiences that occur as people age, such as bereavements and retirement. Additionally, medical conditions complicate recognition and treatment of mental disorders in old age and baby boomers are entering it with an increased range and prevalence of medical concerns including: cardiovascular disease; lung problems; obesity; and diabetes, as mentioned previously. Generally as the baby boomers age they will carry a heavier burden of chronic illness and related disability from disease including arthritis and hypertension as well as the diseases mentioned above. And as research continues to gather connecting gerontological psychopathology to comorbidity with medical illnesses, a focus on the help-seeking intentions and attitudes of baby boomers for mental health concerns becomes even more vital (Karel et al., 2012). As the baby boomers' current mental health status has been outlined earlier, the following section will cover mental disorders that develop in older age and particularly the major mental health issues most prevalent in the elderly: the dementias, depression, anxiety and substance abuse (Ellis & Collings, 1997). For this reason the current research will focus on baby boomers' attitudes towards seeking professional and preventive help for these concerns. What follows is a summary on each of these groups of disorders regarding symptomology, risk factors, possible comorbid illnesses and preventive or protective factors related to each in order to understand how these disorders manifest when onset is over age 65.

Dementia. Dementia is the general term for decline in cognitive ability to the point that social and occupational functions are impaired. It is a clinical state and due to one of several underlying pathologies, the most common being Alzheimer's disease (AD). Other

types of dementia are vascular dementia (VaD) or less prevalent types like dementia with Lewy bodies and frontotemporal dementia. Dementia occurs as a result of physical changes in the structure of the brain, but no single factor has been identified as a cause. It is likely that a combination of factors, including age, genetic inheritance and environment are responsible. Across all dementias symptomology includes intellectual functioning and memory declining, personality and emotional changes and abstract thinking and judgement deterioration.

Alzheimer's disease. AD is projected to be the biggest health concern facing baby boomers, in fact, according to Alzheimer's New Zealand in 2011 - 48,182 New Zealanders were diagnosed with dementia, with around 50% to 70% of these being AD (Alzheimer's New Zealand, 2012). The onset of AD is not restricted to a diagnosis over the age of 65, but is more commonly diagnosed then. AD is a progressive, irreversible illness caused by cortical cells wasting away. To begin with, symptoms may be very subtle and concurrent with older age, for example, absentmindedness, irritability and difficulty concentrating. However, symptoms get slowly worse and may also include language skills and word finding problems, visuo-spatial ability decline and disorientation. Memory will continue to deteriorate. Diagnosis can be made through a combination of mental testing and PET scans where increased plaques will be evidenced in the frontal cortex and extra neurofibrillary tangles in the hippocampus. The key etiological risk factor in developing AD is genetic - heritability accounts for 79% in variance in onset of Alzheimer's disease and 21% is related to environmental factors (Gatz et al., 2006). Seven lifestyle-related factors have been directly linked to AD and they are type-2 diabetes, hypertension, obesity, smoking, depression, low cognitive and physical activity (Barnes & Yaffe, 2011). As outlined earlier baby boomers are entering older age with the highest rates ever seen of diabetes and obesity, and as the numbers of boomers surpassing 65 swells, parenthetically, the rates of AD are set to rise rapidly. Protective factors for AD have been identified as increased cognitive activity

(Valenzuela & Sachdev, 2006), weight management (Benito-León, Mitchell, Hernández-Gallego, & Bermejo-Pareja, 2013; Tolppanen et al., 2014) and physical exercise (Jedrziwski, Ewbank, Wang, & Trojanowski, 2010; Larson et al., 2006). These findings emphasise the considerable advances that have been made in the protective and preventive fields of research in association with AD.

Vascular Dementia (VaD). VaD is the second most common form of dementia (around 20%) and will always occur as a result of cerebrovascular disease, for example a series of strokes in which a clot forms and circulation is impaired and cells in the brain die. Compared to AD, genetics are not risk factors, rather the risks are the same for all cardiovascular complaints that can lead to strokes: smoking, high cholesterol and high blood pressure. Depending on where the cell death occurs, symptoms can vary markedly, and a key differentiator between it and AD is that onset is usually more rapid. Despite the strong association with age, dementias, particularly of the vascular (and AD) type are considered to be preventable by focusing on a host of modifiable risk factors linked to the risk of stroke and cardiovascular disease such as obesity and hypertension (Barnett et al., 2013). Furthermore, in a meta-analysis Beydoun, Beydoun and Wang (2008) found that obesity plays a central role in the aetiology of AD and sometimes VaD.

Dementia with Lewy Bodies (DLB). DLB includes two subtypes depending on whether it occurs within the context of Parkinson's Disease. Symptoms are hard to distinguish from Parkinson's as they include a shuffling gait and also from AD because of the core component of memory loss. However, those with DLB are more likely than those with AD to have visual hallucinations and fluctuating cognitive symptoms. DLB has been associated with unusual patterns of dopamine activity in the basal ganglia (the area of brain associated to Parkinson's). DLB accounts for around 15% of all dementia cases.

Frontotemporal (lobe) dementia (FTD). FTD results in a loss of neurons in the frontal and temporal regions of the brain (mainly in the amygdala, anterior temporal lobes, prefrontal cortex and other regions linked to serotonergic neurons). Onset typically occurs in mid to late fifties but subtle behavioural and personality changes can be evidenced earlier. Where FTD differs from AD is that memory stays largely intact, but social and emotional changes are evidenced. Moreover, executive functioning including planning, problem solving and goal-directed behaviour is more impaired than in AD. In comparison to AD there is a much faster progression from onset. FTD can be caused by Pick's disease, characterised by Pick bodies or spherical inclusions found within neurons and accounts for around 5% of all dementia cases.

Parkinson's disease. This is a progressive disorder of the central nervous system resulting from the loss of the neurotransmitter dopamine in the brain. It is characterised by tremors, stiffness in limbs and joints, speech impediments and difficulty in initiating physical movements and accounts for around 3% to 4% of all dementia cases.

In New Zealand all dementia cases are expected to nearly triple to 146,000 by 2050 (Alzheimer's NZ, 2012). Baby boomers, more so than the cohorts preceding them, can increasingly lower their risk of developing dementia, evidenced by the growing body of research outlined above. The most common forms of dementia, AD and VaD are repeatedly being linked to modifiable risk factors including smoking, diet, lack of exercise and cognitive activity. Early recognition and intervention of cognitive decline and dementia is desirable, yet a recent community survey has found the prevalence of formal help-seeking for memory-related concerns was only 23% (Jorm et al., 2004). For those that do seek help for such concerns, research has found that those who make a pathological causal attribution for the memory complaint are more likely to seek formal help for it (Hurt, Burns, & Barrowclough, 2011). "Forgetfulness" or general cognitive decline however is often seen as a natural part of

ageing and consequently help is often not sought. Comparing 15 'common complaints' in ageing, Begum et al. (2013) found that in a cross-sectional survey of those aged over 65, subjective memory complaints was the concern participants were least likely to seek professional help for.

Depression. One of the most important and prevalent disorders in old age is depression. The disorder is distressing across the lifespan but in older age is associated with: an increased risk of morbidity and suicide, particularly in men (Wærn et al., 2002); a considerable impact on quality of life due to decreased physical, cognitive and social functioning in older age; and greater self-neglect (Penninx et al., 1999). Each of these symptoms is in turn associated with increased mortality due to associated physical illness (Blazer & Hybels, 2004; St. John & Montgomery, 2009). There is ongoing debate about possible underreporting of depression in the elderly due to the use of insufficient screening instruments (Fisher & Zeiss, 2001) and the complicated presenting issues often found in older clients (isolation, physical and cognitive conditions common in ageing) (Oakley Browne et al., 2006). Understanding the sequelae of the disease helps to identify vulnerabilities and risk factors associated with depression in older age. Fiske et al. (2009) found that half or more of geriatric patients with major depression are experiencing a new condition arising in old age, or what is known as late-onset depression. The risk factors for developing depression in later life have been found to be biological changes in the brain concurrent with ageing, as well as risk factors linked to vascular and cerebrovascular diseases such as hypertension, diabetes and smoking (Hickie et al., 2001; Valkanova & Ebmeier, 2013). Studies among patients with common chronic medical conditions such as diabetes (Anderson, Freedland, Clouse, & Lustman, 2001), arthritis (Cassileth et al., 1984), asthma (Ho & Jones, 1999) or cancer (Cassileth et al., 1984) also demonstrate an increased level of depressive symptomology. However age is not a causal factor for mental illness despite age-related disease and

neurobiological changes being universal with ageing, therefore it is important to consider other factors associated with the development of depression in older people. These have been found to include critical life events (Kraaij, Arensman, & Spinhoven, 2002), deterioration in financial status (Fiske, Wetherell, & Gatz, 2009), economic disadvantage (Mojtabai & Olfson, 2004), being in supervised care (Ames, 1993), family history (Vink, Aartsen, & Schoevers, 2008), and loneliness arising from diminished social networks (Golden et al., 2009). A tragic possible outcome of depression in later years is suicide and suicide among older adults is more likely to be associated with depression than at any other time of life (Conwell & Brent, 1995). The World Health Organization databank on elderly suicide demonstrates a consistent worldwide trend which is that elderly males have the highest rate of successful suicide of any age group in most of the countries that supply data (Catell, 1994). In terms of suicide prevention, Matsubayashi and Ueda (2011) evaluated twenty-one developed countries' government suicide prevention programs and found that while the suicide rates dropped in countries like New Zealand, the prevention programs were most successful at the younger end of the spectrum. In terms of help-seeking by baby boomers for depression, the hypothesis is that baby boomers will demonstrate high intention towards seeking both preventive and professional help. In a study of help-seeking interventions on depression the key intervention that increased willingness to seek help was the sharing of information focused on the physiological aspects of depression (e.g., genes or neurotransmitters) (Han, Chen, Hwang, & Wei, 2006). As depression is increasingly being explained via a biomedical model (Schreiber & Hartrick, 2002) including the way it is described in some public awareness campaigns in New Zealand (more will follow on these endeavours in the preventive section to follow), it is predicted it will receive higher intent to seek help for than the other mental health disorders of focus in this research. Furthermore, as has been noted earlier, baby boomers in New Zealand have been found to have a positive 'can-do' mind-set

(Buckland, 2009), and it is this attitude that has been associated with an increased likelihood to seek help for psychological concerns like depression (Cepeda-Benito & Short, 1998).

Anxiety. Anxiety disorders remain chronic and common and can cause extensive distress in old age. As with depression, older adults generally have a lower prevalence of anxiety disorders relative to younger cohorts. However, also like depression, debate exists about limitations of the instruments used to measure anxiety in older adults and whether they are appropriate for use (Diefenbach, Tolin, Meunier, & Gilliam, 2009; Wetherell & Gatz, 2005). Worry is the symptom that dominates presentation in older age. For this reason studies suggest generalised anxiety disorder (GAD) is the most common anxiety disorder in old age, and is as common in older adults as it is with younger adults (Lenze & Wetherell, 2011; Rockhill et al., 2010). Anxiety disorders are generally considered to be neurodevelopmental disorders, including onset in older age. For example, in a longitudinal study researchers found almost one half of older patients with GAD have onset in later life (Samuelsson, McCamish-Svensson, Hagberg, Sundström, & Dehlin, 2005). Agoraphobia, late-onset post-traumatic stress disorder and panic disorder can all occur for the first time in later life. Pathological anxiety has been linked to a functional disconnect between the amygdala and frontal areas of the brain. This process impairs natural fear extinction, converting worries into chronic pathological conditions (Schoenberg & Scott 2011). As people age and neurodegenerative changes occur, this process may be expedited. Psychological and social risk factors may also play a role in the development of late-onset anxiety disorders, in particular: cognitive impairment; being female; chronic health conditions; poor self-rated health; and having personality traits of neuroticism (Vink et al., 2008). A common experience for people as they approach older age is anxiety about ageing. Fears may be exaggerated depending on what experiences or period effects the individual is going through. Levey (2003) states that “when individuals reach old age, the ageing stereotypes internalized in childhood, and then

reinforced for decades become self-stereotypes” (p.204). Should members of the baby boom experience ageing anxiety their fears will be instigated by very different things. For instance, older boomers are more likely to have experienced their parents die and may perceive their life will end at approximately the same time and for similar reasons. Regarding physical conditions that present later in life, anxiety can be associated with physical disability and the relationship is bi-directional (Brenes et al., 2008), medical illness (Todaro, Shen, Raffa, Tilkemeier, & Niaura, 2007) and this is linked to increased mortality risk (Brenes et al., 2007). In comparison to depression, it is estimated that only a third of people with anxiety seek professional help (compared to half of those with depression) (Andrews, Issakidis, & Carter, 2001). Furthermore, older adults are more likely to seek help for perceived to be serious problems like suicidal ideation or schizophrenia than for more common disorders like anxiety (Robb, Haley, Becker, Polivka, & Chwa, 2003). A point further highlighted by a secondary data analysis of psychiatric epidemiology surveys in Canada, which showed that in a sample of adults aged over 65, 41% of those with anxiety perceived a need for mental health care, but did not use it (compared to 17% who met the criteria for Major Depressive Disorder) (Garrido, Kane, Kaas, & Kane, 2011). In the same study GAD was associated with the very lowest likelihood of mental healthcare use. Lastly, in a correlation analysis, a comorbid diagnosis of anxiety and depression was found to associate with perceived need for professional help, more than anxiety alone (Mojtabai, Olfson, & Mechanic, 2002). As with previous research it is hypothesised that in this study anxiety will receive lower intent to seek professional and preventive help compared to depression and substance abuse and the reasoning supporting the latter, will follow next.

Alcohol and drug abuse. Historically statistics have shown that by the time people reach older age substance abuse declines. Yet very recently the elderly have been significantly associated with substance abuse concerns (Llorente, Oslin, & Malphurs, 2011).

Coupled with baby boomers' drinking and drug use becoming more hazardous and in particular women's consumption rates greatly increasing (Women's Health Action, 2013), the problem looks set to worsen. Therefore, substance abuse is not only a current concern for older people, but is projected to be even more problematic for baby boomers in older age. Under-reporting or misdiagnosing of alcohol use disorder in the elderly stems from a number of factors. In the first instance, the diagnostic criteria, certainly in the DSM-IV-TR, has been difficult to interpret for older people in that two of the key measurements are recurrent use resulting in the failure to fulfil responsibilities and duties or alcohol-related problems related to social or occupational situations (APA, 2000). These criteria are hard to assess with the elderly, who are more likely to drink at home in isolation and may have fewer working responsibilities. However because some baby boomers are planning on working beyond retirement age in New Zealand (EEO Trust, 2006), the application of this criteria may have better relevance in future. Also, now that the criteria for alcohol use and dependence has been combined and strengthened in the DSM-V allowing for diagnoses of mild, moderate or severe substance use disorder, an increase in diagnoses might also be evidenced. Owing to the increased likelihood of physical and medical health complaints as people age, the recommended weekly intake rates of alcohol decrease but will baby boomers entering old age adhere to these recommendations? With a key driver for help-seeking being the increased mortality associated with substance abuse in the elderly, this powerful incentive may be enough (Knight, 2004). Another driver to seek help is the increased probability of taking prescription and over the counter medication with age, which may either force baby boomers to rethink previously manageable daily drinking, or to seek help.

As mentioned previously alcohol and also drugs like marijuana have been steadily increasing in usage across all demographics in New Zealand. In 2008 it was estimated that between 10 to 15% of all New Zealanders and Australians aged between 15 and 64 smoked

marijuana in the past 12 months (Degenhardt & Hall, 2012). The baby boomers matured into the Counter Culture period where illicit drug use became far more widespread. Drug use, particularly of marijuana, in baby boomers is much higher than that of the current elderly and popular depictions of baby boomer marijuana smokers are either new-user empty nesters, remnants from the hippy era who never gave up or older adults using it to relieve health problems (Blazer & Wu, 2009). Bearing this in mind, it is likely that prevalence rates of SUD (marijuana) may also increase and contribute to comorbid diagnoses with this group. It is hypothesised that intention for preventive and professional help will be higher for substance abuse than anxiety and forgetfulness. This is in part due to the increasing focus on mass education initiatives targeting alcohol abuse in New Zealand, where increased awareness of the issue are predicted to drive benefits (more to follow on these in the preventive section within this chapter).

It is apparent that there is a significant portion of New Zealand's population aged between 49 and 69 with mental health problems. Due to the current projection for late life prevalence of mental disorder (notwithstanding the increasing rates in which baby boomers are being diagnosed with mental health disorders), over the next two decades those over 65 will be requiring mental health services in unprecedented numbers. Starkly, this means that when all New Zealand baby boomers are aged over 65, based on the current 12-month prevalence rate of 7.1% only (Wells, 2006b), nearly 80,000 New Zealanders will meet mental disorder criteria (compared to approximately 40,000 today). This, compounded by the fact that the majority of older adults with mood or anxiety disorders do not use mental health services (Byers et al., 2012), means it is critical to understand the attitudes and intentions of baby boomers towards help-seeking. As baby boomers become elderly the medical, psycho-social and mental picture complicates further. The understanding of the sequelae of symptoms and the risk factors that can be targeted to halt cognitive decline or potentially

reverse it, or prevent and protect against other mental health concerns has greatly improved, putting the baby boomers in an advantageous position if they are open to mental disorders as valid constructs and prevention or treatment as options to consider. The information baby boomers provide in this research has the potential to help the mental health sector better target and design resources, information, interventions and treatment for this important segment of New Zealand's population. Customarily older populations have been found to be less likely to seek professional help for mental health problems (MacKenzie, Pagura, & Sareen, 2010), however research suggests that for the elderly and the generation preceding them a positive intent towards help-seeking is associated (Mackenzie, Gekoski, & Knox, 2006; Mojtabai et al., 2002; Segal, Coolidge, Mincic, & O'Riley, 2005; Williamson, 2013). For these reasons it is hypothesised that baby boomers will show an overall favourable intent towards professional and preventive help for mental disorders.

Mental Health Services Available In New Zealand

A summary of the professional and preventive help that is available for mental health in New Zealand will now be presented, important information to highlight because help-seeking is regarded as a cognitive process and as part of this process consideration is given by the individual to the options available to them in order to ameliorate the presenting concern. Professional help is defined as mental health professionals an individual would encounter if he or she approached the public or private health system for support; in New Zealand these include general practitioners (GP), counsellors, psychologists, clinical psychologists and psychiatrists. However because individuals seek help at varying levels of distress and in order to understand the full range of services available to individuals a summary of other mental health services and resources New Zealanders have available to them is also included.

Mental health services vary greatly across New Zealand. Broadly speaking the key professional services available fall within the following three systems of health care: primary;

secondary; and support services. Services are delivered under the *Mental Health (Compulsory Assessment and Treatment) Act 1992* and are available to all who are entitled to them in New Zealand. The key inclusion criteria being that the client must be enrolled with a District Health Board (DHB). In terms of payment for services, if the client enters the system through the public health route and is enrolled (as above) a subsidised consultation fee will be charged by the GP, the same applying to any on-going appointments, however if a referral is made from the GP to specialist care, state funding usually provides for an average of four sessions with whoever the client is referred on to (usually a clinical psychologist or psychologist). Depending on how the client responds to treatment and the symptom severity they may be encouraged to undergo more than four sessions, if this scenario eventuates an agreement will be made between patient and provider about an ongoing charge or fee. Some mental health support is covered by the Accident Compensation Corporation (ACC), including “mental injury resulting from sexual abuse or injury or from a physical injury” (ACC, 2013). Individuals can also opt to pay for private mental health support and a brief summary on how this works and the services available through this route completes this professional care section.

Primary health care. Providing a client is enrolled with a Primary Health Organisation (PHO) which is part of a DHB, they are eligible for the provision of mental health services. General Practice is usually what is referred to with regards to primary care and it is where 50-70% of all presented mental health conditions in New Zealand are managed (Dowell et al., 2009). Primary care is often the first point of professional contact for people with mental health and/or addiction concerns and is where assessment, treatment and possibly management of people with mild-to-moderate mental health problems or addiction takes place. For baby boomers looking to engage with professional psychological help through the public system, this would often be the first step they make. However depending

on severity of symptoms or how well the client responds to the initial intervention, clients may then be referred on to secondary specialist care. The primary care clinician therefore has an important role to play in detecting disorders and acts as a gateway to the rest of the public health system. The model of mental health care in primary care has been generally understood in terms of ‘pathways to care’, which refers to the ability to access specialist mental health care requiring clients to pass through different levels of community and specialist care first. New Zealand’s adapted model includes elements of ‘stepped care’ where a client’s perceived need and severity of symptoms is connected to the appropriate scale and intensity of intervention. Given the limited resources available in New Zealand, this approach is designed to restrict access to specialist services to those deemed most in need meaning that the consistency or quality of care is not necessarily consistent across all DHBs. For those presenting with sub-threshold symptoms in primary care then, the importance of lifestyle and self-management approaches are encouraged.

Due to a recent increase in funding for mental health in the primary care sector, primary mental health initiatives (PMHIs) have been introduced at PHOs which allow for additional time for patients with the general practitioner (GP) or practice nurse (a normal appointment is 15 minutes), improved access to psychological therapies and increased connections to other health and social services. An example of a new connection to social services is the online treatment programme for people with mild-to-moderate depression and/or anxiety called ‘*Beating the Blues*’. This programme can only be accessed by patients through GP referral and offers strategies to help to change unhelpful thinking and behaviour over eight sessions. New types of mental health clinicians and professionals have also been introduced as part of the funding including PHO mental health coordinators and mental health clinicians (Rodenburg & Dowell, 2008).

The primary care pathway a client would usually take in New Zealand is: to identify to a GP or Māori health provider, if they meet inclusion criteria they are assessed by a clinical coordinator, GP or practice nurse via extended consultation, and will then receive treatment interventions such as lifestyle choices, talking therapies, pharmacological prescriptions or other self-management interventions. The client's progress is monitored and reassessment will occur to gauge progress depending on the intervention prescribed. Depending on resources available, or if a client presents and fails to meet the inclusion criteria, they will be referred on to secondary health care, or other providers such as non-governmental organisations (NGO) for specialist mental health support. If the client does not respond to the treatment plan and is still clearly in distress at assessment, they are then referred on to secondary health care. Lastly, for those presenting specifically with primary alcohol and/or drug problems, the primary care treatment facility they will be referred on to is a community-based Alcohol and Drug Treatment centre.

Secondary care and support services. If a referral to a secondary health care provider is given, the client will receive treatment by specialists in a different location, perhaps in a hospital or community clinic. From a GP the client may be referred to community mental health centres (provided by DHBs). The services provided in these environments, once an assessment has been made, are driven by a central treatment plan and may include treatment options like the prescription of medication, combined with empirically-supported talking therapies and other interventions. The treatment plan is managed by a key worker, and may also include home visits and support, mobile support, peer-led support, respite services and on-going referrals if necessary. The multi-disciplinary team a client may encounter as part of the delivery of their treatment plan could include a key worker, occupational therapists, social workers, clinical psychologists, nurses and

psychiatrists. In some DHBs NGOs like 'Pathways' sometimes work alongside the DHB to support the delivery of the treatment plan.

For severely mentally distressed patients whose mental health needs cannot be met in their usual environment acute mental health services are available. These are fully funded in-patient services, providing 24 hour care for those who meet the criteria across all DHBs in New Zealand. Drug and alcohol in-patient services are available for acute cases, and beds are available either in hospital clinics, or some DHBs fund beds in privately run clinics across the country. For patients who perceive they are in crisis, or for family or friends with a potential patient in crisis - Crisis Assessment Teams operate in all DHBs and can be phoned directly for either an assessment over the telephone, or a referral into acute in-patient services at a DHB.

Outside of the public health system there are many other counselling or treatment options clients can contact directly: women's or men's centres with counsellors available for a fee or University-run clinics, for example. Or clients could contact national organisations like the NZ Association of Counsellors or the College of Clinical Psychologists directly for advice about which therapist or counsellor, psychologist, or clinical psychologist they could engage with. Going direct to a provider however, will incur a cost in comparison to the publicly funded route via a referral from a GP, as outlined above. Costs for therapy vary depending on the skills and expertise of the person administering the treatment, but will cost on average at least NZ\$100 an hour, but potentially a lot more.

There are also a number of support services available to New Zealanders: Work and Income New Zealand, which supplies employment and financial support to those that need it in New Zealand, offer 10 counselling sessions (or more if required) through the Disability Allowance; paid employment schemes; Family Court free counselling for couples undergoing relationship problems; free relationship counselling from Relationship Aotearoa;

free telephone services like the Depression Helpline, Lifeline or the Samaritans; online services such as the NZ Depression Awareness Campaign; or the Mental Health Foundation of New Zealand who host a raft of information on their website and in a dedicated library. There are a number of other counselling and health services available specifically for Māori, lesbian, gay and bisexual people and refugees or for those affected by sexual abuse, alcohol and drug abusers or for those going through bereavement.

There are considerable mental health service options available to New Zealanders at little to no cost. Should someone have private medical insurance they may be able to access paid-for psychological services for an extended period of time and for a reduced cost. Privately-run addiction and mental health treatment clinics like Capri Hospital, Ashburn or Bexley Clinic charge for their in-patient and out-patient services, and again, some insurance policies may cover elements of their offering.

Baby boomers have a wide range of mental health services available to them, from confidential phone lines to specialist secondary care the range of options available to New Zealanders is broad. However despite the high prevalence of mental disorders in New Zealand (Oakley Browne et al., 2006), and the fact that research suggests approximately half of people presenting in GP practices in New Zealand have some level of psychological distress (Bushnell et al., 2003) there still remains a significant unmet need for treatment of mental health disorders. *Te Rau Hinengaro* predicts that over a 12 month period only 39% of people with mental health concerns visited health services (Wells, 2006b). Uncovering attitudes towards help-seeking and help-seeking intention in baby boomers will contribute to explaining why this is. Furthermore, understanding what contributes to help-seeking across the dynamic cohort of baby boomers will help mental health services tailor mental health approaches to this important segment of the population.

Preventive Strategies For Mental Health

An established mental health service is active in New Zealand complete with many access points appropriate for varying levels of emotional distress. Yet even when performing optimally, only 60% of the burden of mental health illness is averted by a mental health system and a heavy burden of disease persists (Andrews et al., 2004). Considering baby boomers' unique demography, life experiences and attitudes, prevention could be a fruitful area of exploration. From a service utilisation perspective alone, even if only 60% of the burden is treated in New Zealand, owing to the size of this cohort the system is not equipped to treat the number of people it will need to. In order to maximise health outcomes and minimise health care costs among older adults, prevention programs are some of the most promising and appropriate ways to complement the current system and reduce this anticipated strain (Bartels, Blow, Brockmann, & Van Citters, 2005). This section introduces the concept of mental health prevention and argues that because these strategies can be targeted at known risk factors for developing mental disorders and because of the growing knowledge pool of risk factors associated to mental health disorders such as Alzheimer's disease, baby boomers are ideal targets for them. The case for preventive options is then made, including a review of the important role preventive practices have played in New Zealand's mental health strategy over the last two decades. Promotion, to complement preventive tactics, is discussed with regards to its impact on attitudes towards mental health in New Zealand. A description of the levels of preventive strategies: universal, selective, and indicated is outlined, including an explanation of why selective and indicated strategies are of focus in this research due to the research question posed to participants. The section then reviews and presents the empirical evidence currently available relating to preventive strategies for the four key concerns of baby boomers as they enter old age.

Definition. Mental disorder prevention has a broad range of aims but the following from Mrazek and Haggerty (1994) summarises the general aims:

To reduce incidence, prevalence, recurrence of mental disorders, the time spent with symptoms, or the risk condition for a mental illness, preventing or delaying recurrences and also decreasing the impact of illness on the affected person, their families and the society. (p.17).

It is often said that an ounce of prevention is worth a pound of cure. In order to prevent incidence or recurrence, preventive strategies are designed to counteract determinants of mental health that are individually related such as risk factors, an example being that because physical illness is more likely to occur later in the lifespan and is a known risk factor for mental illness, preventive strategies can be effectively utilised at this time. Preventive interventions can also be targeted at individual behaviours and lifestyle factors, or to enhance protective factors such as resilience, self-esteem, social support, mastery, self-efficacy or motivation which improve people's resistance to risk factors and disorders. Examples of preventive options include exercise, reading information about the disorder, undertaking courses in person or online, social groups, chat rooms, dietary changes or listening to audio information.

Prevention strategies have been found to prevent the onset of new disorders (Andrews et al., 2004; Muñoz, Beardslee, & Leykin, 2012; Nores, Belfield, Barnett, & Schweinhart, 2005). With this in mind they become an important area of research with regards to the baby boomers, particularly because the projected prevalence of mental disorders expected in the upcoming years and the size of the cohort. However evaluating preventive interventions is complicated as it is impossible to exclude people with prior history of mental illness when conducting the gold standard research design - randomised controlled trial (RCT) (Mihalopoulos, Vos, Pirkis, & Carter, 2011). Also, because there is no psychometrically-

tested, diagnostically-valid tool which identifies lifetime prevalence for mental disorders, it is difficult to ascertain how many people may be suffering from sub-threshold symptoms in New Zealand and consequently how many may benefit from preventive interventions. However, if it is accepted that only 60% of the burden of mental health disease is treated by the current system (as outlined above), this is reason alone to consider preventive options. Further evidence which highlights an essential focus on prevention include: longitudinal research showing that people with sub-threshold mental disorder symptomology are at higher risk for comorbid physical difficulties such as immune deficiency, coronary heart disease, smoking and nicotine dependence (Cuijpers, Smit, Lebowitz, & Beekman, 2010; Cuijpers, Van Straten, Smit, Mihalopoulos, & Beekman, 2008; Cukrowicz & Joiner Jr, 2007); the longer the duration of untreated illness, the poorer the outcomes of treatment tend to be (A. Altamura et al., 2008; A. C. Altamura et al., 2010; de Diego-Adeliño et al., 2010); and that individuals with mild symptoms are less likely than those with moderate ones to seek help (Byers et al., 2012). Therefore preventive interventions may not only reduce disease incidence and therefore prevalence, but may also contribute to improving the baby boomers' general burden of disease as they enter older age.

Role of prevention in New Zealand's mental health strategy. In 1998 the *Blueprint for Mental Health Services in New Zealand* proposed mental health prevention services could address the first goal of the national Mental Health Strategy – the reduction of the prevalence of mental illness. It stated that evidence-based mental illness prevention programmes have the potential to lower the likely prevalence of illness and therefore reduce demand on the services (MHC, 1998). Over the last 15 years New Zealand has increased the focus on mental health promotion and prevention strategies, with prevention featuring in a number of strategy and policy documents and programmes developed by the government including: *Building on Strengths: A New Approach to Promoting Mental Health in New Zealand/Aotearoa* (MOH,

2002), the *Mental Health and Addiction Action Plan* (MOH, 2010b), *Te Tāhuhu* (MOH, 2005), *Te Kokiri* (MOH, 2006b), the *New Zealand Suicide Prevention Strategy* (MOH, 2006a), *Te Puawaiwhero: the second Māori mental health and addiction national strategic framework* (MOH, 2008b) and the *National Depression Initiative* (MOH, 2008a) and the “*Like Minds, Like Mine*” programme (MOH, 2014). Promotion strategies complement preventive efforts as they aim to enhance positive mental health in the community. They are important to acknowledge in this research as they can help decrease the incidence of mental disorders and are therefore an important consideration amongst the current mental health services milieu. Despite the two prevention programmes outlined above (*National Depression Initiative* and the *Like Minds, Like Mine* programme) being operational in New Zealand for some years, little is known about their efficacy. Understanding the impact on incidence for programmes of this type is extremely difficult to distinguish given the sample size required in order to achieve adequate statistical power and effect size, particularly considering the limited research resources to evaluate their effectiveness available in New Zealand (Muñoz et al., 1995; Office of the Prime Minister’s Science Advisory Committee, 2011). For this, and other reasons, prevention programmes in New Zealand are fledgling and in comparison to professional help services, receive far less focus and resource as an intervention option.

Universal, selective and indicated nosology. The conventional nosology when reviewing literature on medical prevention strategies is based on the classification of the prevention of physical illness and the public healthcare distinctions between primary, secondary and tertiary care (Gordon, 1983). Amongst the primary prevention category sits three classifications widely used in mental health prevention, universal prevention - involving targeting of the general public or a whole population group, an example being the New Zealand *National Depression Initiative* fronted by Sir John Kirwan (Health Promotion

Agency (HPA), 2014). Selective prevention - where individuals or subgroups of the population are targeted whose risk of developing a mental disorder is significantly higher than that of the rest of the population, for example, programs targeted at recently widowed or divorced people. And indicated prevention - where persons who are at a high-risk for mental disorders are targeted, for example an individual presenting at a GP with elevated symptoms of depression. In the present research, participants were asked whether they would consider taking a preventive course if they hypothetically thought they may be experiencing a mental health concern. They were also asked if they would consider a list of specific preventive options if they were undergoing psychological distress. This question implies that a level of symptomology is present, therefore, given the categories of preventive strategies outlined above the following review of evidence-based preventive programmes will focus on selective and indicated prevention options for the four disorders but will acknowledge universal initiatives where appropriate.

Empirical support for prevention strategies.

The dementias. Due to the high prevalence of this group of diseases in older age and the enormous burden of disease and the social impact associated with it, preventing dementia has received considerable focus. There is currently no cure for any of the dementias, therefore once an individual presents with significant cognitive loss due to the neuronal damage inherent in the dementias, the intellectual functioning of the individual will never be reconstructed. While there is some efficacy for approved treatments including the acetylcholinesterase inhibitors (AChEIs) donepezil, galantamine and rivastigmine, and the N-methyl-D-aspartate (NMDA) antagonist memantine, symptoms are only mildly relieved for a short period of time (National Institute for Health and Care Excellence, 2009). No drug has been shown to halt the cognitive decline that comes with dementia. The scientific understanding of dementia has recently shifted to defining it no longer as a late-life disease

but as a disease across the lifespan where the risk can be decreased by modifying known risk factors to either delay onset or decrease risk for some forms of dementia. Half of the risk for dementia is attributable to lifestyle factors and preventive interventions have been found to be effective particularly for Alzheimer's disease and for strokes that may lead to VaD (Barnett et al., 2013). Dementia risk factors targeted by preventive interventions include cognitive activity, high blood pressure, diabetes, smoking, depression and obesity, as exposure to these in middle age is predictive of later-life dementia risk (Barnes & Yaffe, 2011).

The cognitive benefits of exercise have been widely reported and empirically supported as one way to lower the risk of developing all forms of dementia (Hamer & Chida, 2009; Larson et al., 2006). Exercise has also been connected to improving controllable risk factors linked to developing strokes including diabetes, and high blood pressure (Percy et al., 2014; Tolppanen, Solomon, Soininen, & Kivipelto, 2012). Given three quarters of those with VaD have a history of stroke, compared with only 6% of people with Alzheimer's (Rockwood, Ebly, Hachinski, & Hogan, 1997), exercise is the key preventive intervention associated to reducing dementia, alongside structured formal learning or "brain games" which have been found to lower the risk of Alzheimer's disease (Ball et al., 2002). Research continues to support the Mediterranean-style diet as a dementia risk-reducer as it has been shown to lower cholesterol levels and blood pressure (Sofi, Abbate, Gensini, & Casini, 2010).

Depression. In the most comprehensive meta-analysis of preventive interventions for depression Cuijpers et al. (2008) found a 22% reduction in the incidence of depressive disorders, with no significant difference detected across universal, selective or indicated types of prevention. The same meta-analysis found that 22 people need to be treated to ensure one case of depressive disorder is avoided. While this may seem high, no clear guidelines are yet in place to signal what is an appropriate ratio. New Zealand's *National Depression Initiative* and *Like Minds, Like Mine* are selective and universal initiatives respectively, and are aimed

at raising awareness and understanding of depression and mental illness. There has been no evaluation of the effectiveness of the depression initiative but, as a comparable strategy, Australia's "*beyondblue*" has been connected to an increase in awareness of depression and a reduction in discrimination against depressed people between 1995 and 2003-4 (Griffiths, Christensen, Jorm, Evans, & Groves, 2004). Like New Zealand's *National Depression Initiative* website depression.org.nz, "*bluepages*" provides online literacy on depression, including evidence-based information on treatments but also directs users towards online preventive interventions. Online prevention methods are delivering empirical support in reducing depression symptoms: in a RCT, the online courses on "*bluepages*" were shown to be as efficacious in reducing depression symptoms as another online therapy course (Christensen, Griffiths, & Jorm, 2004); *MoodGym*, an internet-based cognitive behaviour therapy (CBT) program available on "*bluepages*" has been proven to be effective in reducing dysfunctional thinking and depressive symptoms in a community sample (Christensen et al., 2004) and relative to a placebo control found to deliver statistically significant benefits at six and 12 months (Mackinnon, Griffiths, & Christensen, 2008); in a meta-analysis the online CBT intervention *Coping With Depression (CWD)* (Lewinsohn & Clarke, 1984) achieved a 38% reduced risk of developing a depressive disorder (Cuijpers, Muñoz, Clarke, & Lewinsohn, 2009), however Allart-van Dam et al. (2007) found that despite reducing depressive symptomology at the time there was no evidence that *CWD* prevented the disorder developing in the future. In a recent meta-analysis on self-help for chronic and potentially remitting clinically diagnosed anxiety and depressive patients den Boer, Wiersma, and van den Bosch (2004) reported large effect sizes for self-help interventions for anxiety and depressive symptoms (.84 at post-treatment and .76 at follow-up). In this study non-computerised self-help approaches, or what is known as bibliotherapy, were seen to be more

effective than wait list or no treatment conditions. Furthermore, no difference was found between preventive bibliotherapy and psychiatric treatment of a relatively short duration.

Research focusing on the prevention of depression in older patients is also collecting, with a number of studies citing success with patients displaying sub-threshold symptoms. Preventive interventions with this age group have included courses covering problem-solving (Rovner, Casten, Hegel, Leiby, & Tasman, 2007), CBT techniques (Konnert, Dobson, & Stelmach, 2009) and stepped-care which has been found to halve the 12 month incidence of depressive and anxiety disorders (Van't Veer-Tazelaar et al., 2009). Healthy living interventions like exercise or improving social support through befriending are examples of universal strategies that enhance protective factors for anxiety and depression (Ajrouch, Abdulrahim, & Antonucci, 2013; Barlow, Allen, & Choate, 2004; Lucas et al., 2011; Mammen & Faulkner, 2013; M. Park & Unützer, 2011; Sjösten & Kivelä, 2006).

Anxiety. Many anxiety disorders appear first in childhood and adolescence, but anxiety disorders are prevalent and seriously diminish the quality of life of older adults. A primary risk factor proven to have predictive validity for full-syndrome anxiety in older age is sub-threshold anxiety meaning preventive measures targeted at these individuals may have considerable impact (Shankman et al., 2009; Smit et al., 2007). Universal programmes have offered modest but promising results in reducing anxiety symptoms (Lau & Rapee, 2011). In a 2004 critical analysis of preventive interventions for anxiety Feldner & Zvolensky (2004) found that across all universal programs statistically significant and clinically significant effects on reducing anxiety symptoms was reported. They also noted, however, that a great amount of homogeneity was found between all research reviewed, suggesting that research was needed to look at other levels of intervention. Statistically and clinically significant effects have been consistently found for selective interventions for general anxiety. For example, Kenardy, McCafferty and Rosa (2003) found an internet-based CBT intervention,

targeted at 'at risk' individuals for developing anxiety disorders achieved significant treatment effects, compared to the waitlist control group. In a controlled study Gardenswartz and Craske (2001) looked at participants at risk for developing panic disorder (PD), as they had experienced a panic attack within the last 12 months. Those assigned to the intervention (a cognitive workshop) were 13% less likely than those in the wait list to demonstrate an elevated risk for the development of PD. Indicated prevention strategies have had mixed results with Van Ballegooijen et al. (2013) finding an internet-based cognitive self-help intervention was ineffectual for those with panic symptoms. Schmidt et al. (2007) conducted an RCT, assigning those individuals who had scored high on an Anxiety Sensitivity Index (ASI) to a brief computer-based intervention designed to reduce anxiety sensitivity or to a control. The intervention, even after two years, produced greater reductions in ASI, compared to the control.

Generalised Anxiety Disorder (GAD) is associated with an estimated delay in treatment of potentially 23 years (Feldner & Zvolensky, 2004), indicating that the cost burden of GAD to the community is high and preventive measures may help to contain that cost. Currently, however, there is little research available which supports preventive measures with GAD. While a recent RCT found that an internet-based preventive CBT program, compared to a wait-list control, significantly reduced worry and anxiety symptoms (Titov et al., 2009), the results need to be reviewed with caution because the participants all had full diagnoses of GAD. And while a preliminary case study of an internet self-management program for GAD showed that none of the participants achieved a GAD diagnosis at the completion of the study, the trial only included three adults and therefore due to size limitations is only able to show 'some positive evidence' for preventive measures with anxiety symptoms (Draper, Rees, & Nathan, 2008).

Alcohol abuse. Based on the new DSM-V diagnostic criteria for “alcohol use disorder” a leading addiction specialist, Professor Doug Sellman, predicts that one in ten New Zealanders would be classed as alcoholics (K. Johnston, 2013). He also suggests that two-thirds of these are unlikely to recognise a problem exists, as the drinking culture in New Zealand is heavily ingrained and normalised (Sellman, 2010). For these reasons, in countries like New Zealand, promotion as a framework for preventive endeavours is the recommended strategy. Leading addiction treatment scientists agree that there are five key aspects to promotion of alcohol that could prevent more instances of alcohol use disorders and these include: raising prices and purchasing age; reduce accessibility and marketing and advertising and increasing drink-driving counter measures (Sellman, 2010).

Universal campaigns targeted at the individual, on the other hand, seek to change knowledge and attitude towards alcohol (Gunzerath, Hewitt, Li, & Warren, 2011). Recent New Zealand advertising campaigns which have enjoyed widespread dissemination include “*No More Beersies*”, “*Ghost Chips*” and “*Know Your Limits*” and aim to raise awareness about alcohol abuse and safe drinking habits. Devised by the Government-led Health Promotion Agency, campaigns like these result in an increase in awareness, exposure and recognition, but no beneficial change attributable to the campaigns with regards to alcohol consumption (WHO, 2004; Sellman, 2010). Despite best efforts, public campaigns cannot match the high quality, pro-drinking advertisements that appear in the media more frequently, and therefore the impact of government campaigns is somewhat mitigated. Despite the importance of environmental-led initiatives which are proven to drive down alcohol problems, selective interventions delivered by GPs have been found to be effective in preventing alcohol use disorders (Babor & Grant, 1992). These brief interventions are often grounded in social cognitive theory and can vary from simple advice by the physician, advice coupled with distribution of an information leaflet to counselling and discussion of problem

solving strategies over separate sessions. None of the methods last for long periods of time and even the simplest advice by a GP during the first visit has been found to be effective. The targets for these interventions are “at-risk drinkers” and a recent meta-analysis found brief interventions following protocols similar to those outlined above, result in significant reductions in weekly consumption for men at one year follow up (Kaner et al., 2009).

Preventive measures have been shown to be empirically supported across the four key areas of mental health concern facing baby boomers as they age. Owing to the inability of the mental health service to treat all New Zealanders with mental health concerns, preventive interventions not only have the potential to reduce symptoms in individuals presenting with sub-threshold symptomology, but they can also enhance protective factors such as mastery and motivation and lead to lower incidences of mental health disorders, lowering prevalence overall. With new knowledge amassing daily about risk and protective factors relating to the key mental health concerns facing baby boomers, alongside an reported propensity for fighting health concerns (Utz, 2011) and not adhering to the status quo (Buckland, 2009), this cohort seems ideally positioned for engaging in preventive measures.

There is little empirical evidence investigating preventive help-seeking intentions, however in a qualitative narrative study with Canadian leading-edge baby boomers, Murray, Pullman and Rodgers (2003) found that in response to public health care messages, participants were prepared to accept certain responsibilities for their health and felt guilty if they deviated off these plans. Middle class participants in particular expressed a common narrative “health as a lifestyle” indicating health promotion messages had been integrated into everyday thinking. Health was also seen by this group as a psychological concept that needed to be worked at in order for illness (including psychological) to be prevented. In comparison, Westerhof et al. (2008) found that whilst intention was regarded as low (respondents wanted to follow preventive courses for 1.5 of the 5 psychological complaints

outlined compared with .7 out of the 5 disorders with a professional helper) older adults (aged 65 to 75) had higher intentions to seek preventive help over professional help in a representative older adult sample in the Netherlands. It is hypothesised that this sample of New Zealand baby boomers will show a positive intent towards preventive measures in line with the Canadian sample, and higher than the Dutch sample.

In summary from the information outlined in this chapter it is hypothesised that baby boomers will show a positive intention towards professional and prevention help for mental health concerns and that substance abuse and depression will receive higher intentions to seek both professional and preventive help than anxiety and forgetfulness.

CHAPTER FOUR: HELP-SEEKING AND THE THEORY OF PLANNED BEHAVIOUR

It should be clear now who the baby boomers are, what mental health support they have available to them in New Zealand and the scale of the mental health concerns facing their age group in the future. Help-seeking will now be explained in the context of the theoretical models available to explain it and in relation to the attitudes inherent in baby boomers. Ajzen's Theory of Planned Behaviour (TPB), as a social-cognitive model of help-seeking, is then compared and contrasted with alternative approaches to understanding help-seeking. Core concepts of the TPB are further critiqued and placed alongside empirical evidence for and against the model. Through this analysis the case is put forward for a two-factor attitudinal measure, minimising the need for a measurement of stigma. Other predictor variables including demographical information are discussed, in particular, the impacts of these variables within help-seeking and TPB literature will be outlined. It is also reasoned that prior contact with a mental health professional and current level of emotional distress impact upon help-seeking and should be considered in conjunction with the other TPB predictor variables. Lastly, research connecting the applicability of the revised TPB to understanding preventive psychological measures is reviewed.

Help-seeking

Definition And Process. While stress is an inevitable part of life, coping makes a difference in how stress leads to particular outcomes. ‘Coping’ has been defined as a cognitive and/or behavioural response to manage specific internal and external demands on an individual (Andrew & Dulin, 2007). Help-seeking is an important subset of coping behaviour. Rickwood et al.(2005) define help-seeking in response to mental illness as:

the behaviour of actively seeking help from other people . . . it is about communicating with other people to obtain help in terms of understanding, advice, information, treatment and general support in response to a problem or distressing experience. (p.4).

Research shows baby boomers perceive self-fulfilment as an important aspect of their attitude to life. From rejecting the status quo to join mass protests in the 1960s as the leading-edge boomers did, through to tail-end boomers holding on to core consumerist values through materialist consumer activity, baby boomers are motivated by personal needs and ambitions. What Rickwood et al.’s (2005) definition implies is that help-seeking is an individually-led socially cognitive process: a problem is acknowledged and this awareness instigates an action to seek help. A consistent theme amongst help-seeking theory and literature, is that the individual acknowledges a problem, which instigates an intention (Nadler, 1987; Wacker & Roberto, 2008). As will be evidenced shortly, the theoretical model this research will use to explore help-seeking attitudes includes a core construct of psychological openness as a determinant of intention towards a behaviour. This construct is a crucial element in help-seeking for mental health, not only because the link between recognising mental health disorders and seeking treatment is clear (Jorm, Christensen, & Griffiths, 2006) but also because it implies that for the individual, mental health concerns are considered valid constructs, thereby increasing the propensity for seeking options to ameliorate or avoid them.

This research also proposes to include an additional variable to the model of analysis of “current emotional distress”. It will be argued that the acknowledgement of present mental health concerns and mental health issues in general is intrinsically related to the theoretical construct of psychological openness and it is therefore important to analyse its role in help-seeking.

Nadler (1986) states help-seeking is driven by two separate personality characteristics: autonomy or dependency. Autonomous help-seeking is associated with future independence and an ability to cope. In a mental health scenario this could be demonstrated by an inclination towards preventive interventions and psychological interventions in general, as the approach is synonymous with gaining competencies to deal with future stressors and potential mental health problems (Cowen, 1994). Referring once more to the previously outlined traits of the baby boomer cohort, autonomous help-seeking evidenced through a favourable attitude towards help-seeking and a higher intention to seek professional and preventive psychological options are expected from this cohort. Specifically, it will be hypothesised that the leading-edge boomers who rejected the status quo so significantly and who championed a re-writing of gender roles in the 1960s and 1970s, will demonstrate an even higher intention to use preventive measures than the younger end of the cohort.

Barriers to help-seeking. Despite the extensive mental health system currently in operation in New Zealand, there is a significant unmet need for the treatment of mental disorders. This unmet need can be partially explained by understanding barriers to help-seeking. The literature on help-seeking barriers generally classifies them into two categories: attitudinal (beliefs about mental health and the efficacy of treatment) and structural (time, resources and availability of treatment). Because the consensus in help-seeking literature is that attitude is the strongest predictor of intent to help-see than structural barriers (Bayer & Peay, 1997; Wells, Robins, Bushnell, Jarosz, & Oakley-Browne, 1994; Yousaf, Grunfeld, &

Hunter, 2013) and because the mental health system in New Zealand is relatively cost-effective and the standard of living considered good by global standards, the core focus of this research will be on attitudes as possible barriers to help-seeking. Examples of attitudinal barriers found to impede help-seeking include stoicism “I preferred to manage it by myself” and “I should be strong enough to manage it by myself” (Outram, Murphy, & Cockburn, 2004; Wells et al., 1994), lack of knowledge about mental illness and availability of treatment “I thought the problem would just go away” (Issakidis & Andrews, 2002; Johnson & Coles, 2013) and a lack of belief that the system could effectively treat the individual (Byers et al., 2012). Stigma has also been found to be an attitudinal barrier to seeking help, whether it is an individual’s own responses to mental illness and help-seeking (self stigma) or their perceptions of others’ negative responses (perceived stigma) (Barney, Griffiths, Jorm, & Christensen, 2006; Jagdeo et al., 2009; Vogel & Wade, 2009). With the elderly, stigma or embarrassment has been found to be a strong indicator of underutilisation of mental health (Corrigan, Swantek, Watson, & Kleinlein, 2003; Segal et al., 2005). However, as a construct within the TPB, stigma has been found to be the weakest concept within the model as well as being the attitude least likely to correlate as a barrier to help-seeking in New Zealand adults or baby boomers. For this reason an instrument has been chosen which utilises a two-factor model of attitude toward help-seeking and does not explicitly identify stigma as a construct. More will follow on the rationale on this decision shortly, and in the methodology chapter.

One final barrier identified in the help-seeking literature that falls outside of attitudinal and structural categories is a social support network including friends and family (Corrigan et al., 2003). Although help-seeking is a term traditionally used to refer to formal support, such as GPs, psychologists or counsellors, it can also include informal support such as family, kinship networks, friends and religious leaders (Angermeyer, Matschinger, & Riedel-Heller, 1999). Both informal and formal help-seeking are adaptive coping strategies

and research suggests informal help-seeking plays a significant role in the facilitation of mental health care both from a protective and predicting utilisation perspective (Kulka, Veroff, & Douvan, 1979; Oliver, Pearson, Coe, & Gunnell, 2005; Pilisuk, Boylan, & Acredolo, 1987; Turner & Brown, 2010; P. Wang, Berglund, & Kessler, 2003). However, informal support has also been seen as disadvantageous in certain circumstances, where the support is deemed insufficient to deal with the presenting issue due to lacking knowledge, training or expertise (Griffiths, Crisp, Barney, & Reid, 2011). The focus of the current research is on intentions to seek preventive or professional psychological help, however participants were given the option to demonstrate their intention to seek help from a selection of formal and informal sources in four hypothetical psychological situations. Furthermore, they were asked to state if they have had psychological concerns in the past whether they sought professional help or not. If they chose not - they were asked - 'why not?'. It is assumed that the influence of previous and current informal support will influence participants as they engage in this research, particularly for the leading-edge boomers who have been found to prefer this network over professional sources of help (Mackenzie et al., 2006). Moreover, compared to the generation before them, baby boomers have been found to rely on a more complex array of help-seeking sources including GPs, psychologists, family, friends, and religious or spiritual contacts (A. Woodward, 2013). Religious affiliation or spirituality usually increases with age and the New Zealand Census 2013 revealed that around 70% of baby boomers have some religious affiliation (Statistics NZ, 2013a). Despite friends and family being the highest sources of 'informal' help across all age groups, religious or spiritual contacts feature as a popular form of help for psychological concerns particularly for baby boomers (Brown et al., 2014). However, due to the scope of the current research preventive and professional help-seeking options are the help sources under analysis, and using a slightly enhanced theoretical model this research will explore the influence past

experiences may have on intentions to seek help. It will be argued shortly that a reciprocal effect of past or current behaviours on current intentions is a valid consideration in this research, necessitating the addition of this extra variable for exploration.

Help-seeking Models

Several theoretical models have been proposed which describe predictors of help-seeking. The information gleaned from explanatory models can contribute towards more appropriate interventions and approaches to the target audience. For the specific purpose of this research - explaining mental health help-seeking behaviour with baby boomers, only a small number of models are suitable for use.

Andersen Model. Where the Andersen Model (Andersen & Newman, 1973) explains mental health service utilisation as the result of a series of predisposing, enabling and need factors, it does less to answer the question of how people come to use the services. The Andersen Model does not acknowledge the specific cognitive mechanisms of action involved in help-seeking, nor does it focus on the individual factors associated with this process (Choi, 2011). Past research has also confirmed that enabling factors such as resources and time can be poor predictors of help-seeking behaviour (Stecker, Fortney, Hamilton, Sherbourne, & Ajzen, 2010; Wells et al., 1994) indicating that this model may be conceptually incompatible with the target audience. Because the process of help-seeking is primarily socially-cognitive the theoretical model needs to approach the subject from this position and for these reasons this model has not been used in the current research.

Health Belief Model. As help-seeking is seen as a socially cognitive act, and because social cognitive determinants of mental health are amenable to change, the findings of research undertaken via socially cognitive models are of increased interest to people working in mental health (Armitage & Conner, 2000). Given the projected strain the baby boomers

will place on New Zealand's mental health system in the coming years, the theoretical model chosen should be able to contribute information that can be used to guide and influence service or preventive intervention uptake and design. The Health Belief Model (HBM, Rosenstock, 1974) is grounded in social-cognitive theory and has at its core the constructs of individual perceptions, modifying factors, and likelihood of action factors. While the HBM accounts for individual factors and also the influence of individual perceptions of barriers, threat, severity and susceptibility unlike the previous model, it has received mixed empirical support for the predictive power of its key constructs and its lack of applicability to a variety of contexts (Carpenter, 2010; Sheeran & Abraham, 1996). Given that several of this model's variables fail to predict health behaviour and as intentions are widely regarded as antecedents to behaviour and this model overlooks this important variable, it was discounted.

Model of Interpersonal Behaviour. Triandis' (1977) Model of Interpersonal Behaviour posits that intention is an immediate antecedent of behaviour, but that habits mediate behaviour alongside facilitating conditions. The Triandis model (1977) is similar to the TPB except for the component of 'habit' and an extra measure about how a person feels about performing the behaviour. Focusing on the role of habit in behaviour, it is said to be connected to future behaviour, whereas intention is able to predict novel or unplanned behaviours (Triandis, 1977). Given the stated aim of this research is to examine intentions to seek preventive and professional help for mental health concerns, it is assumed that the behaviours under analysis are not habitualised, nor planned for in the future. For this reason, this model was deemed unsuitable to analyse the behaviour of help-seeking for mental health concerns.

Theory Of Planned Behaviour (TPB)

The TPB (Ajzen, 1991) has been selected to underpin this research as it is increasingly and successfully been used to predict and explain intentions and behaviours in numerous mental health settings (H. Green, Johnston, Cabrini, Fornai, & Kendrick, 2008; McDowell, Occhipinti, Ferguson, & Chambers, 2011; Skogstad, Deane, & Spicer, 2006; Smith, Tran, & Thompson, 2008; Stecker et al., 2010; Westerhof, Maessen, De Bruijn, & Smets, 2008). Moreover, the TPB is particularly useful as it is an integrated social-cognitive model of behaviour that allows researchers to understand some of the psychological processes inherent in the intentions to engage in help-seeking. The model is empirically supported and is seen to possess good psychometric properties: discriminant validity has been found between the construct intention and desire and self-prediction, and also between self-efficacy and perceived control over behaviour (Armitage & Conner, 2001). Meta-analytic research has shown the TPB constructs of attitudes, social norms and perceived behavioural control explained 44.3% of the variance in intention (McEachan, Conner, Taylor, & Lawton, 2011), 39% of the variance in intention (Armitage & Conner, 2001), 28% of the variance in behaviour (Sheeran, 2002) and 30-40% of the variance in intentions, constituting large effect sizes (Godin & Kok, 1996; Sheeran & Taylor, 1999). The TPB has also achieved good predictive validity for a wide range of health care behaviours include safer sex practices, nutrition behaviours and physical activity (Asare & Sharma, 2010; Ickes & Sharma, 2011; Rhodes & Courneya, 2003).

Based on the original Theory of Reasoned Action (TRA, Fishbein & Ajzen, 1975) the TPB assumes that individuals consider three aspects with regard to the researched behaviour: attitude, subjective norms and perceived control. Using these three constructs, the variance identified in intention or willingness to seek help can be identified and used to predict or explain behaviour (Angermeyer, Holzinger, & Matschinger, 2009). A decision to engage in

any behaviour can be traced to attitude, explained by beliefs about the behaviour under investigation including the consequences of engaging in it (for example whether mental health services would be effective with the individual) and beliefs about normative expectations of others (for example whether their social group would approve of them undertaking preventive psychological options). Combined, these two factors influence intent which in turn predicts and explains behaviour. To increase the model's predictive ability the construct of behavioural control was added. This construct is associated to control beliefs about elements that may facilitate or prevent the behaviour being performed (for example, the belief that mental health services are available if needed) thus influencing intention and the ability to carry out those intentions. Together, these three constructs form a behavioural intention, assumed to be the immediate antecedent to behaviour. For a visual depiction of the TPB model, see Figure 1. This sequential relationship suggests that help-seeking attitudes are important precursors to understanding behaviour and through the model's framework - knowledge about intention can go some way to predicting behaviour (Ajzen, 1991).

Mental health help-seeking studies often share research goals with TPB studies - explaining and predicting behaviour. As antecedents to behaviour are the TPB's focus, understanding what these are for baby boomers is crucial information to help guide services, information and mental health intervention for this group. Applying models like the TPB, that explain relationships among variables matches how help-seeking has been researched and analysed to date. Furthermore because help-seeking is generally seen as a personal cognitive process prior to acting on the intent, the TPB is tightly nested within this approach and can help to explain a significant amount of variance in behaviour. This research is primarily concerned with examining what contributes to the intentions of baby boomers in their decision to use professional and preventive psychological measures. One of the outcomes of using the TPB is the ability to predict behaviour. Previously, simply having an understanding

of intention was seen to be a suitable predictor of behaviour. However the TPB has come under criticism that it lacks practical utility and predictive ability if a) the proxy behaviour measure is not explicit enough or b) no behaviour measure is used at all (Eagley & Chaiken, 1993; Ogden, 2003). As the present research has not been able to incorporate a behaviour measure due to the research design timeframe limitations of a Master's thesis it will be argued in the methodology section that extant research supports the approach taken, providing the intention measure is specific enough.

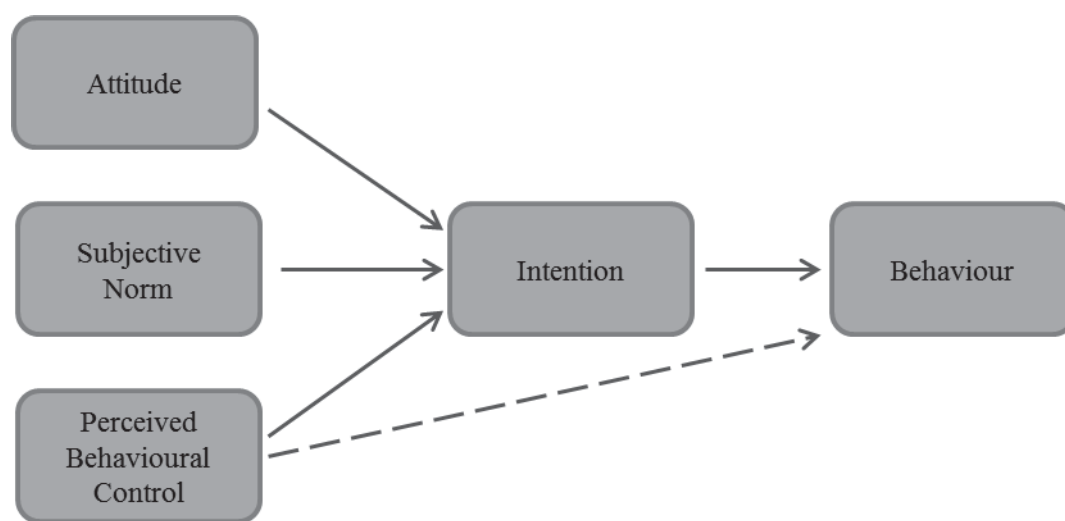


Figure 1. The Theory of Planned Behaviour.

The current research will use a broadly typical, but slightly altered TPB strategy which is to focus on a small set of explanatory variables and intention options (to seek preventive measures for psychological concerns or not, to seek professional psychological help or not). However given the case outlined earlier, that stigma has been found to be the weakest predictor of help-seeking behaviour, the instrument chosen to measure attitude towards seeking professional help takes a two factor structure focusing on a participant's openness to help-seeking (PO) and perceived need and value in seeking treatment (PBC) (Elhai, Schweinle, & Anderson, 2008). Because PO and PBC better explain variance in intention and therefore in predicting behaviour, and that the instrument chosen was shorter

and perceived to deliver less participant fatigue for respondents the decision was made to capture the constructs this way. The current TPB framework can be seen in Figure 1, however it will also be argued shortly that the addition of extra variables is valid in this research context and with the population sample, either as part of an extended set of TPB predictor variables (prior contact with a psychologist, level of current emotional distress) or as socio-demographic variables that could indirectly influence help-seeking intentions (age, gender, ethnicity and relationship status). Further information about the constructs under investigation and the instruments used to capture these will follow in the methodology section.

Intentions. The core component of the TPB model is intention. Its role is mediatory and PBC is also seen to determine behaviour either directly or indirectly via intentions. Intentions are assumed to encapsulate the motivational factors that trigger behaviours, indicating how hard people might try or effort they will devote to performing a certain behaviour (Ajzen, 1991). Behavioural intention has been defined as a valid proximal determinant for behaviour, predicting 27-28% of the variance in actual behaviour across a number of different contexts (Armitage & Conner, 2001; Sheeran, 2002). As help-seeking has been defined as an action, whether that is seeking help from another person such as a professional or from sources such as books or courses, intention is a necessary condition for action. What the TPB model can help uncover is if intention is low, what might the barriers to action be? Given the difficulty of capturing actual help-seeking behaviour amongst a population sample as generic as the baby boomers, this research focuses solely on intentions as the outcome variable and proximal determinant for behaviour. In a large meta-analysis, the link between behaviour and intention was found to hold a significant relationship ($r = .47$, $r^2 = .22$) (Armitage & Conner, 2001) and it is accepted that intention is a valid outcome variable

of behaviour (Ajzen, 2001). More will follow on the proxy variable for help-seeking intention chosen in the methodology chapter which follows this chapter.

Determinants of intentions. As the TPB posits, predicting behaviour accurately can be determined simply through knowledge about intention towards the behaviour (Ajzen, 1991). The rest of the model's theory relates to the explanation of why the behaviour is intended. The sources of influence on intention are attitudes, subjective norms and perceived behavioural control. However it is argued in this research that subjective norm is a weak contributor and therefore it will receive significantly less focus than the two other TPB variables.

Attitudes. Help-seeking attitudes have been the most consistent and strongest predictor of intentions to seek psychological help (R. Morgan, Ness, & Robinson, 2003; Vogel & Wester, 2003). Attitude is considered as a cognitive action by Ajzen and Fishbein (2000) and is defined as an individual's positive or negative belief about performing a certain behaviour - in this instance seeking help for psychological problems. Ajzen's initial approach to attitude however has been criticised as it failed to consider emotion as an input to forming the attitude (Triandis, 1977; Zajonc, 1984). In 2000, Ajzen and Fishbein expanded their position on attitude by acknowledging the role of moods and emotions. This revised position from the model's creators therefore supports research which includes a measure of emotional distress, as a potential predictor variable of influence on intention to help-seeking, as has been undertaken in the current research. Further discussion on this will follow shortly.

Some of the attitudinal beliefs associated to attitudes to seeking help for mental health problems include: coping alone, as found in data from the Christchurch Health and Development Study (Wells et al., 1994); a fear of discussing one's psychological problems (Komiya, Good, & Sherrod, 2000; Vogel & Wester, 2003); and being positive about mental health professionals being able to deliver an effective treatment (Jackson et al., 2007).

Specifically with regards to attitudes of baby boomers towards mental health help-seeking, Mackenzie, Erickson, Deane and Wright's (2014) found that attitudes of university students in 1968 towards seeking mental health help were considerably more positive than those 40 years later in 2008. This cross temporal 40 year meta-analysis therefore suggests that the leading-edge boomers were certainly positive about the subject under the spotlight almost 50 years ago, a finding replicated by Currin et al. (2011). Using a cohort design they found that later born cohorts' attitudes to mental health services were becoming increasingly positive (between 1977 and 2000), with the later born cohorts (some of which included leading-edge boomers) being flexible regarding the etiology of mental illness and the range of problems appropriate to seek help for. In studies of older age groups, specific attitudes associated with negative views are fears of identifying a problem, denial that there is a problem or seeing mental illness as something normal with ageing (Morano & DeForge, 2004; Satcher, 2000). Quinn et al. (2009) found that older (leading-edge boomers) and younger people's attitudes towards mental health were in fact very similar and that any negative attitudes identified were those associated with ageing, not mental health. Considering these findings it is predicted that these results will also be found in the current study; the entire cohort will score highly on PO, but that the younger sub-cohort will report higher levels of PO than the older sub-cohort.

Perceived Behavioural Control. In the TPB model perceived behavioural control (PBC) influences both intention and behaviour (Armitage & Conner, 2000). With the addition of this construct the TRA became the TPB and it was proposed that through a general appraisal (the extent to which a person would find it easy or difficult to perform the behaviour), and specific beliefs (for example barriers or facilitating factors to achieve a behaviour, and the extent to which these factors would stop someone from performing the behaviour), the model could achieve stronger predictive powers. Initially, Ajzen (1991) likened PBC to the concept of self-efficacy (Bandura, 1982), referring to a person's

confidence in achieving a behavioural goal, however he broadened the definition to include elements that could be perceived as barriers towards predicting behaviours that are not under complete volitional control, such as resources.

In relation to how the PBC construct fits with New Zealand's baby boomers' beliefs: early baby boomers were well into young adulthood and midlife in the 1980s and had high expectations based on the abundant economic climate of the 1950s and 1960s they had grown up in. The sense of optimism generated by the income and educational attainments they had been part of has been associated with a higher sense of control in life, indicating PBC, at least generally, may be high with this cohort (Ross & Sastry, 1999). Furthermore, the social and political activity in the 1960s and 1970s the leading-edge boomers contributed to could be seen as events that have shaped the way they perceive they control their lives. Female boomers, specifically, have also experienced marked changes to the way they can control many aspects of their lives that had previously been seen as pre-determined, for example fertility and menopause. However, in a series of longitudinal studies based in the United States, Doherty and Baldwin (1985) found that instead women reported a shift towards an external locus of control, compared to men. These findings were attributed to an increase in awareness of the constraints on women's lives, brought about by the women's movement. This circumscription was also seen with women baby boomers, who, whilst advancing in many aspects of their lives (education, birth control and employment), were found to have a decreased sense of control in their personal lives (Pearlin, 1988). Building on from these findings, Riggs and Turner (2000) also paradoxically found that despite being privileged in terms of education, income and social change, leading-edge boomers (both men and women) felt powerless as individuals and more powerful as a collective. The collective power they felt from their association to social movements, did not translate to a sense of control over their lives. Within this research it is expected that baby boomers will operate with a certain

level of control, yet for the leading-edge boomers in particular, it will be muted by a collective association with a sub-cohort. In comparison, tail-enders who matured into the economic uncertainty of the 1980s and were less likely to have participated in political or social movements may demonstrate higher levels of perceived behavioural control.

It is posited that individuals are more likely to engage in behaviours they believe they can achieve (Bandura, 1982). As a construct PBC has two elements, a personal belief the behaviour is achievable and specific beliefs about factors that may prevent the individual from performing the behaviour. Research in New Zealand and elsewhere indicates however, that external barriers of PBC relevant to mental health seeking assistance - financial resources, for instance, only minimally impact the intention-behaviour relationship (Stecker et al., 2010; Wells et al., 1994). Furthermore, in New Zealand, where health care is relatively accessible to all, it may be expected that intention to use psychological services would be less influenced by resource-related factors. Beyond resource-related barriers, it is perceived that seeking professional psychological or preventive help for psychological problems in New Zealand are behaviours that are considered to be under volitional control, therefore this aspect of PBC should exert little influence on the relationship. While it is accepted that schizophrenia and psychotic disorders, for instance, would often require non-volitional mental health intervention the focus of this research is on the four common mental health complaints of people as they age: depression, dementia, anxiety and substance abuse and it is believed that for these particular concerns, seeking help is seen as a broadly volitional exercise. As Ajzen (1991) posits, PBC can independently contribute to explaining behaviour only when behavioural intention accounts for a small amount of the variance in the behaviour because volitional control is threatened. In a study looking at TPB's predictability across 10 different behaviours, those that had higher volitional control were guided by intention over PBC (Madden, Ellen, & Ajzen, 1992). With regards to the current research it is perceived that

PBC will not explain intention towards help-seeking for the following reasons: because help-seeking as a behaviour is perceived to be high in volitional control; mental health-care is relatively affordable in New Zealand; and tail-ender baby boomers, in particular, are likely to have high PBC due to the economic and political climate they matured into. Therefore it is anticipated that intention will explain behaviour more than PBC, but that PBC and intention will correlate highly. Finally, as outlined previously, it is hypothesised that PBC whilst rating highly for the entire cohort, will achieve greater results from the tail-enders.

Subjective norm. Stigma is often classed as a significant barrier to mental health help-seeking in the help-seeking literature. Yet Armitage and Conner (2001) state that as the last addition to the TRA it is the weakest component. Ajzen and Fishbein (1980) conclude that compared with attitudes, norms will influence intention and behaviour, but it is entirely dependent on the behaviour of interest. Reviews of the TRA and TPB show that the subjective norm construct seldom is stronger as an influencer on behaviour compared with attitudes (Ajzen, 1991; Armitage & Conner, 2001; Godin & Kok, 1996). Focusing on research using TPB's specific measures of stigma as an influence on mental health help-seeking, individual research projects do not support it as a strong predictor for help-seeking behaviour. For example, Andrykowski and Burris (2010) found that social norm was the TPB variable least related to Australian cancer patients' actual use of mental health resources, despite reporting less than favourable attitudes towards mental health resources. In research conducted in New Zealand, James and Buttle (2008) found that in a sample comparison of older and younger New Zealanders (mean age of 56.5), equally high levels of Indifference to Stigma (IS) were obtained. Also stigma did not feature as a significant difference in the comparative analyses with both subsets of adults stating stigma was not of influence. Confirming these findings with older adults, Mackenzie, Gekoski and Knox (2006) found stigma played no role in deterring older adults from seeking professional mental health

services and older adults are less likely to associate therapy with stigma (Sirey et al., 2001). Westerhof et al. (2008) found help-seeking propensity and PO were related to intentions to seek preventive and therapeutic help, where IS was not related to either. While these findings are not universal with the elderly (Segal et al., 2005), what they show is that despite an assumption stigma would be related to mental health help-seeking, few people of the target population act according to perceived social norms, but by attitudes or intentions towards the behaviour instead. Lastly in a meta-analysis considering the efficacy of the TPB in relation to health-related behaviours, McEachan et al. (2011) found that the stigma and intention relationships were stronger with adolescents compared to adults (mean $r = .53$ vs. $.36$) for physical activity ($r = .27$ vs. $.17$) and dietary behaviours ($r = .27$ vs. $.17$), indicating social norms in certain health-related behaviours are a better predictor or interpreter of behaviour for younger samples than older samples.

Building on from the construct's poor ability to predict health behaviour Dutta-Bergman (2005) found that subjective norms do not “effectively tap into the complexity of the social fabric that constitutes health behaviour” (p.107). He argues that social influence is beyond individuals but actually embedded in the sociocultural context of the community. This sociocultural context heavily effects attitudes resulting in variables that can all have a mediatory role on stigma, for example those of gender-role-conflict (Shepherd & Rickard, 2012), gender-roles (Vogel & Wade, 2009), masculinity (Levant et al., 2013) and family (Outram et al., 2004). Bearing in mind the TPB principle of focusing on a few explanatory variables, it is suspected that variables including age, gender, current emotional distress and previous contact with a professional would have more influence on intention towards behaviour, than stigma. Therefore, the instrument chosen to measure attitude towards help-seeking did not specifically include stigma.

In summary, owing to the poor empirical evidence of stigma contributing to explaining the variance of intention or behaviour in the TPB model and that extant research with the target population shows little evidence stigma influences behaviour or intention in help-seeking, a two-factor model of psychological openness and perceived behavioural control/perceived need and value in treatment will be used alongside the suggested additional predictor variables to explain intention.

Extending the TPB. The TPB model proposes that the effects of other variables on behaviour are inconsistent. As Pescosolido and Boyer (1999) state, while it is informative to list the possible social correlates of help-seeking, this does not necessarily explain how they work together. What the TPB does is offer a framework for the study of the antecedents of help-seeking for mental health needs. The emphasis in the current study is on baby boomers' intentions to seek assistance for psychological problems. What the TPB will facilitate is an understanding about what influences baby boomers' decisions to seek help for mental health concerns however there is mounting evidence to support the inclusion of two additional predictor variables, due to the strong role they contribute in a TPB approach to help-seeking. In keeping with Ajzen's (2011) recent reflections on the TPB and the fact the model is known for its parsimonious strength, the two additional predictors have been proposed with due consideration and empirical exploration.

Previous contact with professional help. Research has found that the effect of previous behaviour significantly influences behaviour outcomes, after controlling for TPB constructs (Marsh, Papaioannou, & Theodorakis, 2006). Previous experience with mental health counselling has been found to be related to an increased inclination to seek help in the future (Deane, Skogstad, & Williams, 1999; Deane & Todd, 1996; Jagdeo et al., 2009) and increased psychological openness (James & Buttle, 2008). Moreover, if the treatment was perceived as helpful, this has been correlated with an increased likelihood of seeking help in

the future (Deane et al., 1999; Schomerus, Matschinger, & Angermeyer, 2009a) and a more positive attitude towards mental health care (Quinn, Laidlaw, & Murray, 2009). Despite Ajzen (2011) arguing that past behaviour fails to meet one of the criteria for inclusion in the TPB because it is not necessarily a causal antecedent of intention, he accepts that a measure of past behaviour contributes independently to predicting intentions over and above the other model constructs (raising variance by 9.65% and 13%) (Albarracin, Johnson, Fishbein, & Muellerleile, 2001; Sandberg & Conner, 2008). With consideration of this position and existing research, a measure of previous behaviour will be included as an additional predictor variable. Alongside the theory variables, it is hypothesised that via a reciprocal effect previous experience may be associated with increased intention to seek help and a more favourable attitude towards help-seeking. Furthermore, baby boomers, as a cohort, have utilised professional psychological services more than any cohort before them in New Zealand, and have witnessed and participated in pioneering mental health promotion and prevention campaigns (for example the Health Promotion Agency's depression campaign). In terms of rating the experience, Ford, Bryan and Kim (2013) found that older mental health service users (plus 55 or leading-edge) were generally more satisfied and perceived more benefit from their engagement with the service than the younger participants. Therefore, it is expected that a previous positive professional experience will be found to be a significant predictor variable in the TPB model. Due to the increase in evidence in support of this variable and its role in help-seeking and the baby boomers' increased mental health services utilisation, past experience will be captured and analysed.

Level of emotional distress. While many studies point to an increase in help-seeking intentions as distress increases, for example men are more likely to be seen at the severe psychiatric diagnosis stage (Leaf & Livingston Bruce, 1987), some have found distress does not significantly predict help-seeking intent (Vogel & Wester, 2003). Similarly an inverse

relationship has been found between suicidal thoughts and seeking help (Wilson & Deane, 2010). The type of disorder has been found to be a strong predictor for seeking out help in several studies, for example Iza et al. (2013) were able to predict treatment-seeking for panic disorder which was 12 months from onset, whereas generalized anxiety disorder, specific phobia, and social anxiety disorder were much later. Affective disorder has also been used as a predictor for help-seeking (Mills, Van Hooff, Baur, & McFarlane, 2012). In a comparative mental health help-seeking study, utilising the Andersen Model, Cairney, Corna and Streiner (2010) found that the only predictor to positively and significantly associate with an increased likelihood of accessing mental health care was current (past month) psychological distress. Emotional distress clearly plays an independent predictor role in relation to help-seeking, therefore it has been added to the enhanced TPB model and a measure for current emotional distress was added as a variable to this research. It is predicted that the higher the emotional distress the higher the association will be between intent towards preventive and professional help for mental health and that the variable of emotional distress will contribute significantly to variance within the TPB model.

Demographic variables. Causal connections involving demographic variables associated to participants in this research also require consideration. While demographic factors such as age will not predict help-seeking, the TPB model suggests that they can affect behaviour indirectly through influencing attitudes towards help-seeking. The theory does not specify where beliefs originate, but points to a number of factors of potential influence on intention (for example gender or age) which deliver indirect effects on the theory's direct determinants (Ajzen, 2011). Ajzen and Fishbein (2005) argue that because they only impact behaviour through the psychosocial variables specified through the theory, they will be mediated by the theory variables. In this study, of the demographic information obtained, age, gender, ethnicity and whether the participant is living with someone or not are of most

interest, given mental health services are relatively low-cost in New Zealand and education levels considered high by global standards.

Age. The baby boomer cohort spans an entire generation, almost twenty years, yet is continually referenced as one homogenous group. Age is a strong and consistent predictor for out-patient mental health care utilisation (Pescosolido & Boyer, 1999). It is anticipated that age differences in intention will be evident across the twenty years of the baby boomers, and because intention is an antecedent of behaviour these findings will contribute to understanding the uptake of preventive and professional mental health services. In New Zealand, younger people have the lowest intentions to seek help compared to those in their twenties through to middle adult years (Wells, 2006a). Elsewhere, older adults exhibit more favourable intentions to seek help (Mackenzie et al., 2004; Segal et al., 2005; Skogstad et al., 2006) and favourable attitudes towards the psychological service (Robb et al., 2003) however, these findings are not supported by corresponding service utilisation or formal help-seeking (Veroff, Depner, Kulka, & Douvan, 1980). Choice of service provider baby boomers tend towards has consistently been found to be a more complex set of providers, compared to older cohorts who are more likely to visit their GP (Bogner, De Vries, Maulik, & Unützer, 2009; A. Woodward, 2013). These findings further strengthen the importance of understanding the influence age has on the TPB variable of attitude. For the reasons outlined above, but also, as highlighted previously, this cohort has experienced key life events at varying developmental stages, and the influence on attitude has been identified. It is hypothesised that two age brackets will emerge from within the data: leading-edge boomers (aged 59 to 69) and tail-ender boomers (aged 49 to 58) and that both cohorts will demonstrate a favourable intent to both professional and preventive options, but that the older cohort will reveal a higher intent towards preventive measures. It is also hypothesised that this intent will be related to being less psychologically open and a lower score on perceived behavioural

control. The younger cohort, on the other hand, is hypothesised to have a higher intent towards professional services, and this relationship will be influenced by high PO and higher PBC.

Gender. The female gender has been associated with higher intentions to seek help than men (Bebbington et al., 2000; Parslow & Jorm, 2000), seeking help from multiple sources – both informal and formal (Veroff et al., 1980) and with more positive help-seeking attitudes (Deane & Chamberlain, 1994; Mackenzie et al., 2006). Simon (2005) reports women have greater attention and fear of mental health problems, which is associated with higher levels of help-seeking despite lower levels of symptomatology (Snyder, Irving, & Anderson, 1991). In a study investigating whether being referred by someone or knowing someone who had sought help for mental health concerns influences help-seeking, it was found women are more likely to be prompted to seek help and know someone who had sought help (Vogel et al., 2007). Furthermore, in this study 47% of participants said their mothers encouraged them to seek help, compared to only 5% saying their fathers did. Men are generally perceived to have more negative attitudes towards help-seeking than women (Addis & Mahalik, 2003), therefore, it is anticipated that, based on research to date, men will demonstrate less favourable attitudes to help-seeking and lower propensity to seek help for mental health concerns.

Ethnicity. People make sense of the world via cultural beliefs that have been socially transmitted throughout generations and it is this that guides their worldview (Hodgetts et al., 2010). This distinct worldview means that cultures approach health and mental health from very different perspectives (Berry, Poortinga, Segall, & Dasen, 2002). As the mental health system in New Zealand is based upon westernised or a bio-medical model of psychological practice, the influence of ethnicity and culture on help-seeking intentions and attitudes will be apparent in this research. Ethnic minorities often mistrust this model as it is driven by

different expectations regarding the types of health care that should be provided (Boulware, Cooper, Ratner, LaVeist, & Powe, 2003). Furthermore, cultural norms have been found to play a role in attitudes towards psychological openness or privacy (Lin & Lin, 1978) and how much importance is placed on seeking help for emotional problems (Tracey, Leong, & Glidden, 1986). Māori, Chinese and Pacific Islanders feature as the largest ethnic minority groups in New Zealand (Statistics NZ, 2013a) and are collective cultures with a tendency to avoid help-seeking due to stigmatisation and the shame one's illness will bring to the entire family (Kageyama, 2012; Sachdev, 1990; Uba, 1994). Depending on the ethnic composition of responses to this survey, the absence of the construct of normative beliefs will need to be examined.

Relationship status. Relationship status has been positively linked to increased help-seeking behaviours both for those in and out of relationships. For those with high levels of spousal support: those with major depressive disorder, generalised anxiety disorder, panic disorder or alcohol use disorder were 40% more likely to access services for mental health (Maulik, Eaton, & Bradshaw, 2009). In contrast Kessler et al. (2005) found that those who have never married are even more likely than married to seek help from mental health professional and divorced people have been found to make the most visits to psychiatrists when depressed (Vogel et al., 2007). The overriding finding from previous research is that marital status positively influences life satisfaction and mental health, with married people being happier and healthier, on balance (Holt-Lunstad, Birmingham, & Jones, 2008; Kelly et al., 2011). As baby boomers have redefined the family sanctum, by cohabitating in de-facto relationships and with rates of divorce higher than any generation before them, it is envisaged that relationship status will contribute significant variance as an additional predictor variable in the revised TPB model.

Drawing together the approach, the model of the TPB to be used in the current research can be seen in Figure 2. Reflecting the causal structure of the TPB, the additional socio-demographic variables and variables of emotional distress and previous help are seen as causally prior to TPB variables, followed by the TPB variables of PBC and PO (attitude) seen as the determinants of intention therefore directly connected to intention. Unlike the TPB variables, the additional variables to the model can influence attitude towards intention, but attitudes are the key determinants towards intention and therefore the ability to explain behaviour.

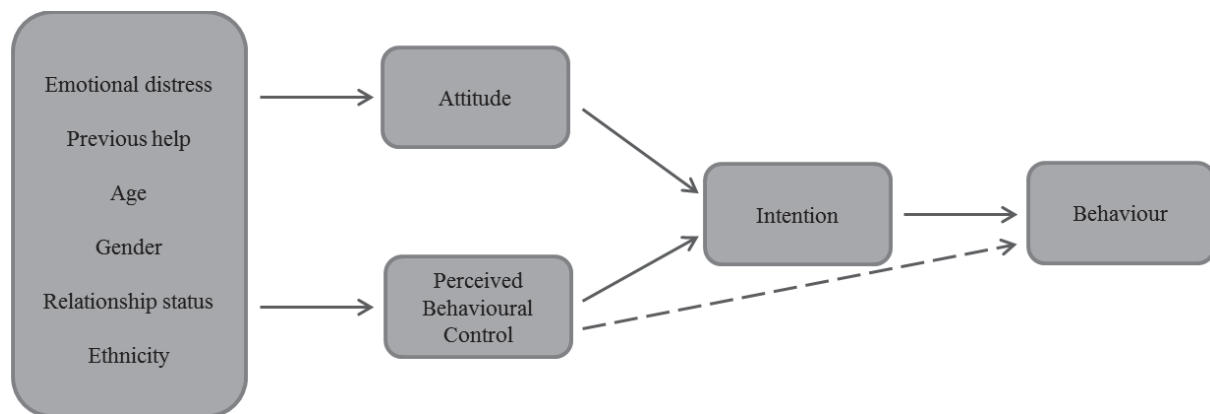


Figure 2. An edited Theory of Planned Behaviour and additional variables

NZ empirical support for TPB. Research undertaken in New Zealand using the TPB has found the model can accurately explain and predict behaviour. The most recent research available in New Zealand is James and Buttle’s (2008) exploration of attitudinal differences between young and older New Zealand adults, cited previously. Earlier research in New Zealand including Carlton and Todd’s (2000) study of high school students found prior help, suicidal ideation and attitudes were significant and unique predictors for seeking help for suicide, whereas the only variable found to be a significant predictor for help-seeking for personal emotional problems was attitude. This finding is consistent with Deane and Todd’s (1996) study with a sample of non-clinical university students which found attitudes toward seeking professional psychological help significantly predicted help-seeking intentions for

emotional problems and suicidal ideation. The two last TPB New Zealand studies looked at attitudes of male prisoners towards seeking professional help for mental health problems. The two studies found that attitude was the only significant predictor of help-seeking intentions (Deane et al., 1999; Williams, Skogstad, & Deane, 2002). Both studies included psychological distress as a possible moderator and found increased distress was related to positive attitudes towards help-seeking. Furthermore, prior positive experiences with psychology professionals also increased the intention of help-seeking in these New Zealand prisoner populations. Where the New Zealand studies converge is on positive previous experience being related to favourable intention and an interaction with psychological openness and general ability to predict and explain behaviour, further justifying the inclusion of this variable in this study.

Empirical support for the Theory of Planned Behaviour and preventive measures. The TPB has been used as a theoretical basis to design successful preventive programmes for adolescents for smoking, for example, focusing on the social cognitive aspect of PBC as the strongest predictor of intentions to smoke (Cuijpers, Jonkers, De Weerdt, & De Jong, 2002). And it has also been used to explore other health related preventive behaviours, for example HIV-prevention (Eifler, 2004), type-2 diabetes and obesity (Muzaffar, Chapman-Novakofski, Castelli, & Scherer, 2014) and exercise programmes (Pfeffer, 2012). However, there is limited research utilising the TPB to understand or predict preventive psychological behaviours. Of the available research however, the results are consistent. Westerhof et al. (2008) found that whilst intention was low, older adults had higher intentions to seek preventive help over professional help in a sample of older adults in the Netherlands. Respondents wanted to follow preventive courses for 1.5 of the 5 psychological complaints outlined compared with .7 out of the 5 disorders with a professional helper. With regards to TPB constructs they found, PBC and PO were

related to intentions to seek preventive help, and IS was not related. Personal characteristics were also captured and compared against the TPB variables and intentions. The only significant and surprising finding was that men had stronger intentions to seek help from a professional than women. The authors concluded that PO was the only barrier to help-seeking in this study. In a recent Northern Irish study, Brisling and McKay (2013) found evidence suggesting that respondents had high PBC with regards to both physical and mental health. However, participants had significantly higher perceived PBC over their physical, rather than their mental health. As Ajzen (1985) states those with low level of PBC will be less likely to engage in the targeted behaviour, in this case, protective behaviours that may enhance mental health. This theoretical assumption is supported by self-reports in this research that showed 72% had made lifestyle changes to improve their physical health, compared to 41% for mental health over the last 12 months. Furthermore, of the baby boomer cohort, men aged 65 and over were less likely to engage in behaviour that would improve their mental well-being. In other findings that show support for TPB constructs in relation to preventive measures, Jorm et al. (2006) found that the “*beyondblue*” depression promotion and prevention campaign in Australia has had an effect on awareness or openness and discrimination against those with the illness. While this implies that PO and IS increased it is unclear whether this translated to an increase in intention to undertake preventive courses. Jorm (2011) also advocates for increased mental health literacy in Australia which he defines as: “knowledge that is linked to the possibility of action to benefit one’s own mental health or that of others” (p.1). Within this definition is knowledge about prevention, recognition of when a disorder is developing and knowledge of the help-seeking and treatment resources available. Jorm’s widely publicised ideas link clearly to TPB constructs PO and PBC. Schemers et al. (2008) confirm that 75% of adults believed that preventing depression was possible, and 58% of them were willing to pay money to take part in preventive programs including forming stable

relationships, enjoying leisure activities, thinking positively and doing meaningful activities. This finding connects the construct of PO to intention to undertake preventive measures. Outcomes like this show that there is a desire for preventive action, however in contrast to physical diseases such as cancer, for example, it is difficult to know whether New Zealand's baby boomers are actively engaging in preventive mental health activities as there is no measurement in operation. It is hypothesised that PO and PBC will correlate highly with intention towards preventive measures within this cohort.

The focus of the present research is on a large cohort of people in New Zealand who are rapidly entering older age. As it is common for adults to delay seeking treatment for mental health disorders, and traditionally, those over 65 years of age underuse mental health services, preventive strategies need to be examined as they have been shown to improve mental health in individuals and help to reduce potential service burden. By attempting to explain intentions and attitudes towards a behaviour by examining constructs like PO and PBC, mental health providers and those responsible for mental health strategy in New Zealand, can practically use these findings because they relate to fluid and modifiable constructs that can act as either a barrier or an opening towards help-seeking. Sutton (2004) proposes that understanding what drives health behaviours through a small set of variables is advantageous as it lessens the demands on the participants, but also reduces the potential targets for TPB-based interventions. With the addition of past experience and current distress, not only are the results theoretically interesting, but the results could also provide extra focus for TPB based professional and preventive interventions tailored specifically to baby boomers.

The Current Study

Aims and objectives. The key goal of this research is to increase the understanding of help-seeking attitudes and intentions towards preventive and professional mental health

services by baby boomers in New Zealand, in relation to the four most prevalent disorders affecting the elderly. A key future goal is to use the information obtained to modify or target resources at interventions that may increase service utilisation or engagement in preventive options by baby boomers. This study aims to extend Westerhof's et al. (2008) study by comparing the attitudes and intentions within the target population, in this case the cohort of baby boomers. Owing to the heterogeneity of the target population, it is believed that attitudes and intent towards help-seeking will vary depending on age. As a consequence it is predicted that interventions and strategies will need to be modified to match these attitudinal differences.

This research is broadly based on the theoretical TPB model. Given the previous lack of empirical support for the construct 'subjective norm' to explain or predict behaviour, the instrument chosen to measure attitude will capture two-factors; psychological openness and perceived behavioural control. It is predicted that these two constructs will be related to intentions to seek help. Using an enhanced TPB model this research will also include emotional distress and previous experience with professional help as possible influences on attitudes towards seeking help, owing to the now acknowledged role of emotion in help-seeking (Fishbein & Ajzen, 2010) and the fact that New Zealand's baby boomers have, are presently and will be expected to experience unprecedented levels of mental ill health compared to generations before them. The current study will also capture biographical information including gender and relationship status, ethnicity and age, for their potential role in contributing to variance in the TPB model. This study will seek to determine the association between and contribution of these variables towards the baby boomers' stated help-seeking intentions. The baby boomers are heterogeneous across many demographical variables and the current study expects that for some of these variables, the relationship with attitudes and intentions will vary.

This study aims to extend James and Buttle's (2008) comparison of a group of old and young New Zealanders and their attitudes towards seeking professional help by including preventive measures as a help-seeking option. Preventive options for mental health have been proven to reduce the incidence and therefore prevalence of mental disorders. Given the volume of baby boomers approaching old age, it is envisaged that understanding attitudes and intentions towards preventive interventions will provide information of use for the New Zealand mental health services.

The present research was conducted in one phase which included the development and dissemination of an online and paper-based questionnaire. The instrument's development began with the original questionnaire used in Westerhof's et al. (2008) research, supplied by the research team in the Netherlands, which included TPB measures of PO and PBC as well as intention to engage in preventive and professional help. The questionnaire was then bolstered by additional information including biographical details of interest and relevance to New Zealand baby boomers and a psychometrically valid and reliable measure of emotional distress was also added. Lastly, owing to the dual focus of preventive measures as well as professional, a further question asking preferences towards a variety of preventive options was added.

Hypotheses. The survey was designed to test out the following hypotheses.

Hypotheses relating to baby boomers:

- Hypothesis One. Baby boomers will demonstrate a degree of favourable intent towards both professional and preventive help and attitude towards help-seeking.
- Hypothesis Two. From among the more common mental health disorders in the elderly, depression and substance abuse will receive the highest intention to seek professional and preventive help.

- Hypothesis Three. Gender will influence attitude and intent to help-seek; with men demonstrating less favourable attitudes and intent towards help-seeking.
- Hypothesis Four. Prior contact with professional help will be associated with more favourable help-seeking attitudes (PBC and PO).
- Hypothesis Five. Prior contact with professional help will be associated with higher intention to seek both professional and preventive help.

Hypotheses relating to the Theory of Planned Behaviour:

- Hypothesis Six. Psychological Openness (PO) and Perceived Behavioural Control (PBC) will correlate highly with intention, and contribute the highest amount of variance as predictor variables in intent to seek both preventive and professional help for all four concerns.
- Hypothesis Seven. Relationship status (living with a partner or not) will be shown to be a significant predictor variable in the TPB model.
- Hypothesis Eight. Prior positive contact with a psychological professional will be a significant predictor variable in the TPB model.
- Hypothesis Nine. Level of emotional distress will correlate highly with intention and will be shown to be a significant predictor variable in the TPB model.

Hypotheses relating to the Theory of Planned Behaviour and sub-cohorts within the baby boomers:

- Hypothesis Ten. Tail-end boomers (aged 49-58) will show higher PO and PBC which will significantly correlate with higher intent towards professional help.
- Hypothesis Eleven. Leading-edge boomers (aged 59-69) will have lower PO which will significantly correlate with higher intent towards preventive measures.

The above hypotheses will be tested using general measures of PO and PBC, emotional distress, previous help, demographical information, and intent to use preventive and professional help for depression, anxiety, forgetfulness (dementias) and substance use disorder.

CHAPTER FIVE: METHODOLOGY

A non-probability convenience sample of baby boomers filled out the questionnaire, developed to replicate Westerhof et al.'s (2008) cross sectional study but including alterations to reflect the population under focus. The questionnaire included an attitude measurement containing standard TPB variables of perceived behavioural control (PBC), psychological openness (PO) and intention to seek both preventive and professional help for four mental health problems (depression, anxiety, forgetfulness and substance abuse). Other information included was the additional help-seeking variables of psychological distress and previous contact with professional help. Lastly, demographical information was obtained including age, gender, ethnicity, relationship status, income and education.

Procedure For Obtaining Participants And Data Collection

The survey was constructed for online and face-to-face distribution. The online version was created using SurveyGizmo and was initially issued to the researcher's wider network via email. The researcher also approached a number of New Zealand websites that targeted baby boomers to publicise the web address of the survey and hisbiz.co.nz and walsh.org.nz published information on it. After an interview between the researcher and a journalist, newspaper stories were published in three Auckland community newspapers: the Western Leader (circulation 78,000) and East Coast Bays Courier newspapers (circulation 49,000) both on May 16th 2014 and the North Shore Times Advertiser (circulation 84,500) on May 20th 2014, all articles included the survey's web address. Participants completed the survey online after they had read the information provided on the Participant Information Sheet (Appendix A) after which the full questionnaire followed (Appendix A). The paper version of the questionnaire was distributed at a number of organisations in Hamilton and Auckland, complete with a return-addressed, stamped envelope. The organisations who took it were the Titirangi Library and Glen Eden Library, the Returned Services Associations in

Titirangi and in Glen Eden and a crèche in Glen Eden (all in Auckland). Prospective participants were also approached by the researcher outside a small shopping centre in Hamilton East, Hamilton. This area (and the locations of the organisations above) was selected due to the diverse socio-economic conditions in each. Prospective participants were verbally given information about the research project and if they agreed to participate were then given the questionnaire which took between five and 10 minutes to complete. The researcher was on hand and available to answer any questions the participants had, or to read out any information if necessary. No identifying information was recorded during this interaction and anonymity of the data collected was emphasised. The questionnaire included the Participant Information as the cover sheet and the questionnaire then followed this (Appendix B).

After a two month period of seeking responses, it was noted that the male response rate was much lower than the female response rate (45 of a total of 185). In a targeted effort, male-dominated organisations or employers were approached. These included the NZ Fire Service, a number of West Auckland High Schools - particularly boys' schools, the NZ Police Service and the NZ Army. The researcher was also interviewed on a Radio Live morning talkback show by host Sean Plunkett (to coincide with Men's Health Week). This effort increased male responses from 45 to 118. In total 262 questionnaires were returned, 38 were returned as paper copies and the remainder were completed online. Six responses were deemed invalid and discarded from analysis, the reasons for which will follow shortly.

Participant Characteristics

This non-probability convenience sample consisted of 256 New Zealand adults. The average age of the participants was 58.63 years and ages ranged from 49 to 69 years old (born 1946 – 1965). Across the entire sample there were more females ($n = 138$) than males ($n = 118$). The majority of the participants (85.9%) classified their ethnicity as New Zealand

European or Pākehā with the remaining selecting Māori (6.3%), Chinese (.8%), Indian (.4%) or Other (5.9%). Ethnicities specified as 'Other' included one of each of the following unless otherwise stated: British, Canadian, Croatian European, NZ Pākehā, Pasifika/Pacific Island, South African European, South East Asian Burmese, Caucasian (2), English (2) and Samoan (2). The highest level of education attained was University (51.2%), followed by Secondary or High School (24.2%), Polytechnic (12.1%), Teachers' College (4.7%), Apprenticeship (3.9%) and Other (3.5%). Those who selected 'Other' specified the following as their highest level of education attained (one person per option unless otherwise stated): Wananga, School of Occupational Therapy - UK, RNZAF, NZ School of Pharmacy, LTCL per flute, Karitane nurse, Business College and NZ Registered Nurse (2). The majority of participants stated that they lived with a partner (76.2%), whether they were married (67.2%) or in a de-facto relationship (8.2%), while the rest (23.4%) lived alone, classing themselves as divorced (11.3%), single - never married (5.9%), separated (4.3%) or widowed (1.2%). Of the four participants who chose 'Other' as their relationship status they recorded the following as best depicting their relationship: no longer married, life partners with a woman, single/widowed and divorced, and boyfriend/girlfriend. Of the 246 who included their income bracket (missing 10), the modal household income bracket was \$50,000 - \$100,000 (34.4%).

Compared to the New Zealand Census, the demographical characteristics of this baby boomer cohort were partially consistent with a representative sample of New Zealanders. The ages captured were spread across the cohort evenly and a significant proportion of the group selected the income category of \$50,000 to \$100,000, which reflects Statistics New Zealand's average New Zealand family income prediction of between \$79,256 to \$81,067 (Statistics NZ, 2013b). Around three quarters of respondents were in a relationship or living with someone, broadly mirroring relationship trends and statistics in New Zealand for baby boomers. However the ethnicity statistics highlight an over proportion of NZ European or

Pākehā respondents (85.9% compared to 56% in population), and an under representation of all other ethnicities that make up New Zealand, for example Māori (6.3% v 12% in the actual population). Therefore, despite earlier acknowledging that ethnic differences would influence help-seeking intention and attitudes the low response rate across ethnicities apart from European/ Pākehā means analysis on ethnicity is unable to be undertaken. Overall, the sample also featured a high proportion of University graduates compared to estimates (51.2% v 30%). The potential implications of these two skewed demographic variables on results are covered later in the discussion section.

Leading-edge v tail-end characteristics. Because age is a key focus in this research and previously defined cohorts within the baby boomer group known as leading-edge (aged between 59 and 69) and tail-end boomers (aged between 49 and 58) are the two generational units hypothesised to show differing attitudes, focus now turns to these two groups. Table 1 outlines all demographical data and compares to the two age groups. From the sample, 142 participants were classed in the leading-edge and 114 in the tail-end. The gender split was 64 male and 78 female for the leading-edge sub-cohort, with the majority stating they were in a relationship by choosing either married (69.7%) or in a de facto relationship (5.6%). Tail-enders included a 54 male and 60 female gender split, included 75.4% stating they were in a relationship, whether it was marriage or de facto. Unsurprisingly the older sub-cohort signalled lower educational attainment, however the numbers stating University-level education were still high at 48.6% compared with 54.4% for the tail-enders. There were significantly more Teachers' College graduates in the leading-edge than the younger cohort (7 % v 1.8%). It is unknown whether respondents in the younger cohort may have classed Teachers' College as University, if this was the case educational attainment across both groups would almost be identical in all categories.

Table 1

Demographic characteristics of sample comparing leading-edge and tail-end baby boomers

Characteristic	Tail-enders (49-58 years old)			Leading-edge (59-69 years old)		
	<i>n</i>	%	<i>M</i>	<i>n</i>	%	<i>M</i>
Age	114		53.37	142		62.86
Gender:						
	Female	60	52.6	78	54.9	
	Male	54	47.4	64	45.1	
Ethnicity:						
	Pākehā	93	81.6	127	89.4	
	Māori	11	9.6	5	3.5	
	Chinese	2	1.8			
	Indian			1	.7	
	Other	7	6.1	8	5.6	
	Didn't answer	1		1		
Lives with partner:		86	75.4	109	76.8	
	Married	73	64	99	69.7	
	Defacto	13	11.4	8	5.6	
	Other			2	1.5	
Doesn't live with a partner:		28	24.6	33	23.2	
	Widowed	1	.9	2	1.4	
	Separated	6	5.3	5	3.5	
	Single-never married	11	9.6	4	3.8	
	Divorced	9	7.9	20	14.1	
	Other	1	.9	2	1.4	
Education:						
	High School	29	25.4	33	23.2	
	Teachers' College	2	1.8	10	7	
	University	69	55.4	69	48.6	
	Polytechnic	14	12.3	17	12	
	Apprenticeship	5	4.4	5	3.5	
	Other	1	.9	8	5.6	
Income:						
	0 - \$50k	21	18.4	31	21.8	
	\$50,001 - \$100k	37	32.5	51	35.9	
	\$100,001 - 150k	29	25.4	31	21.8	
	\$150,000 +	23	20.2	23	16.2	
	Missing	4	3.5	6	4.2	

The older cohort, on average, stated their total family income was lower than the younger cohort with 57.7% of respondents choosing either \$0 - \$50,000 or \$50,001 to \$100,000 options compared to 50.9% of the younger cohort choosing the same two categories. In comparison 45.6% of the younger cohort chose over \$100,000 as total household income compared to 38% of the older cohort. It is possible that these numbers may be influenced by those in the older category being more likely to have retired or have reduced their working commitments, compared to the younger cohort.

Ethical Considerations

The study was conducted in accordance with the Massey University Human Ethics Committee Guidelines. After a review of the initial application submitted the research was deemed low-risk and was therefore not reviewed by one of the University's Human Ethics Committees. Completion of the survey was regarded as informed consent for both the online and paper versions. Participants were given the right to decline to answer any questions they wanted to, however there were very few who chose not to answer the majority of the questions on the survey. The survey did cover material relating to current emotional distress, which may have been a sensitive topic for respondents to consider. As the responses were anonymous, it was assumed that if participants did not want to be connected to their responses, they could answer freely and not feel self-conscious. Also, participants were also encouraged to make contact with the researcher, should any aspect of the questionnaire raise concern. No contact was made from respondents, or prospective respondents throughout the data collection process. Regarding the question about disclosure of past psychological problems and experiences with professional psychological help, a similar ethical approach to the above was made. Finally, respondents were given the opportunity to submit their contact details should they wish to receive a summary of the final findings. Bearing this in mind, they were informed that should they choose to do this, they had the right to withdraw from the

study up until the data began to be coded. No participants who returned the survey with contact details chose to withdraw from the study.

Measures And Their Connection To The TPB Model/Help-Seeking

The instrument used in this research was developed into three sections and used a variety of existing TPB measures, with the addition of a number of items as extensions to the TPB model. The instrument took between five to 10 minutes to complete and can be found in Appendices A and B (online and paper versions are identical with the exception of minor wording differences due to the mode of delivery i.e. ‘tick’ options for paper compared to ‘choose’ for the online version). The cover page outlined the purpose of the study, how data would be safely stored, the anonymity of participants and the voluntary nature of participation in the study. The low risk ethics information was also included on this page, alongside contact information for the researcher should the participant have had any questions or comments on the research and contact information for the Director of Research Ethics at Massey University.

Section One. Included items measuring the behavioural intention of participating in preventive courses and seeking professional psychological help for four separate mental health concerns common in older age: depression, anxiety, forgetfulness and substance abuse. An adaption of the Intention to Seek Counselling Inventory (ISCI, Cash, Begley, McCown, & Weise, 1975; Cepeda-Benito & Short, 1998) was used to capture this information. For professional - participants were asked whether they would discuss their feelings connected to each of the issues outlined above and then if they answered yes, they were asked to rank how likely it would be they would speak to a ‘professional’, if faced with each concern, on a 5-point Likert scale (1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All). For preventive - participants were asked whether they would be interested in courses that teach them how to deal with each of the issues outlined above and if they answered yes,

they were then asked to rank the likelihood of taking a course on a 5-point Likert scale (as described above). For both preventive and professional measures, strengths of intention to perform the behaviour of interest were included in this research (respective Cronbach's alphas achieved were .85 and .84). Owing to the research focus of help-seeking by baby boomers for mental health concerns, this study has captured these intentions via Likert scale, otherwise known as a continuum scale, implying that the stronger intention baby boomers have towards either measure is a strong indication of future behaviours. Furthermore, intention has been defined subjectively by using wording such as "how likely you would be to discuss these feelings with ... a professional" and for preventive measures "please rate how likely it would be that if you were currently dealing with these issues you would consider taking a course (preventive)". Distinguishing intent in this way has been seen to be a better predictor of behaviour, as it is perceived individuals take into account a wider range of elements, including those related to personal control over behaviours as these statements are made (Sheppard, Hartwick, & Warshaw, 1988). Previous research shows that a stronger relationship has been found between subjective estimates and behaviour ($r = .57$) than intentions and behaviour ($r = .49$). The present study perceives engaging in professional and preventive measures for psychological concerns as behaviour under high volitional control for most baby boomers in New Zealand. Therefore, despite the acknowledgement that "the performance of most (behaviours) depends at least to some degree on such non-motivational factors as availability of requisite opportunities and resources" (Ajzen, 1991, p. 182), it is perceived that in the context of help-seeking for mental health concerns in New Zealand, subjective estimates will be a good predictor of behaviour.

An assumption Ajzen and Fishbein (2010) ask TPB researchers to consider is that if the behaviour is defined specifically, according to time, target, action and context it can be better predicted. They propose that the theory is applicable to very specific instances (seeking

help from a psychologist, for suspected Major Depression, within two weeks from detecting symptoms) but also to general circumstances (seeking professional help for suspected psychological concerns). Despite this guidance, concerns exist about the practical utility of information gathered via the very specific route (Ajzen, 2011). Therefore the generality of the intention design in this research, as outlined above, has been selected as an appropriate and also specific measure to predict and explain behaviour within this cohort. Furthermore, because the social behaviour under focus is help-seeking for mental health, participants were asked about their intentions of speaking to a “professional” for each of the four problems, but were also asked to rank other options including friends, family, GP or other (it was made clear on the survey that the term professional referred to individuals who have been trained to deal with mental health problems (e.g., clinical psychologists, psychiatrists, social workers)). This strategy was chosen as it allowed respondents to rank their preferences between different behaviours, mirroring a real-life scenario (Putte, Hoogstraten, & Meertens, 1996).

In this section a measure of prior help-seeking behaviour was added to determine the effects of this prior help-seeking on further decisions to seek psychological help. To achieve this respondents were also asked in this section that if they had had a mental health problem in this past, whether they had ever sought help for it from a professional and to rate their satisfaction with the help they received on a 5-point Likert scale (1 = Very Helpful 2 = Helpful 3 = Neither helpful or not helpful 4 = Not Helpful 5 = Not Helpful At All). Positive ratings of helpfulness have been associated with higher intentions to seek psychological help in the future (Schomerus et al., 2009a). In addition to the items outlined above participants were asked an open-ended text question about what they would advise a friend or family member to do if they approached them with mental health concerns, the results from this question will be used to expand on the quantitative analysis in the discussion section. Lastly they were asked to outline which preventive measures (other than a course) they would

consider if they thought they were about to or were experiencing psychological distress. They could select one or more options from: social group, community group, exercise, reading books, reading online material, audio programme (e.g., CD, mp3), online programme, none, or 'other' where the participant could write additional options to the list provided. The findings from this question will be used in conjunction with the findings regarding the intentions towards preventive psychological measures identified within the cohort.

Section Two. The Hopkins Symptom Checklist-21 (HSCL-21, Deane, Leathem, & Spicer, 1992) was used as a measure to capture current emotional distress. It is a 21-item self-report inventory designed to assess common psychological symptoms and is a short form of the Hopkins Symptom Checklist (HSC, Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974). Participants are asked how often they experience a number of symptoms over the past seven days, for example "Difficulty in speaking when you are excited" or "Trouble remembering things". Items are rated on a 4-point Likert scale from 1 = not at all to 4 = extremely. The total score indicates the participant's level of general psychological distress, with higher scores indicating a higher level of distress. The HCL-21 achieved a Cronbach's alpha coefficient of .91 in this research, indicating excellent internal consistency, and construct and concurrent validity has been supported for the measure (Deane et al., 1992). The HCL-21 was also chosen due to its brevity and because it maintains its factor structure across ethnically diverse groups (Cepeda-Benito & Gleaves, 2000). While the HCL-21 has a reported three-factor structure of performance difficulty, somatic distress and general feelings of distress (D. Green, Walkey, McCormick, & Taylor, 1988), this research will focus on the Total Distress score only, where higher results indicate higher distress.

Section Three. Included questions concerning attitudes towards seeking professional psychological help and the Attitudes Towards Seeking Professional Psychological Help Scale-Short Form (ATSPPHS-SF, Fischer & Farina, 1995) was chosen to represent this

construct. It is a 10-item, 4-point Likert scale (1 = Disagree 2 = Partly Disagree 3 = Partly agree 4 = Agree) version of Fischer and Turner's (1970) 29-item questionnaire, which assessed general attitudes towards seeking therapeutic help for psychological concerns. It is free to use and requires no permissions to administer. Five items are reverse scored so that higher scores reflect more positive attitudes (the total range of possible scores is 10 to 40). Examples of statements that participants were asked to respond to regarding whether they agree with them or not were: "If I believed I was having a mental breakdown, my first thought would be to get professional attention" and "Considering the time and expense involved in counselling, it would have doubtful value for a person like me". The short version has been found to achieve internal consistency ranging from .82 to .84, one month test-retest reliability of .80 and a correlation of .87 with the longer version, suggesting both instruments are identifying similar constructs (Elhai et al., 2008; Fischer & Farina, 1995). Elhai et al (2008) also tested the ATSPPHS-SF for validity and reliability on medical patients and it achieved a coefficient alpha of .78. In the current research this instrument was chosen due to its strong psychometric properties, including criterion validity with a similar age profile to the current sample (Robb et al., 2003) and also because of its brevity; the shorter version is considered "less obtrusive" than the longer version (Fischer & Farina, 1995, p. 368). The total scale achieved a Cronbach's alpha coefficient of .82, indicating excellent internal consistency and the two subscales of PO and PBC, .74 and .76 respectively, indicating good internal consistency.

Attitude is a key construct within the TPB model and within help-seeking literature. The three constructs that make up Ajzen and Fishbein's attitude towards seeking help for psychological concerns are 'psychological openness', 'indifference to stigma' and 'perceived behavioural control'. The original ATSPPHS has been used in multiple TPB studies and represents four factors: need for help, stigma tolerance, interpersonal openness and

confidence in mental health staff, but due to the unreliable factor structure, total scores reflecting a general orientation toward help-seeking for psychological help are generally used (Fischer & Farina, 1995). As mentioned above the short form has been found to correlate with the longer version indicating a one-factor model, but also produces a two-factor model closely reflecting two of the TPB constructs; Openness to Seeking Treatment for Emotional Problem (PO) and Value and Need in Seeking Treatment (PBC). With a sample of college students Elhai et al. (2008) identified a moderately good fit through a confirmatory factor analysis $\chi^2(34, n=394)=84.57, p < 0.001$, testing this two-factor model. Despite the TPB construct of IS not being represented in this two-factor model, the ATSPPH-SF has been found to correlate (.41) with a Stigma Scale for Receiving Psychological Help (SSRPH; $p < 0.001$) with medical patients, demonstrating construct validity (Elhai et al., 2008). Through these findings it can be generalised that participants who score higher on the ATSPPH-SF (Fischer & Farina, 1995) are more likely to seek professional help and have decreased stigma toward mental health. As outlined previously, IS has performed as the weakest variable in TPB research to date, therefore the focus of the present research will be with the two other constructs within the general attitude measure. With regards to control, as Ajzen (1991) proposed, it is often difficult to determine how much actual control a person has over performing behaviour. The current study has chosen to operationalise control by assessing the confidence in performing the behaviour (the PBC/Value and Need in Seeking Treatment construct identified in the ATSPPHS-SF). As outlined earlier it is perceived that New Zealanders can access New Zealand's mental health system with relative ease. Therefore, with regards to control barriers like time and money, the current study will not follow Ajzen's (1991) TPB approach strictly as external barriers to mental health service utilisation have not been identified in the measure. However, in a review of the PBC construct Ajzen (2001) identified studies that had investigated the factor structure of the PBC and found that self-

efficacy always improved the prediction of intentions. In contrast, "controllability items predicted intentions only when combined with self-efficacy items" (Ajzen, 2002, p. 675).

What this finding should not detract from is that separate control elements have been found to be highly correlated and reliability has been found to increase when a mixture of efficacy and controllability items are used. Given the state of the New Zealand mental health system, as outlined previously, a decision was made to focus on generic aspects of control, compared with specific elements. Analysis will follow the results section regarding this choice and its impact on findings.

Section Four. Included six biographical and demographical questions asking participants to include their age, ethnicity, relationship status, highest level of educational attainment and total household income.

Design Strategy

Descriptive statistics are presented alongside relevant correlation and parametric *t*-tests to identify statistical differences in intentions to seek either preventive or professional help across the four psychological areas of concern. Independent samples *t*-tests were used to test differences in intent and attitude within the baby boomer cohort and Pearson's Chi-Square was used to analyse differences relating to non-parametric categorical data including gender and whether they had seen a professional in the past for psychological concerns. Univariate statistics for non-continuous data and open-ended answers are then summarised and presented in graph and table format.

The TPB is suited to multiple regression analysis, where the intention towards the behaviour is used as the dependent variable. Using the Statistical Package for Social Sciences (SPSS) Version 22.0 for Windows, a series of hierarchical regression analyses were undertaken; reflecting the causal structure of the TPB model, a variable entry sequence was

used. First socio-demographic variables (age, relationship status and gender) were entered as they are classed as causally prior to TPB variables, the TPB variables of PBC and PO were then entered at step two, followed by the extended model variables of emotional distress and satisfaction with previous professional help. Entered separately, it is possible to see any effect on intentions in addition to the TPB variables. Significance tests in all analyses were two-tailed, with an alpha level of .05. In total, four hierarchical multiple regression models were undertaken to illustrate intentions to seek professional help for the four mental health concerns outlined.

It was also hypothesised that two distinct sub-cohorts would emerge from within this data set: leading-edge (aged 59-69) and tail-end (aged 49-58) and intent and attitude scores would emerge relating to these sub cohorts. The data set was split by this age distinction and independent samples *t*-tests were run comparing means across relevant variables. On nominal data, Pearson's Chi-Square tests were run to analyse any statistically significant differences between these two groups. To further probe sub-cohort attitudinal differences a multivariate analysis (MANOVA) was run comparing three age groups (49-55, 56-62, 63-69) across all dependent and independent variables.

All of the variables were normally distributed except the HCL-21 which resulted in positive skewness, indicating participants reported slightly lower levels of emotional distress than average. Preliminary analyses were conducted using a log-10 transformation on the HCL-21 score and the results were virtually identical to the raw data, therefore no transformation was made. The distribution of the ATSPPHS-SF subscales of PO and PBC both resulted in negative skewness, however, considering the sample size ($N = 256$) the central limit theorem was taken into consideration and the assumptions of normality of the data on these two scales deemed acceptable (Field, 2013). The scores on the help-seeking intention scale were negatively skewed, indicating a higher number of positive results,

however skewness never exceeded -1.0. Testing for kurtosis, intention results never exceeded three, indicating a platykurtic distribution, meaning results were widely distributed around the mean. Of the demographic variables, relationship status was scored nominally and contained more than two categories, meaning difficulties in using it for multiple regression analysis. To counter this, dummy variables were entered and the two variables used were “living with a partner” and “living without”.

Assumptions for multiple regression were assessed using the guidelines developed by Tabachnick and Fidell (2013). Multicollinearity and tolerance statistics were tested across all dependent and independent variables with no issues arising from this testing.

Multicollinearity was not perceived to be a problem with tolerance statistics ranged from .984 for Living With Someone or Not to .562 for PO, well above the recommended number of .1 and all VIF statistics were between 1 and 2, where values over 10 are perceived as indicators of multicollinearity (Field, 2013). Residual scores across participants were sufficiently independent.

Data screening

The data was screened for any problematic items and questionnaires that were deemed invalid. The criteria chosen to exclude questionnaires was if the respondent failed to include their age, or if there was a high number of missing responses, for example at least one section of the questionnaire included only nil responses. Of the 262 surveys returned, six were deemed invalid as they either recorded an age outside of the baby boomer specified age range (between 49 and 69), failed to include their age entirely, or they did not complete significant portions of the questionnaire. These questionnaires were removed from the data sample. For the rest of the analysis pairwise deletion was used to manage the remaining responses containing a small number of unanswered responses. Due to using pairwise deletion to manage the data and because one of the multiple regression predictor variables “previous

help” included 116 eligible responses, this was the total number of cases used in the multiple regression from a total $N = 256$. This sample size meets the multiple regression threshold as outlined by Tabachnick and Fidell (2013), assuming alpha of .05. The following equation was used to ascertain sample size: $n \geq 50 + 8(m)$, with m indicating number of predictor variables in each equation: $n \geq 50 + 8(7)$ equal 106 samples, or more, required (actual samples used $n = 116$).

A key issue which prevented hierarchical multiple regression being used on the preventive intention arose at this point in data analysis. Owing to the number of predictor variables in the equation (seven) and due to utilising the appropriate pairwise deletion method, the sample size in the preventive equations reduced to eighty samples. With a sample this small, detecting adequate power in the results is jeopardised, as is the validity of the results considering 95% confidence intervals would be employed. Therefore multiple regression was not performed on the preventive results.

CHAPTER SIX: RESULTS - UNIVARIATE

Hypotheses being tested in this section are linked to Baby Boomers:

- Hypothesis One. Baby boomers will demonstrate a degree of favourable intent towards both professional and preventive help and attitude towards help-seeking.
- Hypothesis Two. From among the more common mental health disorders in the elderly, depression and substance abuse will receive the highest intention to seek professional and preventive help.
- Hypothesis Three. Gender will influence attitude and intent to help-seek; with men demonstrating less favourable attitudes and intent towards help-seeking.
- Hypothesis Four. Prior contact with professional help will be associated with more favourable help-seeking attitudes (PBC and PO).
- Hypothesis Five. Prior contact with professional help will be associated with higher intention to seek both professional and preventive help.

Univariate Descriptive Statistics, Correlation and Parametric *t*-tests For Continuous Variables For The Whole Sample

Table 2 displays the set of descriptive statistics for all of the continuous variables used in the regression analyses including mean and standard deviation (age is not included, as it has been captured in the previous section).

Table 2
Descriptive statistics for all continuous variables

Variables	N	M	SD
PI: Depression	247	3.51	1.312
PI: Anxiety	230	3.44	1.346
PI: Forgetfulness	211	3.38	1.386
PI: Substance Abuse	213	3.79	1.269
Prev Intent: Depression	144	3.96	.900
Prev Intent: Anxiety	155	4.00	.912
Prev Intent: Forgetfulness	152	4.00	.869
Prev Intent: Substance Abuse	152	3.99	.949
Previous Help	116	4.11	1.028
HCL-21	254	32.55	8.673
PO	254	15.16	3.120
PBC	254	15.20	3.388

PI = Professional Intention, Prev Intent = Preventive Intention, HCL = Hopkins Checklist-21, PO = Psychological Openness, PBC = Perceived Behavioural Control

It was hypothesised that baby boomers will demonstrate a degree of favourable intent towards both professional and preventive help options. Hypothesis one was therefore supported as the current sample indicated a degree of favourable intent to seek professional help (with an average across the four disorders of $M = 3.53$, indicating a ‘likely’ more than a ‘neutral’ response) and preventive help ($M = 3.99$, indicating a ‘likely’ response) for the prescribed list of psychological complaints. Furthermore, noting the standard deviation level across each intent (on average around 1) it is clear some participants held strong (either negative or positive) intentions towards help-seeking for mental health concerns. It was also hypothesised depression and substance abuse would be the two areas New Zealand baby boomers in New Zealand would be more likely to seek help for compared to forgetfulness and anxiety. Substance abuse reported the highest mean intention ($M = 3.79$, $SD = 1.269$) indicating a neutral to likely intent to discuss this concern with a professional, followed by depression ($M = 3.51$, $SD = 1.31$), anxiety ($M = 3.44$, $SD = 1.34$) and then forgetfulness (M

= 3.38, $SD = 1.38$) indicating closer to neutral for likelihood of speaking to a professional.

These results partially support hypothesis two that depression and substance abuse would receive the highest professional intention ratings. Respondents in the current study indicated they were more likely than not to seek help from a professional for each of these four complaints.

Paired t -tests (based on mean professional intention ratings for each of the problems outlined in the research) showed significant differences between intent to seek professional help for several of the psychological disorders outlined and the results can be seen in Table 3.

Table 3
Paired t-tests for intention towards professional help

Variables	M	SD	t	df	$Sig.$
Depression - Anxiety	3.55	1.313	1.606	225	.110
Depression – Forgetfulness	3.60	1.278	2.630	207	.009*
Depression - Substance Abuse	3.56	1.289	-2.657	208	.008*
Anxiety – Forgetfulness	3.51	1.340	1.523	202	.129
Anxiety – Substance Abuse	3.46	1.337	-4.206	203	.000**
Forgetfulness – Substance Abuse	3.37	1.396	-5.374	190	.000**
Substance Abuse	3.81	1.265			

*correlation is significant at the .01 level (2-tailed) **correlation is significant at the .0001 level (2-tailed)

Notably, between depression and forgetfulness ($t(207) = 1.60, p < .009$), depression and substance abuse ($t(208) = -2.65, p < .008$), substance abuse and anxiety ($t(203) = -4.20, p < .00003$) and substance abuse and forgetfulness ($t(190) = -5.37, p < .0000002$). These results indicate that intention towards seeking professional help for depression ($M = 3.51, SD = 1.312$) is significantly stronger compared to that for forgetfulness ($M = 3.38, SD = 1.386$), and intent towards professional help for substance abuse ($M = 3.79, SD = 1.269$) is significantly stronger than that for depression ($M = 3.51, SD = 1.312$), anxiety ($M = 3.44, SD = 1.346$) and forgetfulness ($M = 3.38, SD = 1.386$). Indicating that participants showed a

significantly higher intent to seek professional help for substance abuse compared with all three other psychological complaints and depression compared with forgetfulness, continuing partial support for hypothesis (two) for professional help.

In comparison, responses on intent to seek preventive help resulted in almost identical and higher mean intentions overall across all four areas of focus. The strength of intention was captured for those who chose yes to the screening question (for depression this was 56.25% of the total sample, anxiety 60.54%, forgetfulness 59.37% and substance abuse 59.37%). Both anxiety and forgetfulness achieved an identical mean of ($M = 4.00$) with standard deviations of ($SD = .912$) and ($SD = .869$) respectively, followed closely by substance abuse ($M = 3.99$, $SD = .949$) and depression ($M = 3.96$, $SD = .900$). Respondents in the current study, therefore, indicated they were likely to seek preventive help across the four psychological areas of interest, also supporting hypothesis two. In general, a preventive course was viewed positively by over half of the sample relating to each psychological concern. Paired t -tests (based on average intention ratings for each of the problems outlined in the research) showed no significant differences between mean intentions to seek preventive help.

To explore whether the strength of intention between professional and preventive measures was significantly different across the four disorders, paired t -tests were carried out comparing the professional and preventive means and the results are shown in Table 4.

Table 4
Paired t-tests for intention towards professional help and preventive help

Variables	M	SD	t	df	Sig
Depression	-.273	1.268	-2.572	142	.011*
Anxiety	-.253	1.243	-2.495	149	.014*
Forgetfulness	-.392	1.295	-3.617	142	.00**
Substance Abuse	.007	1.021	.082	141	.935

**correlation is significant at the .02 level (2-tailed) **correlation is significant at the .001 level (2-tailed)*

Significant differences were found between three of the four areas indicating participants had a stronger intent towards preventive measures for depression, anxiety and forgetfulness compared with professional help for the same concerns. Participants reported a non-significant difference between intention towards prevention and professional help for substance abuse.

The measure used in the current research to capture emotional distress was the HCL-21, and the responses indicated that participants were experiencing relatively low levels of emotional distress with an overall mean score of 32.55 ($SD = 8.473$). This result will be used shortly in the hierarchical multiple regression equations as a predictor variable. Correlational information, comparing it and all other variables in the TPB model also follows shortly, preceding the multiple regression analysis.

Scores on the two attitude measures (PO and PBC) that combine to make the ATSPPHS-SF were distributed evenly around a shared midpoint of 16 and separate means of 15.16 (PO) and 15.20 (PBC), combining to give a total ATSPPHS-SF mean score of 30.24 ($SD = 5.49$). This result indicates a positive attitude towards help-seeking, supporting hypothesis one that baby boomers will have a positive attitude towards seeking help. Of the ATSPPHS-SF subscales specifically, PO had a mean of 15.16 within a range of 5 – 20, suggesting respondents rated themselves considerably more psychologically open than not. Similarly, the PBC measure achieved a mean of 15.20, within a range of 6 – 20 suggesting respondents see more value and need for seeking psychological help for concerns, than not. Correlational information, comparing these subscales and all other variables in the TPB model follows shortly, preceding the multiple regression analysis.

Differences Between Males And Females

It was hypothesised that males would indicate a less favourable attitude and intent towards seeking help for mental health concerns (hypothesis three). In order to examine the gender differences within the data set, independent *t*-tests were conducted between the males' and females' responses to intention to seek professional and preventive help and scores on the PO and PBC subscales of the ATSPPHS-SF. Despite females scoring more positively on every measure with higher means, only one of these differences was statistically significant: females reported a significantly higher intent towards seeking professional help for substance abuse problems ($M = 3.97, SD = 1.202$), than males ($M = 3.56, SD = 1.319$). This difference of .417, BCa 95% CI [.089, .747], was significant $t(211) = 2.409, p = .017$, however the Cohen's *d* ($d = .32$) effect size calculation failed to produce an effect size over 'small'. Therefore there was little difference in attitude and intention to seek professional help between women and men, contradicting previous research and partially not supporting hypothesis three.

However, returning to the difference between the professional and preventive intention, when comparing percentages of those answering yes or no to whether a preventive course appeals across the four disorders, yes was selected 65.65% of the time on average by females compared to 49.52% by males, indicating a much stronger interest in preventive measures by females. To understand whether the differences between these categorical variables were statistically significant, one-tail Pearson Chi-Square tests of association analyses were undertaken and the results can be seen in Table 5. The results reveal that males selected 'yes' for preventive courses across all four concerns significantly less than females. However, while all associations were classed as statistically significant, the phi effect sizes were weak, for example: depression ($\phi .197, p < .002$), anxiety ($\phi .145, p < .046$), forgetfulness ($\phi .160, p < .012$) and substance abuse ($\phi .140, p < .028$). These results indicate the difference

between women and men in considering preventive options for a range of psychological complaints is highly significant, partially supporting hypothesis three, but the strength of these relationships is not particularly strong. Gender as a contributing predictor variable, will also be assessed shortly for its contribution to variance within the TPB model. In summary, there was little difference between the genders with regards to attitude and intention to seek professional help for mental health complaints with females' results slightly and insignificantly higher on all measures, however females were more likely to consider preventive options than males.

Table 5
Preventive course considered between male and female

	Gender	Would consider <i>n</i> (%)	Pearson Chi-Square		
			χ^2	<i>df</i>	<i>Sig.</i>
Prev Intent: Depression	M	53 (44.9%)	9.899	1	.002**
	F	89 (64.5%)			
Prev Intent: Anxiety	M	58 (49.2%)	6.143	1	.046*
	F	89 (64.5%)			
Prev Intent: Forgetfulness	M	57 (48.3%)	6.321	1	.012*
	F	90 (65.2%)			
Prev Intent: Substance Abuse	M	59 (50%)	4.803	1	.028*
	F	89 (64.5%)			

Prev Intent: = Preventive Intention, **p* <.05, ***p* <.005

Differences Between Those Who Had Received Professional Help Or Not

Of the 116 respondents who had sought help in the past, the mean satisfaction rating was ($M = 4.11$, $SD = 1.028$), indicating respondents found the previous help 'helpful'. This result will be used shortly in the hierarchical multiple regression equations as a predictor variable to potentially explain variance. Correlational information, comparing it and all other variables in the TPB model, also follows shortly and precedes the multiple regression

analysis. In order to examine group differences between respondents who have received professional help in the past and those who have not (hypothesis four and five), independent samples *t*-test were undertaken to inspect differences in relation to intention and attitude. Descriptive statistics including mean, SD and *t*-tests are all seen in Table 6. The hypotheses that baby boomers with prior contact with a professional will have more favourable help-seeking attitudes (PBC and PO) and higher intention to seek both professional and preventive help are supported as means across all measures are greater for the group who had sought help. However, in relation to intention, statistically significant differences were only found between pairs relating to intention towards professional not preventive help, therefore only partially supporting hypothesis five, and a “medium” effect (compared to “small”) was found on only one of the paired *t*-tests: intention for professional help for anxiety ($d = .531$, $r = .256$). Comparing those who had sought help with those who had not for differences in attitude, statistically significant differences were found between both PO and PBC scales. Thus, hypothesis four, which stated that those who had experienced previous help with psychological issues would report with higher attitudes and intent towards seeking help for mental health concerns was partially supported with regards to attitude and professional intention.

A post-hoc analysis was carried out to examine group differences between those who stated that they had had psychological concerns in the past and those who had not, in relation to intention, attitude and emotional distress. Independent sample *t*-test analyses were undertaken and found that statistically significant differences existed between all pairs except for preventive help for forgetfulness and substance abuse. The influence of these results and this variable on intent to seeking help will be covered in the discussion section alongside other key research variables.

Table 6

Descriptive statistics of those who had sought professional help and those that had not, and independent t-tests between them

	Prev help	M	SD	Independent t-test					
				M diff.	Lower	Upper	t	df	Sig.
PI: Depression	Y	3.77	1.252	.477	.152	.802	2.894	245	.004**
	N	3.29	1.328						
PI: Anxiety	Y	3.81	1.222	.691	.352	1.031	4.011	228	.000***
	N	3.12	1.371						
PI: Forgetfulness	Y	3.62	1.278	.443	.070	.817	2.338	209	.020*
	N	3.18	1.447						
PI: Substance Abuse	Y	4.06	1.024	.498	.170	.827	2.990	208. 265	.003**
	N	3.56	1.404						
Prev Intent: Depression	Y	4.06	.894	.238	-.059	.536	1.583	142	.116
	N	3.86	.897						
Prev Intent: Anxiety	Y	4.11	.930	.233	-.055	.521	1.596	153	.112
	N	3.88	.881						
Prev Intent: Forgetfulness	Y	4.01	.864	.026	-.253	.306	.186	150	.852
	N	3.99	.880						
Prev Intent: Substance Abuse	Y	4.13	.864	.263	-.040	.565	1.713	150	.089
	N	3.86	1.00*						
PO	Y	15.96	3.049	1.464	.710	2.218	3.825	252	.000***
	N	14.49	3.031						
PBC	Y	15.86	3.148	1.224	.396	2.053	2.911	252	.004**
	N	14.64	3.491						

*Prev help: sought professional psychological help, M diff: Mean difference, PI: Professional Intention score, Prev Intent: Preventive Intention score, PO: Psychological Openness, PBC: Perceived Behavioural Control, *correlation is significant at the .01 level (2-tailed), **correlation is significant at the .005 level (2-tailed), ***correlation is significant at the .0001 level (2-tailed)*

In summary, New Zealand baby boomers demonstrate a favourable intent to seek professional help, a preventive course was also viewed positively by well over half of the

sample, with the majority indicating 'likely' with regards to intent for each of the concerns under focus and overall attitude towards seeking help, as captured by the ATSPPHS-SF, was very positive. These three findings combine to provide support for hypothesis one. For professional help, intention was higher for substance abuse and depression, compared to forgetfulness and anxiety, for preventive help intention results were similar across all four disorders, partially supporting hypothesis two. Current emotional distress levels indicated a medium to low level of distress across the whole sample. Comparing groups within the sample: men and women were relatively similar across all measures with the only two significant differences found between the two groups being: the intent towards seeking professional help for substance abuse (where females were more likely to seek this help) and preventive intention (where women were significantly more likely to seek preventive help for all four disorders). These results provide evidence to partially support hypothesis three. Those who had experienced professional help for psychological issues in the past rated their experiences very highly, and when comparing this group with those who had not seen professional help in the past, attitude was more positive for those who had had professional psychological experience, across both scales of PO and PBC, supporting hypothesis four. Intention towards professional help was significantly higher for those who had experienced professional help (anxiety in particular), but not preventive help, partially supporting hypothesis five.

Univariate Statistics For Non-Continuous Variables

Statistics for relationship status, age and gender have already been described. 122 of respondents had had psychological concerns in the past and of these, 116 had sought help from a psychologist. Of the entire sample therefore 45% had previously had contact with professional services for mental health concerns. Figure 3 shows the range of previous complaints experienced by the group with depression ($n = 41$), anxiety and depression ($n =$

29) and anxiety ($n = 16$) featuring as the top three psychological concerns help was sought for.

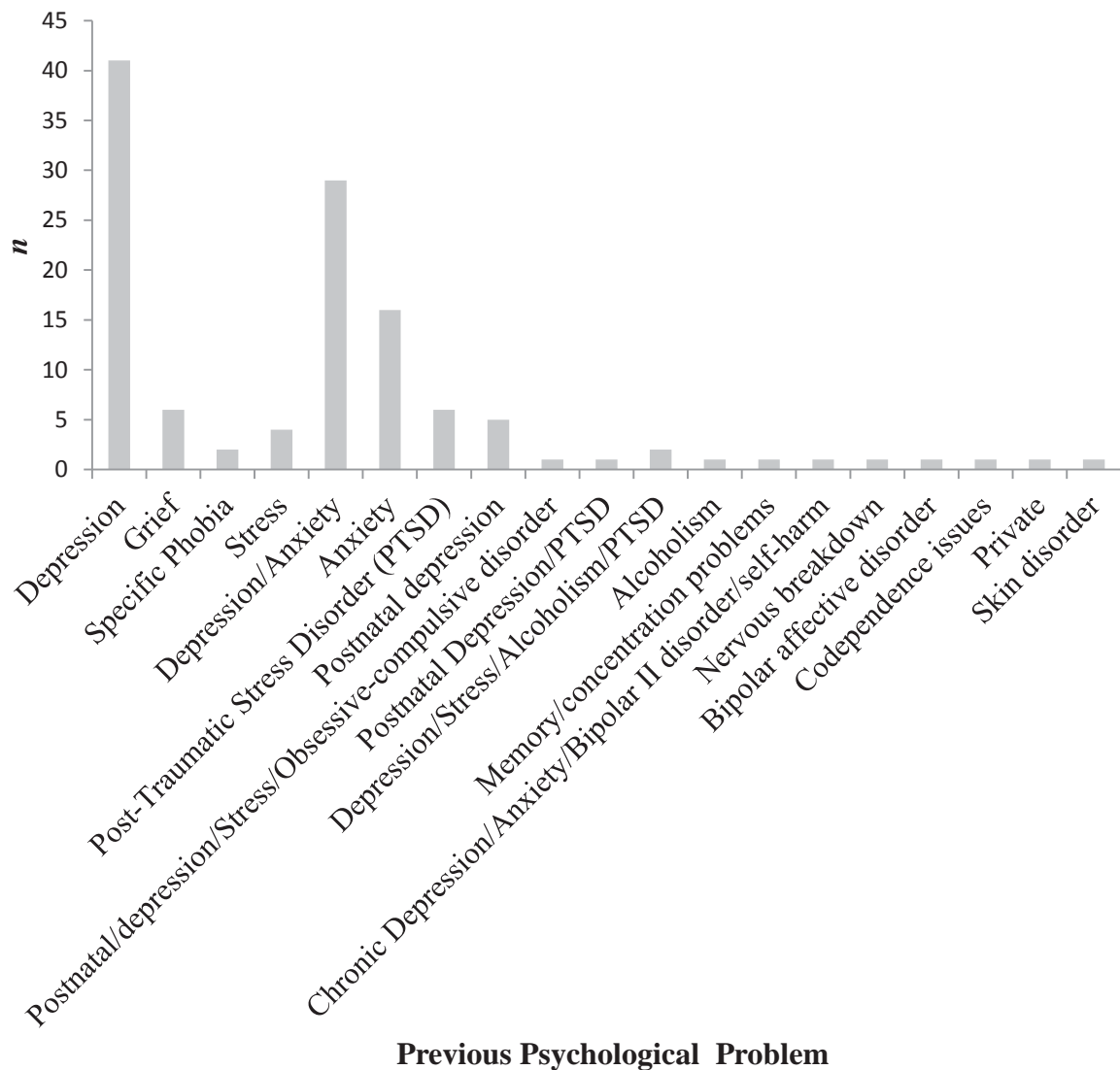


Figure 3. Previous Psychological Problems recorded by participants.

Alongside the strength of intention for preventive measures, survey respondents were presented with a list of preventive options for consideration (for example books or exercise) and asked whether they would consider any if faced with possible psychological concerns (they could choose as many as they liked). The results of this question can be seen in Figure 4. Only a small number of participants ($n = 8$) selected ‘no’ to any preventive measures. As

outlined in the previous section respondents were asked would they consider a preventive course, in relation to each of the four psychological concerns, and on average this was answered yes 57.5% of the time. In comparison, this question on preventive options generated a considerably more positive response than the earlier one. Exercise was selected by 81.64% of respondents ($n = 209$), books by 66.40% ($n = 170$), reading online material by 64.06% ($n = 164$) and joining a social group by 35.15% ($n = 90$). There is a possibility of

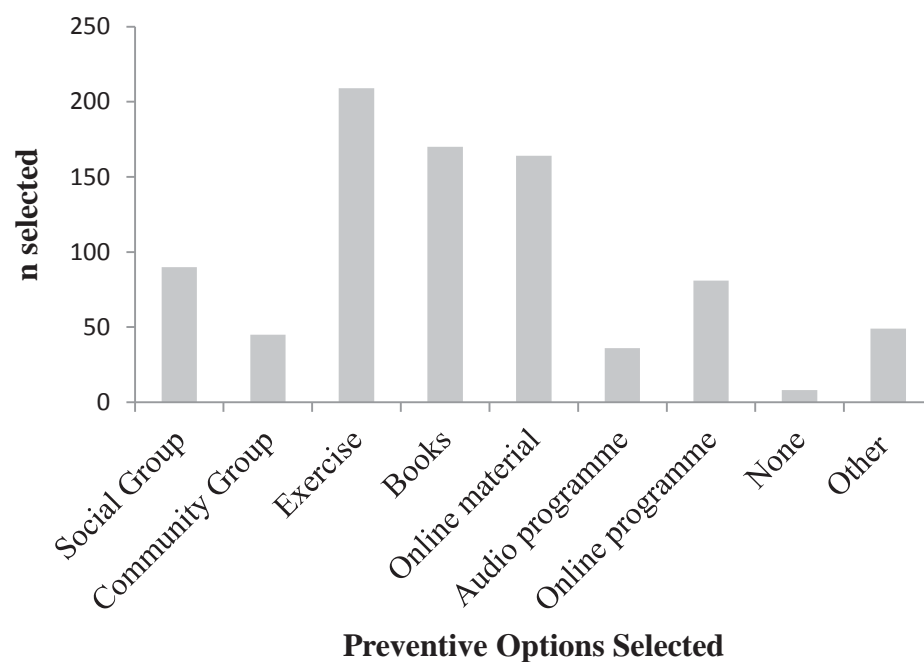


Figure 4. Preventive options selected by participants.

overlapping constructs with regards to the online programme option in this question (selected by 31.64%) and the overall preventive intention question, however as the responses from this question will not be used in the multivariate analysis, this issue is inconsequential other than whether its relatively low response rate, in comparison to the other options, was influenced by the earlier question. Of the 45 ‘other’ responses: 10 opted to speak to a professional such as a counsellor or psychologist, five to friends and five to their GP. Of the remaining 25, the responses provided were: meditation (6), diet (3), prayer (2), exercise (2), creative pursuits

(2), immediate family who have experienced it (2), keeping busy (2) and one each for support group, employee provided support, gardening, whānau group, classical music, audio books, move away from people and alternative remedies. These results will be considered in combination with the correlation and multivariate analysis, in the discussion section. Respondents were also asked what they would recommend a friend or family member do if they contacted them for help for their own personal psychological problems. The most common responses were GP (32.8%), professional help (30.7%) and talk to them and professional help (25.3%). All responses with valid *n* and percentages can be viewed in Appendix C.

In summary, the current sample contains of a high percentage of those who are either experiencing or have experienced psychological concerns, 49.45%. Rates of depression, anxiety and anxiety and depression were the most common psychological disorders faced by this group. When faced with a list of preventive options for consideration, baby boomers were extremely positive about exercise as a preventive measure and fairly positive about other preventive measures, including reading books and reading online material. A GP is seen as the favoured recommendation they would make to a friend facing psychological concerns, followed closely by professional help which includes help options like psychologist, counsellor or psychiatrist and thirdly, a mixture of talking and professional help.

Qualitative Information For Open-Ended Text

As outlined earlier the mean result for how satisfied respondents were with previous help was 4.11, indicating that the majority of participants found the experience either helpful or very helpful (79.8%). Participants were also asked to describe their experience; the trends observed in these answers now follow.

Reflecting the mean overall positive response, the majority of qualitative responses were similarly positive about the experience. Although it is difficult to ascertain precisely what kind of help respondents were referring to in each case (for example if it was counselling, psychodynamic interventions, clinical psychology interventions, psychiatry or only GP assistance), some responses were clear about the sort of help that was provided and its impact on the individual. For example respondents who attended group therapy were overall positive, with the following response representative of this position: *“I was referred to a skills group where we shared problems and skills to cope, which were great.”*

Several respondents spoke of learning practical coping mechanisms, putting in plans to deactivate situations, indicating potential clinical psychological interventions. Others mentioned that once a hormonal or chemical imbalance was explained to them, they were able to accept the problem and a sense of liberation ensued, probably indicating a GP, clinical psychologist or psychiatrist interaction. The ability to express feelings in a safe environment with an objective individual was also noted as a positive experience. One overwhelming positive theme about previous professional psychological help was that the interactions gave the individuals relief and a sense of reassurance they were facing a common problem and that there were strategies available to help them to cope.

A number of responses identified a ‘mixed bag’ with regards to their professional experiences. One experience included time in a psychiatric ward which was unsatisfactory, through to a specialist referral where the participant learnt practical self-care skills seen as the most valuable part of the entire encounter. Someone else included experiencing group therapy which was seen as being painful and directionless, through to then seeing a psychiatrist for eight years, combined with medication which the participant found resulted in a positive outcome. Several responses generally show a movement through a series of

professional touch points (for example GP, psychologist, counsellor and psychiatrist) with success coming at only one of the stages.

Medication warrants observation on its own as responses were generally split between negativity about being placed on it, as medication was seen to “*create its own problems*”, that it “*made me feel worse*” or as “*terrifying*.” In general those that had experienced medication stated that they were frustrated they could not look at alternative solutions. In contrast others felt that medication was positive, in that it “*enabled me to sleep, this in turn enabled me to better cope with the situation at hand*” or “*helped short-term*.”

Despite the overall mean indicating participants who had experienced professional help for previous psychological concerns were positive about these experiences, nearly one in five respondents’ qualitative responses were particularly damning of their experiences. Examples of the sorts of responses that illustrate this position are: “*Medical assistance was unsuccessful and in the end demeaning and destructively judgemental*”, “*Unsatisfactory, did not feel the doctor had any idea about the depth of my suffering. Nobody did. Took me several goes to find a GP who took me seriously*”, “*The first psychologist mucked up my booking and I left her office humiliated and never went back there. I tried ringing Lifeline, but it was always engaged*.” To the following from another participant:

I didn't seek help with the post-natal depression; I did with the head injury and it was a nightmare - it cost me a fortune, I went to numerous conventional professionals as well as undergoing a heap of alternative therapies. Main issue was I looked fine on the outside but no-one seemed to know who to refer me to for the fatigue, concentration (lack of) and other issues that seemed to be set off by the traumatic brain injury. It is not a happy period to reflect on! It seems to be a bit of a case of the luck of the draw whether you find someone who knows what you're going through!

Eight respondents said that they had faced psychological problems in the past, but had not sought help. The reasons given included five who said that they could self-manage the issue, with this example characterising this sort of response: *“I thought it was temporary and I took steps to improve my health and got support from friends and made changes to reduce stress. If it had persisted or got worse I would have sought help.”* The final three responses included two who stated they were not able to recognise there was a problem requiring help and one stating that because it was the 1970s there were no services available and their family expected them to get over it.

In summary, the responses in this section generally corroborate the positive previous experience with professional help results as evidenced seen earlier. It is reasonable to assume that the positive experiences, as outlined by participants in this section, have influenced the overall positive intention towards professional help, given a significant portion of the entire sample had sought professional help for mental health problems in the past. For the one fifth of those who had experienced professional help who wrote of a poor experience, what is not clear in all cases is exactly where that help came from. Furthermore it is not clear whether respondents were undergoing professional help at the time of filling out the questionnaire, and if so, how that may have influenced these responses.

CHAPTER SEVEN: RESULTS - DETERMINANTS OF INTENTIONS TO SEEK PROFESSIONAL HELP FOR: DEPRESSION, ANXIETY, FORGETFULNESS AND SUBSTANCE ABUSE

Hypotheses being tested in this section are linked to The Theory of Planned Behaviour:

- Hypothesis Six. Psychological Openness (PO) and Perceived Behavioural Control (PBC) will correlate highly with intention, and contribute the highest amount of variance as predictor variables in intent to seek both preventive and professional help for all four concerns.
- Hypothesis Seven. Relationship status (living with a partner or not) will be shown to be a significant predictor variable in the TPB model.
- Hypothesis Eight. Prior positive contact with a psychological professional will be a significant predictor variable in the TPB model.
- Hypothesis Nine. Level of emotional distress will correlate highly with intention and will be shown to be a significant predictor variable in the TPB model.

Bivariate Relationships

Table 7 shows simple correlations amongst all of the variables used in the regression analysis and contains the two types of correlation generated by SPSS and required in this analysis: Pearson's r (where both variables are continuous) and point biserial correlation (one continuous and one non-continuous variable). Correlations between all relevant variables relating to both professional and preventive intention for each of the four psychological complaints (depression, anxiety, forgetfulness and substance abuse) are displayed at the top

of the table. For both preventive and professional help-seeking intentions for depression, anxiety and substance abuse, all of the TPB correlations were significantly associated except

Table 7
Simple Correlations amongst determinants for intention to professional and preventive help for depression, anxiety, forgetfulness and substance abuse (N=256 – n.b. prev dep n=144, prev anx n=155, prev for n=152, prev sub n=152, previous help n=116)

Variable	1	2	3	4	5	6	7	8
PI Depress	0.068	0.024	-0.015	.338**	.262**	.381**	0.143	0.071
PI Anxiety	-0.037	0.032	0.058	.402**	.334**	.413**	0.185	0.089
PI Forgetfulness	-0.084	0.049	-0.016	.305**	.187**	.337**	0.123	0.067
PI Substance Abuse	-.164*	0.08	0.091	.384**	.286**	.364**	.213*	0.025
Prev Intent Depression	-0.044	-0.057	0.153	.182*	.213*	0.115	.241*	0.091
Prev Intent Anxiety	-0.145	0.04	0.154	.199*	.168*	.164*	0.101	0.061
Prev Intent Forgetfulness	-0.139	-0.005	0.069	0.098	0.148	-0.005	-0.037	0.118
Prev Intent Substance Abuse	-0.06	0.109	0.074	.216**	.169**	.228**	0.134	0.059
1 Gender		-0.038	-0.015	-0.05	-0.049	-0.015	.192*	-.128*
2 Age	-0.038		-0.02	-0.005	-0.036	0.073	-0.03	-.124*
3 Living with/without partner	-0.015	-0.02		0.011	0.025	-0.088	-0.129	.135*
4 Attitude	-0.05	-0.005	0.011		.807**	.818**	.607**	-0.053
5 PBC	-0.049	-0.036	0.025	.807**		.525**	.457**	-0.047
6 PO	-0.015	0.073	-0.088	.818**	.525**		.604**	-0.046
7 Previous help	.192*	-0.03	-0.129	.607**	.457**	.604**		-0.148
8 Emotional distress	-.128*	-.124*	.135*	-0.053	-0.047	-0.046	-0.148	

*PI = Professional Intention, Prev Intent = Preventive Intention, PBC: Perceived Behavioural Control, PO: Psychological Openness, *p <.05 (2-tailed), **p <.01(2-tailed)*

for PO with preventive intent for depression and forgetfulness and PBC and preventive intent for forgetfulness. Of the correlations amongst intention and the TPB values, the strongest relationships were found to be ‘moderate’ between professional help intent for depression and PO ($r = .381$), professional intent for anxiety and PBC ($r = .334$) and PO ($r = .413$), professional intent for forgetfulness and PO ($r = .337$) and professional intent for substance abuse and PO ($r = .364$). While several of the relationships between TPB variables and

preventive help intention were seen as statistically significant, the strength of the relationship was found to be weak. In relation to hypothesis six these results indicate that PO and PBC are highly related to intent to seek help in the following cases: professional help for depression, anxiety, forgetfulness and substance abuse; and preventive help for depression (only PBC), anxiety and substance abuse, partially supporting this hypothesis.

Of the relationships between socio-demographic variables and attitude and intent, only gender and intent to seek professional help for a substance abuse problem was found to be significant. A negative correlation between gender and intent ($p < .05$) indicated females were significantly more likely to seek professional help for substance abuse problems than males. Of the extended TPB model variables satisfaction with a previous professional psychological experience achieved a positive and significant relationship between intent to seek professional help for substance abuse ($p < .05$) and intent for preventive options for depression ($p < .05$), showing that prior (positive) contact is associated with stronger intention to seek both professional and preventive help for some disorders. Furthermore, satisfaction with previous experience achieved significant relationships with both TPB measures PO ($p < .01$) and PBC ($p < .01$) and the strength of the relationship with PO in particular was found to be strong at ($r = .6$). While emotional distress was positively associated with intention and attitude towards seeking help, none of the relationships were deemed significant or of any considerable strength. Correlations between the two TPB variables of PO and PBC were unsurprisingly both significant and strong ($r = .525, p < .01$). Other correlations of note were: a significant negative relationship between gender and emotional distress ($p < .05$), indicating women were more emotionally distressed than males at the time of survey response; a significant relationship between gender and rating of previous experience ($p < .05$), indicating males rated their professional psychological experience higher than females; a significant negative relationship between age and emotional distress, highlighting that the older

participants in the research reported statistically significant lower levels of emotional distress ($p < .05$) and a significant relationship between living with someone or not and emotional distress ($p < .05$) indicating those living alone were under more emotional distress than those living with a partner.

In summary, these results indicate that baby boomers' intentions to seek both professional help for psychological concerns of depression, anxiety, forgetfulness and substance abuse are associated with their general attitude towards help-seeking, specifically the constructs of PO and PBC. The same findings can be generalised to preventive measures excluding forgetfulness and the association between PO and depression. From the attitude scale, baby boomers positive PO is connected most strongly with their intention to engage in help-seeking behaviour and while a higher intent towards preventive measures was evidenced in the descriptive statistics, the relationship between attitudinal variables and this intention by the baby boomers is not significant. These results offer partial support for hypothesis six. No relationships were significant between socio-demographic variables and either intent or TPB variables, except for the gender differential in relation to substance abuse professional help-seeking intentions (females more than males). The result of hypothesis seven and eight, relating to the TPB model will be seen shortly. Emotional distress levels were not found to correlate significantly with any measure of focus, partially not supporting hypothesis nine.

Multiple Regression Analysis

A hierarchical multiple regression equation was performed between the dependent (in each analysis this is the intention to seek professional help for mental health concerns (depression, anxiety, forgetfulness and substance abuse)), and the independent variables: these included socio-demographic variables which were entered at step one, TPB variables at step two and extended variables of prior contact and emotional distress entered at the third

stage. Beta weights and R^2 change statistics are listed separately for each step in Table 8, and this is completed by the Adjusted R^2 for the whole model.

Table 8

Results from the hierarchical regression analysis of intentions towards professional help for depression on specific TPB variables and other variables

Variable	Step One β	Step Two β	Step Three β
Age	.034	.016	.022
Gender	-.029	-.014	.021
Living With Someone	.055	.083	.063
PO		.338**	.398**
PBC		.155	.186
Emotional Distress			.094
Previous Experience			-.122
Change Statistics	R^2 ch = .005 F ch = .201	R^2 ch = .157 F ch = 9.789***	R^2 ch = .187 F ch = 1.975***
	Adj R^2 (full model) = .134, F = 3.531**		

*PO: Psychological Openness, PBC: Perceived Behavioural Control, ** $p < .01$ *** $p < .001$*

In terms of individual relationships between independent variables and intention towards professional help for depression the socio demographic variables contributed a small proportion of the explained variance (5%). At step two: of the TPB variables, PO was a significant predictor of help-seeking intentions with the strongest relationship to intentions ($\beta = .337, p = .01$), suggesting that an increase in PO accounts significantly towards the explained variance in intention for seeking professional help for depression. In explaining intention, the TPB variables accounted for almost all of the shared variability in intention towards professional help for depression. Of the two predictor variables PO had the strongest association with intention in this regression equation, continuing its significance at step three ($p < .01$). The addition of the extended TPB measures in step three resulted in no reliable increase in explained variance. This prediction model was seen as good fit for the data at stages two $F(5,109) = 4.055, p < .002$ and three $F(7,107) = 3.512, p < .002$ and together the seven variables contributed 18.6% (adj R 13.4%) in shared variability. Within the model, PO

was seen to account for a statistically significant amount of variance in intention to seek professional help for depression.

Similar results (as seen in Table 9) were obtained to predict intention for professional help for anxiety from the independent variables. At the second stage the model was seen to statistically significantly predict intention: $F(5, 100) = 4.912, p < .0004$. Overall the predictor variables explained 21.6% (Adj R16%) of the variance within the dependent variable, PO added statistical significance to this prediction at stage two $p < .00002$ and the model was seen as a good fit for the data at stages two (as above) and three $F(7,98) = 3.853, p < .001$.

Table 9
Results from the hierarchical regression analysis of intentions towards professional help for anxiety on specific TPB variables and other variables

Variable	Step One β	Step Two β	Step Three β
Age		0.08	0.128
Gender	-0.007	0.022	-0.002
Living With Someone	0.026	0.006	0.007
PO		.337**	.431***
PBC		0.088	0.133
Emotional Distress			-0.19
Previous Experience			0.086
Change Statistics	R^2 ch = .05 F ch = .186	R^2 ch = .197 F ch = 11.944**	R^2 ch = .216 F ch = 1.167
	Adj R^2 (full model) = .16, $F = 3.855$ ***		

*PO: Psychological Openness, PBC: Perceived Behavioural Control, ** $p < .01$ *** $p < .001$*

Tables displaying the model in relation to intention towards substance abuse and forgetfulness can be found in Appendix D with the results generally reflecting those found earlier. For intention towards professional help for substance abuse, at the second stage the model was seen to statistically significantly predict intention: $F(5, 90) = 3.987, p < .003$. Together the seven variables contributed 18.2% (Adj R11.7%) in shared variability, PO added statistical significance to this prediction at both stage two $p < .003$ and the model was seen as a good fit for the data at stages two (as above and three $F(7,88) = 2805, p < .011$). For

professional help for forgetfulness the weakest model results were found: at the second stage the model was seen to statistically significantly predict intention: $F(90,3) = 2.459, p < .039$, but overall the variables explained 13.2% (Adj R² 6.3%) of the variance within the dependent variable and PO added statistical significance to this prediction at stage two $p < .039$.

In summary, the model was seen as a good fit for the data particularly in relation to PO which accounted for the majority of variance in intention to seek professional help, in all four regression equations partially supporting hypothesis six. However, there was no support for an extended TPB model of help-seeking to explain intention to seek both professional and preventive help for the four areas. Moreover, the socio-demographic information and multivariate relationships with intentions offered no major contribution to variance, offering no support for hypotheses seven, eight or nine. Living with or not living with a significant other, positive previous contact and emotional distress and their roles as significant predictor variables in contributing to variance, were not identified. What the results did offer was some support for the TPB variables, particularly PO, in explaining and predicting professional psychological help-seeking intention. Overall PO had the strongest relationship with professional intent to seek help and explained the most variance in all regression equations, partially supporting hypothesis six.

CHAPTER EIGHT: RESULTS - LEADING-EDGE VERSUS TAIL-ENDERS

Hypotheses being tested in this section are linked to the sub-cohorts within the baby boomers and The Theory of Planned Behaviour constructs:

- Hypothesis Ten. Tail-end boomers (aged 49-58) will show higher PO and PBC which will significantly correlate with higher intent towards professional help.
- Hypothesis Eleven. Leading-edge boomers (aged 59-69) will have lower PO which will significantly correlate with higher intent towards preventive measures.

Hypothesis ten predicted that tail-end boomers, the younger end of the cohort, would show higher PO and PBC, and this would correlate with a higher intent to seek help for professional help. This hypothesis was not supported, as the tail-enders had a lower mean PO, only very slightly higher PBC, and lower means for intent to seek professional help for three of the concerns (with forgetfulness professional intention the same result as leading-edge). Table 10 displays means and standard deviation statistics on all relevant variables. For preventive help, tail-enders had slightly higher mean intent scores on depression ($M = 3.98$, $SD = .813$) and forgetfulness ($M = 4.04$, $SD = .762$), but independent t tests revealed no significant statistical differences between these findings $t(142) = .281$, $p = .77$ and $t(150) = .562$, $p = .08$. Hypothesis eleven stated that leading-edge boomers would have a lower PO (not supported) and a higher intent towards preventive measures (only slightly higher mean intent for anxiety and substance abuse for preventive measures), resulting in no support for this hypothesis. In order to further examine the effects of age within the baby boomer cohort, data was split further into three age groupings – young 49-55, middle 56-62 and older 63-69. A MANOVA multivariate analysis with all continuous variables as dependent variables and three age groups as the fixed factors was run and the results showed no statistically significant differences in scores based on the three age groups.

Table 10
Descriptive statistics of key measures comparing leading-edge and tail-ender groups

	LE/TE	<i>M</i>	<i>SD</i>
PI: Depression	LE	3.46	1.377
	TE	3.55	1.264
PI: Anxiety	LE	3.42	1.335
	TE	3.46	1.359
PI: Forgetfulness	LE	3.38	1.357
	TE	3.38	1.414
PI: Substance Abuse	LE	3.71	1.213
	TE	3.85	1.315
Prev Intent: Depression	LE	3.98	0.813
	TE	3.94	0.961
Prev Intent: Anxiety	LE	3.94	0.953
	TE	4.05	0.88
Prev Intent: Forgetfulness	LE	4.04	0.762
	TE	3.96	0.95
Prev Intent: Substance Abuse	LE	3.71	1.213
	TE	4.04	0.993
PO	LE	14.88	3.063
	TE	15.39	3.157
PBC	LE	15.21	3.208
	TE	15.19	3.539

*PI = Professional Intention, Prev Intent = Preventive Intention
 PO: Psychological Openness, PBC: Perceived Behavioural Control, LE: Leading-edge (aged 59-69), TE: Tail-ender (aged 49-58)*

Comparing Non-Continuous Data Between The Tail-Enders And Leading-Edge

Statistics for relationship status and gender have already been described. Comparing the groups; 52 of a possible 114 (45.6%) of the younger sub-cohort (tail-enders) indicated they had had previous psychological complaints, compared to 70 of a possible 142 (49.3%) in the older cohort. 48 of the younger group had sought professional help for their concerns, compared to 68 of the older group, a near identical result in terms of proportion. The range of previous complaints experienced by both groups reflects the overall baby boomer groups' results outlined earlier, a minor difference being that the range of complaints experienced by

the older group was more varied. For both groups depression, depression and anxiety and anxiety featured as the three highest areas of past or present concern. Alongside the strength of intention for preventive measures, survey respondents were presented with a list of preventive options (for example books, exercise or social group) and asked whether they would consider any of these if faced with possible psychological concerns. Comparisons of the two groups' answers to this question can be seen in Figure 5. The two biggest differences were found between the groups with regards to preference for online material and online programmes (tail-end - 69% compared with leading-edge - 55% and tail-end - 37% compared with leading-edge 25%, respectively). In order to calculate whether the differences between any of these percentages were statistically significant, Pearson Chi-Squared tests of association were run between both groups' results, including phi statistics, to check for effect size as each equation was a 2 X 2 contingency table. No statistical differences were observed between the two groups, and the effect sizes were small. The "recommendations to a friend" data was also compared between the two age-groups, indicating similar advice would be given from both ends of the cohort.

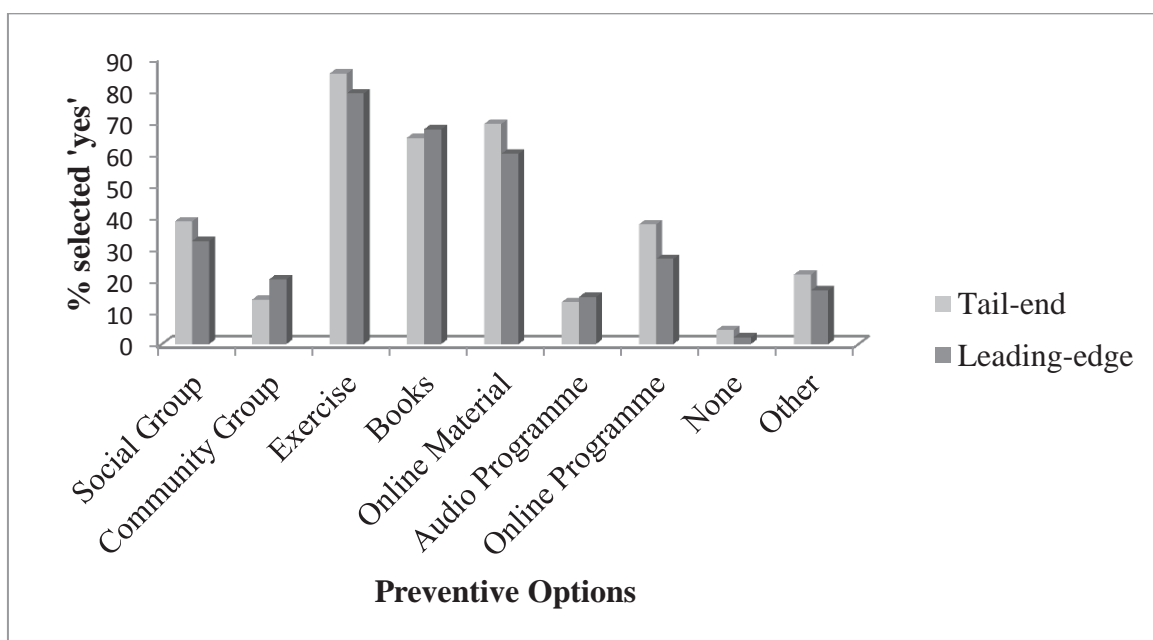


Figure 5. Comparing tail-end and leading-edge responses for preventive options.

In summary, the baby boomer cohort's attitudes towards seeking psychological help and intentions towards seeking professional and preventive help for psychological issues offer no statistical differences in relation to age. It was hypothesised that based on cohort experiences, differences would be found within this group, yet this was not the case. Generally, the baby boomer cohort are positive about seeking both preventive and professional help for psychological concerns, and display high levels of PO and PBC as attitudes towards seeking professional and preventive help for mental health issues.

CHAPTER NINE: DISCUSSION

This section leads with a summary of the findings from the current research, followed by an analysis of these results in comparison to research looking at similar constructs, audience and theoretical concepts. Weaved into this analysis, broader issues arising from the results are identified, particularly in relation to the mental health service in New Zealand and the treatment and engagement of New Zealand's baby boomers with mental health help as they begin to enter into old age. Particular issues raised include: an analysis of what the homogeneity of attitude and intent results across the cohort mean for targeting interventions and information at the group; based on these findings whether current mental health resourcing is suitable to adequately meet the needs of this population; the role of technology in helping to meet the mental health needs of baby boomers; a renewed case to invest in further research and a focus on preventive endeavours particularly with regards to females; and the disorder-specific implications of these results for mental health policy makers. Findings relating to the Theory of Planned Behaviour are also critically analysed in comparison to similar research. Through this analysis extra information is revealed regarding the variables that may help to further explain psychological help-seeking by baby boomers. Limitations of the study are then reviewed including aspects of the participant sample which may affect generalisability of the results, the potential external validity issues in the use of 'forgetfulness' as a construct and various aspects of how the Theory of Planned Behaviour was operationalised. This is then followed by future directions this research may take.

Current Findings' Summary

New Zealand's baby boomers' attitudes towards seeking psychological help and intentions towards seeking professional and preventive help for psychological issues show no significant differences in relation to age within the cohort. With regards to mental health help-seeking at least, baby boomers *are* a homogenous group.

Generally, this cohort is positive about seeking both preventive and professional help for psychological concerns. Specifically, New Zealand baby boomers are more inclined towards preventive measures, than professional interventions. Attitude towards seeking help for mental health problems was also found to be very positive within the cohort, with high levels of psychological openness (PO) and perceived behavioural control (PBC) identified. Statistically strong relationships were found between both PO and PBC and professional and preventive intent across all disorders, excluding PBC and preventive intent toward forgetfulness and PO and preventive intent for depression and forgetfulness.

In terms of disorders, professional intent was higher for depression and substance abuse than for anxiety and forgetfulness and the results indicated a significant difference between intentions to seek professional help for substance abuse compared with all three other psychological complaints and depression compared with forgetfulness and anxiety. For preventive help, the reverse was identified with forgetfulness and anxiety achieving higher intent to seek help than substance abuse and depression. However, the mean intention results across all four disorders were almost identical nullifying this observation.

In a comparative analysis between men and women there was no significant difference between professional intent or attitude towards seeking help for mental health issues identified, excluding women's intent towards seeking professional help for substance abuse which was considerably higher. However, women's intent towards preventive measures was significantly higher than males across all four disorders, yet the strength of these relationships was considered low. Baby boomers who had experienced professional help for psychological issues in the past rated their experiences very highly and when comparing this group with those who had not seen professional help in the past, attitude was more positive for those who had had professional psychological experience, across both scales of PO and PBC and intention towards professional help was significantly higher for

those who had experienced professional help (anxiety in particular), but not preventive help. Emotional distress levels did not correlate significantly with any measure.

Within the TPB model a small contribution to variance for professional help-seeking was identified from five of the seven predictor variables chosen for investigation (age, gender, living with a partner or not, emotional distress and satisfaction with previous help). Therefore there was no support for an extended TPB model of help-seeking in identifying any significant predictor variables; however support was achieved for the TPB variable PO and to an extent PBC as significant predictors of professional help-seeking behaviour and their contribution in explaining help-seeking behaviour in this cohort. Overall however, the variables combined and individually contributed little to variance in explaining intention to seek professional help.

Current Research In Comparison To Existing Research

Baby boomers

Positive intent and attitude. Supporting hypothesis one, this convenience sample of New Zealand baby boomers demonstrated a relatively favourable intent towards seeking both preventive and professional help, as well as a positive attitude toward help-seeking. As this is the first study undertaken in New Zealand focusing on the attitudes and intentions of baby boomers towards mental health help this information is critically important as the projected demand for mental health care in New Zealand from this age group is expected to grow significantly (Cornwall & Davey, 2004). The findings from this research are similar to a number of cohort studies aimed at uncovering attitudes towards psychological help. Perhaps the most critical conclusion in support of the current findings is that negative attitudes to mental health and help-seeking in this age group may not be as pervasive as previously assumed. Instead, the conclusion is that current attitudes towards mental health services are

becoming increasingly positive amongst the baby boomer (and older) age group and are similar to younger cohorts (Currin, Schneider, Hayslip Jr, & Kooken, 1998; Mackenzie et al., 2014; Quinn et al., 2009; Robb et al., 2003; R. Woodward & Pachana, 2009).

This research utilised the Life Course Theory (Ryder, 1965) but it is also worth considering the impact of age effects on the current findings, particularly when considering the support found for the hypothesis of a favourable intent towards professional and preventive help. For example, older age is increasingly associated with increased satisfaction with mental health services and perceived benefit from the service (Ford et al., 2013). What is clear is that despite the widely held belief that older people's attitudes towards mental health and help-seeking are more negative than those younger than them, the reverse now appears true. As people age, they are more likely to encounter mental health services, also, they are more likely to encounter either their own, or others with mental health issues. It is possible that this increased exposure, inherent with ageing, has contributed to the positive attitude and intent found with this cohort.

The current finding further adds to the contention that more elderly than ever before will seek out clinical therapy over the coming years as attitudes have been found to indicate behaviour (Ajzen & Fishbein, 2000). These findings necessitate a fresh focus on the current mental health workforce in New Zealand, particularly with regard to dedicated psychiatric or psychological resource for the elderly due to the ostensible shortfall. This situation occurs despite the issue of under-resourcing and a lack of specialist services for the elderly being raised over ten years ago in the Ministry of Health policy paper "*Ageing New Zealand and Health and Disability Services 2001–2021*" (MOH, 2004). Of the limited data that is available it is known that in 2008 there were only 29 'old age' psychiatrists in New Zealand (equating to one per 20,000 people over 65 years of age) (Statistics NZ, 2007) and identified numbers of clinical psychologists or registered psychologists working specifically with the

elderly in New Zealand are low (Boston, 2014). Beyond resourcing, innovative strategies to meet workforce concerns are required and the role of technology is an area of growing interest in association with baby boomers. The evidence base connecting technology to the delivery of psychological interventions and client information continues to build both from a preventive capacity (Christensen et al., 2004; Kenardy et al., 2003; Titov et al., 2009) to clients presenting with a variety of levels of sub-threshold and threshold symptoms (Aguilera & Muñoz, 2011; Mewton, Smith, Rossouw, & Andrews, 2014; Wiersma et al., 2011; Woodberry et al., 2014). In an associated finding within the current research a positive intention towards technology was identified. This, combined with the knowledge that baby boomers are using technology far more than the generation before them (Statistics NZ, 2012), signals an area of focus which may contribute towards helping to solve the concerns raised above.

It was also hypothesised that differences in help-seeking attitude would be found associated to age within the cohort, and that these would correlate to differences in intention towards preventive or professional help. No significant differences were found within the baby boomer cohort in relation to intent and attitudes towards mental health help-seeking and the variable of age. These results were not expected given the cohort's twenty year time-span and the markedly different life events that occurred during the years the cohort matured into. Using Ryder's (1965) Life Course Theory as a framework for understanding how sub-cohorts within the cohort would emerge, it was envisaged that the attitudes towards mental health help-seeking uncovered in this research would have been shaped by the varying lifetime experiences baby boomers had been part of. While individuals each have their own lived in experience, this theory posits that lives and attitudes are structured by shared experiences. For baby boomers, this shared world has been punctuated by dramatic change across all spectrums of life. However the results indicate that despite experiencing major social

movements like the Civil Rights movement and Counter Culture at vastly different points or maturing into different economic circumstances (welfare state during the late 1960s and 1970s versus economic turbulence of the 1980s for example), the attitudes towards mental health help-seeking by this group were uniform. These results contrast with baby boomer research which has identified intra-cohort differences with regards to value systems, attitudes and defining events pertinent to their generation (Gale, 2013; Schuman & Scott, 1989; Whitbourne et al., 2009). Furthermore, the current results do not support research identifying the development of specific attitudes in relation to experiencing events at key developmental periods, for example the tail-end boomers' inward focus on self-fulfilment seen as a response to the 1980s deregulation period (Higgs & Hilleard, 2005) or tail-end boomers' focus on stability and relationships, brought about by the omnipresent fear of nuclear war (Muller, 1997), compared with the leading-edge's collectivist ideology created from participation in major social change (Riggs & Turner, 2000).

Much has been documented about the baby boomers' distinctive and pioneering attitudes towards and in response to many aspects of their lives. What is significant in this research is the finding that their attitude towards seeking help for mental health concerns was positive on the constructs of psychological openness (PO) and almost as high on perceived behavioural control (PBC), or value and need in seeking treatment and that these variables are strongly associated to intent to seek mental health help. Notwithstanding the resourcing issues outlined above, engaging baby boomers in seeking help for mental health problems is a priority, owing to the increased quality of life, and decreased morbidity and mortality associated with early help-seeking and intervention for mental health disorders (Jorm, Korten, Jacomb, Rodgers, & Pollitt, 1997). The contributions of PO and PBC towards explaining intention offers valuable insight into how baby boomers can be engaged with in order to encourage and facilitate mental health service use. Mental health policy and

engagement planning, including the development of interventions for baby boomers in New Zealand, must consider this cohort's different position on life, compared to past generations. For example, approaches made to baby boomers should aim to enhance the already positive attitude towards seeking help from this cohort, rather than focus on transforming negative perceptions into positive ones.

In understanding these findings, it is worth considering the rate of change baby boomers have experienced alongside their increasingly complex individual circumstances. Viewing the results within this context offers some illumination to the uniform and broadly positive results found within this cohort. Where the life course perspective attempts to understand the continuities of life, with regards to baby boomers it could also combine this approach with an examination of the unique twists and turns this distinct cohort has chosen. The life course theory therefore, as used in this research, may not have adequately linked the increasingly complex micro world of baby boomers, to the complex and fluid social world they in fact inhabit and have experienced. In contrast to Ryder's original theory, the life course has recently been associated with human development across the entire life span (Baltes, Lindenberger, & Staudinger, 1998; Featherman, 1983). This approach places significance on the timing of key life transitions which have varying patterns of influence, depending on when and significantly, how often, they occur. Consider the new territory baby boomers have embarked upon with respect to key life transitions: entering the workforce (particularly women of this cohort), marriage (or in baby boomers' case, multiple marriages), child birth (where expectations around age of child bearing have become much more flexible), and increased rates of separation or divorce. Against a backdrop of unprecedented social, technological, political and environmental change, baby boomers have defied the status quo with regards to key life transitions. Looking at the present results through the lens of a theory that involves not only historic events of influence, but the ever-changing

individual environments baby boomers operate within, contributes to an understanding of the uniformity of the results. For baby boomers, key life events and their associated attitudinal impacts may have been mitigated by the complex life transitional experiences and more importantly the frequency of which they have undertaken these major events.

Preventive versus professional findings. Generally, the intent identified towards both preventive and professional help for mental health issues (in the neutral to positive range for professional, and positive towards preventive) was higher than comparative studies (Hyland, McLaughlin, Boduszek, & Prentice, 2012; Skogstad et al., 2006; Westerhof et al., 2008), and similar to others (James & Buttle, 2008; Schomerus et al., 2009a). Note that all research cited above is linked to intent to professional services, excluding Westerhof et al.'s (2008) which includes prevention. These results indicate that New Zealand's baby boomers show similar-to-higher intent towards seeking professional help for mental health concerns than comparative samples. For prevention, there is no directly comparable research, either from an audience or from the constructs under investigation. Existing research on attitudes towards preventive interventions is also rare, however Yap, Reavley and Jorm (2012) found that young people (aged 15-25) in Australia were generally optimistic about the prevention of a number of mental disorders, with attitudes found to be stable across a five year period. In the most positive examination on record of public attitude towards preventive measures, 75.4% of a German representative population sample indicated that it was possible to prevent depression, and of this, 52.6% stated they would take part in a preventive programme in order to prevent depression, mirroring the current research in terms of intent (Schomerus, Angermeyer, Matschinger, & Riedel-Heller, 2008). Overall, the results from the present research support the growing empirical evidence highlighting positive attitudes towards preventive measures. It was hypothesised age differences would be identified within the cohort, with the leading-edge boomers expressing a proclivity for preventive measures over

professional, however, as outlined previously, no age differences were found within the cohort on any measure. It is possible therefore to interpret this finding in a highly positive manner as the intentions for professional help were neutral to positive across the four disorder areas and the intention to engage in preventive measures was positive, reflecting a collective openness on the part of this group to seek psychological help. This current result suggests that if the preventive intent by baby boomers is capitalised upon, some of the concerns outlined earlier, around resourcing and demand for services, could be diluted. Currently New Zealand's preventive mental health strategy is limited, however, as uncovered in this research, baby boomers have indicated that they are open to preventive measures. This finding delivers a critical component towards a renewed case to invest in or at least examine preventive alternatives for New Zealand's baby boomers' mental health needs, mirroring global and professional advice (de Diego-Adeliño et al., 2010; Jané-Llopis, Muñoz, & Patel, 2005).

Given the statistically significantly higher intention towards engaging in preventive measures found when comparing the professional and preventive responses in the current research, the findings of preferred type of preventive intervention merit attention. Of the preventive options outlined for consideration, exercise was selected by 81.64% of respondents, books by 66.40%, reading online material by 64.06% and joining a social group by 35.15%. Exercise has been rated as the number one prevention method in a number of studies: by an adult representative population sample (Schomerus et al., 2008), mental health experts (A. Morgan & Jorm, 2009) and a general sample of Australian youth (Yap et al., 2012) and self-help, including exercise, was rated as the most 'helpful' intervention by an Australian representative population sample when faced with mental ill-health (Jorm et al., 1997). Furthermore, the evidence showing the benefits of increased exercise on a variety of mental disorders: depression levels (Teychenne, Ball, & Salmon, 2008), anxiety (Ströhle,

2009) and general mental health problems, including burnout (Jonsdottir, Rödger, Hadzibajramovic, Börjesson, & Ahlberg, 2010) continues to grow and the current research findings support this evidence base. With exercise being identified most positively amongst the available options, New Zealand's mental health sector has increased reason to consider and support universal and selective preventive strategies incorporating exercise that are targeted at baby boomers. Baby boomers are entering elderly with higher rates of cardiovascular disease, obesity, and cerebrovascular complaints including hypertension (Martin et al., 2009; MOH, 2012) than the generations before them and these are now known risk factors for many mental disorders (Jacka & Reavley, 2014). These results demonstrate that encouraging exercise as a component of a preventive response to baby boomers' mental health will be received by a responsive audience, but harnessing this positive intent is the next challenge given that nearly half of baby boomers are not currently participating in any form of daily exercise (MOH, 2012).

Gender differences. It was hypothesised that the female gender would demonstrate a more favourable intent and attitude towards both professional and preventive help in this study, as the existing evidence base suggests (Addis & Mahalik, 2003; Bebbington et al., 2000; Mackenzie et al., 2006; Parslow & Jorm, 2000; Ten Have et al., 2010; Veroff et al., 1980; Vogel et al., 2007). However, the current findings did not support this hypothesis for any of the four mental health concerns outlined other than substance abuse and this relationship was deemed to be of 'low' magnitude (preventive results will be covered shortly). Other research using similar constructs to the present research supports this finding: Hyland et al., (2012) found no difference between the genders in intention or attitude towards seeking professional help, amongst a group of 'at-risk occupation' Northern Irish public sector workers. Using epidemiological data in Canada, Mackenzie et al., (2012) found no difference between the genders in help-seeking for mood disorders and modest differences

across other disorders. Previous research has identified women's favourable attitudes towards help-seeking is associated to their favourable intentions to seek professional help, and specifically psychological openness (Mackenzie et al., 2006). Conversely, a general representative survey across Portugal, Hungary, Germany and Ireland found that being male was significantly associated with having a lower openness to treatment and general attitude towards treatment (Coppens et al., 2013). However in the current research both men and women obtained similar (positive) results on the attitude scale and these were positively and, in one case, significantly associated to intentions to seek professional help. This result implies that gender does not act as a barrier to help-seeking amongst this cohort. Intention has been shown to predict behaviour, yet because service utilisation is lower than known prevalence rates (Andrews, Henderson, & Hall, 2001), further analysis is required regarding what is contributing to the generally positive intention by baby boomers. As Fishbein and Ajzen (1980) state other social and personal factors are worth considering when explaining actual behaviour and these will be considered shortly.

Despite achieving a low magnitude effect, a significant difference was achieved between the genders regarding intention towards seeking professional help for substance abuse. This result is significant because as outlined previously substance abuse, particularly alcohol related, is becoming an increasing problem for females in New Zealand (Women's Health Action, 2013). The result in the current research shows that women have an increased positive intent toward seeking professional help for this particular concern, a promising finding which matches other research. In a study with an in-treatment sample, Lewis and Nixon (2014) found women entered treatment more rapidly (by four years) than males, even though they did not experience alcohol related problems earlier than men. However, while women's drinking habits are of increasing concern, the demographics most associated with hazardous drinking in New Zealand are male, Pākehā, high earners, aged below 65 and

partnered (Towers et al., 2011). The results in the present study for this group are less promising; indicating that the group most in need of help was less likely to engage in help-seeking behaviour. Yet, of all disorders outlined in the current study, substance abuse had the highest intent to seek professional help by all baby boomers - an optimistic finding. Cultural factors linking hazardous drinking as a normalised practice for both men and women in New Zealand (Willott & Lyons, 2012) may be contributing to this intention difference between genders, in that males do not perceive their levels of use hazardous enough to warrant professional intervention compared to females.

Significant differences between males and females for preventive courses for all four psychological complaints were found, however it is worth noting that males' positive responses to the question "would you consider a preventive course" in comparison to extant research were relatively positive, at an average of over 50% across all disorders. In comparison to females, delayed help-seeking has long been associated with males across a range of health issues (Galdas, Cheater, & Marshall, 2005; Yousaf et al., 2013). This delay is associated to a reluctance to seek help even after falling ill, yet the current research findings indicate that at a sub-threshold or even earlier stage, men are still less likely than women to engage in preventive behaviours generally supporting the research available on this subject. In 1993 researchers carried out a viewer's study looking at the impact of a mass media television show on preventive mental healthcare in the United Kingdom and found that the contents of the television show resonated slightly more with females, who were also younger and demonstrating somatic symptoms (Barker, Pistrang, Shapiro, Davies, & Shaw, 1993). However, Schomerus et al. (2008) found that with regards to preventive measures both females and males were equally as positive about the prevention of depression in general and whether they would take part in a programme in order to prevent depression. A finding supported by Yap, Reavley and Jorm (2012) who found a group of young Australians' views

on preventive strategies for mental health were broadly similar, with the exception of females believing that having a spiritual or religious belief is more helpful in preventively dealing with mental health concerns. With a longer life expectancy than men (Statistics NZ, 2013c), and significantly higher prevalence rates for the dementias (Alzheimer's NZ, 2012) and depression and anxiety (Wells, 2006b), New Zealand's women baby boomers will command a majority share of mental health sector resource in their elderly years. Therefore, their proclivity towards preventive measures is a critical finding which should not be overlooked. While the intention is evident from women, the challenges baby boomer women face in terms of demands on their time and resources may limit their ability to exercise control over preventive measures for their mental health. Currently women in mid-life in New Zealand are involved in unremitting responsibility towards their families, their jobs and their own declining physical health. If preventive campaigns or interventions are to be targeted at baby boomer women, thought must be given to the restrictions they face which may prevent their participation in such activities.

Type of disorder. For intention to seek professional help, substance abuse reported the highest mean intention followed by depression, anxiety and then forgetfulness. Within the results a significant difference was found between intention to seek professional help for substance abuse compared with all three other psychological complaints and depression compared with forgetfulness and anxiety. The hypothesis that substance abuse and depression would receive a more favourable intent to seek professional help for was therefore supported and the current results are reinforced by existing research on the topic. Using secondary data, Cairney, Corner and Streiner (2010) found that psychological distress, associated with all DSM-IV disorders under investigation in the research, was the strongest need factor in seeking mental health care. Compared with mood disorders, anxiety disorders have the highest prevalence of non-use with middle aged people (Byers et al., 2012; MacKenzie,

Reynolds, Cairney, Streiner, & Sareen, 2012) and in the same study participants with perceived mild versus serious symptoms were less likely to seek out professional help. Severity of a disorder has been linked to mental health service use, for example some research has found that anxiety and forgetfulness are inherent with work and ageing, respectively, and therefore, have a reduced perceived need for professional care (Begum, Morgan, Chiu, Tylee, & Stewart, 2012; Robb et al., 2003). Like depression, anxiety has recently been reported as being on the rise across all age groups, overtaking depression as the second most common psychological problem (Roy Morgan, 2014). The findings in the present research are significant as anxiety is at risk of becoming a group of disorders overlooked in this age group in favour of the traditional disorders associated with older age like the dementias. Understanding what is contributing to the lower intention (beyond the finding in this research that PO and PBC associate highly with intention) to seeking professional help for anxiety by baby boomers is therefore important information to discover.

Substance abuse received the highest intent to seek professional help out of all of the disorders cited. Research supports this finding, particularly through an analysis of what is driving help-seeking behaviours. For example, current drinkers taking part in *the US National Alcohol Surveys* between the years of 1984 and 2005 were asked to explain the association between pressure and help-seeking, frequently citing heavy drinking and strong beliefs about alcohol use as drivers for help-seeking. Women, alternatively, are more likely to seek help for external reasons, compared with men who are motivated by internal factors such as a belief in their own capability (Jakobsson, Hensing, & Spak, 2005). In the absence of intent to seek help for substance abuse research amongst the target population, these findings help contribute to an understanding of why the positive result was found within the current research. Aware of New Zealand's unhealthy drinking culture and its devastating effects, universal promotional campaigns have been run by the Government through the Health

Protection Agency to raise awareness about unhealthy drinking practices. This research has drawn a clear association between attitude and intention towards professional help for substance abuse. Beyond these constructs however, whether increased awareness about dangerous aspects of drinking is contributing to this relatively high intention to seek help is speculative as no research exists on the topic, but it offers another possible route for exploration in relation to explaining this finding. This is the first time, in a comparative analysis, New Zealand baby boomers have been asked about their help-seeking intentions regarding four of the most prevalent psychological problems they face. Focusing on the two areas where baby boomers showed a higher intent to seek help, substance abuse and depression, the results are promising given the significant risk factor for morbidity and mortality both disorders present. But as previously mentioned, the less positive intention towards anxiety is equally as significant and efforts should now focus on the other variables that may be contributing to this result.

With regards to forgetfulness previous research investigating help-seeking for subjective memory complaints suggests that the prevalence for help-seeking is low at 23% and 26% (Jorm et al., 2004; Waldorff, Rishøj, & Waldemar, 2008). Furthermore, a connection has been made between those who make a pathological causal attribution due to family history being more likely to seek help than those who have no connection (Hurt et al., 2011). Supporting the current research finding, researchers in London found that of 126 over 65 year old participants where subjective memory impairment was reported by 66.7% and significant concern with their memory was reported by 31%, only one participant sought help. The results obtained in the present research may indicate that baby boomers are likely to see memory concerns as a normal part of ageing and not requiring professional help. With such a large cohort moving into old age and the dementias' prevalence rates remaining as they are, thousands more New Zealanders will have a form of dementia, yet many will go

undiagnosed. Estimates in the United Kingdom, for example, predict that up to 80% of all Alzheimer's cases will go undiagnosed (Weimer & Sager, 2009). The results in the current research do give some hope to the mental health sector as they are at least neutral and not negative and demonstrate the predictive ability of the construct PO towards baby boomers engaging in professional help for forgetfulness. Furthermore, considering a significant relationship was identified between both PO and PBC and intention to seek professional help this suggests that other attitudinal barriers may better explain the lower intention rating. Investigating barriers like loss of independence or fear due to the hopelessness of a prognosis with no cure are avenues that may be rewardingly explored to complement the current findings (Agency Reporters, 2014).

By comparison, intent towards preventive measures associated to the four mental health concerns achieved almost identical means across all four disorders. Furthermore, when compared with professional intent the mean result was higher, with a 'likely' intention to engage in the intervention. These results are more positive than Westerhof et al.'s (2008) study and reinforce the qualitative findings from a group of leading-edge boomers in Canada where taking personal responsibility for psychological health was identified as a core theme (Murray et al., 2003). For depression specifically, the current results are supported by a pre-eminent study into perceived helpfulness and preference for preventive and self-help methods for depression (Shin et al., 2014). In this study, psychiatrists, patients with depression and the general public were surveyed. The general public is the sample which best matches the present research sample and this group preferred self-help interventions over meeting with a psychiatrist as a helpful intervention, furthermore psychiatrists and the general public were in agreement that self-help methods, and in particular exercise, were the most effective of all of the options offered. The preventive benefits of exercise, diet and cognitive activity for a range of physical diseases and some psychological disorders are repeatedly extolled in New

Zealand's media and it appears, within this group at least, preventive choices incorporating these themes are popular with baby boomers. Despite intent for professional intervention being low for forgetfulness, preventive intention in comparison was much higher. Protecting cognition in ageing is a widely publicised topic and researchers agree that focusing on intellectual and occupational activity, alongside spiritual, emotional, physical and social activities can protect cognition (Strout & Howard, 2012). Perhaps owing to the fact that cognitive decline is perceived to be one of the biggest fears in ageing adults (Phelan, Anderson, LaCroix, & Larson, 2004), a high intention to engage in preventive activities was found for 'forgetfulness'. In particular, exercise has been widely communicated as a protective endeavour for cognition as well as other diseases inherent in ageing, even for those that were inactive in earlier years (Middleton, Barnes, Lui, & Yaffe, 2010). The result identified in this research may be in response to the increased exposure these messages receive in mainstream media, amongst other factors.

Lastly, it was hypothesised that intent to seek help for anxiety would be lower than substance abuse and depression; however preventive measures across all four disorders received almost identical, positive, ratings. As mentioned previously, feeling anxious is a common experience for people and seen as a normal reaction to day-to-day stressors. However what the preventive results indicate, is that compared to professional intent, baby boomers acknowledge the benefits of activities like exercise, bibliotherapy or socialising in protecting and minimising the harmful effects of unhealthy levels of anxiety or in the prevention of anxiety. This finding therefore, gives the mental health sector some confidence that, for some baby boomers, preventive strategies may be a valid alternative to professional services and in some cases may already be actuated.

Previous professional experience. The majority of previous research suggests that the effect of engaging in previous mental health help-seeking significantly, and positively,

influences future professional help behaviours (Deane et al., 1999; Deane & Todd, 1996; Jagdeo et al., 2009; Marsh et al., 2006), contributes to increased psychological openness (James & Buttle, 2008) and to general positive attitudes towards help-seeking (J. Wang & Patten, 2007). It also suggests that if the encounter was perceived to be positive a correlation can be found between increased likelihood of seeking help in the future and a positive attitude towards mental health care (Deane et al., 1999; Quinn et al., 2009; Schomerus et al., 2009a). As hypothesised, the findings in the current research support this body of research; with regards to positive previous help, significant and positive correlations were found between it and attitudes towards help-seeking (both scales reported positive and significant relationships). In a New Zealand study, older participants' previous help contributed to their psychological openness score (James & Buttle, 2008), a finding matched in the current study. In a logistic regression analysis on older people's attitudes towards help-seeking and treatment beliefs, controlling for a number of potential covariates, including previous help, Mackenzie et al., (2008) found that significantly more positive ratings of mental health intervention effectiveness were found from those who had experienced psychological treatment. In terms of association with intent to seek professional and preventive help, while all of the correlations between previous help and intent were positive (except for professional help for forgetfulness) only two of the relationships were significant - professional help for substance abuse and preventive help for depression. In a randomised controlled trial with participants who met the DSM-IV criteria for alcohol dependence or abuse, at-risk drinking or binge drinking, a logistic regression analysis found that previous psychological help was a positive predictor for utilisation of formal help (Grothues et al., 2008). Furthermore in another multivariate logistic regression, previous help-seeking was one significant predictor of receiving alcohol detoxification in a hospital setting (Freyer-Adam, Gaertner, Rumpf, John, & Hapke, 2010). Therefore, the current results support some existing research

suggesting that previous help-seeking is linked to stronger intentions to seek professional help for substance abuse concerns. With regards to preventive intention for depression, the significant and positive relationship with positive previous help experiences may, in part, be connected to the way professional services are delivered in New Zealand. For example, evidence-based interventions like CBT are often used to treat depression (Ellis et al., 2004), but depending on the practitioner the systematic programme may also be complemented with strategies that mirror mainstream media messages about exercise as a way to manage some depressive symptomatology. This service approach combined with messages evident in national depression campaigns like the *National Depression Initiative* may also be contributing to this result. Furthermore, this particular campaign has been fronted by a New Zealand sporting icon, Sir John Kirwan, who is a strong proponent of exercise as a preventive tool.

In comparing those who had sought help with those who had not, significant differences were found between all professional intent scores, but none of the preventive intention means. This finding also fits with the existing research regarding engaging in professional services for mental health and inclination to engage with it once more (Schomerus, Matschinger, & Angermeyer, 2009b; Skogstad et al., 2006). Furthermore, participants in the current research chose professional help as the second highest option they would recommend most often to a friend with mental health issues, with GPs being the number one and a mixture of ‘talking to them’ and professional help in third. Qualitative responses about professional help experiences corroborated the positive intent for professional help for psychological concerns seen earlier. In another related finding, group differences were examined between those who stated they had had psychological concerns in the past and those who had not. In comparing these groups for their intention, attitude and emotional distress, statistically significant differences were identified across all relationships,

except for preventive help for forgetfulness and substance abuse. This finding supports the notion that sub-groups within the cohort were more open-minded to both professional and preventive interventions across nearly all disorders, depending on their personal experience. This attitudinal difference has been connected to an increased proclivity to seek help in the future for mental health concerns, particularly for those from Western cultures (Karasz, 2005). In a pan-European analysis of the correlates between attitudes and actual service use for mental health problems, past mental health concerns as a clinical correlate was identified, suggesting that those who had previously experienced mental health problems held the belief they would seek help again (Ten Have et al., 2010), a finding supported by Wang and Patten (2007).

In summary, the current research uncovered surprising findings in relation to the cohort of baby boomers. Despite the twenty years over which they originate from, no differences in relation to age were found in attitude or intention to seek professional or preventive help. These findings offer policy makers and the mental health service of New Zealand a significant basis from which to engage with this important cohort as findings were uniform and consistent. The findings from this research contribute to the prediction of increased demand on the mental health sector from the elderly now and in future years, and offer positive information for those in the sector as engagement plans are reviewed and developed. Intention to seek both preventive and professional help by the baby boomers of New Zealand was at least similar or greater than other comparable samples. And generally the relationship between PO and intention to seek both professional and preventive help was strong, uncovering a positive and psychologically open trend amongst this generation. Additionally, the findings relating to preventive options may offer a promising contribution to the solution for workforce demand issues. Females were more likely to show positive intent toward professional help for substance abuse and preventive efforts for all four

disorders identified, giving valuable information about specific disorder-specific intervention options between the genders. Matching many other international studies, depression and substance abuse received higher intention to seeking professional help and intent was positive and broadly similar across all four disorders for prevention, again matching equivalent research. Significantly, this research firmly connects attitude to intention, and provides a basis for understanding the differences in intention across disorders for professional and preventive help with this cohort. Lastly, the significance of past professional experiences is highly related to future help-seeking, a finding that has been emulated in many separate research projects.

Theory of Planned Behaviour. In measuring whether the TPB model variables (PBC and PO) were related to intention to seek professional or preventive help for all four disorders, significant correlations were found between all pairs, excluding intent for preventive forgetfulness with both constructs, and PO and preventive depression. Of these relationships several were found to be both significant and moderate for relationship strength: PO and all professional intent scores and PBC with professional help for anxiety. This result indicates that having a positive attitude is a strong and significant predictor of intent to seek both professional and preventive help for almost all of the disorders identified in the current research, therefore partially supporting hypothesis six. This finding mirrors Westerhof et al.'s (2008) study which established that PO and PBC (defined as help-seeking propensity) was significantly correlated with both professional and preventive intention. While there is no other research available connecting TPB variables with intention towards preventive help-seeking for mental health, in a meta-analytical study of the TPB predictors of the intent to adopt preventive innovation, both PO and PBC correlated positively and significantly with intent across several preventive behaviours (Overstreet, Cegielski, & Hall, 2013). The results

indicate that with increased PO or PBC levels, higher intent towards both professional and preventive help-seeking may be found.

In multiple regression analyses using professional intent as the dependent variable, beta coefficients achieved in the current research, for all four disorders, were similar to those found in Westerhof et al.'s (2008) study. PO was found to contribute the most (and a significant amount) towards variance in intention, suggesting that of the variables chosen for analysis it is the one associated highest with seeking professional help for mental health issues, also supporting hypothesis six. This finding is similar to Westerhof et al.'s (2008), however PBC or help-seeking propensity was also deemed a significant contributor to variance in the current study, also supporting hypothesis six. This finding replicates other studies investigating TPB contributions towards psychological help-seeking intention which have found that despite PBC correlating positively with intention, the magnitude is lower than that of PO (or attitude), meaning it contributes significantly less variance within the TPB model (Hess & Tracey, 2013; Overstreet et al., 2013; Zemore & Ajzen, 2014). However, some studies have shown a greater role for PBC over PO in explaining variance in intention (Hyland et al., 2012). The current research obtained larger overall adjusted variance compared to Westerhof et al.'s (2008) overall model finding suggesting the TPB model variables, and additional variables identified in this research explained intention to seek professional help more than the former research.

Like Westerhof et al.'s (2008) study the model predictor variables also accounted for relatively low amounts of variance in comparison to other studies undertaken using similar variables and constructs. For example, using a case-vignette as the dependent variable, and with the addition of behavioural, control and normative beliefs elicited through a qualitative preparation study, researchers were able to attribute 42% of the variance in help-seeking for depression to independent TPB variables in a non-depression symptom sample (Schomerus et

al., 2009a). This result, compared to the body of TPB research indicates a high amount of variance identified (in a meta-analysis of TPB variables explaining a variety of behaviours the mean result was 39% (Armitage & Conner, 2001)). Key differences between the present study and the cited research are the explicit hypothetical situation outlined to participants, which is arguably a more well-defined example of the behaviour and the addition of the construct Indifference to Stigma (IS). Similar to the present study, PBC had a minor influence on intention possibly reflecting the location of the research; Germany's public health system is similar to New Zealand's in terms of the comparative ease and relative low-cost access to psychological care. Lastly, the cited research was conducted via face-to-face interviews, where clarification could be delivered regarding the constructs under investigation, potentially shaping or even generating attitudes. Researchers in Northern Ireland used TPB variables with a sample of at-risk Irish government employees as they investigated intention to seek counselling (Hyland et al., 2012). Using multiple regression, their model variables explained 49.9% of variance in intention to seek counselling. Independent variables used in this study were measures of perceived behavioural control, subjective norms, perceived control, self-efficacy and attitude, extending the operationalisation of the TPB model compared to the current research. Unlike many other TPB studies, it found that PBC was the strongest predictor of intention. Using the TPB model, but with the added predictor variable of masculinity ideology, Smith and Thompson (2008) were able to account for 29.6% of variance in intention in men's psychological help-seeking intention, with a sample of United States University students (median age 20). Using a generic help-seeking questionnaire (the long form of the ATSPPHS) and the additional measure of masculinity ideology, this research not only accounted for a reasonable amount of variance, but was also able to highlight a mediatory role for attitudes towards help-seeking and the relationship between intention and masculine ideology. In research on a community sample of Chinese, Mak and

Mo (2009) found that predictor variables of subjective norm, perceived behavioural control and attitude (PO) explained 57% of variance in intention to seek help for mental health concerns. Subjective norm contributed the most variance in this model of TPB, in fact, the researchers asserted that attitude and PBC towards help-seeking are partially influenced by significant others among Chinese adults. With the participant sample in the cited research being from an Eastern culture, where mental illness stigma features strongly compared to a Western culture (Chung & Wong, 2004), the subjective norm finding is not surprising. Lastly, Ajzen and Zeng (2014) used an altered TPB model to predict substance abuse treatment completion from a public outpatient programme in the United States. Using standard TPB variables of subjective norm, PBC and attitude (PO), most of the 27% of variance accounted for by the model could be explained by PO and PBC. The proxy measure of intention - treatment completion, was found to be moderately but significantly associated with intention. A reliable association was not found between subjective norm and the intention to complete treatment. As evidenced, the TPB model has played a valuable role in elucidating the variables that contribute to explaining and predicting help-seeking for mental health, yet in the current research the variables chosen for analysis contributed considerably less to variance (between 13% to 43% less than the research reviewed above). However, as identified above, no two studies used the same TPB model or constructs for investigation, so comparisons must be made with caution. Notwithstanding this, methodological issues may have contributed to the current research result (for example a lack of elicitation analysis to uncover specific beliefs relative to this audience, the general definition of the behaviour, the homogeneity and particular characteristics of the sample, or the omission of stigma as a potential predictor variable) and these will be reviewed shortly.

Additional predictor variables of level of emotional distress and satisfaction of previous professional help were added to the TPB model in the current research. As identified

earlier, previous contact was significantly and positively correlated with attitude and two intention scores (partially supporting hypotheses four and five). It was hypothesised that the level of emotional distress would contribute highly to variance in the TPB model, and correlate highly with intention. However, no evidence was found to support the inclusion of this predictor variable in the TPB model given the low contribution to variance found and the minimal strength of correlation between emotional distress and intention ratings, albeit all correlations were found to be positive. This result matches other TPB research that has attempted to investigate emotional distress as a predictor variable. Despite its association with a higher intent to seek help (Cairney et al., 2010), studies linked to mental health help-seeking utilising TPB variables and the addition of emotional distress have found no association with intent (McDowell et al., 2011; Wojtowicz, Day, & McGrath, 2013). The finding in the present research could be explained by the relatively high intention towards help, compared to other research, demonstrating that baby boomers are open towards treatment irrespective of sub-threshold or threshold symptomology. In contrast, the other predictor variable of “satisfaction with a previous professional psychological experience” achieved a positive and significant relationship with: intent to seek professional help for substance abuse; intent for preventive help for depression; and with both TPB measures used in the current research; but contributed little to explaining variance in help-seeking intentions. This finding matches similar research using the TPB predictor variables to explain mental health help-seeking in that it contributes little to variance but still maintains significant relationships with other TPB variables. James and Buttle (2008) found that previous help correlated positively to PO with a sample of older New Zealand adults and Skogstad, Deane and Spicer (2006) found that in comparing a sample of New Zealand prisoners, previous psychological help outside of prison was associated with higher intention to seek future help,

however contribution to variance within the extended TPB model was minimal and non-significant.

Socio demographic variables identified as possible predictor variables (age which has already been discussed, gender and living with a partner or not) in the current research were also found to contribute little to variance within the TPB model. With regards to gender; while non-TPB research supports women being more likely to seek help for mental health concerns, the finding in this research that gender contributed little to variance is matched by similar research finding the effect of the TPB variables on help-seeking intention were invariant across gender (Mak & Davis, 2013). It was assumed that living with or without a partner would contribute significantly to variance in the TPB model, based on non-TPB research, yet in the current research it did not. There is no TPB research to compare this finding to. While these results contain a number of statistically significant results and strong relationships between variables, they are equally important for what they do not explain. Considering the baby boomers' inimitable experiences, it is important to consider other barriers that may be holding New Zealand adults and the elderly back from accessing help. Attitudinally, independence may act as a barrier to baby boomers who will want to cope with their perceived difficulties alone (Outram et al., 2004), skill level of the professional help (in this case - primary care) may prevent some from wanting to seek help (Kravitz et al., 2011), to resource-related reasons like relying on personal social networks (Corrigan et al., 2003; Turner & Brown, 2010), or a lack of time and money (RANZCP, 2014) or availability of treatment, may all act as barriers to time-poor, financially strapped baby boomers. Furthermore a simple lack of knowledge about the resources available may contribute to a negative intention response, and as Ajzen (1991) stated: "perceived behavioural control may not be particularly realistic when a person has relatively little information about the behaviour" (p.184-185).

In summary, this research uncovered a key finding relating to the help-seeking intentions of baby boomers and TPB model variables: a positive attitude is a strong and significant predictor of intent to seek both professional help for depression, anxiety and substance abuse and preventive help for anxiety and substance abuse. With regards to variance, the Theory of Planned Behaviour and predictor variables chosen to explain variance in professional intention partially achieved this. Psychological Openness and Perceived Behavioural Control were found to correlate significantly and strongly with intention, however PO was found to contribute the most variance in intention signifying a stronger magnitude in relationship. However, in comparison to other quasi-similar TPB research, the variables chosen for analysis explained less total percentage variance in intention. Additional predictor variables of emotional distress, previous help, living or not living with a partner, gender and age did not contribute any meaningful addition to variance also. This finding gives the mental health community in New Zealand some direction as to other variables that may better explain and predict professional help-seeking for mental disorders by this generation.

Study Limitations

This study had a number of limitations that limit the generalisability of the results. These include specific participant characteristics, the construct validity of ‘forgetfulness’ and aspects of how the help-seeking model was operationalised.

Participants’ characteristics. As outlined earlier the characteristics of the survey participants reflected a bias towards New Zealand European/Pākehā and well educated respondents. In comparing the demographic characteristics of this convenience sample of baby boomers and the corresponding Census New Zealand profile, it indicates that this group was not a representative sample. Higher levels of education are strongly associated with positive attitudes towards psychological help-seeking and treatment of specific disorders (Fischer & Turner, 1970; Jorm et al., 2000; Koydemir-Özdena & Erelb, 2010). Furthermore, help-seeking behaviours can be determined by the way a culture comprehends health. Māori and Asian people together make up 21% of New Zealand’s population and both cultures are associated with a holistic model of health compared to the bio-medical model dominant in Western culture (Durie, 1985; K. Park, 2011). Therefore the responses gathered through this study may not represent all New Zealanders and surveying a more representative sample would increase the generalisability of the results, particularly across the increasingly ethnically diverse population of baby boomers now residing in New Zealand.

Participants also recorded a high prevalence of past mental disorders (47.7% in the cohort, compared with 39% lifetime prevalence amongst New Zealanders (Oakley Browne et al., 2006)). This discrepancy has potential implications on the generalisability of the results owing to the known association between personal experience of mental disorder and attitude and propensity towards help-seeking interventions (Dahlberg, Waern, & Runeson, 2008). In comparing those who had past psychological concerns with those who had not, all pairs except two were considered significantly different, with those with no previous experience of

mental illness demonstrating lower levels of intention and attitude towards help-seeking. Furthermore, those with previous experience of psychological help (representing the majority of those stating past psychological concerns) recorded significantly higher attitudes and intentions to seek professional help across every measure. In comparing the genders, male rates of mental disorder matched the general lifetime prevalence rates outlined above, whereas female rates were much higher at almost 60%, explaining the higher than normal prevalence rates found in the sample. Evidence shows that women are inclined to seek psychological help more than men (Bebbington et al., 2000; Parslow & Jorm, 2000) and have more positive attitudes towards help-seeking (Mackenzie et al., 2006). Within the current research, differences were found between the genders regarding women's propensity for preventive help which was significantly higher than men's across all disorders, and a similar finding was identified for professional help for substance abuse, however gender was not found to contribute significantly within the help-seeking model used nor were there any differences found between the genders regarding attitudes towards help-seeking scale. Lastly the sample was self-selecting indicating possible non-representation of a general sample. Females were more inclined to respond to the survey, alongside those who had experienced psychological concerns and as outlined above these characteristics have been associated with increased help-seeking and attitudes towards help-seeking and may limit the generalisability of the results.

Forgetfulness as a construct. 'Forgetfulness' received the lowest professional intention rating in comparison to the other disorders identified. It is important to critically examine why this was and in doing so raise the question of whether construct validity was compromised. 'Forgetfulness' was intended to indicate memory concerns that may mark the beginning of one of the dementias, however construct validity is challenged when participants do not perceive what was intended to be measured as an adequate definition

(Cronbach & Meehl, 1955). It is possible that in assessing this term participants supposed forgetfulness was a common experience in everyday life right across the lifespan. Depression, anxiety and substance abuse are understood as diagnosable psychological disorders, whereas forgetfulness is considered by many as a normal part of ageing (Imhof, Wallhagen, Mahrer-Imhof, & Monsch, 2006). Where the current research failed to draw a distinction was between forgetfulness as a normal ageing state and memory loss related to cognitive impairment, now seen as a condition requisite for a diagnosis of one of the dementias (APA, 2013). Therefore it is unclear whether this result is valid in comparison with the other disorders. As previously discussed, baby boomers are enthusiastic internet users, and easily accessible information proliferates on it, demarcating the difference between pathological and normal memory loss. Nosology surrounding memory decline in older age is also expanding and now includes multiple terms including ‘dementia’, ‘Alzheimer’s disease’, ‘mild cognitive impairment’, ‘subjective cognitive impairment’, ‘subjective forgetfulness’, ‘memory loss’ and ‘memory decline’. Associated symptoms to these terms range on a continuum from memory-related problems that either do or do not cause noticeable problems in daily life functioning. The construct of forgetfulness used in this research could have been improved by including a specifier about the type of forgetfulness intended, for example geographical disorientation or vocabulary problems such as mixing up words as symptoms of Alzheimer’s disease (APA, 2013). Another consideration is whether stigma is more intrinsically associated with forgetfulness in older age as research postulates (Ballard, 2010; Mol et al., 2007; Öhman, Josephsson, & Nygård, 2008) and whether this impacted results. A core aim of this research was to understand participants’ intentions towards seeking help for a range of disorders and as researchers in the Netherlands found, of the 90% of those concerned with their forgetfulness only 25% actually sought help (Ponds, Commissaris, & Jolles, 1997). While it is important to examine whether construct validity was compromised, perhaps the

current result is representative of a response to forgetfulness as a psychological concern? The challenge for participants and for clinicians alike is ensuring the fine line between normalising and pathologising memory decline inherent with ageing is navigated in terms of determining at which point forgetfulness needs investigating, or in the client's case, when is it time to seek help?

Operationalising the Theory of Planned Behaviour. Aspects of how the Theory of Planned Behaviour (TPB) was operationalised may have impacted on the model's ability to account for variance within professional help-seeking intention, namely: definition of the behaviour/intention, the lack of a belief elicitation study and the omission of other predictor variables related to help-seeking. As identified earlier, the current study chose to operationalise the model slightly differently to a traditional TPB study therefore the limitations outlined below are identified, but should be considered within a traditional TPB operationalisation.

The TPB model creator Ajzen (2002) advises that the behaviour being examined must be specifically defined according to Target, Action, Context, and Time (TACT) and that any attitude measures used must be compatible with this approach. The balance must be made between being too specific with the behaviour and too general, given that a common criticism of the TPB is its lack of practical utility when the behaviour is defined as too specific. In the current research the behaviour was defined as the following (this is the depression example):

“What we want to know is what you would do if you had such problems. So, answer the questions by imagining what it would be like to have such a problem and what you would do in such a situation... Suppose you have depressed or sad feelings, would you like to discuss these feelings with ‘professional help’ and would you be interested in courses that teach you to deal with these issues?”

A potential limitation therefore was the lack of specificity of this measure as respondents were asked to consider a hypothetical scenario of experiencing mental distress and their help-seeking response to this over an indeterminate period of time. The extent to which a participant could imagine such a scenario is unclear, further, the more proximal the defined behaviour the more concrete and contextual the thinking, increasing the predictive ability of actual behaviour (Lieberman & Förster, 2009). Therefore more specificity on the duration of the concern and the process of help-seeking may have improved the construct validity of the intention measure and therefore its predictive ability. However, it is important to remember that despite the link between intention as an antecedent for behaviour, a core aim of the current work was to explain help-seeking behaviour amongst this cohort, not solely to predict service utility. In a related limitation, a single-response item was used to measure intention towards the behaviour for each disorder indicating concomitant concerns for reliability. With more time available a pilot study could have tested a range of behaviour intention items for internal consistency and a selection of items then used to represent this construct.

Also, with time permitting, a belief elicitation study could have been conducted to test out the help-seeking beliefs of this unique cohort. In the TPB, beliefs play a core role as it is assumed that they provide the foundations for the constructs being measured. The belief elicitation study would have helped to identify beliefs salient to this cohort, in turn allowing for a comparison between these and the TPB model constructs within the measurement instrument used. As these beliefs are indicators of the same latent constructs, further clarification on whether the measures of attitude and perceived behavioural control were measuring these constructs may have been obtained. For example, the TPB has been scrutinised for its ability to explain or predict behaviours which have volitional control threatened in any way. It was the researcher's belief that seeking professional help for mental

health in New Zealand is a volitional behaviour and therefore the instrument chosen to measure PBC may not have captured the construct adequately as obstacles to volitional control like money and time were not explicitly included in it. This is a potential limitation as construct validity may have been compromised with regards to PBC. Indicating that other variables or in fact a different definition of PBC may contribute significantly more to variance over and above the theory constructs chosen for study (Godin & Kok, 1996). A belief elicitation study would have allowed for further clarification on this point.

Given the relatively low levels of variance identified by the predictor variables chosen for analysis and the fact that a social cognitive model of health behaviour is at best able to identify half of the variance in the behaviour being examined (Conner & Norman, 1996), other factors may better explain the determinants of intention towards help-seeking. To address this point, additional variables of theoretical interest may be added for analysis (known as theory broadening (Perugini & Bagozzi, 2001)), provided they are shown to significantly contribute to variance and correlate with the behaviour or intention (Ajzen, 2001). This research attempted to uncover extra variance through theory broadening with the addition of emotional distress and perceived helpfulness of prior contact with professional help services; yet both variables contributed little variance to the model. Gender, age and living with a partner or not, were also considered as variables of interest based on extant research, yet no important findings were identified relating to these variables in the regression or correlational analyses. A possible avenue for future research would be to identify other salient predictor variables to baby boomers (for example self-determination (Conner & Armitage, 1998)) through qualitative work and more will follow on this shortly. Owing to the poor contribution of stigma or subjective norm to the TPB model found in a number of meta-analyses (Godin & Kok, 1996; Sheppard et al., 1988), and the perception that normative factors are less likely to determine intention, a decision was made to exclude it from

constructs measured in this research. The omission of this construct may also be a limitation, given the improved but still apparent relationship between stigma and mental health in New Zealand (Thornicroft, Wyllie, Thornicroft, & Mehta, 2014). However, by focusing on the percentage of variance alone, the core aim of this research is overlooked, which was to contribute to explaining mental health help-seeking behaviour.

Lastly, as identified in the results section, due to the addition of binary predictor variables (including previous professional psychological help and the initial yes/no intention towards preventive and professional help) the possible sample size for multivariate regression analysis for prevention across the disorders was reduced to on average 80, which is too low to adequately detect power. For future research looking at the contributions to variance within preventive help-seeking intention an increase in sample size would be required in order to undertake the appropriate statistical analyses.

Directions for Further Research

Considering the pivotal position baby boomers occupy in New Zealand society and their consequential and expected engagement with mental health services, there is surprisingly little research available on their attitudes and intentions towards mental health help-seeking. Capitalising on the findings of this research, the above-mentioned scenario presents prospective researchers with numerous future research opportunities. Traversing four areas - professional help-seeking, preventive help-seeking and the Theory of Planned Behaviour – and specifically in relation to four key psychological disorders encountered in old age - what this research has achieved is a broad understanding of intention and an explanation about some of the variables that contribute and can predict this intention. In order to provide even more information to health providers and policy makers, future research could build on from these findings in the following ways.

Using the social cognitive model of help-seeking, the TPB, the aim of the current research was to identify variables that contribute towards the intention to seek professional help for mental health needs. In part, this was achieved through identifying the significant predictor roles Psychological Openness and Perceived Behavioural Control play in contributing to variance within the TPB model. Just as significant were the findings that the other variables chosen for analysis contributed low variance. These findings leave a number of other variables open for consideration regarding their possible role in contributing to professional help-seeking intention by the baby boomers. As numbers of those seeking professional help for mental health concerns falls below known prevalence rates a qualitative study could use in-depth interviews to examine other variables that may be contributing to help-seeking by baby boomers. Furthermore, with this sort of approach other help-seeking related topics could be covered including other sources of psychological assistance, as well as what the barriers to professional mental health help-seeking are. Furthermore, given over half of the participants indicated previous psychological concerns and the majority sought help, a complementary qualitative investigation could usefully examine the various pathways of help-seeking by those baby boomers who had sought help in the past, compared with those who had not.

Intention towards preventive interventions received a reasonably positive response from the cohort, indicating an untouched and potentially rewarding area of future research in New Zealand. Given the expected demand on mental health services by this group in the coming years, investigating how preventive interventions may already be impacting on the mental health of baby boomers in New Zealand seems a valuable next step. With regards to general preventive options like exercising, social groups and online communities, a prospective cohort study could be undertaken which would compare a population sample of baby boomers varying in their participation of preventive activities. Measured over a period

of time, the impact of preventive behaviours on mental health outcomes could be assessed in relation to either general mental health, or to a specific set of symptoms. For example, using baseline readings of a valid and reliable mental health instrument and weekly exercise or social group participation, participants' results could be compared and monitored for associations over a set timeframe. The results of this research would be the first of its kind in New Zealand and could greatly contribute to the burgeoning field of preventive psychological practice in this country. In a related future research angle; relatively positive current levels of mental health, alongside extremely positive intention toward particular preventive endeavours like exercising or social groups were identified in this research. It is not clear from the results however exactly what preventive behaviours baby boomers are participating in which may be impacting on their mental health. While there is a lack of formal preventive programme efficacy research within in New Zealand, a cross-sectional study examining current preventive practices combined with a qualitative information to elicit personal beliefs on the impact of the preventive behaviour would contribute to a much better understanding of what baby boomers actual behaviours are in this field and what the impact of this engagement may be.

The current research was focused on explaining intention towards seeking professional and preventive help for mental health concerns. While intention has been found to predict actual behaviour the evidence is not entirely clear (Skogstad et al., 2006; S. Sutton, 1998). In order to understand whether the relatively positive intention ratings found in this research can predict utilisation (of either professional or preventive help) the Theory of Planned Behaviour could again be employed in a future design. Over a longer period of time of at least two years, a general sample of baby boomers could be surveyed for their intentions and attitudes and then followed up at a later date regarding actual service or preventive course usage. This approach will give valuable information regarding the predictive

capability of the TPB model amongst this cohort. Furthermore, within this approach, incorporating a belief elicitation study at the onset of research would enable researchers to fine tune the constructs in order to incorporate and better reflect the specific beliefs of this cohort. The approach could follow the current research and cover multiple disorders, common in elderly or be targeted more specifically by disorder, audience and by help-seeking behaviour. For example, regarding prevention, researchers may choose to work with the *National Depression Initiative* and investigate usage of the preventive course on their website over a defined time period. With a sample of baby boomers experiencing subclinical levels of depression, this approach could provide invaluable information on what contributes to preventive help-seeking by baby boomers and whether intention does in fact predict behaviour.

Help-seeking for specific disorders prevalent in the elderly is of particular interest with regards to the baby boomers, as certain disorders, such as the dementias, are expected to proliferate over the coming years. Building on the finding that, compared to the three other disorders outlined in this research, forgetfulness received the lowest intention to seek professional help researchers have multiple avenues to consider in building on from this important finding. For example, finding out about the relationship between intention, TPB variables and help-seeking behaviours for those suffering from varying levels of forgetfulness would require a sophisticated prospective study design which should account for a variety of help-seeking pathways. Within this approach salient beliefs linked to social-cognitive constructs that contribute to help-seeking intention for the dementias could be identified and measured. A TPB approach could also be supplemented with an initial qualitative investigation into the baby boomers' perception of varying levels of forgetfulness and where help-seeking is seen to play a role.

CHAPTER TEN: CONCLUSION

The relatively positive attitudes and high intention towards seeking both professional and preventive help for four key mental disorders in older age by baby boomers offer positive and promising news to New Zealand's mental health service. In contrast with what is known about service utilisation in the elderly, baby boomers indicate a higher intent to seek professional help compared to the actual service use of those that have preceded them. Specifically, baby boomers have been found to be psychologically open, have high perceived control over accessing various forms of mental health help and these findings are associated to an intention to seek professional help for a variety of mental health concerns associated with older age. Within the cohort, attitudes and intentions are largely identical with regards to age and gender. Considering the unmet need inherent within the mental health service in New Zealand, these findings offer two important strands of discovery: first in predicting future service utilisation and secondly, how to engage with baby boomers in order to encourage mental health help-seeking now and in the future. The homogeneity of the group's attitude and intentions towards help allow for communications and interventions that canvass the whole generational cohort. As there is some evidence to suggest a positive previous experience with psychological services is related to a positive intention result and a positive attitude towards help-seeking, this sub-group of baby boomers offers another angle to consider when engaging with this cohort on the subject of mental health help.

The proclivity of baby boomers, particularly by women, towards prevention of mental health complaints found in this research should not be overlooked. This is the first study in New Zealand to examine preventive intention towards four key disorders in older age and their connection to attitude towards help-seeking; the results obtained offer a fruitful basis for further examination and discussion. As the largest cohort ever ages over 65 years old,

demand on the mental health services of New Zealand will be stretched. It is therefore a duty to continue to investigate the role that prevention can play alongside the traditional system.

Intentions towards seeking help for depression and substance abuse are higher than that of anxiety and memory issues. Because of the strong associations identified between these intentions and the attitude constructs under examination further work is required to uncover what other variables contribute to help-seeking for memory concerns and anxiety. Intention by women to seek professional help for substance abuse is an exciting and extremely relevant finding due to the increasing substance abuse diagnoses identified within this cohort. What this research has been able to do is identify that women, high in psychological openness and perceived behavioural control, are more likely to seek help should substance abuse become an issue in their lives.

This is only the second research project in New Zealand to use the Theory of Planned Behaviour to examine attitude and intention towards help-seeking specifically for a number of mental health complaints. With an edited approach to the traditional theory, the findings not only provide support for the theory in explaining help-seeking behaviour amongst this age group but offer further avenues for discovery. Of the model variables, Perceived Behavioural Control and Psychological Openness particularly, explain a significant aspect of professional help-seeking by baby boomers and are significant predictors of help-seeking behaviour. While this result on its own is an important finding, harnessing it and refining the attitudinal variables under investigation will provide even further information to help to explain mental health help-seeking and the barriers towards it and help to better understand how to engage baby boomers with professional and preventive mental health help.

This research was ambitious as it traversed a number of psychological subjects pertinent to an important group of New Zealanders. It offers many avenues for future research and discussion, for example: continuing to try to explain help-seeking intention and

attitudes of baby boomers using the Theory of Planned Behaviour; further analysis of the role of mental health prevention in baby boomers' lives; and what contributes to disorder-specific related help-seeking attitudes and intentions. It is hoped that this work leads to further analysis in some or all of these areas.

APPENDICES

Appendix A: Online Version Of Participant Questionnaire

Attitudes of New Zealand's baby boomers towards mental health assistance

Participant Information

ID: 217

ID: 143

Thank you for clicking through. Before you begin the questionnaire please read the following information outlining the purpose behind this research and other administrative aspects that may be of interest to you.

My name is Joanna Macfarlane and I am conducting research which will be asking 'baby boomers' (those born between 1946 and 1965) about their attitudes towards mental health help-seeking. I am undertaking this research for my Master's thesis at Massey University, Albany and I am being supervised by Associate Professor Paul Merrick.

You are invited to participate in this important research which will, for the first time in New Zealand, uncover what baby boomers' attitudes are towards mental health help-seeking and whether there are any barriers to help-seeking in place. This is important information to uncover because it is hypothesised that New Zealand's mental health system will come under unprecedented strain as baby boomers age. It is envisaged the findings from this research may help New Zealand's mental health providers plan for the future mental health needs of baby boomers in New Zealand. So, if you are a baby boomer you are warmly invited to take part in this research project.

Your involvement in this research will consist of filling out the survey which follows this information and it is anticipated this should take about ten minutes of your time.

You are under no obligation to accept this invitation; however completion of the questionnaire implies consent. All responses will be anonymous and you have the right to decline to answer any particular question. All of the data received will be stored securely and only my supervisor, Paul Merrick, and I will have access to it. Finally, at the conclusion of the study, the survey data will remain securely stored at Massey University for five years, thereafter being destroyed. If you are interested in receiving a summary of the main findings of the study, I will ask you to provide details of your name and address at the end of the survey so that this can be sent to you.

If you have any queries about any aspect of this study please contact myself, Joanna Macfarlane, on 09 817 5874 (email: joanna.macfarlane.1@uni.massey.ac.nz) or Associate Professor Paul Merrick on 09 414 0800, Ext. 41231 (email: paul.l.merrick@massey.ac.nz).

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researchers named above are responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research that you wish to raise with someone other than the researchers, please contact Professor John O'Neill, Director, Research Ethics, telephone 06 350 5249, email: humanethics@massey.ac.nz.

Thank you for your time so far, let's begin!

Suppose you had these concerns..

ID: 215

Please note: only complete this questionnaire if your year of birth is from 1946 through to 1965. Please read the instructions below carefully before completing the questionnaire:

- Please try to answer each question by yourself.**
- Read each question carefully first.**
- There are no right or wrong answers, please select the answer that best applies to you.**
- Select one answer in each case, unless otherwise indicated.**

Once again, thank you for your time!

The first questions are about psychological problems that people your age and older might experience. You do not have to be suffering from these problems. What we want to know is what you would do if you had such problems. So, answer the questions by imagining what it would be like to have such a problem and what you would do in such a situation. The term professional refers to individuals who have been trained to deal with mental health problems (e.g., psychologists, psychiatrists, social workers).

ID: 77

19) Suppose you have depressed or sad feelings. Would you like to be less gloomy or depressed?

Yes

No

ID: 78

20) Would you like to discuss these feelings?

Yes

No

ID: 184

If yes, please rate how likely you would be to discuss these feelings with each of the following (please choose one answer for each):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

ID: 185

21) Family

1

2

3

4

5

ID: 186

22) Friends

1

2

3

4

5

ID: 187

23) GP

1

2

3

4

5

ID: 188

24) Professional help

1

2

3

4

5

ID: 189

25) Other e.g., (please include your 'other' choice)

ID: 190

26) Please rate your 'other' choice.

1

2

3

4

5

ID: 80

27) If not, please indicate why not?

ID: 81

28) Would you be interested in courses that teach you to deal with these issues?

Yes, the idea appeals to me

No, the idea does not appeal to me

ID: 191

29) If yes, please rate how likely it would be that if you were currently dealing with these issues you would consider taking a course (please choose one).

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

1

2

3

4

5

ID: 82

30) Suppose you have anxiety. Would you like to be less anxious?

Yes

No

ID: 83

31) Would you like to discuss these feelings?

Yes

No

ID: 192

If yes, please rate how likely you would be to discuss these feelings with each of the following (please choose one answer for each):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

ID: 84

32) Family

1

2

3

4

5

ID: 193

33) Friends

- 1
- 2
- 3
- 4
- 5

ID: 194

34) GP

- 1
- 2
- 3
- 4
- 5

ID: 195

35) Professional help

- 1
- 2
- 3
- 4
- 5

ID: 196

36) Other (please include your 'other' choice)

ID: 197

37) Please rate your 'other' choice

- 1
- 2
- 3
- 4
- 5

ID: 85

38) If not, please indicate why not?

ID: 86

39) Would you be interested in courses that teach you to deal with these issues

Yes, the idea appeals to me

No, the idea does not appeal to me

ID: 198

40) If yes, please rate how likely it would be that if you were currently dealing with these issues you would consider taking a course (please choose one):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

- 1
- 2
- 3
- 4
- 5

ID: 87

41) Suppose you are forgetful. Would you like to be less forgetful?

Yes

No

ID: 88

42) Would you like to discuss this issue?

Yes

No

ID: 199

**If yes, please rate how likely you would be to discuss these feelings with each of the following
(please choose one answer for each):**

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

ID: 200

43) Family

1

2

3

4

5

ID: 201

44) Friends

1

2

3

4

5

ID: 202

45) GP

1

2

3

4

5

ID: 203

46) Professional help

1

2

3

4

5

ID: 204

47) Other (please include your 'other' choice)

ID: 205

48) Please rate your 'other' choice

1

2

3

4

5

ID: 90

49) If not, please indicate why not?

ID: 91

50) Would you be interested in courses that teach you to deal with these issues?

Yes, the idea appeals to me

No, the idea does not appeal to me

ID: 206

51) If yes, please rate how likely it would be that if you were currently dealing with these issues you would consider taking a course (please choose one):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

1

2

3

4

5

ID: 92

52) Suppose you thought you might have a drink or drug problem? Would you like to drink or do drugs less?

Yes

No

ID: 93

53) Would you like to discuss these feelings?

Yes

No

ID: 207

If yes, please rate how likely you would be to discuss these feelings with each of the following (please choose one answer for each):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

ID: 208

54) Family

1

2

3

4

5

ID: 209

55) Friends

1

2

3

4

5

ID: 210

56) GP

- 1
- 2
- 3
- 4
- 5

ID: 211

57) Professional help

- 1
- 2
- 3
- 4
- 5

ID: 212

58) Other (please include your 'other' choice)

ID: 213

59) Please rate your 'other' choice

- 1
- 2
- 3
- 4
- 5

ID: 95

60) If not, please indicate why not?

ID: 96

61) Would you be interested in courses that teach you to deal with these issues?

Yes, the idea appeals to me

No, the idea does not appeal to me

ID: 214

62) If yes, please rate how likely it would be that if you were currently dealing with these issues you would consider taking a course (please choose one):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

1

2

3

4

5

ID: 145

63) If you felt you were experiencing or about to experience psychological distress, which of the following preventive measures would you consider starting or engaging in in order to prevent further psychological distress (tick all that you would consider):

Social group

Community group

Exercise

Reading books

Reading online material

Audio programme (e.g., CD, mp3)

Online programme

None

Other:

ID: 97

64) Imagine a family member or friend contacts you because he or she suffers from psychological problems. What would you recommend that they do?

ID: 98

65) Have you ever suffered from psychological complaints?

Yes

No

ID: 99

66) If yes, what problems?

ID: 100

67) When you suffered from psychological complaints did you look for help?

Yes

No

ID: 176

68) If yes, did you find the help (please circle the answer that best applies):

1 = Very Helpful 2 = Helpful 3 = Neither helpful or not helpful 4 = Not Helpful 5 = Not Helpful At All

1

2

3

4

5

ID: 101

69) If yes, what was the experience like?

ID: 102

70) If no, please indicate why you didn't look for help when you had psychological complaints?

Bothered by symptoms

ID: 50

Think of how you have been feeling over the past seven days, including today. Below is a list of things you may have been feeling over this time. Please circle the appropriate number to describe how distressing you have found these things over this time. If do not suffer from symptoms, it is important that you indicate this. 1 = not at all, 2 = a little, 3 = quite a bit, 4 = extremely

ID: 182

71) Difficulty in speaking when you are excited

not at all

a little

quite a bit

extremely

ID: 53

72) Trouble remembering things

- not at all**
- a little**
- quite a bit**
- extremely**

ID: 54

73) Worried about messiness or carelessness

- not at all**
- a little**
- quite a bit**
- extremely**

ID: 55

74) Blaming yourself for things

- not at all**
- a little**
- quite a bit**
- extremely**

ID: 56

75) Pains in the lower part of your back

- not at all**
- a little**
- quite a bit**
- extremely**

ID: 57

76) Feeling lonely

not at all

a little

quite a bit

extremely

ID: 58

77) Feeling sad

not at all

a little

quite a bit

extremely

ID: 59

78) Your feelings being hurt easily

not at all

a little

quite a bit

extremely

ID: 60

79) Feelings others do not understand you or care about you

not at all

a little

quite a bit

extremely

ID: 61

80) Feeling that people are unfriendly or dislike you

- not at all**
- a little**
- quite a bit**
- extremely**

ID: 62

81) Having to do things very slowly to be sure that you are doing things right

- not at all**
- a little**
- quite a bit**
- extremely**

ID: 63

82) Feeling not as good as others

- not at all**
- a little**
- quite a bit**
- extremely**

ID: 64

83) Soreness of your muscles

- not at all**
- a little**
- quite a bit**
- extremely**

ID: 65

84) Having to check and double check what you do

- not at all
- a little
- quite a bit
- extremely

ID: 66

85) Hot or cold spells

- not at all
- a little
- quite a bit
- extremely

ID: 67

86) Your mind going blank

- not at all
- a little
- quite a bit
- extremely

ID: 68

87) Numbness or tingling in parts of your body

- not at all
- a little
- quite a bit
- extremely

ID: 69

88) A lump in your throat

not at all

a little

quite a bit

extremely

ID: 178

89) Trouble concentrating

not at all

a little

quite a bit

extremely

ID: 179

90) Weakness in parts of your body

not at all

a little

quite a bit

extremely

ID: 180

91) Heavy feeling in your arms and legs

not at all

a little

quite a bit

extremely

Seeking help

ID: 125

On the following pages are some descriptions that indicate how one can think about seeking professional psychological help with mental health problems. The term professional refers to individuals who have been trained to deal with mental health problems (e.g., psychologists, psychiatrists, social workers). The term psychological difficulties refers to reasons one might visit a professional. Similar terms include mental health concerns, emotional problems, mental troubles, and personal difficulties. Please indicate after each sentence how much you agree with it. You can do this by putting a circle around the answer that best suits you. There are no right or wrong answers.

1 = Disagree 2 = Partly Disagree 3 = Partly agree 4 = Agree

ID: 126

92) If I believed I was having a mental breakdown, my first thought would be to get professional attention

1

2

3

4

ID: 127

93) The idea of talking about psychological difficulties with a psychologist strikes me as a poor way to get rid of emotional conflicts

1

2

3

4

ID: 128

94) If I were experiencing a serious emotional crisis at this point in my life, I am confident that I could find relief in counselling

1

2

3

4

ID: 129

95) There is something good in the attitude of a person who is willing to cope with his or her psychological difficulties without resorting to professional help

1

2

3

4

ID: 130

96) I would want to get psychological help if I were worried or upset for a long period of time

1

2

3

4

ID: 131

97) I might want to have psychological counselling in the future

1

2

3

4

ID: 132

98) A person with an psychological problem is not likely to solve it alone; he or she is likely to solve it with professional help

1

2

3

4

ID: 133

99) Considering the time and expense involved in counselling, it would have doubtful value for a person like me

1

2

3

4

ID: 134

100) A person should work out his or her own problems; getting psychological counselling would be a last resort

1

2

3

4

ID: 135

101) Personal and emotional problems solve themselves, just like most things

1

2

3

4

General Information

ID: 3

102) Lastly, some general questions about you. Your age, including the year you were born?

ID: 4

103) What is your gender?

Male

Female

Other:

ID: 5

104) What is your relationship status?

Married

Widowed

Separated

Single, never married

Divorced

In a de-facto relationship

Other:

ID: 6

105) Please select the category that best describes your ethnic background

New Zealand European

Māori

Chinese

Indian

Tongan

Cook Islander

Other:

ID: 7

106) What is the highest level of education you have achieved?

Secondary school/High school

Teachers' College

University

Polytechnic

Apprenticeship

Other:

ID: 8

107) Please select the category that best describes you and your family's annual income

\$0 - \$50,000k

\$50,001 - \$100,000

\$100,001 - \$150,000

\$150,000 and above

Contact details for further information

ID: 141

108) Only if you would like to see a summary of the final findings of this research, please leave your contact details below and they can be sent to you.

Thank You!

ID: 1

Thank you for taking our survey. Your response is very important to us.

Appendix B: Paper Version Of Participant Questionnaire



Attitudes of New Zealand's baby boomers towards mental health assistance

INFORMATION SHEET

My name is Joanna Macfarlane and I am conducting research which will be asking 'baby boomers' (those born between 1946 and 1965) about their attitudes towards mental health help-seeking and preventive and therapeutic psychological measures. I am undertaking this research for my Master's thesis at Massey University, Albany and I am being supervised by Associate Professor Paul Merrick.

You are invited to participate in this important research which will, for the first time in New Zealand, uncover what baby boomers' attitudes are towards mental health help-seeking and whether there are any barriers to help-seeking in place. This is important information to uncover because it is hypothesised that New Zealand's mental health system will come under unprecedented strain as baby boomers age. It is envisaged the findings from this research may help New Zealand's mental health providers plan for the future mental health needs of baby boomers in New Zealand. So, if you are a baby boomer you are warmly invited to take part in this research project.

Your involvement in this research will consist of filling out the questionnaire which follows this information and it is anticipated this should take about ten minutes of your time. Upon completion, I ask that using the postage-paid and addressed envelope provided, you post back the completed questionnaire.

You are under no obligation to accept this invitation; however completion of the questionnaire implies consent. You have the right to withdraw at any stage prior to submission of the questionnaire. You also have the right to decline to answer any particular question. All of the data received will be stored securely and only my supervisor, Paul Merrick, and I will have access to it. Finally, at the conclusion of the study, the returned questionnaires will remain at Massey University for five years, thereafter being destroyed. If you are interested in receiving a summary of the main findings of the study, I will ask you to provide details of your name and address at the end of the questionnaire so that this can be

sent to you. If you choose to send this information, you have the right to withdraw from the study up until August 1st 2014, when the data will be coded for analysis.

If you have any queries about any aspect of this study please contact myself, Joanna Macfarlane, on 09 817 5874 (email: joanna.macfarlane.1@uni.massey.ac.nz) or Associate Professor Paul Merrick on 09 414 0800, Ext. 41231 (email: paul.l.merrick@massey.ac.nz).

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researchers named above are responsible for the ethical conduct of this research. If you have any concerns about the conduct of this research that you wish to raise with someone other than the researchers, please contact Professor John O'Neill, Director, Research Ethics, telephone 06 350 5249, email: humanethics@massey.ac.nz.

Thank you for your time.

Please read the instructions below carefully before completing the questionnaire:

- Please try to answer each question by yourself.
- Read each question carefully first.
- There are no right or wrong answers, please select the answer that best applies to you.
- Select one answer in each case, unless otherwise indicated.

Examples of how to circle the answers:

1. Auckland is in New Zealand. True False

2. Wellington is the capital of the New Zealand? Yes No

agree neutral disagree

3. New Zealand is a beautiful country 1 2 3

A. These questions are about psychological problems that people your age and older might experience. You do not have to be suffering from these problems. What we want to know is what you would do if you had such problems. So, answer the questions by imagining what it would be like to have such a problem and what you would do in such a situation. The term *professional* refers to individuals who have been trained to deal with mental health problems (e.g., psychologists, psychiatrists, social workers).

Suppose you have depressed or sad feelings (please circle):

1. Would you like to be less sad or depressed? Yes No

2. Would you like to discuss these feelings? Yes No

If yes, please rate how likely you would be to discuss these feelings with each of the following (please circle one answer for each):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

3. Family

1 2 3 4 5

4. Friends

1 2 3 4 5

5. GP

1 2 3 4 5

6. Professional help

1 2 3 4 5

7. Other e.g. (please write your 'other' choice)

8. Please rate below your 'other' choice

1 2 3 4 5

9. If not, please indicate why not?

.....
.....
.....

10. Would you be interested in courses that teach you to deal with these issues?

Yes, the idea appeals to me

No, the idea does not appeal to me.

11. If yes, please rate how likely it would be that if you were dealing with these issues you would consider taking a course (please circle one):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

Suppose you have anxiety (please circle):

12. Would you like to be less anxious? Yes No

13. Would you like to discuss these feelings? Yes No

If yes, please rate how likely you would be to discuss these feelings with each of the following (please circle one answer for each):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

14. Family

1 2 3 4 5

15. Friends

1 2 3 4 5

16. GP

1 2 3 4 5

17. Professional help

1 2 3 4 5

18. Other e.g. (please write your 'other' choice)

19. Please rate your 'other' choice

1 2 3 4 5

20. If not, please indicate why not?

.....
.....
.....

21. Would you be interested in courses that teach you to deal with these issues?

- Yes, the idea appeals to me
- No, the idea does not appeal to me.

22. If yes, please rate how likely it would be that if you were dealing with these issues you would consider taking a course (please circle one):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

Suppose you are forgetful (please circle):

- 23. Would you like to be less forgetful? Yes No
- 24. Would you like to discuss this issue? Yes No

If yes, please rate how likely you would be to discuss these feelings with each of the following (please circle one answer for each):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

25. Family

1 2 3 4 5

26. Friends

1 2 3 4 5

27. GP

1 2 3 4 5

28. Professional help

1 2 3 4 5

29. Other (please write your 'other' choice)

30. Please rate your 'other' choice

1 2 3 4 5

31. If not, please indicate why not?

.....

32. Would you be interested in courses that teach you to deal with these issues?

- Yes, the idea appeals to me
- No, the idea does not appeal to me.

33. If yes, please rate how likely it would be that if you were dealing with these issues you would consider taking a course (please circle one):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

Suppose you thought you might have a drink or drug problem (please circle):

34. Would you like to drink or do drugs less? Yes No

35. Would you like to discuss these feelings? Yes No

If yes, please rate how likely you would be to discuss these feelings with each of the following (please circle one answer for each):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

36. Family

1 2 3 4 5

37. Friends

1 2 3 4 5

38. GP

1 2 3 4 5

39. Professional help

1 2 3 4 5

40. Other (please write your 'other')

41. Please rate your 'other' choice

1 2 3 4 5

42. If not, please indicate why not?

.....
.....
.....

43. Would you be interested in courses that teach you to deal with these issues?

- Yes, the idea appeals to me
- No, the idea does not appeal to me.

44. If yes, please rate how likely it would be that if you were currently dealing with these issues you would consider taking a course (please circle one):

1 = Very Likely 2 = Likely 3 = Neutral 4 = Not Likely 5 = Not Likely At All

45. If you felt you were experiencing or about to experience psychological distress, which of the following preventive measures would you consider starting or engaging in, in order to try to prevent further psychological distress (tick all that you would consider):

- Social group
- Community group
- Exercise
- Reading books
- Reading online material
- Audio programme (e.g., CD, mp3)
- Online programme
- None
- Other e.g.,

46. Imagine a family member or friend contacts you because he or she suffers from psychological problems. What would you recommend that they do?

.....
.....
.....
.....
.....

47. Have you ever suffered from psychological complaints? Yes No

48. If yes, what problems?

.....
.....
.....
.....

49. When you suffered from psychological complaints did you look for help? Yes No

50. If yes, did you find the help (please circle the answer that best applies):

1 = Very Helpful 2 = Helpful 3 = Neutral 4 = Not Helpful
5 = Not Helpful At All

1 2 3 4 5

51. If yes, what was the experience like?

.....
.....
.....
.....
.....

52. If no, please indicate why you didn't look for help when you had psychological complaints?

.....
.....
.....
.....

B. Think of how you have been feeling over the past seven days, including today.

Below is a list of things you may have been feeling over this time. Please circle the appropriate number to describe how distressing you have found these things over this time. If you do not suffer from symptoms, it is important that you indicate this.

	1 =	2 =	3 =	4
=				
	not at all	a little	quite a bit	
extremely				
53. Difficulty in speaking when you are excited ...	1	2	3	4
54. Trouble remembering things	1	2	3	4
55. Worried about messiness or carelessness	1	2	3	4
56. Blaming yourself for things	1	2	3	4
57. Pains in the lower part of your back	1	2	3	4
58. Feeling lonely	1	2	3	4
59. Feeling sad ...	1	2	3	4
60. Your feelings being hurt easily ...	1	2	3	4
61. Feelings others do not understand you or care about you	1	2	3	4
62. Feeling that people are unfriendly or dislike you ...	1	2	3	4
63. Having to do things very slowly to be sure that you are doing things right	1	2	3	4
64. Feeling not as good as others	1	2	3	4
65. Soreness of your muscles	1	2	3	4
66. Having to check and double check what you do ...	1	2	3	4
67. Hot or cold spells	1	2	3	4
68. Your mind going blank ...	1	2	3	4
69. Numbness or tingling in parts of your body ...	1	2	3	4
70. A lump in your throat	1	2	3	4
71. Trouble concentrating	1	2	3	4
72. Weakness in parts of your body	1	2	3	4
73. Heavy feeling in your arms and legs	1	2	3	4

79. I might want to have psychological counselling in the future

1	2	3	4
1 = Disagree	2 = Partly Disagree	3 = Partly agree	4 = Agree

80. A person with an psychological problem is not likely to solve it alone; he or she is likely to solve it with professional help

1	2	3	4
1 = Disagree	2 = Partly Disagree	3 = Partly agree	4 = Agree

81. Considering the time and expense involved in counselling, it would have doubtful value for a person like me

1	2	3	4
1 = Disagree	2 = Partly Disagree	3 = Partly agree	4 = Agree

82. A person should work out his or her own problems; getting psychological counselling would be a last resort

1	2	3	4
1 = Disagree	2 = Partly Disagree	3 = Partly agree	4 = Agree

83. Personal and emotional problems solve themselves, just like most things

1	2	3	4
1 = Disagree	2 = Partly Disagree	3 = Partly agree	4 = Agree

D. Last, some general questions about you:

85. Your age, including the year you were born

86. Your gender (please tick) male female other

87. Your relationship status (please tick):

married

widowed

separated

single, never married

divorced

in a de-facto relationship

other (please state)

88. Please select the category that best describes your ethnic background

New Zealand - European

Māori

Chinese

Indian

Tongan

Cook Islander

Other (please state)

89. What is the highest level of education you have achieved?

Secondary school/High school

Teachers' College

University

Polytechnic

Apprenticeship

Other (please state)

90. Please select the category that best describes you and your family's annual income:

\$0 - \$50,000k

\$50,001 - \$100,000

\$100,001 - \$150,000

\$150,000 and above

THANK YOU FOR YOUR TIME AND EFFORT!

Please now post back this completed questionnaire in the postage-paid envelope that is supplied. Only if you are interested in being sent a summary of the top-level findings of this research, please add a postal or email address in the box below:

APPENDIX C: Raw Data Frequency Tables

Hopkins Checklist-21 scores

Score	Frequency	Percent	Valid Percent	Cumulative Percent
21	4	1.6	1.6	1.6
22	10	3.9	3.9	5.5
23	11	4.3	4.3	9.8
24	12	4.7	4.7	14.6
25	10	3.9	3.9	18.5
26	16	6.3	6.3	24.8
27	18	7.0	7.1	31.9
28	17	6.6	6.7	38.6
29	19	7.4	7.5	46.1
30	8	3.1	3.1	49.2
31	14	5.5	5.5	54.7
32	13	5.1	5.1	59.8
33	14	5.5	5.5	65.4
34	11	4.3	4.3	69.7
35	5	2.0	2.0	71.7
36	6	2.3	2.4	74.0
37	10	3.9	3.9	78.0
38	3	1.2	1.2	79.1
39	7	2.7	2.8	81.9
40	4	1.6	1.6	83.5
41	10	3.9	3.9	87.4
42	3	1.2	1.2	88.6
43	2	.8	.8	89.4
44	2	.8	.8	90.2
45	2	.8	.8	90.9
46	3	1.2	1.2	92.1
47	2	.8	.8	92.9
48	1	.4	.4	93.3
49	4	1.6	1.6	94.9
50	2	.8	.8	95.7
51	2	.8	.8	96.5
52	1	.4	.4	96.9
53	1	.4	.4	97.2
54	2	.8	.8	98.0
56	1	.4	.4	98.4
59	1	.4	.4	98.8
67	1	.4	.4	99.2
68	1	.4	.4	99.6
69	1	.4	.4	100.0
Total	254	99.2	100.0	
Missing	2	.8		
Total	256	100.0		

ATSPPHS-SF – Psychological Openness Scale Data

Score	Frequency	Percent	Valid Percent	Cumulative Percent
5	2	.8	.8	.8
6	2	.8	.8	1.6
7	4	1.6	1.6	3.1
8	3	1.2	1.2	4.3
9	4	1.6	1.6	5.9
10	4	1.6	1.6	7.5
11	8	3.1	3.1	10.6
12	16	6.3	6.3	16.9
13	24	9.4	9.4	26.4
14	26	10.2	10.2	36.6
15	32	12.5	12.6	49.2
16	34	13.3	13.4	62.6
17	36	14.1	14.2	76.8
18	26	10.2	10.2	87.0
19	19	7.4	7.5	94.5
20	14	5.5	5.5	100.0
Total	254	99.2	100.0	
Missing	2	.8		
Total	256	100.0		

ATSPPHS-SF – Perceived Behavioural Control Scale Data

Score	Frequency	Percent	Valid Percent	Cumulative Percent
6	1	.4	.4	.4
7	5	2.0	2.0	2.4
8	3	1.2	1.2	3.5
9	5	2.0	2.0	5.5
10	13	5.1	5.1	10.6
11	17	6.6	6.7	17.3
12	9	3.5	3.5	20.9
13	23	9.0	9.1	29.9
14	27	10.5	10.6	40.6
15	21	8.2	8.3	48.8
16	27	10.5	10.6	59.4
17	25	9.8	9.8	69.3
18	34	13.3	13.4	82.7
19	16	6.3	6.3	89.0
20	28	10.9	11.0	100.0
Total	254	99.2	100.0	
Missing	2	.8		
Total	256	100.0		

Preventive options considered between the tail-end and leading-edge groups

	Age Group	Would consider <i>n</i>	Pearson Chi-Square				
			χ^2	<i>df</i>	<i>Sig.</i>	<i>phi</i>	<i>Sig.</i>
Community Group	TE	16	1.781	1	.182	.083	.182
Social Group	LE	29	1.067	1	.302	-.080	.302
	TE	44					
Exercise	LE	46	1.629	1	.202	.028	.202
	TE	97					
Books	LE	112	.206	1	.650	.118	.650
	TE	74					
Online material	LE	96	2.447	1	.118	.023	.118
	TE	79					
Audio programmes	LE	85	.139	1	.709	.023	.709
	TE	15					
Online programme	LE	21	3.511	1	.061	-.117	.061
	TE	43					
None	Violated assumptions due to low numbers, unable to compute						

TE: Tail-enders (aged between 49-58), LE: Leading-edge (aged between 59-69)

Recommendations to a friend who is facing psychological concerns

Recommendation	Frequency	Percent	Valid Percent	Cumulative Percent
Find out more information	1	0.4	0.4	0.4
Professional help	74	29.5	30.7	31.1
GP	79	31.5	32.8	63.9
Talk and professional help	61	24.3	25.3	89.2
Can't generalise	4	1.6	1.7	90.9
Give them a purpose	1	0.4	0.4	91.3
Talk	18	7.2	7.5	98.8
Take control yourself	1	0.4	0.4	99.2
Preventive/self help	1	0.4	0.4	99.6
Journey practitioner or naturopath	1	0.4	0.4	100
Total	241	96	100	
Missing	10	4		
Total	251	100		

Comparisons between leading-edge and tail-end responses to “Recommendations to a friend with mental health concerns”

	Age Group	Would consider n (%)
Find out information	TE	0
	LE	1 (.7%)
Professional help	TE	35 (31.8%)
	LE	38 (27.9%)
General Practitioner	TE	36 (32.7%)
	LE	45 (33.1%)
Talk and professional help	TE	22 (20%)
	LE	41 (30.1%)
Exercise	TE	3 (2.7%)
	LE	2 (1.5%)
Can't generalise	TE	3 (2.7%)
	LE	2 (1.5%)
Give them a purpose	TE	0
	LE	1 (.7%)
Talk	TE	12 (10.9)
	LE	7 (5.1%)
Take control yourself	TE	1 (.9%)
	LE	0
Protective/preventive measures	TE	1 (.9%)
	LE	0
Journey practitioner/naturopath	TE	0
	LE	1(.7%)

TE: Tail-enders (aged between 49-58), LE: Leading-edge (aged between 59-69)

APPENDIX D: Independent *t*-tests, hierarchical multiple regression and multivariate tests

Independent t-tests between women and men on intention and attitude results

Variables	Mean Difference	95% Confidence Interval of the Difference		<i>t</i>	<i>df</i>	<i>Sig</i>
		Lower	Upper			
IP: Depression	-.178	-.509	.152	-1.062	245	.289
IP: Anxiety	.081	-.225	.388	.525	142	.601
IP: Forgetfulness	.100	-.252	.452	.559	228	.577
IP: Substance Abuse	.269	-.024	.562	1.812	153	.072
IPrev: Depression	.235	-.145	.615	1.219	209	.224
IPrev: Anxiety	.246	-.036	.529	1.725	150	.087
IPrev: Forgetfulness	.246	-.036	.529	1.725	150	.087
IPrev: Substance Abuse	.417	.076	.758	2.409	211	.017*
PO	.116	-.196	.428	.735	150	.463
PBC	.093	-.682	.868	.237	252	.813

**correlation is significant at the .02 level (2-tailed)*

Independent t-tests between those with or without previous psychological concerns on intention and attitude results

Variables	Mean Difference	95% Confidence Interval of the Difference		<i>t</i>	<i>df</i>	<i>Sig</i>
		Lower	Upper			
IP: Depression	0.434	0.109	0.759	2.629	245	0.009**
IP: Anxiety	0.632	0.292	0.973	3.656	228	.0003***
IP: Forgetfulness	0.382	0.008	0.756	2.012	209	0.046*
IP: Substance Abuse	0.458	0.12	0.797	2.669	211	0.008**
IPrev: Depression	0.383	0.089	0.677	2.572	142	0.011*
IPrev: Anxiety	0.313	0.025	0.6	2.149	153	0.033*
IPrev: Forgetfulness	0.185	-0.093	0.464	1.314	150	0.191
IPrev: Substance Abuse	0.289	-0.013	0.591	1.893	150	0.06
HCL	4.057	1.966	6.149	3.821	252	0.0001***
PO	4.057	1.966	6.149	3.821	252	.003**
PBC	1.163	0.403	1.923	3.013	252	0.0003**

*IP: Professional Intention score, IPrev: Preventive Intention score, PO: Psychological Openness, PBC: Perceived Behavioural Control, HCL: Hopkins Checklist-21, *correlation is significant at the*

.05 level (2-tailed), **correlation is significant at the .05 level (2-tailed), ***correlation is significant at the .0005 level (2-tailed)

Results from the hierarchical regression analyses of intentions towards professional help for forgetfulness on specific TPB variables and other variables

Variable	Step One β	Step Two β	Step Three β
Age	.047	.025	.028
Gender	-.085	-.077	-.048
Living With Someone	-.024	.005	-.011
PO		.328**	.379**
PBC		.013	.039
Emotional Distress			.070
Previous Experience			-.104
Change Statistics	R^2 ch = .010 F ch = .308	R^2 ch = .120 F ch = 5.643**	R^2 ch = .132 F ch = .606
	Adj R^2 (full model) = .063, F = 1.915		

PO: Psychological Openness, PBC: Perceived Behavioural Control, ** $p < .01$ *** $p < .001$

Results from the hierarchical regression analyses of intentions towards professional help for substance abuse on specific TPB variables and other variables

Variable	Step One β	Step Two β	Step Three β
Age	.076	.058	.063
Gender	-.152	-.140	-.143
Living With Someone	.076	.101	.100
PO		.304**	.287*
PBC		.119	.113
Emotional Distress			.025
Previous Experience			.034
Change Statistics	R^2 ch = .038 F ch = 1.206	R^2 ch = .181 F ch = 7.888***	R^2 ch = .182 F ch = .058
	Adj R^2 (full model) = .117, F = 2.805**		

PO: Psychological Openness, PBC: Perceived Behavioural Control, * $p < .05$, ** $p < .01$,

*** $p < .001$

MANOVA Multivariate Tests^a comparing young 49-55, middle 56-62 and older 63-69

Effect		Value	<i>F</i>	Hypothesis <i>df</i>	Error <i>df</i>	<i>Sig.</i>
Intercept	Pillai's Trace	.993	378.776 ^b	12.000	31.000	.000
	Wilks' Lambda	.007	378.776 ^b	12.000	31.000	.000
	Hotelling's Trace	146.623	378.776 ^b	12.000	31.000	.000
	Roy's Largest	146.623	378.776 ^b	12.000	31.000	.000
	Root	146.623	378.776 ^b	12.000	31.000	.000
young_med_ol d	Pillai's Trace	.544	.996	24.000	64.000	.484
	Wilks' Lambda	.503	1.060 ^b	24.000	62.000	.412
	Hotelling's Trace	.897	1.121	24.000	60.000	.351
	Roy's Largest	.778	2.074 ^c	12.000	32.000	.049
	Root	.778	2.074 ^c	12.000	32.000	.049

^a. Design: Intercept + young_med_old, ^b. Exact statistic, ^c. The statistic is an upper bound on *F* that yields a lower bound on the significance level.

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