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# **Preferences for Early Retirement: The Role of Work Related Factors**

A thesis  
submitted in partial fulfilment  
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of  
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## **Abstract**

This study investigated the work related factors related to the retirement preferences of 132 full time older workers, defined as those aged 55+, in a range of New Zealand organisations. This research is important as due to the ageing population, maintaining the employability of the older worker for as long as possible is vital for economic growth and sustainability. Identifying the work related factors that may be influencing the early retirement preferences of older workers may lead to a better understanding of ways to maintain these workers in employment. The aim of this study was to contribute to the understanding of the factors which can be influenced directly by organisations, as retirement preferences are strongly influenced by norms and attitudes within the workplace.

The research proposed that the predictor variables perceived age discrimination, job flexibility satisfaction, attitudes towards information and communication technologies (ICTs), perceptions of techno-complexity, and perceived threat from organisational downsizing, would have a direct relationship with early retirement preferences. In this study, the older worker was considered to have early retirement preferences if their preferred retirement age was earlier than their expected retirement age. The model predicted that job satisfaction and job security would mediate the relationships between the predictor variables and early retirement preferences.

Correlation and mediation analyses were performed in SPSS to test the proposed hypotheses. Several hypotheses were supported: perceived age discrimination was positively related to early retirement preferences; perceived age discrimination was negatively related to job satisfaction; job flexibility satisfaction was positively related to job satisfaction; perceived threat from organisational downsizing was negatively related to job security; job satisfaction was negatively related to early retirement preferences; and job security was negatively related to early retirement preferences. The other hypotheses were not supported. This may be due to external factors not explored in this study potentially influencing the retirement intentions of older workers more heavily than the work related factors studied.

Non-hypothesized significant relationships were also found. Firstly, perceived age discrimination was significantly related to job flexibility satisfaction, job security, and perceived threat from organisational downsizing. Job satisfaction and job security were also found to be significantly related to perceived threat from organisational downsizing. These results indicate that the work related factors thought to predict early retirement intentions, are perhaps not currently as important to New Zealand employees as past research has shown, as none of the predictor variables except perceived age discrimination correlated significantly with early retirement preferences. Overall, the results indicate that there are likely to be other factors not explored in this study influencing the retirement intentions of older workers in New Zealand organisations.

For organisations who have recently been through organisational downsizing, employers should be mindful of the negative impacts this can have on older workers, namely job security and job satisfaction. New Zealand organisations should strive to create working environments that take into consideration the needs of older workers, and which encourage older workers to want to stay working, even past the age they are eligible for New Zealand Superannuation. Older workers who feel as though they have limited choice when it comes to making decisions surrounding their retirement may have difficulty adjusting to post-retirement life, thus organisations should be doing all they can to encourage flexible transitions to retirement.

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# Table of Contents

Abstract .....	ii
Acknowledgements .....	iv
Table of Contents .....	v
List of Figures .....	ix
List of Tables.....	x
Chapter One: Introduction.....	1
Background .....	1
Defining Retirement.....	5
Factors Leading to Retirement .....	7
Purpose of the Research .....	9
Theoretical Model .....	13
Variables .....	14
Early Retirement Preferences.....	14
Age Discrimination. ....	15
Job Flexibility. ....	16
Influence of Information and Communication Technologies. ....	17
Perceptions of Techno-complexity. ....	18
Organisational Downsizing. ....	20
Job Satisfaction. ....	22
Job Security.....	24
Summary of Hypotheses .....	25
Chapter Summary.....	26
Chapter Two: Method .....	28
Participants.....	28
Procedure.....	28
Measures .....	30

Screening Questions.....	31
Early Retirement Preferences.....	31
Perceived Age Discrimination. ....	31
Job Satisfaction. ....	32
Job Flexibility Satisfaction.....	32
Job Security.....	33
Threat from Organisational Downsizing.....	33
Attitudes towards Information and Communication Technologies. ....	33
Perceptions of Techno-complexity. ....	34
Demographics. ....	34
Data Analysis .....	35
Factor Analysis. ....	35
Descriptive Statistics.....	35
Correlational Analysis.....	35
ANOVAs and t-tests. ....	36
Mediation Analysis. ....	36
Chapter Three: Results.....	38
Exploratory Factor Analysis .....	38
Perceptions of Age Discrimination.....	38
Job Satisfaction. ....	38
Job Flexibility Satisfaction.....	39
Job Security.....	39
Attitudes towards ICTs. ....	39
Perceptions of Techno-complexity. ....	40
Missing Data .....	41
Descriptive Statistics.....	42
Data Transformations.....	43

ANOVAs and <i>t</i> -tests .....	43
Correlation Analysis.....	45
Mediation Analysis .....	48
Supplementary Findings .....	53
Chapter Four: Discussion.....	56
Supported Research Findings.....	57
Perceived Age Discrimination and Early Retirement Preferences. ....	57
Perceived Age Discrimination and Job Satisfaction. ....	57
Job Flexibility Satisfaction and Job Satisfaction. ....	58
Threat from Organisational Downsizing and Job Security.....	59
Job Satisfaction and Early Retirement Preferences. ....	59
Job Security and Early Retirement Preferences. ....	60
Unsupported Hypothesised Findings .....	60
Direct Hypothesised Relationships. ....	60
Job Flexibility Satisfaction and Early Retirement Preferences.....	63
Attitudes towards ICTs and Early Retirement Preferences. ....	63
Perceptions of Techno-complexity and Early Retirement Preferences.....	64
Perceived Threat from Organisational Downsizing and Early Retirement Preferences. ....	65
Mediator Hypotheses. ....	65
Job Satisfaction as a Mediator Variable.....	65
Job Security as a Mediator Variable. ....	66
Supplementary Findings .....	66
Perceived Age Discrimination, Satisfaction with Job Flexibility, Job Security, and Threat from Organisational Downsizing.....	66
Job Satisfaction, Job Security, and Threat from Organisational Downsizing. .....	67
Practical Implications.....	68

Theoretical Implications.....	69
Strengths.....	70
Limitations .....	70
Future Research Suggestions .....	72
Conclusion .....	73
References .....	74
Appendix A .....	93
Appendix B .....	95
Appendix C .....	97
Appendix D .....	105
Appendix E .....	109

## List of Figures

<i>Figure 1.</i> The Process of Retirement .....	10
<i>Figure 2.1.</i> Model of direct relationships between the predictor variables and early retirement preferences. ....	13
<i>Figure 2.2.</i> Model of job satisfaction and job security mediating the relationships between the predictor variables and early retirement preferences. ....	14
<i>Figure 3.</i> Diagram of a basic mediation model (Field, 2013). ....	36
<i>Figure 4.</i> Model of perceived age discrimination as a predictor of early retirement preferences, mediated by job satisfaction – hypothesis 1c .....	49
<i>Figure 5.</i> Model of job flexibility satisfaction as a predictor of early retirement preferences, mediated by job satisfaction – hypothesis 2c .....	50
<i>Figure 6.</i> Model of negative attitudes towards ICTs as a predictor of early retirement preferences, mediated by job satisfaction – hypothesis 3c .....	51
<i>Figure 7.</i> Model of perceptions of techno-complexity as a predictor of early retirement preferences, mediated by job satisfaction – hypothesis 4c .....	52
<i>Figure 8.</i> Model of perceived threat from organisational downsizing as a predictor of early retirement preferences, mediated by job security – hypothesis 5c .....	53
<i>Figure 9.</i> Framework showing the significant correlations between variables. ...	54
<i>Figure 10.</i> Scree plot for perceptions of age discrimination. ....	105
<i>Figure 11.</i> Scree plot for job satisfaction. ....	106
<i>Figure 12.</i> Scree plot for job flexibility satisfaction. ....	106
<i>Figure 13.</i> Scree plot for job security. ....	107
<i>Figure 14.</i> Scree plot for overall attitudes towards ICTs. ....	107
<i>Figure 15.</i> Scree plot for perceptions of techno-complexity. ....	108
<i>Figure 16.</i> Distribution of perceived age discrimination variable. ....	109
<i>Figure 17.</i> Distribution of job satisfaction variable. ....	110
<i>Figure 18.</i> Distribution of job flexibility satisfaction variable. ....	110
<i>Figure 19.</i> Distribution of perceived threat from organisational downsizing variable. ....	111
<i>Figure 20.</i> Distribution of negative attitudes towards ICTs variable. ....	111
<i>Figure 21.</i> Distribution of perceptions of techno-complexity variable. ....	112
<i>Figure 22.</i> Distribution of job security variable. ....	112

## **List of Tables**

Table 1. Demographics .....	29
Table 2. Attitudes towards ICTs pattern matrix.....	41
Table 3. Descriptive statistics of variables.....	44
Table 4. Pearson’s product moment correlations for predictor, mediator, outcome and continuous variables. ....	46

# Chapter One: Introduction

## Background

Due to the ageing population in New Zealand (Jackson, 2011), maintaining the employability of the older workforce is important for both economic growth and sustainability (Loretto & White, 2006). There are many factors that may lead to an older worker making the decision to leave the workforce, and these factors can be substantially influenced by organisations and employers. The aim of this study was to investigate the factors that were related to the retirement preferences of older workers, who are defined by the New Zealand Department of Labour as workers aged 55 years and above (Boyd & Dixon, 2009). Retirement preferences are important to study as often these preferences are precursors to the actual act of retirement (Barnes-Farrell, 2003). This study focused on the ‘push’ (involuntary) rather than the ‘pull’ (voluntary) factors that influence older workers’ preferences for early retirement, as research has shown that retirement due to ‘push’ factors is negatively related to satisfaction in retirement (Jex & Grosch, 2012). In this study, the older worker was considered to have early retirement preferences if their *preferred* retirement age was earlier than their *expected* retirement age. This study focused on the work environment factors rather than personal factors leading to early retirement preferences, such as perceived threat of job loss due to organisational downsizing, attitudes towards the use of information and communication technologies in the workplace, personal experiences of age discrimination, perceived techno-complexity, and satisfaction with job flexibility. Personal factors influencing the decision to retire such as health and financial status were not addressed in this study due to the vast amount of literature already showing that these factors greatly influence thoughts surrounding retirement (Feldman, 1994; Jex & Grosch, 2012; Kim & DeVaney, 2005; Montalto, Yuh, & Hanna, 2000; Shultz & Wang, 2007; Topa, Moriano, Depolo, Alcover, & Morales, 2009; von Bonsdorff & Ilmarinen, 2013).

Sustaining the employability of the older worker is important in today’s society due to the ageing population (Loretto & White, 2006). Population ageing is defined as “... a persistent change in the age structure of the population, caused by two long-term demographic trends: New Zealander’s are having fewer children

and living longer than they used to” (O’Connell, 2014, p. 3). Since 1980, the number of people aged 65+ has doubled within New Zealand, with this age group reaching 600,000 in 2012. It is predicted that this number is likely to double again by 2036 (Jackson, 2011), and it is estimated that there is a 90% chance that by 2036, 21% to 24% of the population will be aged over 65, in comparison to 14% in 2012 (Bascand & Dunstan, 2014). Although ageing populations are occurring worldwide, the issue is most prevalent in countries with a baby boom generation (Statistics New Zealand, 2014, define this generation as those born between 1946 and 1965) approaching retirement (Gringart, Helmes, & Speelman, 2005). Due to this ageing population phenomenon, the costs of retirement income and health for the growing older population are expected to rise significantly over the coming decades (Ministry of Social Development, 2011; St John, 2015). Additionally, a large number of older workers exiting early from the labour force is likely to cause worker shortages, as well as a significant loss of knowledge and skill (van Dam, van der Vorst, & van der Heijden, 2009). It is likely that “employers will want continued access to the increasingly hard-to-replace skills of older workers” (Ministry of Social Development, 2011, p.5). Prolonging the employment of the older generation will be vital for continuing the economic growth as the population in New Zealand continues to age (Paul, Rashbrooke, & Rea, 2006).

Concerns over how the New Zealand economy is going to be able to afford these rising costs have been the subject of numerous debates in recent years. Solutions to overcoming this issue that have been debated include increasing the qualifying age for New Zealand Superannuation (NZS), decreasing the payment levels of NZS, and changing the degree of targeting (St John, 2015). New Zealand is not the only country being presented with these changing demographics, and so it is likely that in response to this, many countries will try and retain older workers in employment for as long as possible, even after they have reached the national/usual retirement age (Billett, Dymock, Johnson, & Martin, 2011a; Gringart et al., 2005). Later retirement is likely to help as it would increase the size of the labour force as well as decrease the number of dependent older adults (Denton & Spencer, 2009) who are reliant on NZS.

Retaining older workers for as long as possible should not be thought of as a burden or obligation on employers, but rather should be thought of as a source of

strength for the organisation. Despite contrary belief, performance levels between younger and older workers are not remarkably different (Sullivan & Duplaga, 1997). Although older workers may potentially be at a disadvantage in employment which requires fast reactions or physical strength (Davey, 2006), apart from instances such as these, often older workers are able to perform just as well as their younger colleagues (Davey, 2006; Sullivan & Duplaga, 1997). In some instances, older workers even perform better, and have higher motivation and job satisfaction levels than their younger counterparts (Sullivan & Duplaga, 1997).

Older workers have also been found to have low absenteeism and turnover rates, and are viewed as being diligent, cooperative, responsible (Qu & Cheng, 1996), and reliable, dependable, and loyal (Brooke, 2003; McGregor & Gray, 2002; McNeill, 2002). Their lower turnover rates may also potentially generate a higher return on investment in training programmes (Davey, 2006). Because of their age, older workers are generally also highly experienced and skilled in their jobs (Eyster, Johnson, & Toder, 2008). They have a wealth of knowledge which they have gained over the years, and as such, this can be seen as an important financial investment by organisations (Turner, 2000). Not only this, but the cost and effort involved in replacing workers who retire can become expensive and time consuming for the organisation (Beehr, Glazer, Nielson, & Farmer, 2000). Additionally, older workers are frequently viewed as having corporate memory, as often they are long-term, experienced employees who have a vast amount of knowledge about the organisation in which they work (Lahaie, 2005). Older workers are also thought of as being valuable during times of organisational change (Brooke, 2003). Employing older workers can also help reflect the diversity of the target market, as in some industries customers prefer to be served by experienced staff members (Australian Employers Convention, 2001). Furthermore, companies have become familiar with marketing to the baby boomer population and have thus changed over the years to meet the needs of this population. However, evidence suggests that these businesses "... have not kept pace as they contemplate older age, leading to a possible lack of commitment to this market in their retirement years" (Ministry of Social Development, 2011, p.14). Therefore, retaining older workers could be beneficial to organisations, as a match is created between the age profile

of employees to that of the customer base (Australian Employers Convention, 2001; Davey & Cornwall, 2003; Ministry of Social Development, 2011).

Retaining the older worker in employment is not only beneficial for organisations, but it can also enhance the well-being of the individual (Eyster, Johnson, & Toder, 2008), as it has been found that many older workers would like to remain in paid employment for lengthier periods (Paul et al., 2006). Delaying retirement and continuing to engage in the workforce can potentially promote physical as well as emotional health by keeping older workers active (Eyster et al., 2008). Remaining in the work force may also increase social interaction and participation amongst older individuals (Drentea, 2002).

Although older workers are now being relied on more heavily than previously, negative attitudes still surround this age group and therefore employers are still reluctant to employ and retain them (Billett, Dymock, Johnson, & Martin, 2011b). Due to organisations needing to retain older workers for longer than before because of the ageing population, it is important to examine the reasons why employers may be reluctant to hire/retain older workers. These reasons can be largely attributed to the numerous negative age stereotypes that surround older workers. Stereotypes and myths surrounding ageing and the abilities of older workers create difficulties when trying to get organisations and businesses to see the need for retaining and hiring older workers (Davey, 2006). They also cause significant obstacles for older workers when it comes to looking for full time employment (Davey, 2006). Age stereotypes can be defined as "... schema or cognitive categories people use to evaluate others based on their age" (T. W. H. Ng & Feldman, 2012, p. 825). These stereotypes include the perception that the older worker has poor health, an inflexible attitude, has outdated skills and is difficult to train (Chiu, Chan, Snape, & Redman, 2001). Additionally, the older worker is often viewed as being less adaptable to change than their younger counterparts and also less willing to adopt new technologies (Chiu et al., 2001; McGregor & Gray, 2002). New Zealand studies suggest that although the views employers have of older workers are mixed, they are mostly negative (Davey, 2006).

These stereotypes surrounding older workers however are not always supported by evidence. Literature shows that older workers are able to adapt to new working environments, are interested in furthering their careers and overcoming

challenges, and although they may need to be trained differently, their resulting performance has been found to be to the same standard as younger workers (Gringart et al., 2005). It has also been found that older workers are not less flexible, can work well with all age groups, and usually have more knowledge than individuals who are younger and less experienced (Gringart et al., 2005). In addition to this, T. W. H. Ng & Feldman's (2012) evaluation of common age stereotypes found that of those explored, only one was consistent with empirical evidence. The meta-analytical study explored common stereotypes that older workers are (a) less motivated, (b) less willing to participate in training and career development, (c) more resistant and less willing to change, (d) less trusting, (e) less healthy, and (f) more vulnerable to family-work imbalance. T. W. H. Ng and Feldman (2012), examined 418 studies and concluded that the only stereotype that had any empirical evidence is that older workers are less willing to participate in activities associated with training and career development.

### **Defining Retirement**

There is no compulsory age for retirement in New Zealand, although the eligibility age for NZS is 65. In 1960, the average age of retirement in New Zealand was 62.5 for females and 66.2 for males (Anderson & Hussey, 2000). By 1995, this had declined to 58.6 and 62.0, for females and males respectively (Anderson & Hussey, 2000). This decline in employment rates of older workers in the 1970s and 1980s, regardless of improving life expectancy, was similar to other countries (Hurnard, 2005). However unlike other countries, during the 1990s and early 2000s New Zealand experienced a reversal of this trend (Hurnard, 2005). It has been argued that the reason for this reversal in older workers' participation in the labour force was due to an increase in the age of eligibility for NZS, as the age of eligibility for public pensions is thought of as being an important factor influencing retirement rates (Hurnard, 2005). NZS is structured quite differently from public pension systems in other Organization for Economic Cooperation Development (OECD) countries for several reasons: there is an emphasis on social protection (as opposed to an emphasis on earnings replacement), there is no mandatory age of retirement, pensions are not dependent on retirement, and there are limited early retirement options (Hurnard, 2005).

It is often difficult to define retirement as there is not only dispute amongst researchers as to its definition, but retirement also means different things to different people. The traditional definition of retirement was when an individual was no longer physically able to continue to work. The retirement period started when one finished paid work, and ended with that person's death (Beehr & Bowling, 2013). However, due to people now living longer, and the changing demographics of the labour force, this view of retirement has changed dramatically.

Due to these changing demographics of labour force participation, the definition of retirement has changed from the traditional view. Retirement today is commonly defined as withdrawal from paid working life (Denton & Spencer, 2009), which assumes that individuals quit the labour force and never again undergo paid employment. While this may be the case for some individuals, often retirement does not happen in this way, and thus should not be thought of as a single transition. The rise in popularity of bridge employment has also made defining retirement difficult. Bridge employment is "... defined as the transition into some part-time, self-employment, or temporary work after full time employment ends" (von Bonsdorff, 2009, p. 12). Retirement therefore should be thought of as *multiple* transitions, where an individual may move in and out of the labour force several times (Denton & Spencer, 2009). Because retirement is not so obviously defined, there are issues when trying to measure it. "Retirement can be voluntary or involuntary; it can be gradual or sudden; and it can be temporary or permanent" (Denton & Spencer, 2009, p. 3), which makes one universal definition of retirement difficult. Researchers therefore have to carefully operationalise the definition of retirement and make it specific for their particular study (Beehr & Bowling, 2013). Denton and Spencer (2009) presented eight conceptualisations of retirement that are present in the literature on retirement. These are: nonparticipation in the labour force; a reduction in hours worked and/or earnings; the hours worked or earnings are below a minimum cut off value; receipt of retirement income; leaving one's main employer; changing career or employment late in life; self-assessed retirement; and a combination of these definitions. This study adopts the view that an individual is retired if they are no longer participating in full time employment.

The trend of earlier retirement is thought of as being one of the most important developments to the labour market over the past five decades (Dorn &

Sousa-Poza, 2010). In nearly all OECD countries, participation rates of older workers in the labour force have fallen (Dorn & Sousa-Poza, 2010). Research looking at early retirement has commonly defined it as retirement before the age of 65, or retirement before the individual is eligible for the full pension/superannuation (Feldman, 2013). It "... is a form of job withdrawal and has been defined as leaving a position or career path of long duration before the age of 65 years" (von Bonsdorff & Ilmarinen, 2013, p. 77). Previous research has characteristically used three objective criteria to define early retirement. These criteria are age, years of service, and eligibility for full benefits from a pension, or the like (Feldman, 2013). However it is now becoming more common to examine early retirement in the context of the individual (Feldman, 2013). In this study, the older worker will be considered to have early retirement preferences if they expect to retire at a later age than what they consider to be their ideal or preferred age of retirement.

### **Factors Leading to Retirement**

There are many factors that may contribute towards an older worker making the decision to retire. These predictors of retirement-related decisions can be classified into either personal factors or work-related factors. Personal factors can include financial circumstances, the individual's health and age, and their goals for retirement. The age of the individual is an obvious factor that influences the decision to retire. The older the individual is, the more likely they are to make the decision to retire (Jex & Grosch, 2012; von Bonsdorff & Ilmarinen, 2013). Financial assets is another of these personal factors that often weighs heavily on an individual's decision to retire. Older workers who have a large income and have undertaken significant financial investment and planning, generally retire earlier than those who are on a lower income and who do not have a lot of financial assets (Feldman, 1994; Jex & Grosch, 2012; H. Kim & DeVaney, 2005; Montalto et al., 2000). The health of the individual is also a significant determinant of early retirement intentions. There is a large volume of literature that suggests that older workers who are in poor health are more likely to retire earlier than older workers who have reasonably good health (Feldman, 1994; Shultz & Wang, 2007; Topa et al., 2009).

Work-related factors that can impact older workers' retirement preferences can include changes in workplace technology, age discrimination (Jex & Grosch, 2012), and work and job characteristics such as job flexibility, autonomy, skill, variety, task significance, interaction with colleagues, workforce reductions, and organisational retirement packages (Beehr, Glazer, Nielson, & Farmer, 2000).

The factors effecting early retirement preferences can generally be classified as either 'push' or 'pull' factors. Push factors are typically thought of as involuntary, negative aspects, such as poor health, dislike of their job (Shultz, Morton, & Weckerle, 1998), or heavy work demands (Jex & Grosch, 2012), that may prompt individuals to retire. They are also generally work related and can include characteristics of the labour market (Stattin, 2005). In some instances, certain at risk individuals may feel they are being pushed out of the labour market when there is a mismatch between the characteristics of available jobs and the characteristics of the labour force. This can be the result of advances in technology and increased competition (Stattin, 2005). Other push factors can include recruitment policies, where stereotypical attitudes towards certain groups of people, such as the elderly, can increase their risk of exclusion from employment (Stattin, 2005). While involuntary early retirement is still a conscious choice made by the individual, the choice is often strongly influenced by the absence of employment opportunities (Dorn & Sousa-Poza, 2010). Pull factors on the other hand are generally thought of as positive aspects that may lead an individual to retire voluntarily, such as the desire to pursue activities outside of work (Shultz et al., 1998) or the need to spend more time with one's spouse or family (Jex & Grosch, 2012). Voluntary early retirement is considered to be the decision by the individual to choose to pursue leisure activities rather than continuing to work (Dorn & Sousa-Poza, 2010).

Factors leading to retirement are important to consider in the context of push and pull factors as these factors can affect how well an individual adjusts to post-retirement life (Barnes-Farrell, 2003; Dorn & Sousa-Poza, 2010; Shultz et al., 1998). Research has found that individuals who have more push than pull factors influencing their decision to retire are generally less satisfied with retirement than employees who have more pull than push factors (Shultz et al., 1998). Additionally, it has been "... shown not only that retirement due to "push" factors is negatively associated with retirement satisfaction, but also that it is negatively associated with

engaging in bridge employment in the same profession” (Jex & Grosch, 2012, p. 273).

Jex and Grosch (2012) also believe that organisations play a part in influencing the factors that may push some older workers to retirement. For example, perceived age-related discrimination of the older worker. This is an issue that the organisation could potentially help overcome by implementing age-friendly policies and redesigning certain aspects of jobs to make them easier for individuals approaching retirement (Jex & Grosch, 2012). Employers’ negative perceptions surrounding age may also lead to them encouraging the early retirement of older workers (Billett et al., 2011b). This means that a significant number of retirees may perceive their transition to retirement as forced or involuntary (van Solinge & Henkens, 2007). It has also been found that the beliefs and views of employers “... towards older workers are major factors influencing labor participation and retirement behavior of older workers” (van Oorschot & Jensen, 2009, p. 274), and that the retirement decisions that the employee forms during the years leading up to retirement “... are strongly shaped by workplace norms and supervisors’ attitudes” (van Solinge & Henkens, 2014, p. 22). For example, employees working in an organisation where they have strong perceived managerial support for remaining in their position have the intention to retire later compared to those who perceive they do not have the same degree of support from their managers (van Solinge & Henkens, 2014). Likewise, employees working in companies where early retirement is usual are themselves also more likely to exit the workforce early (van Solinge & Henkens, 2014). The ‘youth centred’ culture in some organisations can also be a driving force behind discrimination towards older workers, and can lead to these older workers feeling as though they are being unfairly treated in regards to promotional opportunities, work assignments, and employee cutbacks (Jex & Grosch, 2012).

## **Purpose of the Research**

The purpose of this study was to investigate the work related factors that could potentially be influencing the retirement preferences of older workers in New Zealand organisations. Investigating retirement preferences is important, as although preferences do not always lead to actual behaviours, they “... serve as an

important precursor to other retirement behaviors, including retirement intentions, retirement planning, and retirement decisions” (Barnes-Farrell, 2003, p.160). Studying preferences for retirement, rather than the actual act of retirement, provides a greater understanding of the psychological processes involved with the retirement decision making process (Beehr, 1986). The importance of preferences for retirement is visible in Beehr’s (1986) model of the process of retirement (Figure 1).

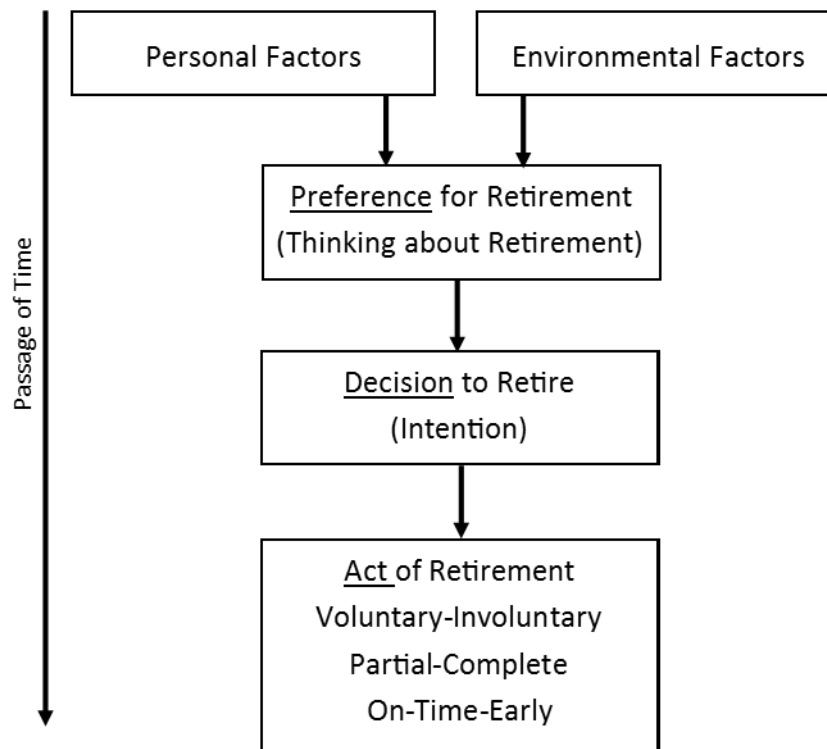


Figure 1. The Process of Retirement (Beehr, 1986, p. 46)

From Figure 1 we can see that over time personal and environmental factors influence *preferences* for retirement, which in turn influences the *decision* to retire, and then finally, this influences the *act* of retirement. This model illustrates that it is important to study retirement preferences as these can affect the act of retirement, whether it be voluntary or involuntary, partial or complete, or on time or early.

This study focused on the ‘push’ factors that were related to early retirement preferences, as these factors have an impact on post-retirement adjustment as well as satisfaction with retirement life. It is important to identify the contributing factors towards early retirement for multiple reasons. One of these reasons is that

retirement can have a significant impact on the health of the older worker if they are forced into retirement before they are ready. For example, retirement may lead to a negative lifestyle shock, decrease in activity levels, or ambition loss (Insler, 2014). Individuals who feel like they are being forced from their workplace and into early retirement are also at risk of experiencing on-going negative effects on their well-being (Calvo, Haverstick, & Sass, 2009). Likewise, involuntary or forced retirement has also been associated with higher levels of chronic illness, negative changes in self-assessed health (Gallo, 2013), and depressive symptoms (Szinovacz & Davey, 2004). Gallo and colleagues (2006), explored involuntary job loss amongst older workers using data from the Health and Retirement Survey. They found that involuntary job loss, amongst older workers with limited finances, is associated with long term depressive symptoms in this group. Similarly, Dave and colleagues (2006), also using data from the Health and Retirement Survey, found that full retirement leads to decline in mental health in post-retirement. Increases in difficulties related with daily activities and movement as well as increases in illness were also found (Dave et al., 2006). From these results, the authors concluded that later retirement may reduce the poor health outcomes and increase well-being in older individuals (Dave et al., 2006).

Unlike technology, equipment, and unskilled labour, the knowledge that older workers hold about the organisation is not a commodity (Calo, 2008). The older worker is likely to have "... amassed great knowledge, skills, and wisdom" (Calo, 2008, p. 405) during their time with the organisation, and if this older worker transitions into retirement abruptly, then this knowledge may leave with them. This knowledge has often "... not been captured within the organization's collective memory system or which has not been personally transferred to other individuals in the organization" (Calo, 2008, p. 405). In order for this knowledge to be useful once the older worker has retired, it must be passed on to other employees so that potential strengths remain in the organisation. Many organisations, however, focus on the short-term rather than the long-term, and thus often lay off talented older workers or push them out of the workplace with early retirement incentives (Calo, 2008). In light of this, it is important that organisations ensure that this knowledge is passed on, which would be easier to do if the older worker stayed in the organisation for longer and retired later. In addition to this, flexible working

arrangements, such as mentoring roles, may help this transfer of knowledge between older and younger workers (Hewitt, 2008), and may also encourage older workers to retire later.

There are two reasons for this research focusing on the work related factors rather than personal factors impacting early retirement preferences. Firstly, there is already a vast amount of literature exploring personal factors that affect retirement preferences, as was discussed earlier (Feldman, 1994; Jex & Grosch, 2012; Kim & DeVaney, 2005; Montalto et al., 2000; Shultz & Wang, 2007; Topa et al., 2009; von Bonsdorff & Ilmarinen, 2013). Work-related factors however have not been explored as thoroughly, and identifying these predictors may be beneficial to both the employee and the employer. The results of this study have the potential to provide organisations and employers with information about factors that may be causing an individual to consider early retirement. This valuable information may be used by the organisation to try and retain older workers for longer.

Secondly, identifying the factors that impact early retirement preferences that can be influenced by the organisation itself are important as older workers' plans for retirement – which are formed in the years leading up to retirement – are strongly influenced by norms and attitudes within the workplace (van Solinge & Henkens, 2014). As mentioned earlier, employers' negative perceptions surrounding older workers may lead to them encouraging these older workers to retire early (Billett et al., 2011b). Retirement preferences are also largely influenced by social relationships within the workplace (Feldman, 1994; van Dam et al., 2009; van Solinge & Henkens, 2007). It has been found that low levels of support from colleagues and managers increases the probability of early retirement amongst older workers (van Solinge & Henkens, 2007). Identifying the factors that may be leading to early retirement can provide insights for employers about how to make the workplace more attractive for its older workers, which in turn could encourage them to remain with the organisation for longer (Armstrong-Stassen & Ursel, 2009). Organisations who are seen as providing workplaces that are tailored towards older workers' specific needs may be perceived as being more supportive to their ageing workforce (Armstrong-Stassen & Ursel, 2009).

This chapter provides descriptions of the variables explored in this study, along with the hypotheses explored and their reasoning. The theoretical model

which was tested, Figure 2.1 and Figure 2.2, is presented, and the chapter concludes with a summary of the hypotheses.

### Theoretical Model

A theoretical model was developed to help illustrate the relationships and their directions between the predictor variables, the mediator variables, and the criterion variable in this study. Figure 2.1 illustrates the direct relationships between the predictor variables: perceived age discrimination, job flexibility satisfaction, negative attitudes towards ICTs, perceptions of techno-complexity and perceived threat from organisational downsizing, and the criterion variable: early retirement preferences. This theoretical model was used to develop hypotheses 1a to 5a in this study. Figure 2.2 shows the relationships between the mediating variables (job satisfaction and job security), the predictor variables (perceived age discrimination, job flexibility satisfaction, negative attitudes towards ICTs, perceptions of techno-complexity and perceived threat from organisational downsizing), and the criterion variable (early retirement preferences).

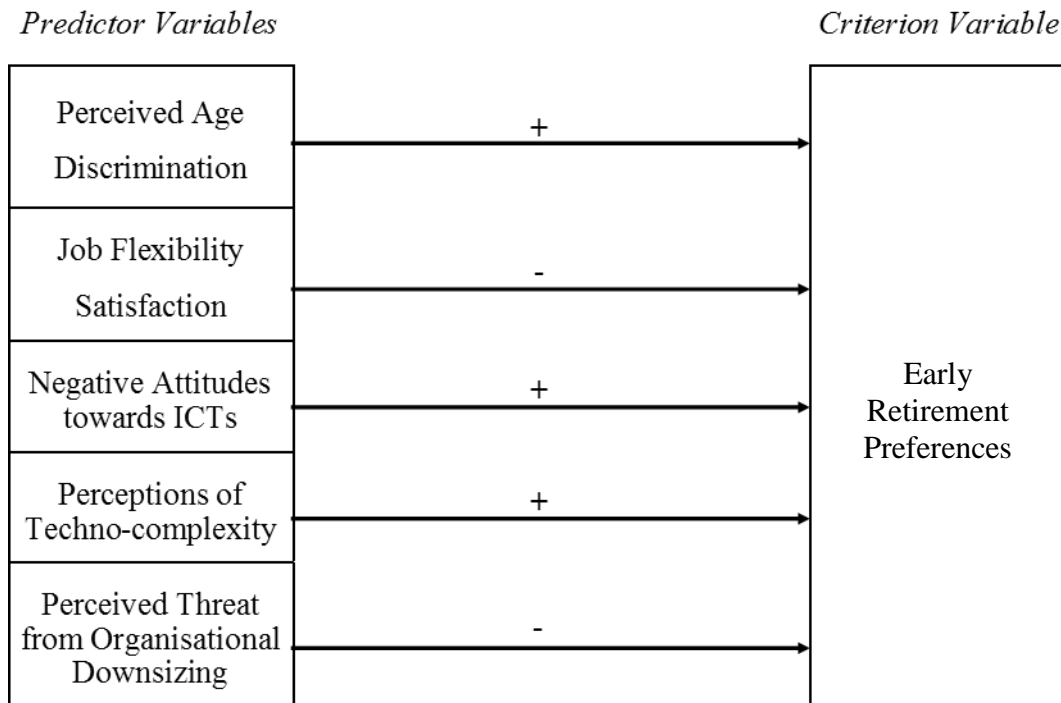


Figure 2.1. Model of direct relationships between the predictor variables and early retirement preferences.

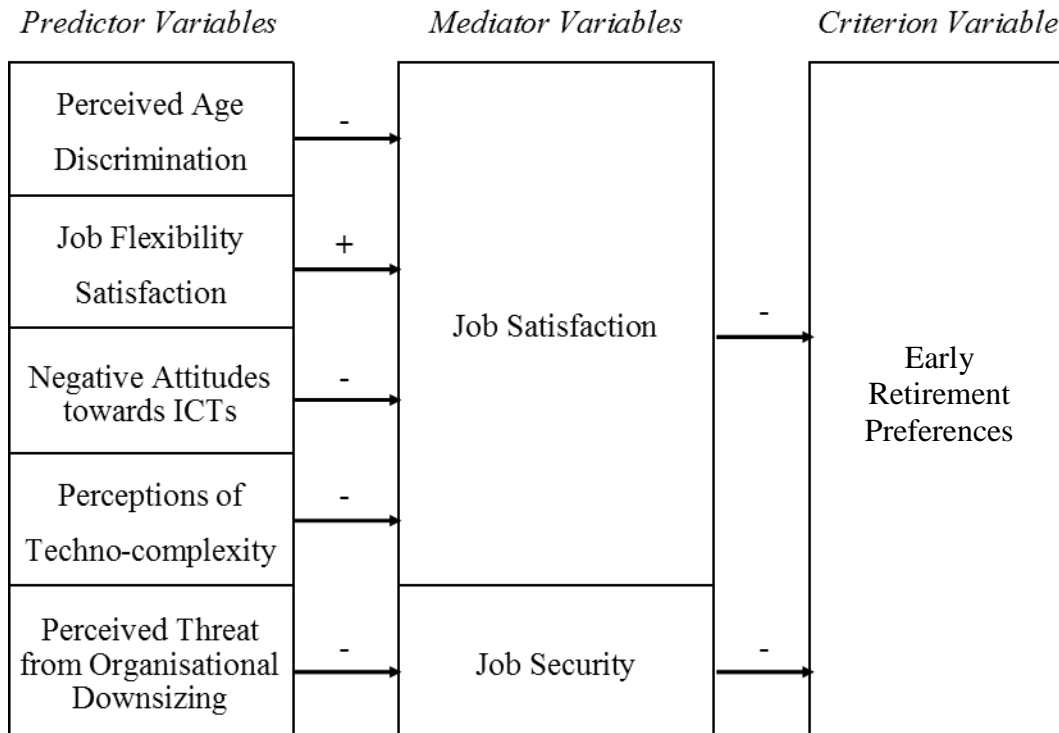


Figure 2.2. Model of job satisfaction and job security mediating the relationships between the predictor variables and early retirement preferences.

## Variables

**Early Retirement Preferences.** Studies surrounding early retirement have regularly shown that personal factors are linked with retirement preferences of older workers, however, research has only recently started to examine the work related factors impacting on this decision making process (von Bonsdorff, Huuhtanen, Tuomi, & Seitsamo, 2009). Early retirement preferences are important to explore as often preferences for retirement are “... powerful indicator[s] of the actual event of retirement” (von Bonsdorff et al., 2009, p. 1). According to Beehr's (1986) process of retirement, “... retirement is a process that occurs over time, rather than a single, one-time event” (p.46), and thus it is important to examine the processes that precede the actual act of retiring (Beehr, 1986). Beehr (1986) also proposes that the usual predictors of retirement “... have greater power in explaining the preference to retire than explaining the actual act of retirement” (p.46). It is for these reasons that early retirement preferences are the criterion variable in this study.

**Age Discrimination.** It is important to study perceptions of age discrimination amongst employees, as even though it has been found that employers can be receptive towards older workers, many do not hire and retain them (Duncan, 2003). Stereotypes surrounding the older worker are noticeable in the workplace culture of New Zealand (McGregor & Gray, 2002), and these perceptions can influence areas of human resource management, such as training and development, recruitment, organisational culture, and compensation (Ensher, Grant-Vallone, & Donaldson, 2001).

Negative stereotypes surrounding age are damaging towards organisations as they lead to bad returns on human capital investment, can produce a recruitment pool that is too narrow, and can also cause a loss of skills and experience, as well as corporate memory (Duncan, 2003). The negative views employers have surrounding older workers can also affect their prospects for employment, training and development, promotion and advancement within the company (Billett et al., 2011b; Chiu et al., 2001; Duncan, 2003). Negative stereotypes can affect the training and development opportunities of older workers, as if employers do not enable older workers to access re-training and education, or do not support methods that are age-appropriate, then the age stereotypes are easily reinforced (Davey, 2006). Stereotypes may even lead to some employers encouraging the retirement of older workers (Billett et al., 2011b) and can lead to lower levels of employee engagement (Boone James, McKechnie, Swanberg, & Besen, 2013). Gringart and colleagues (2005) also believe that discrimination of older workers during hiring decisions is detrimental in three ways: it gives younger workers a negative view of what the future could hold for them; it could potentially mean the best person for the job is overlooked; and it can lead to increased levels of mental health illness amongst older adults. Age discrimination not only affects the individual and the organisation, it also "... removes valuable and important skills from the labour pool and results in a less than optimal use of human resources" (Davey, 2006, p. 208).

The coping strategies associated with age discrimination in the workplace are numerous, and the way an individual deals with the negative stigma associated with being an 'older adult' depends on the individual themselves. Some individuals however may cope with the threat of age discrimination by withdrawing from the workforce, and the preference for early retirement can be an indication of this

withdrawal (Desmette & Gaillard, 2008) Older workers may therefore prefer to leave the labour force in order to avoid the stigmatisation associated with being an older worker (Desmette & Gaillard, 2008). Older workers who experience negative stereotypes often express stronger intentions to retire earlier in order to escape the hostile environment of the workplace (Feldman, 2013; T. W. H. Ng & Feldman, 2012). Because of this age discrimination, older workers are also hesitant to seek employment elsewhere, or take up bridge employment, as they are often doubtful that they will be able to find appropriate work in other organisations (Feldman, 2013). Based on this research, it is predicted that:

***Hypothesis 1a:*** Perceptions of personal experiences with age discrimination will correlate positively with early retirement preferences

**Job Flexibility.** A major predictor of retirement age is the extent to which the older worker enjoys their work and whether they find it fulfilling. Job flexibility seems to be particularly important for the older worker and therefore could influence their decision to retire or to remain in the workforce (Jex & Grosch, 2012). Flexibility in their jobs may encourage older workers to remain active in the workforce (Ministry of Social Development, 2011). Although it has been found that older workers prefer the option of flexible working arrangements to abrupt retirement, this opportunity is often not offered to older employees (Siegenthaler & Brenner, 2001). An increase in flexible working schedules in organisations is important as this may lead to an increase in organisations adopting more phased retirement programmes (Chen & Scott, 2006). If organisations want to fully exercise the potential of the older labour force they must recognise that this age group has particular needs, and thus must create policies that fulfil these needs (Solomon, 1995).

Employer accommodations such as permitting employees to have influence over how many hours they work a week, providing them with transfers to less demanding jobs as they approach retirement age, and working from home are all related to increases in the expected age that the person chooses to retire (Jex & Grosch, 2012; Ministry of Social Development, 2011). Davidson, Lambert, Parkhouse, Evans, and Goldacre (2001), in their study of retirement intentions of

doctors, found that 32.6% of respondents would be encouraged to stay working until the normal retirement age if more flexible working patterns were offered, such as sabbatical breaks, and part-time work aimed at reducing their current workload. In light of this, it is predicted that:

***Hypothesis 2a:*** Satisfaction with job flexibility will correlate negatively with early retirement preferences.

**Influence of Information and Communication Technologies.** Advances in information and communication technologies (ICTs) can greatly affect an individual's retirement decisions (Jex & Grosch, 2012). Not only this, but the evidence from the literature shows that the need for older workers has been affected negatively by the fast growth and development of ICTs (Behaghel, Caroli, & Roger, 2014). ICTs "... are broadly defined as technologies used to convey, manipulate and store data by electronic means" (Perron, Taylor, Glass, & Margerum-Leys, 2010, p. 68). ICTs can include, but are not limited to, SMS text messaging, video chat, social media, and different computing devices such as smart phones and laptops (Perron et al., 2010). It is important to consider advances in ICTs as a factor that may lead to older workers' early retirement preferences as "policies designed to encourage later retirement might have limited success if older workers face pressure from technological change" (Friedberg, 2003, p. 527). New ICTs often change the skill requirements of employees and this often has a larger impact on older employees as their skills are of an older vintage (Friedberg, 2003).

New developments in ICTs have a large impact on the older worker as approaching retirement can influence whether or not they make the decision to upgrade their skills to suit the new technology (Friedberg, 2003). Research has shown that "... training costs associated with unanticipated technological change led workers to retire early" (Friedberg, 2003, p. 512), however this research was based on data from the 1960s and 1970s. ICT advancement is also more likely to affect older workers as they are more likely to have completed their training less recently than younger workers (Behaghel et al., 2014). Additionally "... workers with poor 'technological endowments' tend to become less and less productive,

particularly in industries and professions characterised by rapid technological progress” (Biagi, Cavapozzi, & Miniaci, 2007, p. 2).

Brooke (2009), in her study of the influences of older workers’ career paths on early exit in the information technology (IT) industry, found that extended careers did not align with the high intensity demand of IT work. The analysis of 71 employees in 10 small to medium-sized IT firms found that “... older IT workers’ capacity to envisage careers beyond their fifties was constrained by age-based ‘normative’ capability assumptions that resulted in truncated careers, dissuaded the ambition to continue work, and induced early retirement” (Brooke, 2009, p. 237). This reflects how older workers’ opinions about their work capabilities are strongly influenced by the workplace norms in the organisation (van Solinge & Henkens, 2014).

Older workers’ attitudes towards ICT advancement are also important to consider in the work setting (Elias, Smith, & Barney, 2012). When older workers are required to use new and unfamiliar ICTs to improve work performance, they may be more inclined to use this technology if they have positive attitudes towards it (Elias et al., 2012). Therefore, this study will use two subscales which measure older workers’ feelings towards ICTs, and their perceived control over these ICTs (Selwyn, 1997). This research leads to the prediction that:

***Hypothesis 3a:*** Negative attitudes towards ICT use will correlate positively with early retirement preferences.

**Perceptions of Techno-complexity.** Negative perceptions of ICTs may also lead to employees experiencing technostress, which is stress caused by an employee’s “... attempts to deal with constantly evolving ICTs and the changing physical, social, and cognitive responses demanded by their use” (Ragu-Nathan, Tarafdar, Ragu-Nathan, & Tu, 2008, p. 418). Wang, Shu, and Tu (2008) defined technostress as “... a reflection of one’s discomposure, fear, tenseness and anxiety when one is learning and using computer technology directly or indirectly, that ultimately ends in psychological and emotional repulsion and prevents one from further learning or using computer technology” (p. 3004). Potential causes of technostress include how ICTs are constantly evolving and becoming more

sophisticated, which is creating a difference between the knowledge needed to use the ICT, and the knowledge that employees actually have (Ragu-Nathan et al., 2008). Technostress has also been found to affect intention to quit as well as job satisfaction levels (Fuglseth & Sørenbø, 2014). Existing literature identifies five creators of technostress, which can potentially cause ICT strain amongst employees in organisations (Fuglseth & Sørenbø, 2014). These are techno-overload, where the ICTs push employees to work faster; techno-invasion, where the ICTs invade the employee's personal life; techno-complexity, where employees feel incompetent due to the complexity of new ICTs; techno-insecurity, where employees' job security feels as though it is under threat due to fast changing ICTs; and techno-uncertainty, where the constant changes and upgrades in ICT hardware and software causes stress on end-users (Tu, Wang, & Shu, 2005).

In this study, the focus will be on techno-complexity rather than technostress, as this factor describes situations where the complexity of certain conditions associated with ICTs makes users feel as though their skills are not adequate (Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2007). Techno-complexity is defined as "the inability to learn or deal with the complexity of new technology" (Tu et al., 2005, p. 79). It describes situations where the complexity related with ICT use requires users to spend time and exert effort in gaining an understanding of how to appropriately use ICTs that they may not be familiar with (Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2011). Users may have trouble trying to keep up to date with ever-changing technologies, and finding the time to learn how to use new ICTs may be challenging. This can therefore leave the users feeling intimidated by new ICTs, which can potentially lead to the user feeling stressed (Tarafdar et al., 2011).

Techno-complexity can have adverse effects on both the individual and the organisation. For example, techno-complexity implies that the user exerts effort when trying to understand and use ICTs, which can result in increased role overload (Tarafdar et al., 2011). Decreased innovation in jobs may also occur, as well as dissatisfaction with ICT use (Tarafdar et al., 2011), and reduced productivity, as users have to spend time keeping up to date with new ICTs, possibly at the expense of other assigned jobs and tasks (Tarafdar, Tu, & Ragu-Nathan, 2010). For these reasons, it is imperative that employers and managers put efforts in place to try and

prevent techno-complexity. For example, "... adequate training can indirectly alleviate the employee stress caused by having to deal with new technology" (Tu et al., 2005, p. 80), such as courses designed to mitigate the technostress problems that have been linked to techno-complexity (Tu et al., 2005).

Techno-complexity relates strongly to the older worker, who may feel as though their skills are not as up to date compared to younger co-workers. The stress associated with techno-complexity is also often more prevalent with older workers, and they may also have more difficulties with adjusting to new technologies (Tu et al., 2005). This may cause them to struggle to adapt to changes in technology which demand they continuously learn new skills and techniques. Tu and colleagues (2005) also believe that as employees age, their capacity for learning decreases, which can also create difficulties with learning to use new technologies. The change in skill requirements can potentially create job dissatisfaction, especially among those employees who find it difficult to adapt to change. This leads to the prediction that:

***Hypothesis 4a:*** Perceptions of techno-complexity will correlate positively with early retirement preferences.

**Organisational Downsizing.** Due to the ever changing work environment, many organisations today have to downsize and reduce staffing levels in order to remain competitive (Hudson & Rumbles, 2014). Organisational restructuring and downsizing however have the potential to impact negatively on a variety of people within the organisation, and can sometimes lead to adverse effects on workers' health and well-being (Quinlan, 2007). Older workers however are usually more at risk than others during this process (Billett et al., 2011b; Duncan, 2003; van Solinge & Henkens, 2007). Studies of repeated downsizing have found that older workers are more likely than younger workers to experience negative and enduring indicators of distress (Armstrong-Stassen, 2001; Quinlan, 2007). In the past, older workers have been more likely than younger workers to be victims of job displacement, which suggests that experiences of organisational downsizing may be particularly traumatic for this age group because their threat of job loss is likely to be higher (Armstrong-Stassen, 2001).

Other potential reasons for organisational downsizing impacting adversely on older workers include the use of early retirement packages by employers during these times (Armstrong-Stassen, 2001; Isaksson & Johansson, 2000; Carbery & Garavan, 2005). The use of early retirement incentives to trim the company's workforce is seen as more socially acceptable than having large, company-wide layoffs (van Solinge & Henkens, 2007). When organisations are planning restructure, early retirement packages are often offered to older employees, as management generally prefer to reduce the workforce size through this strategy rather than through job displacement of other employees (Farr & Ringseis, 2002). However older workers who are offered these packages may feel as though they are being pressured or forced to leave the workforce before they are ready to (Armstrong-Stassen, 2001). Older workers being offered these packages may feel as though they have the choice of accepting early retirement incentives, or facing the possibility of being laid off in the near future (Feldman, 2013). Billett and colleagues (2011b), from their study of the extent to which Australian older workers perceived they were discriminated against, found that there were self-reported instances of companies making older workers redundant when downsizing. An emerging theme that arose from the results of their study was that there was the possible use of redundancy to disguise age discrimination (Billett et al., 2011b). Older workers are also generally amongst the highest paid employees of the organisation, which also may make them more vulnerable to organisational downsizing (Sweet, 2007).

It is important that employers and managers recognise the adverse effects that organisational downsizing may have on older individuals within the organisation (Armstrong-Stassen, 2001), as "the rumor of cutbacks, and/or layoffs may provide a salient motive for an employee to seek retirement" (Beehr et al., 2000, p. 209). Organisational downsizing has also been linked with increased turnover intention, and thus it is reasonable to assume that it may also be linked with early retirement preferences (Susskind, 2007). Reasons for this include how employees may perceive organisational downsizing as a violation of the psychological contract, which may make surviving employees more susceptible to turnover intentions (Spreitzer & Mishra, 2002). Organisational downsizing will be defined in this study as "... a deliberate reduction by management to reduce a firm's

size in terms of the number of employees it has” (Macky, 2004, p. 63). In light of this, it is predicted that:

***Hypothesis 5a:*** Perceived threat of job loss through organisational downsizing will correlate positively with early retirement preferences.

**Job Satisfaction.** There are many differing definitions of job satisfaction, and it can mean many things to different people. One definition is that it “... has to do with the way people feel about their jobs and various aspects” and also “... with the extent to which people like or dislike their job” (Aziri, 2011, pp. 77–78). Because job satisfaction is an important factor underlying intentions to retire (Kautonen, Hytti, Bögenhold, & Heinonen, 2012; Sibbald, Bojke, & Gravelle, 2003), it is reasonable to assume that decreased job satisfaction will be negatively related to older workers’ preferences for early retirement. This leads to the following prediction:

***Hypothesis 6:*** Job satisfaction will correlate negatively with early retirement preferences.

Perceived age discrimination at work has also been found to have a negative effect on job satisfaction. Orpen (1995) examined the relationships between perceived age discrimination at work and involvement and organisational commitment among 49-68 year olds at an Australian firm. The correlations were significantly negative between age discrimination and job satisfaction. Redman and Snape (2006) examined the consequences of age discrimination amongst older police officers in England. They too found that the effects of perceived age discrimination impacted negatively on job satisfaction. Ensher and colleagues (2001) in their study of the effects of perceived discrimination on ethnically diverse employees also found that perceived discrimination had a negative effect on job satisfaction. The above research leads to the hypotheses that:

***Hypothesis 1b:*** Perceived age discrimination will correlate negatively with job satisfaction.

**Hypothesis 1c:** Job satisfaction will act as a mediator between perceived age discrimination and early retirement preferences. That is, perceived age discrimination will be associated with reduced job satisfaction, which will in turn be associated with early retirement preferences.

Research has also found that job flexibility can result in increased job satisfaction (Chen & Scott, 2006). This leads to the predictions that:

**Hypothesis 2b:** Job flexibility satisfaction will correlate positively with job satisfaction.

**Hypothesis 2c:** Job satisfaction will act as a mediator between satisfaction with job flexibility and early retirement preferences. That is, satisfaction with job flexibility will be associated with increased job satisfaction, which will in turn be associated with early retirement preferences.

There are also links between negative attitudes towards advancements in ICTs and job satisfaction (Elias et al., 2012). If an employee has negative attitudes towards ICTs, then they are "... likely to view technology in the workplace as a source of anxiety" (Elias et al., 2012, p. 454), and this anxiety can in turn lead to lowered job satisfaction (Parayitam, Desai, Desai, & Eason, 2010). ICT advancement within an organisation also has the potential to alter the skill requirements of its workers (Friedberg, 2003). This change in skill requirements can potentially create job dissatisfaction, particularly among employees who are unable to adapt to the new technologies, such as older workers. Because of this, it is predicted that:

**Hypothesis 3b:** Negative attitudes towards ICTs will correlate negatively with job satisfaction.

**Hypothesis 3c:** Job satisfaction will act as a mediator between negative attitudes towards ICTs and early retirement preferences. That is, negative attitudes towards ICTs will be associated with reduced job satisfaction, which in turn will be associated with early retirement preferences.

**Hypothesis 4b:** Perceptions of techno-complexity will correlate negatively with job satisfaction.

**Hypothesis 4c:** Job satisfaction will act as a mediator between perceptions of techno-complexity and early retirement preferences. That is, perceptions of techno-complexity will be associated with reduced job satisfaction, which in turn will be associated with early retirement preferences.

**Job Security.** Job security is an important mediator variable as studies have shown that the notion of job *insecurity* has been rising steadily over the past decades (Sweet, 2007). This variable is also important to consider as older workers approaching retirement today entered the labour force during a time when job security increased with age, which is not the case today (Sweet, 2007). The effects of certain organisational changes such as organisational downsizing can have negative impacts on the surviving employees. These negative effects have been found to threaten job security of remaining employees (Appelbaum, Delage, Labib, & Gault, 1997; Carbery & Garavan, 2005; Quinlan, 2007; Sadri, 1996). Remaining employees may wonder how long they will be able to keep their jobs for after a period of downsizing in the organisation (Appelbaum et al., 1997). Job insecurity has also been found to link with increased turnover intention (Emberland & Rundmo, 2010). Older workers who perceive their job security is threatened may have earlier retirement preferences than older workers who have strong job security perceptions. This leads to the predictions that:

**Hypothesis 7:** Job security will correlate negatively with early retirement preferences.

**Hypothesis 5b:** Perceived threat of job loss from organisational downsizing will correlate negatively with job security.

**Hypothesis 5c:** Job security will mediate the relationship between perceived threat of job loss from organisational downsizing and early retirement preferences. That is, perceived threat of job loss will be associated with

reduced job security, which in will be associated with early retirement preferences.

## **Summary of Hypotheses**

***Hypothesis 1a:*** Perceived age discrimination will correlate positively with early retirement preferences.

***Hypothesis 2a:*** Satisfaction with job flexibility will correlate negatively with early retirement preferences.

***Hypothesis 3a:*** Negative attitudes towards ICT use will correlate positively with early retirement preferences.

***Hypothesis 4a:*** Perceptions of techno-complexity will correlate positively with early retirement preferences.

***Hypothesis 5a:*** Perceived threat of job loss by organisational downsizing will correlate positively with early retirement preferences

***Hypothesis 6:*** Job satisfaction will correlate negatively with early retirement preferences.

***Hypothesis 1b:*** Perceived age discrimination will correlate negatively with job satisfaction.

***Hypothesis 1c:*** Job satisfaction will act as a mediator between perceived age discrimination and early retirement preferences. That is, perceived age discrimination will be associated with reduced job satisfaction, which will in turn be associated with early retirement preferences.

***Hypothesis 2b:*** Job flexibility satisfaction will correlate positively with job satisfaction.

***Hypothesis 2c:*** Job satisfaction will act as a mediator between satisfaction with job flexibility and early retirement preferences. That is, satisfaction with job flexibility will be associated with increased job satisfaction, which will in turn be associated with early retirement preferences.

***Hypothesis 3b:*** Negative attitudes towards ICTs will correlate negatively with job satisfaction.

**Hypothesis 3c:** Job satisfaction will act as a mediator between negative attitudes towards ICTs and early retirement preferences. That is, negative attitudes towards ICTs will be associated with reduced job satisfaction, which in turn will be associated with early retirement preferences.

**Hypothesis 4b:** Perceptions of techno-complexity will correlate negatively with job satisfaction.

**Hypothesis 4c:** Job satisfaction will act as a mediator between perceptions of techno-complexity and early retirement preferences. That is, perceptions of techno-complexity will be associated with reduced job satisfaction, which in turn will be associated with early retirement preferences.

**Hypothesis 7:** Job security will correlate negatively with early retirement preferences.

**Hypothesis 5b:** Perceived threat of job loss from organisational downsizing will correlate negatively with job security.

**Hypothesis 5c:** Job security will mediate the relationship between perceived threat of job loss from organisational downsizing and early retirement preferences. That is, perceived threat of job loss will be associated with reduced job security, which in turn will be associated with early retirement preferences.

## **Chapter Summary**

This study investigated the work related factors that could potentially influence the early retirement preferences of older workers. The factors investigated in this research are related to the work environment, and include perceived threat of job loss from organisational downsizing, attitudes towards ICT use, perceived age discrimination, satisfaction with job flexibility, job security, job satisfaction, and perceptions of techno-complexity. The purpose of this research was to determine whether these factors were related to the early retirement preferences of employees who are aged 55 or above, and who are working at least 30 hours per week in New Zealand organisations.

The theoretical model developed for this study aimed to establish whether direct relationships exist between the predictor variables (perceptions of age

discrimination, job flexibility satisfaction, negative attitudes towards ICTs, perceptions of techno-complexity, and perceived threat of job loss) and the criterion variable (early retirement preferences). Additionally, the theoretical model aimed to observe the extent to which job satisfaction acts as a mediator between the predictor variables (perceptions of age discrimination, job flexibility satisfaction, negative attitudes towards ICTs, and perceptions of techno-complexity) and the criterion variable (early retirement preferences), and also the mediation effect of job security between threat of organisational downsizing (predictor variable) and early retirement preferences (criterion variable).

The method used for this research is presented in the next chapter, followed by a chapter covering the results. The final chapter will present a discussion of the findings.

## **Chapter Two: Method**

### **Participants**

Participants in this study were older workers working full time in New Zealand organisations. The questionnaire was made available to all levels and positions in the organisation, however to be eligible to complete the questionnaire, individuals were required to be aged 55 years or older, and working 30 or more hours per week in a single organisation. 149 participants took part in the online questionnaire over a period of three months. It is not possible to determine the response rate due to the multiple methods of data collection used. From examining the results of the questionnaire, it was found that 16 questionnaires had a considerable amount of data missing (over 50%) or had been started but not completed. Therefore, these 16 responses were deleted from the data set and were not included in the data analysis. An additional response was deleted as the participant indicated they were 52 years of age, and therefore did not fit the criteria to take part in this study. This left a total of 132 responses that were suitable for analysis.

The demographic variables of the 132 participants who completed the questionnaire are shown in the Table 1. The ‘other’ category includes industries such as retail, real estate, transport, sporting and construction.

### **Procedure**

Ethical approval for this research was granted by the School of Psychology Research and Ethics Committee of the Faculty of Arts and Social Sciences, University of Waikato. Participants for the study were recruited through two different methods. The first method of recruitment was through New Zealand organisations. The HR managers, or someone at the organisation who had authority to grant permission for research to be conducted, were identified and contacted via email to determine initial interest in the research. Where a direct email address was not available, a message was sent to a general email address at the organisation, requesting the HR manager to get in contact with me. Managers who showed initial interest in the research were then sent an information sheet (Appendix A) which outlined the research aims, and what would be required of them if they chose to

take part. The information sheet for the organisations also explained the anonymity of their involvement, both for the participants and the organisation themselves. Managers were offered a summary of the results at the conclusion of the study as a way of encouraging their participation. Additional liaising was involved with some organisations which included further emailing, face-to-face meetings, phone calls, and video calls to address any other questions and concerns.

Table 1

*Demographics (N = 132)*

	N	Percent		
<b>Gender</b>				
Male	69	52.3		
Female	63	47.7		
<b>Ethnicity</b>				
New Zealand European	114	86.4		
Other European	11	8.3		
New Zealand Maori	2	1.5		
Asian	2	1.5		
Other	3	2.3		
<b>Industry</b>				
Agriculture, forestry, fishing and hunting	16	12.1		
Educational services	9	6.8		
Finance and insurance	5	3.8		
Government and not for profit	10	7.5		
Healthcare and social assistance	31	23.5		
Professional, scientific and technical services	44	33.3		
Other	17	13.0		
	<i>N</i>	<i>Range</i>	<i>Mean</i>	<i>SD</i>
Age	132	55-74	60.14	4.00
Organisational Tenure (years)	106	0-46	16.86	13.36
Job Tenure (years)	106	0-46	11.92	10.39

Managers who gave permission for their organisation to take part were then sent an information sheet for participants (Appendix B), with the online questionnaire link attached. A copy of the questionnaire is presented in Appendix C. The information sheet for the participants also included the purpose and aims of the study, assurance of anonymity, as well as how long it would approximately take them to complete the questionnaire. There were no incentives offered for completion of the questionnaire, however the participants were offered the chance to be sent a summary of the results at the conclusion of the study. To obtain this summary they were required to email me requesting the results. The information sheet and online questionnaire was then distributed to employees using the internal emailing system. Some organisations were able to identify employees who met the criteria for completing the questionnaire (aged 55 or above and working more than 30 hours per week), and so were able to target these individuals directly. Those who were not able to identify eligible participants sent the email out to all employees. Organisations were also given the option of having their employees complete the questionnaire in hard copy, however none chose to exercise this option.

The second method of data collection was through the social media website LinkedIn, and via the Human Resource Institute of New Zealand (HRINZ). An advert for my research was posted on the University of Waikato Alumni page on LinkedIn, requesting participation from eligible members of this group. The online questionnaire was also sent out to HRINZ members who had opted to receive research participation opportunities (approximately 800 members).

## **Measures**

The data for this research were collected through an anonymous online questionnaire, which was developed using measures from previous research. There were 46 items in total, and these included items measuring early retirement preferences, experiences of perceived age discrimination, job satisfaction, satisfaction with job flexibility, job security, perceived threat of organisational downsizing, and attitudes towards information and communication technologies (ICTs). Screening questions and questions designed to gather demographic data were also used. Items marked with an asterisk were reverse scored.

**Screening Questions.** Screening questions were developed and placed at the start of the questionnaire to determine whether the correct demographic was filling out the questionnaire. The first question was ‘Are you aged 55 years or older?’, and if the respondent answered *no* to this question they were directed to the end of the questionnaire and their data were not used for analysis. If the respondent answered *yes*, they were asked ‘Do you work 30 or more hours per week in one organisation?’. Again, if they answered *no*, they were taken to the end of the questionnaire and their data were not used. Provided the respondent answered *yes* to both questions, they were able to complete the rest of the questionnaire.

**Early Retirement Preferences.** The measure for this variable was taken from Zappalà, Depolo, Fraccaroli, Guglielmi, and Sarchielli's (2008) study on preferences for early or late retirement. Respondents were asked the following questions: ‘What is your expected age of retirement?’, and ‘What is your preferred age of retirement?’, and were required to enter their own answer in years. Respondents were considered as having preferences for early retirement if their preferred age of retirement was earlier than their expected age of retirement. The difference was calculated by subtracting the preferred age of retirement from the expected age of retirement, so that a positive value indicated ‘early’ retirement preferences, and a negative value indicated ‘late’ retirement preferences. Therefore, if the participant had a positive value, then they were classified as having early retirement preferences.

**Perceived Age Discrimination.** The measure looked at older workers’ experiences of perceived age discrimination and used an adaptation of Snape and Redman's (2003) study on the impact of perceived age discrimination ( $\alpha = .69$ ). Respondents were asked to rate to what extent they agreed with nine statements on a seven-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. The items that were used were: ‘Because of my age: (a) I have personally never experienced age discrimination in my job\*, (b) the people I work with treat me less favourably, (c) my immediate supervisor treats me less favourably than older workers, (d) I have been treated unfairly in relation to job applications, (e) I have been treated unfairly in relation to promotions, (f) I have been treated unfairly in relation to opportunities for training (g) I have been treated unfairly in relation to

performance appraisals, (h) I have been treated unfairly in relation to work assignments, and (i) I have been treated unfairly in relation to redeployment'. This scale score was computed by taking the average response of the items in the scale.

**Job Satisfaction.** The job satisfaction of older workers was assessed using an overall job satisfaction measure developed by Cammann, Fichman, Jenkins, and Klesh (1983) that was used as part of the Michigan Organizational Assessment Questionnaire. This measure uses three items and is a global indication of the participant's satisfaction with their job (Fields, 2002). The items for this measure were 'All in all, I am satisfied with my job', 'In general, I don't like my job'\* and 'In general, I like working here'. Respondents were required to answer on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), and the scale was computed by taking the average of the items in the scale. Alpha values for this measure ranged from .67 to .95 in previous studies (Fields, 2002).

**Job Flexibility Satisfaction.** Satisfaction with job flexibility was assessed using the Satisfaction with Work Schedule Flexibility measure developed by Rothausen (1994). The measure uses a five-item scale to measure employee satisfaction with work schedule flexibility. The coefficient alpha for this measure was .79 in a previous study (Aryee, Luk, & Stone, 1998). The respondents were asked to rate the extent to which they agree with five items in a statement format on a seven-point Likert-type scale ranging from 1 (very dissatisfied) to 7 (very satisfied). This scale score was computed by taking the average response of the items in the scale. The original scale only used a five-point Likert scale, however was changed to a seven-point Likert scale in this study for the purpose of consistency with the other scales. The respondents were asked 'How satisfied are you with': (a) the extent to which management accommodates family responsibility needs without any negative consequences, (b) the opportunity to perform your job well and yet be able to perform home-related duties adequately, (c) the ease of getting time off for family as needed, (d) the opportunity to do part-time or flexitime work without being penalized, and (e) the amount of flexibility in work scheduling (Fields, 2002).

**Job Security.** Perceptions of job security were measured using an adaptation of four items from the second version of the Copenhagen Psychosocial Questionnaire (Pejtersen, Kristensen, Borg, & Bjorner, 2010), ( $\alpha = .77$ ). Items from the original study were modified to be presented as statements. These items were: ‘I am worried about becoming unemployed’\*, ‘I am worried about new technology making me redundant’\*, ‘I am worried about it being difficult for me to find another job if I became unemployed’\*, and ‘I am worried about being transferred to another job against my will’\*. Respondents were required to answer on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The scale was computed by taking the average response of the items in the scale.

**Threat from Organisational Downsizing.** Participants were asked to respond to the following statements on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), to assess whether they felt as though their jobs were at risk due to organisational downsizing. Participants were provided with the following definition of organisational downsizing: organisational downsizing refers to reducing the overall size and operating costs of a company, most directly through a reduction in the total number of employees. This was adapted from Macky’s (2004) definition of organisational downsizing. Participants were then asked to rate to what extent they agreed with the following two statements: ‘I feel that I am at risk of losing my job due to organisational downsizing’ and ‘I have been affected by organisational downsizing in the past 12 months’. This scale was computed by taking the average response of the two items. Factor analysis was not performed on this measure due to there only being two items.

**Attitudes towards Information and Communication Technologies.** Attitudes of older workers towards ICTs were assessed using two subscales from a scale developed by Selwyn (1997), ( $\alpha = .9$ ), for assessing attitudes towards computers in high school students. The two subscales are affect attitudes towards ICTs ( $\alpha = .93$ ) and perceived control of ICTs ( $\alpha = .88$ ). Items in the scale were modified to ask about opinions of ICTs in general, rather than computers specifically. The subscales measured feelings towards ICTs, and perceived control of ICTs. Respondents were required to answer on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The original scale was

measured on a five-point Likert scale, however was changed to a seven-point Likert in this study for the purpose of consistency. This measure has also been used more recently in Teo (2008), ( $\alpha = .86$ ), which examined attitudes towards computer use among pre-service teachers.

The items measuring the feelings towards ICTs were: 'If given the opportunity to use an ICT I am afraid that I might damage it in some way', 'I hesitate to use ICTs for fear of making mistakes I cannot correct', 'I don't feel apprehensive about using ICTs'\*, 'ICTs make me feel uncomfortable', 'Using ICTs does not scare me at all'\*, and 'I hesitate to use ICTs in case I look stupid'.

The perceived control component items were: 'I could probably teach myself most of the things I need to know about ICTs'\*, 'I can make ICTs do what I want'\*, 'If I get problems using ICTs, I can usually solve them one way or the other'\*, 'I am not in complete control when I use ICTs', 'I need an experienced person nearby when I use ICTs', and 'I do not need someone to tell me the best way to use ICTs'\*

These two subscales were combined in this study to provide an overall measure of attitudes towards ICTs. The scale score was computed by taking the average response of the items in the scale.

**Perceptions of Techno-complexity.** Techno-complexity was measured using the techno-complexity subscale, ( $\alpha = .77$ ), from Ragu-Nathan and colleagues' (2008) scale of the measurement of technostress. The techno-complexity measure uses five items, and participants were required to respond on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The items for this measure were 'I do not know enough about ICTs to handle my job satisfactorily', 'I need a long time to understand and use new ICTs', 'I do not find enough time to study and upgrade my ICT skills', 'I find new recruits in this organisation know more about ICTs than I do', and 'I often find it too complex for me to understand and use new ICTs'. This scale score was computed by taking the average response of the items in the scale.

**Demographics.** Demographic variables were also measured in order to describe the general characteristics of the sample. These were gender, age, ethnic

group, tenure at current organisation, industry/sector, job title/position, and tenure in current job position (refer to Table 1, p. 27).

## **Data Analysis**

**Factor Analysis.** A preliminary step in the data analysis was to conduct factor analysis, a multivariate technique which identifies clusters of variables (Field, 2013). Exploratory Factor Analysis (EFA) was conducted in order to determine the underlying factor structure of the measures by grouping together correlated variables (Tabachnick & Fidell, 2013). To ensure that the sample was suitable for factor analysis two tests were conducted: the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, with values greater than .6 being regarded as acceptable, and Bartlett's test of sphericity (Field, 2013). Principal Axis Factoring (PAF) with oblique rotation (direct oblimin) was used as it was expected that the factors would be related (Field, 2013). The criterion set for retaining factors was an eigenvalue greater than 1, which is Kaiser's criterion for retaining factors (Field, 2013). Factor loadings were accepted as significant if they were greater than .4 (Field, 2013). The pattern matrix was examined in each case to determine the item composition of each factor, and the scree plots, percentages of variances obtained and factor correlations were also scrutinized.

**Descriptive Statistics.** The means, standard deviations, skew and kurtosis values, and internal consistency were calculated for all variables. Scales that produced a Cronbach's alpha ( $\alpha$ ) value greater than .7 were regarded as reliable (Field, 2013). Skewness and kurtosis values were also examined.

**Correlational Analysis.** Pearson's product-moment correlation was used to examine the strength of the relationships between the key variables in my study, and was used to test Hypotheses 1a, 1b, 2a, 2b, 3a, 3b, 4a, 4b, 5a, 5b, 6 and 7. This correlation method was also used to examine the demographic variables on a continuous scale (age, organisation tenure, and job tenure) and their relationships with the outcome variable, early retirement preferences. This step was important to determine if any demographic variables needed to be controlled for during the regression analyses.

**ANOVAs and t-tests.** One-way analyses of variance (ANOVAs) were conducted to examine if there were any differences among multiple category demographic variables (ethnicity, job position, and industry) with early retirement preferences (criterion variable). An independent sample *t*-test was conducted to test for differences in gender (binary variable) with the early retirement preferences.

**Mediation Analysis.** Mediation analysis was used to test hypotheses 1c, 2c, 3c, 4c and 5c. The mediation hypotheses aimed to assess how job satisfaction could influence the relationship between perceptions of age discrimination, job flexibility satisfaction, negative attitudes towards ICTs, and perceptions of techno-complexity, with the criterion variable, early retirement preferences. It was also used to assess the role of job security in mediating the relationship between threat of job loss from organisational downsizing and early retirement preferences.

Mediation analyses were performed following the recommendations of Field (2013), who suggested using the *PROCESS* command developed by Preacher and Hayes (2004). Figure 3 shows a diagram of a basic mediation model.

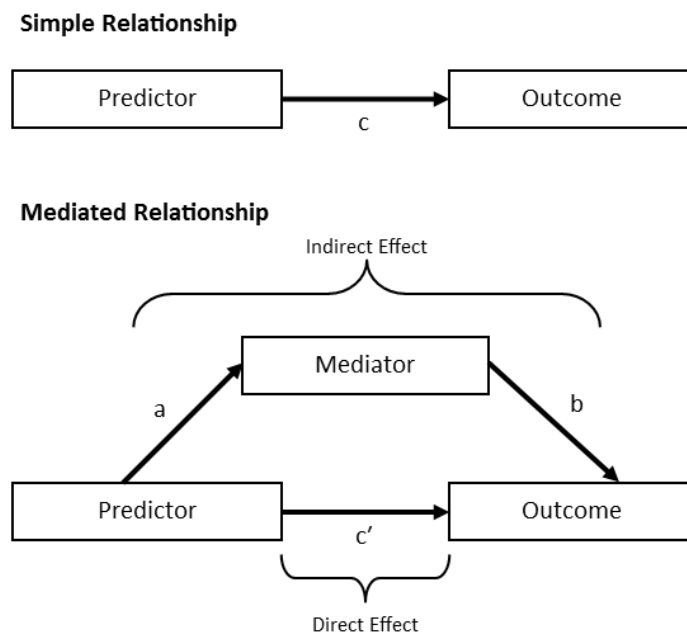


Figure 3. Diagram of a basic mediation model (Field, 2013).

The mediation hypotheses were assessed by estimating the indirect effect between the predictor and the criterion variable (Field, 2013). This indirect effect is the combined effects of path *a* and path *b*, and is shown in Figure 3. The size of the indirect effect was reported using bootstrap confidence intervals, and the kappa-squared ( $\kappa^2$ ) measure, which expresses the indirect effect as a ratio to the largest possible indirect effect (Field, 2013).

This chapter described the method used for data collection and analysis in this study. The following chapter presents and describes the results from the analyses.

## Chapter Three: Results

This chapter presents the findings of this study and includes the factor analyses, descriptive statistics, correlations, and mediation analyses.

### Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) was conducted on perceptions of age discrimination, job satisfaction, job flexibility satisfaction, job security, attitudes towards ICTs, and perceptions of techno-complexity. Principal axis factoring was employed with oblique (direct oblimin) rotation, as it was expected that the factors would be related. Factor loadings greater than .4 were considered significant (Field, 2013).

**Perceptions of Age Discrimination.** EFA was performed on the nine items in the perceptions of age discrimination measure. The KMO measure was .89, which is ‘meritorious’ according to Hutcheson and Sofroniou (1999). Bartlett’s test of sphericity was significant, which indicated that it was appropriate to continue with the factor analysis. One factor had an eigenvalue greater than one (eigenvalue = 5.1) explaining 56.80% of the total variance, and this was consistent with the Scree plot (Appendix D, Figure 10). The factor loadings were examined and one factor loaded significantly onto the items. This suggests that all of the items in this measure fell under one factor, and therefore rotation was not required. Cronbach’s alpha for this scale was .90.

**Job Satisfaction.** Principal axis factor analysis was conducted on the three items in the job satisfaction measure. The KMO measure was .71, which is ‘middling’ according to Hutcheson and Sofroniou (1999). Bartlett’s test was significant which verified the sampling adequacy, indicating it was appropriate to continue with the factor analysis. One factor was greater than 1 (eigenvalue = 2.33) and explained 77.74% of the total variance. The Scree plot (Appendix D, Figure 11) supported this extraction of one factor. One factor loaded significantly onto the items, and thus a one-factor solution was deemed appropriate, and rotation was not required. Cronbach’s alpha for this scale was .86.

**Job Flexibility Satisfaction.** EFA was performed on the five items in the satisfaction with job flexibility measure using principal axis factor analysis. The KMO measure was .79, which is 'middling' according to Hutcheson and Sofroniou (1999). Bartlett's test of sphericity was significant, which indicated that it was appropriate to continue with the factor analysis. One factor had an eigenvalue greater than one (eigenvalue = 3.38) explaining 67.65% of the total variance, and this was consistent with the Scree plot (Appendix D, Figure 12). The factor loadings were examined and one factor loaded significantly onto the items. This suggests that all of the items in this measure fell under one factor, and so rotation was not required. Cronbach's alpha for this scale was .87.

**Job Security.** Principal axis factor analysis was conducted on the four items in the perceptions of job security measure. The KMO measure was .79, which is 'middling' according to Hutcheson and Sofroniou (1999). Bartlett's test was significant which verified the sampling adequacy, indicating it was appropriate to continue with the factor analysis. One factor was greater than 1 (eigenvalue = 2.55) and explained 63.82% of the total variance. The Scree plot (Appendix D, Figure 13) supported this extraction of one factor. The factor loadings were examined and one factor loaded significantly onto all of the items, thus a one-factor solution was deemed appropriate, and rotation was not required. Cronbach's alpha for this scale was .81.

**Attitudes towards ICTs.** EFA was performed on the 12 items in the negative attitudes towards ICTs measure, using principal axis factor analysis. This measure comprised two subscales, affect attitudes towards ICTs (items 1 – 6) and perceived control of ICTs (items 7 – 12), from Selwyn's (1997) original scale. The KMO measure was .86, which is 'meritorious' according to Hutcheson and Sofroniou (1999). Bartlett's test of sphericity was significant, which indicated that it was appropriate to continue with the factor analysis. Three factors had eigenvalue values greater than one (5.87, 1.20, and 1.06), together explaining 67.73% of the total variance. This was consistent with the point of inflexion on the Scree plot (Appendix D, Figure 14). Two items in this measure however (items 5 and 6) did not have any factor loadings, (using the cut-off value of .4). Thus, these items were removed and the principal factor analysis was rerun.

Once the analysis was re-run, the remaining items (1 – 4, and 7 – 12) all had significant factor loadings. Oblique rotation (direct oblimin) was used for the factor rotation, as it was assumed that the factors would be related. Factor 1 loaded onto three items, Factor 2 loaded onto four items, and Factor 3 loaded onto three items. The items that cluster onto the same factors suggest that Factor 1 represents ‘individual control when using ICTs’ (individual control), Factor 2 represents ‘emotional/affective attitudes towards ICTs’ (emotional/affective attitudes), and Factor 3 represents ‘requires assistance from others to feel in control’ (requires assistance). The factor loadings and the descriptions of the items are presented in Table 2.

Because this variable combined two subscales from Selwyn's (1997) original study (perceived control and affective attitudes), the factor analysis should have only extracted two factors for the attitudes towards ICTs measure. However this was not the case, as the second subscale, perceived control, extracted more than one factor. Due to the perceived control subscale only producing one factor in the original study (Selwyn, 1997), the factor analysis was re-run on the scale, with a forced two-factor solution. This analysis showed that the items in the attitudes towards ICTs scale loaded significantly onto one of the two factors. Based on these factor loadings, this study will follow the factoring proposed in the original scale.

**Perceptions of Techno-complexity.** Principal axis factor analysis was conducted on the five items in the perceptions of techno-complexity measure. The KMO measure was .82, which is ‘meritorious’ according to Hutcheson and Sofroniou (1999). Bartlett’s test was significant which verified the sampling adequacy, indicating it was appropriate to continue with the factor analysis. One factor was greater than 1 (eigenvalue = 2.85) and explained 57.04% of the total variance. The Scree plot (Appendix D, Figure 15) supported this extraction of one factor. All of the items in the scale loaded significantly onto the extracted factor and thus a one-factor solution was deemed appropriate. Cronbach’s alpha for this scale was .80.

Table 2

*Attitudes towards ICTs Pattern Matrix*

Items	Factor 1	Factor 2	Factor 3
Given the opportunity to use an ICT I am afraid that I might damage it in some way.		-.916	
I hesitate to use ICTs for fear of making mistakes I cannot correct.		-.893	
I don't feel apprehensive about using ICTs.		-.424	
ICTs make me feel uncomfortable.		-.564	
I could probably teach myself most of the things I need to know about ICTs.	.734		
I can make ICTs do what I want.	.678		
If I get problems using ICTs I can usually solve them one way or the other.	.889		
I am not in complete control when I use ICTs.			.788
I need an experienced person nearby when I use ICTs.			.667
I do not need someone to tell me the best way to use ICTs.			.496

Extraction Method: Principal Axis Factoring  
Rotations Method: Direct Oblimin with Kaiser Normalization

**Missing Data**

There were missing data in the criterion variable (early retirement preferences) in 20 responses. This variable comprised two questions, assessing the participants' expected and preferred age of retirement. The 20 respondents who had missing data either had one or both of these questions unanswered. Due to the nature of the variable, missing data methods such as mean substitution or

imputation would have been inappropriate. Therefore, if a participant had not answered one or both of these items, then these participants were coded as zero, meaning they were assumed to prefer to retire when they expected to, not later than they expected to. This assumption was based on the proposition that if an individual was cognisant of having early or late retirement preferences, then they would have stated as such.

## **Descriptive Statistics**

Descriptive statistics were calculated for all the variables in this study, and included the means, standard deviations, internal reliability, and skew and kurtosis values (refer to Table 3, p.44). Response scales for the variables ranged from 1 to 7 (strongly disagree to strongly agree). On average, respondents reported relatively low levels of perceived age discrimination (2.37), negative attitudes towards ICTs (2.74), techno-complexity (3.10) and threat from organisational downsizing (3.00). Respondents reported moderate levels of job security (4.28), and high levels of job satisfaction (6.02) and satisfaction with job flexibility (5.81). The internal reliability of the scales was measured using Cronbach's alpha. All of the scales had relatively high reliabilities, ranging from .70 to .90. When looking at preferences for early retirement, 90.9% of the sample preferred to retire earlier or when expected, and only 9.1% of respondents preferred to retire later than what they expected.

Although skew and kurtosis scores for all of the predictor and mediator variables were within the acceptable range of -3 and +3 for skew and -8 and +8 for kurtosis according to Kline (2011); when observing the data visually (looking at the histograms, Appendix E), perceptions of age discrimination, job satisfaction, job flexibility satisfaction, threat of organisational downsizing, and attitudes towards ICTs, all appeared to be skewed. Due to this, further analysis was performed on the skew and kurtosis values to determine whether the results were significant, according to the instructions of Field (2013). The skew and kurtosis scores of each variable were converted into *z*-scores, which then allowed me to determine whether these scores were significant at  $p < .05$  (above 1.96). After performing these calculations, it was evident that perceptions of age discrimination, threat of organisational downsizing, and attitudes towards ICTs were all positively skewed,

and job satisfaction and job flexibility satisfaction were negatively skewed. Job satisfaction, job flexibility satisfaction, threat of organisational downsizing, perceptions of techno-complexity and job security also had significant kurtosis. The Shapiro-Wilk test confirmed that the distribution of scores deviated significantly from a normal distribution for these variables (Field, 2013).

Table 3 (p.44) shows the means, standard deviations, skew and kurtosis values, as well as the computed *z*-scores, and Cronbach's alpha of the predictor and mediator variables, before transformations were conducted.

### **Data Transformations**

Due to all of the predictor and mediator variables except for perceptions of techno-complexity having substantial skew and/or kurtosis, data transformations were conducted in order to convert original scores into scores that are more normally distributed (Kline, 2011). Fidell and Tabachnick (2013) recommend applying a square root transformation to distributions that differ moderately from normal, log transformations to distributions that differ substantially, and inverse transformations for distributions that differ severely.

Log10, square root and reciprocal transformations were performed on the variables that had substantial skew and/or kurtosis (Field, 2013). The distributions of all of the variables were improved by either the Log10, square root, or reciprocal transformations. The correlations of the transformed variables with the other variables were compared with the correlations of the non-transformed variables, with the other variables. These differences in correlations between the non-transformed and the transformed data ranged from .002 to .022. These differences were not significant, and therefore the original non-transformed data were retained.

### **ANOVAs and *t*-tests**

A one way ANOVA was conducted in order to test for significant differences in levels of early retirement preferences between industry and ethnicity. This test determined that there was no significant effect of industry on preferences for early retirement,  $F(6, 125) = 1.07, p = .38$ . There was also no significant effect of ethnicity on early retirement preferences,  $F(4, 127) = .43, p = .79$ .

Table 3

*Descriptive Statistics of Variables*

Predictor and Mediator Variables	N	Mean	SD	Skew	z-score of Skew	Kurtosis	z-score of Kurtosis	Cronbach's Alpha
Perceptions of Age Discrimination*	132	2.37	1.30	.74	3.50	-.68	-1.63	.90
Job Satisfaction*	132	6.02	1.21	-1.73	-8.21	3.10	7.39	.86
Job Flexibility Satisfaction*	132	5.81	1.17	-1.62	-7.65	2.96	7.06	.87
Job Security*	132	4.28	1.51	.19	4.74	-.93	-2.23	.81
Threat of Organisational Downsizing*	132	3.00	1.87	.57	2.68	-.85	-2.02	.70
Attitudes towards ICTS*	132	2.74	1.20	.53	2.51	-.71	-1.69	.90
Perceptions of Techno-Complexity*	132	3.10	1.25	.18	0.84	-.78	-1.86	.80
Preferences for Early Retirement	132	1.01	4.05	NA	NA	NA	NA	NA

\*Response values: strongly disagree (1) to strongly agree (7)

An independent samples *t*-test was conducted to test for significant differences between early retirement preferences and gender. On average, males had a slightly larger difference between their preferred age of retirement and their expected age of retirement ( $M = 1.12$ ) than women ( $M = .90$ ), indicating that men in this study intend to retire later than women. This difference, 0.21, however was not significant,  $t(130) = .30, p = .92$ .

### **Correlation Analysis**

Pearson's product moment correlation was computed in order to determine the strength of the relationships between variables used in this study. Table 4 (p. 46) presents the results of these two-tailed correlation analyses. A sample size of 132 gives a power of .80, at the .05 level ( $r = .25$ ), indicating that there is an 80% chance of detecting a statistically significant relationship between the variables (Friedman, 1982). These correlations were used to determine whether hypotheses 1a, 1b, 2a, 2b, 3a, 3b, 4a, 4b, 5a, 5b, 6 and 7 were supported or not.

Hypothesis 1a proposed that perceived age discrimination would correlate positively with preferences for early retirement. Perceived age discrimination correlated significantly with preferences for early retirement ( $r = .19, p < .05$ ), thus hypothesis 1a was supported. This implies that as perceptions of age discrimination increase, preferences for early retirement also increase.

Hypothesis 2a proposed that satisfaction with job flexibility would correlate negatively with preferences for early retirement. However satisfaction with job flexibility was found to be unrelated to preferences for early retirement, thus hypothesis 2a was not supported. This suggests that job flexibility satisfaction did not relate to preferences for early retirement.

Hypothesis 3a proposed that negative attitudes towards ICTs would correlate positively with preferences for early retirement. However negative attitudes towards ICTs was found to be unrelated to preferences for early retirement, thus hypothesis 3a was not supported. This implies that negative attitudes towards ICTs did not relate to preferences for early retirement.

Hypothesis 4a proposed that perceptions of techno-complexity would correlate positively with preferences for early retirement. However perceptions of

Table 4

*Pearson's product moment correlations for predictor, mediator, outcome and continuous variables.*

Variables	Age	Org.T	Job T	PER	AD	JSat	SatJF	JSec	OD	AICTs	TC
Age	-										
Org.T	.40**	-									
Job T	.22**	.57**	-								
PER	-.13	-.10	.05	-							
AD	-.08	-.05	.18	.19*	-						
JSat	.12	.19*	.06	-.18*	-.44**	-					
SatJF	.13	.18	.06	-.08	-.33**	.39**	-				
JSec	.18*	.18	-.01	-.21*	-.47**	.42**	.24**	-			
OD	-.13*	.05	.17	.13	.37**	-.30**	-.21*	-.60**	-		
AICTs	.04	.08	.11	.01	.03	-.06	-.07	-.17*	.03	-	
TC	.02	.07	.08	.06	.02	-.06	-.05	-.21*	-.01	.76**	-

Sample size = 132. \*p < .05, \*\*p < .01.

PER = Preferences for early retirement, AD = Perceptions of age discrimination, JSat = Job satisfaction, SatJF = Satisfaction with job flexibility, JSec = Job security, OD = Threat of job loss from organisational downsizing, AICTs = Attitudes towards ICTs, TC = Perceptions of techno-complexity, Org.T = Organisation tenure, Job T = Job tenure

techno-complexity did not correlate significantly with preferences for early retirement, and thus hypothesis 4a was not supported. This suggests that perceptions of techno-complexity did not relate to preferences for early retirement.

Hypothesis 5a proposed that perceived threat of job loss by organisational downsizing would correlate positively with preferences for early retirement. However perceived threat of job loss through organisational downsizing did not correlate significantly with preferences for early retirement, and thus hypothesis 5a was not supported. This suggests that perceived threat of job loss did not relate to preferences for early retirement

Hypothesis 6 proposed that job satisfaction would correlate negatively with preferences for early retirement. Job satisfaction was found to be negatively correlated with preferences for early retirement ( $r = -.18, p < .05$ ), thus hypothesis 6 was supported. This suggests that as job satisfaction increased, preferences for early retirement decreased.

Hypothesis 1b proposed that perceived age discrimination would correlate negatively with job satisfaction. Perceived age discrimination was found to be negatively related to job satisfaction ( $r = -.44, p < .01$ ), therefore, hypothesis 1b was supported. This suggests that as perceived age discrimination increased, job satisfaction decreased.

Hypothesis 2b proposed that job flexibility satisfaction would correlate positively with job satisfaction. Job flexibility satisfaction was found to be positively correlated with job satisfaction ( $r = .39, p < .01$ ), thus hypothesis 2b was supported. This correlation suggests that as job flexibility satisfaction increased, so too did job satisfaction.

Hypothesis 3b proposed that negative attitudes towards ICTs would correlate negatively with job satisfaction. However, negative attitudes towards ICTs were not found to be significantly related to job satisfaction, thus hypothesis 3b was not supported. This implies that job satisfaction did not relate to negative attitudes towards ICTs.

Hypothesis 4b proposed that perceptions of techno-complexity would correlate negatively with job satisfaction. However, perceptions of techno-complexity were not significantly related to job satisfaction, thus, hypothesis 4b

was not supported. This suggests that job satisfaction was not related to perceptions of techno-complexity.

Hypothesis 7 proposed that job security would correlate negatively with preferences for early retirement. Job security was found to be negatively related to preferences for early retirement ( $r = .21, p < .05$ ) thus hypothesis 7 was supported. This implies that as job security increased, preferences for early retirement decreased.

Hypothesis 5b proposed that perceived threat of job loss from organisational downsizing will correlate negatively with job security. Perceived threat from organisational downsizing was found to be negatively related to job security ( $r = -.60, p < .01$ ), thus hypothesis 5b was supported. This suggests that as an individual's perceived threat from organisational downsizing increased, their job security decreased.

### **Mediation Analysis**

Mediation analysis was used to test for mediation effects between the predictor variables (perceptions of age discrimination, satisfaction with job flexibility, perceived threat of organisational downsizing, negative attitudes towards ICTs, and perceived techno-complexity) and the criterion variable (preferences for early retirement). The mediator variables that were tested were job satisfaction and job security. As discussed in chapter 2, the mediation analyses followed the recommendations of Preacher and Hayes (2004). The mediation effects were assessed by estimating the direct and indirect effects between the predictor and outcome variables. If the indirect effect was significant, then mediation was said to have occurred. Bootstrapping was performed to generate confidence intervals around the indirect effect. The confidence interval (CI) for the indirect effect was a BCa bootstrapped CI (bias corrected and accelerated confidence interval) based on 1000 samples, at a 95% interval.

Hypothesis 1c proposed that job satisfaction would act as a mediator between perceived age discrimination and early retirement preferences. That is, it was predicted that perceived age discrimination would be associated with reduced job satisfaction, which would in turn be associated with preferences for early retirement. Perceptions of age discrimination significantly predicted job

satisfaction,  $b = -.41, t = -5.62, p < .01$ . Perceptions of age discrimination explains 19.6% of the variance in job satisfaction. This relationship was negative: as perceptions of age discrimination increases, job satisfaction decreases.

Perceptions of age discrimination did not significantly predict preference for early retirement when job satisfaction was included in the model,  $b = .41, t = -1.38, p = .17$ ; job satisfaction did not significantly predict preferences for early retirement,  $b = -.41, t = -1.29, p = .20$ . When job satisfaction was not in the model, perceptions of age discrimination significantly predicted preferences for early retirement,  $b = .58, t = 2.17, p = .03$ . The model explains 3.5% of the variance in preferences for early retirement. This relationship was positive: as perceptions of age discrimination increased, preferences for early retirement also increased. Additionally, the indirect effect of perceptions of age discrimination on preferences for early retirement through job satisfaction was non-significant,  $b = .17, \text{BCa CI} [-.0095, .3854], \kappa^2 = .05, 95\% \text{BCa} [.0036, .1157]$ . Therefore, hypothesis 1c was not supported. These results are presented in Figure 4.

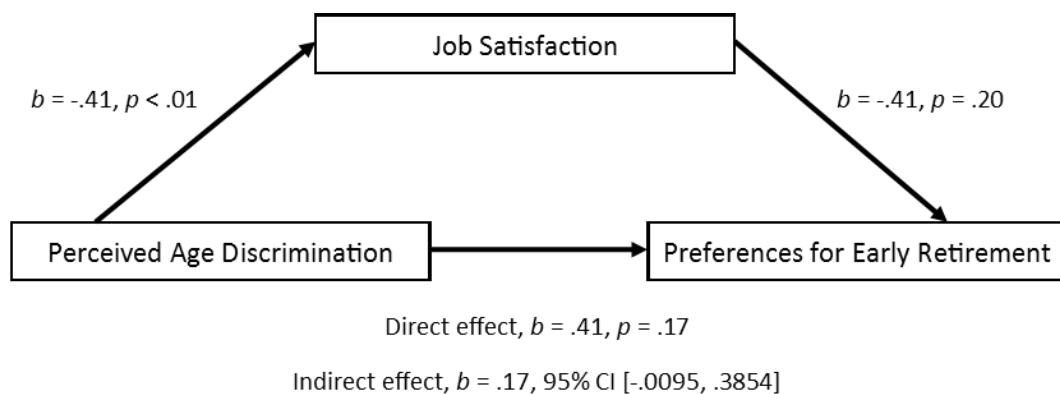


Figure 4. Model of perceived age discrimination as a predictor of early retirement preferences, mediated by job satisfaction – hypothesis 1c

Hypothesis 2c proposed that job satisfaction would act as a mediator between satisfaction with job flexibility and preferences for early retirement. That is, it was predicted that satisfaction with job flexibility would be associated with increased job satisfaction, which would in turn be associated with preferences for early retirement. Satisfaction with job flexibility significantly predicted job satisfaction,  $b = .40, t = 4.79, p < .01$ . Satisfaction with job flexibility explained

14.98% of the variance in job satisfaction. This relationship was positive: as satisfaction with job flexibility increased, job satisfaction increased.

Satisfaction with job flexibility did not significantly predict preferences for early retirement when job satisfaction was included in the model,  $b = -.05$ ,  $t = -.17$ ,  $p = .87$ ; job satisfaction did not significantly predict preferences for early retirement,  $b = -.59$ ,  $t = -1.88$ ,  $p = .06$ . When job satisfaction was not in the model, satisfaction with job flexibility did not significantly predict preferences for early retirement,  $b = -.29$ ,  $t = -.96$ ,  $p = .34$ . The indirect effect of satisfaction with job flexibility on preferences for early retirement with job satisfaction in the model was non-significant,  $b = -.24$ , BCa CI [-.4487, -.0404],  $\kappa^2 = .06$ , 95% BCa CI [.0125, .1331]. Therefore, hypothesis 2c was not supported. These results are presented in Figure 5.

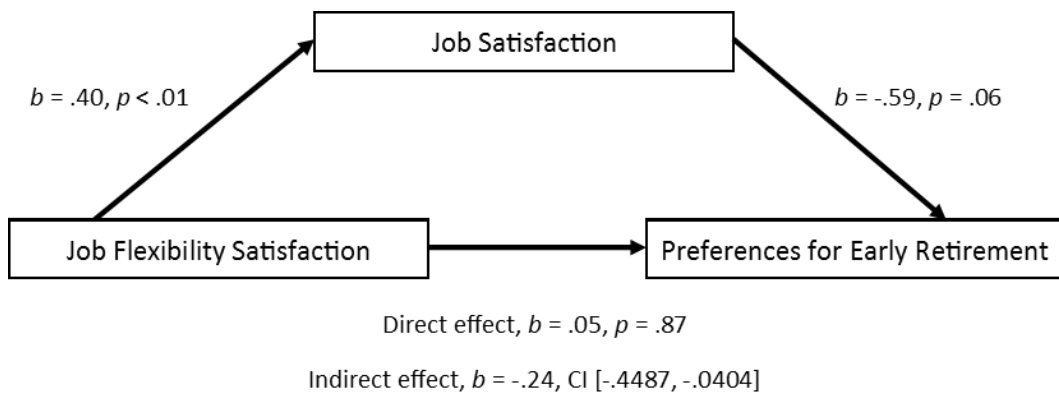


Figure 5. Model of job flexibility satisfaction as a predictor of early retirement preferences, mediated by job satisfaction – hypothesis 2c

Hypothesis 3c proposed that job satisfaction would act as a mediator between negative attitudes towards ICTs and early retirement preferences. That is, it was predicted that negative attitudes towards ICTs would be associated with reduced job satisfaction, which would in turn be associated with preferences for early retirement. Negative attitudes towards ICTs did not significantly predict job satisfaction,  $b = -.06$ ,  $t = -.70$ ,  $p = .51$ .

Negative attitudes towards ICTs did not significantly predict preferences for early retirement when job satisfaction was included in the model,  $b = -.0004$ ,  $t$

= .001,  $p = .99$ ; job satisfaction significantly predicted preferences for early retirement  $b = -.61$ ,  $t = -2.10$ ,  $p = .04$ . When job satisfaction was not included in the model, negative attitudes towards ICTs did not significantly predict preferences for early retirement,  $b = -.04$ ,  $t = -.13$ ,  $p = .99$ . The indirect effect of negative attitudes towards ICTs on preferences for early retirement through job satisfaction was non-significant,  $b = -.04$ , BCa [-.0539, .1788],  $\kappa^2 = .01$ , 95% BCa CI [.0003, .0456]. Therefore, hypothesis 3c was not supported. These results are presented in Figure 6.

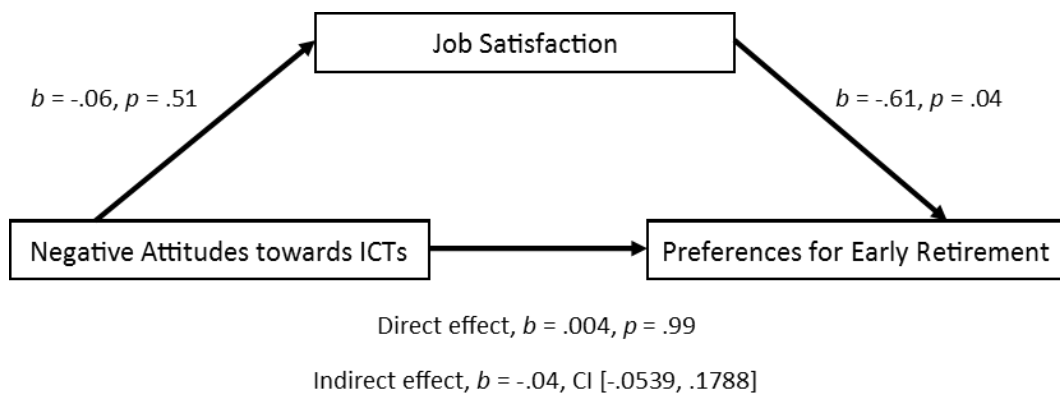


Figure 6. Model of negative attitudes towards ICTs as a predictor of early retirement preferences, mediated by job satisfaction – hypothesis 3c

Hypothesis 4c proposed that job satisfaction would act as a mediator between perceptions of techno-complexity and preferences for early retirement. That is, it was predicted that perceptions of techno-complexity would be associated with reduced job satisfaction, which in turn would be associated with preferences for early retirement. Perceived techno-complexity did not significantly predict job satisfaction,  $b = -.05$ ,  $t = -.63$ ,  $p = .53$ . Perceived techno-complexity did not significantly predict preferences for early retirement when job satisfaction was included in the model,  $b = -.17$ ,  $t = -.60$ ,  $p = .55$ .

Job satisfaction significantly predicted preferences for early retirement,  $b = -.60$ ,  $t = -2.07$ ,  $p = .04$ . When job satisfaction was not included in the model, perceived techno-complexity did not significantly predict preferences for early retirement,  $b = .20$ ,  $t = .70$ ,  $p = .48$ . The indirect effect of perceived techno-complexity on preferences for early retirement through job satisfaction was non-

significant,  $b = .03$ , BCa CI [-.0513, .1791],  $\kappa^2 = .01$ , 95% BCa CI [.0001, .0387]. Therefore, hypothesis 4c was not supported. These results are presented in Figure 7.

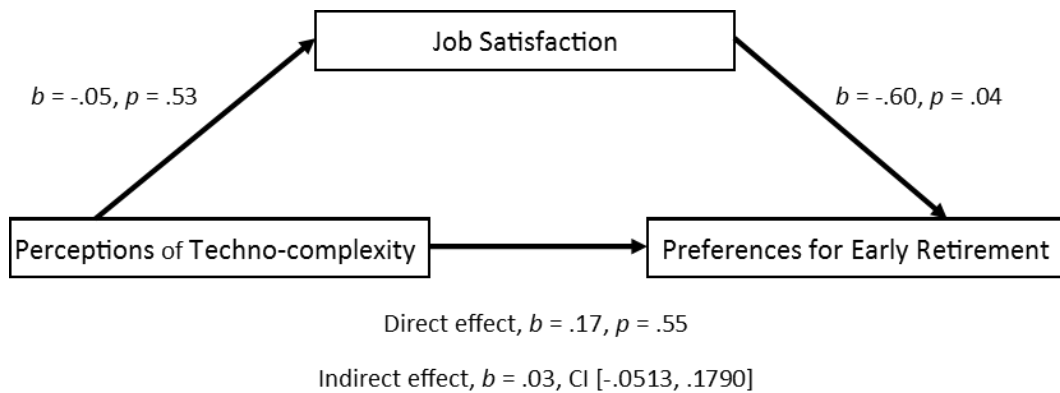


Figure 7. Model of perceptions of techno-complexity as a predictor of early retirement preferences, mediated by job satisfaction – hypothesis 4c

Hypothesis 5c proposed that job security would mediate the relationship between perceived threat of job loss from organisational downsizing and preferences for early retirement. That is, it was predicted that perceived threat of job loss would be associated with reduced job security, which in would be associated with preferences for early retirement. Perceived threat from organisational downsizing significantly predicted job security,  $b = -.48$ ,  $t = -8.50$ ,  $p < .01$ . Perceived threat from organisational downsizing explained 35.73% of the variance in job security. This relationship was negative: as threat of job loss through organisational downsizing increased, job security decreased.

Perceived threat from organisational downsizing did not significantly predict preferences for early retirement when job security was included in the model,  $b = .01$ ,  $t = .05$ ,  $p = .96$ ; job security did not significantly predict preferences for early retirement  $b = -.55$ ,  $t = -1.90$ ,  $p = .06$ . When job security was not included in the model, perceived threat from organisational downsizing did not significantly predict preferences for early retirement,  $b = .28$ ,  $t = 1.47$ ,  $p = .15$ . The indirect effect of perceived threat from organisational downsizing on preferences for early retirement through job security was non-significant,  $b = .27$ , BCa CI

[.0307, .7118],  $\kappa^2 = .10$ , 95% BCa CI [.0132, .1865]. Based on the above results, hypothesis 5c was not supported. These results are presented in Figure 8.

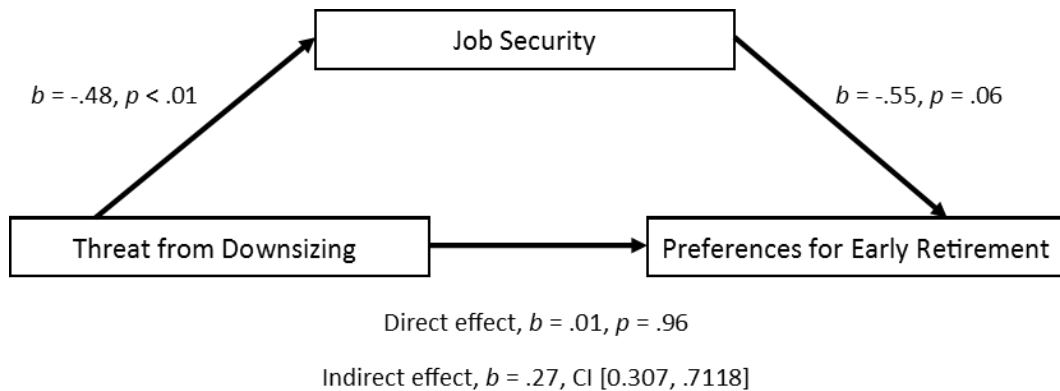


Figure 8. Model of perceived threat from organisational downsizing as a predictor of early retirement preferences, mediated by job security – hypothesis 5c

### Supplementary Findings

This section reports several non-hypothesized significant relationships that were found between variables in this research study, as they add to the discussion of this study. These non-hypothesized significant relationships, as well as other non-hypothesised relationships are illustrated in Figure 9 (p. 54).

Perceived age discrimination was negatively related to satisfaction with job flexibility ( $r = -.33$ ,  $p < .01$ ), as perceived age discrimination increased, satisfaction with job flexibility decreased. Perceived age discrimination was negatively related to job security ( $r = -.47$ ,  $p < .01$ ), as perceived age discrimination increased, job security decreased. Perceived of age discrimination was positively related to threat of job loss from organisational downsizing ( $r = .37$ ,  $p < .01$ ), as perceived age discrimination increased, threat of job loss increased.

Job satisfaction was positively related to job security ( $r = .42$ ,  $p < .01$ ), as job satisfaction increased, job security increased. Job satisfaction was negatively related to threat of job loss from organisational downsizing ( $r = -.30$ ,  $p < .01$ ), as job satisfaction increased, threat of job loss decreased.

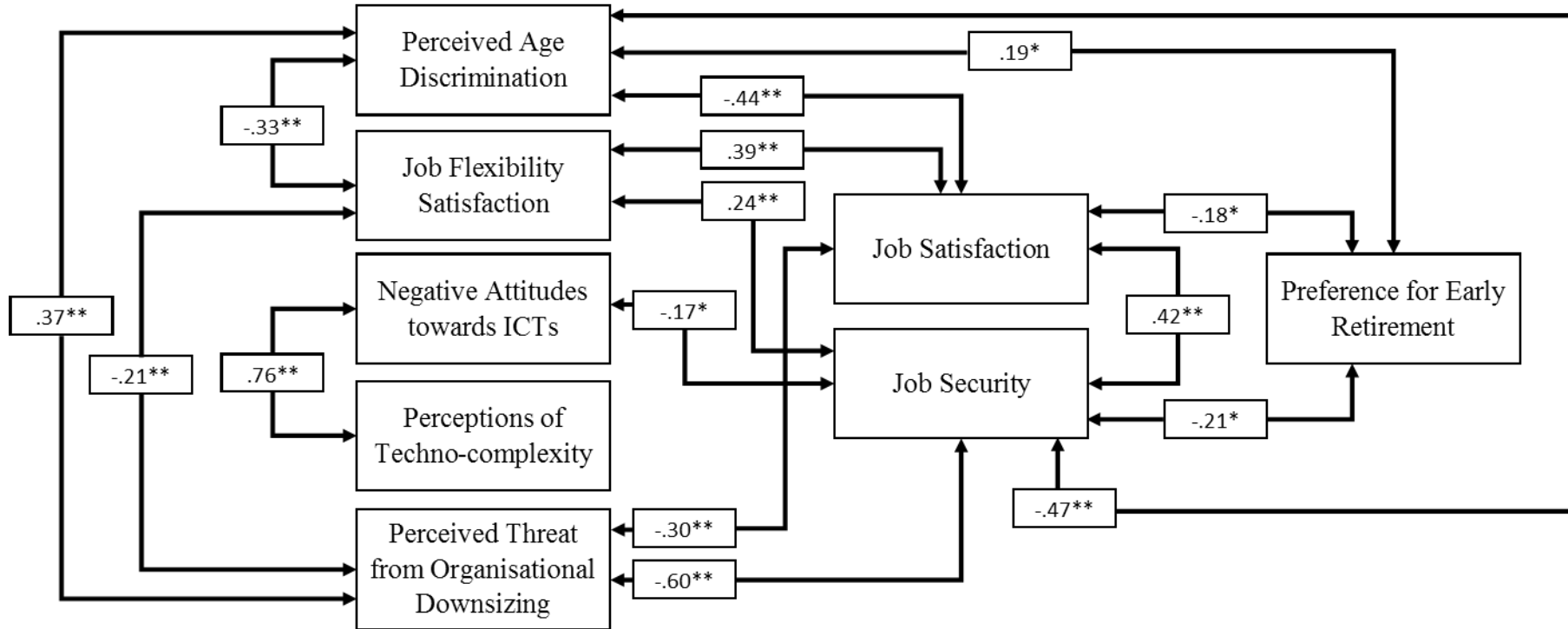


Figure 9. Framework showing the significant correlations between variables.

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

This chapter reports the findings from the data analysis for this study. Although the hypothesized relationships were not well supported, there were several significant and interesting relationships found between some of the variables. These results are discussed in the next chapter in relation to findings from previous research. The strengths and limitations of this study are also discussed, as well as directions for future research.

## Chapter Four: Discussion

The aim of this research was to investigate the work related factors that were related to older workers' preferences for early retirement. The factors that were investigated in this study focused on the 'push' factors that could potentially influence preferences for early retirement, which are typically thought of as involuntary, negative aspects influencing the decision to retire. Push factors were the focus as previous research has found that these factors have an impact on post-retirement adjustment as well as satisfaction with retirement life (Barnes-Farrell, 2003; Dorn & Sousa-Poza, 2010; Shultz et al., 1998). Participants in this study were full time workers in New Zealand organisations aged 55 and above, who completed an online survey that assessed factors that may have been impacting their early retirement preferences.

It is important to investigate factors that may influence early retirement preferences as due to the ageing population, maintaining the employability of the older worker for as long as possible is important for economic growth and sustainability (Loretto & White, 2006). Identifying the work related factors that are related to early retirement preferences of older workers is important as these can lead to a better understanding of ways to maintain these workers in employment. This may help assist organisations to increase the number of older adults who choose to remain in the workforce, even after the 'usual' age of retirement. Doing so would make the most of the experiences and expertise that older workers can offer their organisations (Ministry of Social Development, 2011).

The results of this study supported some of the proposed hypotheses, and other significant non-hypothesized relationships were also found. This chapter discusses the main findings from this research, as well as supplementary findings, in relation to relevant literature, and the ensuing implications for organisations. Possible reasons why some of the hypothesised relationships were not supported are also discussed. The practical and theoretical implications of this research are discussed, as well as the strengths, limitations, and suggestions for future research. The chapter concludes with a final summary of this research study.

## **Supported Research Findings**

Hypotheses 1a, 1b, 2b, 5b, 6 and 7 were all supported. These hypotheses are discussed below in relation to relevant literature. The implications for organisations are also discussed.

### **Perceived Age Discrimination and Early Retirement Preferences.**

Hypothesis 1a was supported: perceived age discrimination was positively correlated with early retirement preferences, indicating that as perceived age discrimination increases, so too do early retirement preferences. This hypothesis was based on previous research which has found that individuals may respond to age discrimination by withdrawing from the workforce, and early retirement preferences can be an indication of this withdrawal (Desmette & Gaillard, 2008). Previous research also indicates that individuals may prefer to leave the work force to escape the stigma associated with being an older worker (Desmette & Gaillard, 2008), and may intend to retire earlier to escape the hostile work environment (Feldman, 2013; T. W. H. Ng & Feldman, 2012).

This finding is important as preferences for early retirement can be precursors for actual retirement behaviour, such as retirement intentions and retirement decision making (Barnes-Farrell, 2003). Therefore, the finding that perceived age discrimination is related to early retirement preferences has important implications for organisations. Workers who perceive that they are discriminated against may also feel as though they have limited choice surrounding their retirement. They may also feel as though they are being pushed out of the workforce before they are ready, which could have negative consequences when trying to adjust to post-retirement life (Barnes-Farrell, 2003; Dorn & Sousa-Poza, 2010; Shultz et al., 1998). Organisations therefore should be doing more to identify age discrimination in their workplaces.

**Perceived Age Discrimination and Job Satisfaction.** Hypothesis 1b was supported: perceived age discrimination was negatively correlated with job satisfaction. This suggests that as perceived age discrimination increases, job satisfaction decreases. This finding supports previous research which has found that there is a negative relationship between age discrimination and job satisfaction

(Ensher et al., 2001; Orpen, 1995; Redman & Snape, 2006). This finding indicates that there are adverse effects of age discrimination in the workplace, which clearly shows that there is a need for employers to be vigilant at identifying potential age discrimination in their organisation. Decreased job satisfaction of employees, which can result from age discrimination, not only has negative effects for the individual, but it has also been found to correlate with job performance, job involvement, organisational commitment, absenteeism and higher turnover (Elias et al., 2012). Thus, age discrimination contributing to decreased job satisfaction could potentially result in the loss of workers for the organisation, as well as decreased job performance.

**Job Flexibility Satisfaction and Job Satisfaction.** Hypothesis 2b proposed that job flexibility satisfaction would be positively related to job satisfaction. Job flexibility satisfaction was found to be positively correlated with job satisfaction, therefore this hypothesis was supported. This correlation suggests that as satisfaction with job flexibility increases, so too does overall job satisfaction. This result is supported by Chen and Scott (2006) who also reported that job flexibility is positively correlated with job satisfaction. An implication of this finding for organisations is that older workers who have flexibility in their jobs are likely to be more satisfied with their job as a whole, which can lead to benefits for both the employee and the employer. Job satisfaction has been found to relate to job performance, organisational commitment, and turnover rates (Elias et al., 2012). Additionally, while workplace flexibility has been found to be a significant predictor of work engagement for employees of all ages, research suggests that it is a more powerful predictor of engagement for employees aged 45 and above (Pitt-Catsouphes & Matz-Costa, 2008). Therefore, older workers in New Zealand organisations may respond well to greater flexibility in their jobs, which may also contribute to better engagement and continued work with the organisation. Organisations should take into account the diversity of older workers, and adjust policies and procedures surrounding workplace flexibility. Providing older workers with access to the job flexibility they need and want may provide organisations with the means to manage the job satisfaction of these employees.

**Threat from Organisational Downsizing and Job Security.** Hypothesis 5b proposed that perceived threat of job loss from organisational downsizing would correlate negatively with job security. Perceived threat from organisational downsizing was found to be negatively related to job security, thus hypothesis 5b was supported. This suggests that as an individual's perceived threat from organisational downsizing increases, their job security decreases. This result supports previous research that has found that organisational downsizing affects the job security of surviving employees (Appelbaum et al., 1997; Carbery & Garavan, 2005; Quinlan, 2007; Sadri, 1996). Research suggests that this effect occurs as the organisational "... downsizing has violated the psychological contract by removing job security from the employment relationship" (Macky, 2004, p.66). Additionally, past research has shown that older employees are more likely than their younger colleagues to be at risk of losing their jobs during this period (Armstrong-Stassen, 2001), which puts this age group at greater risk of job insecurity. Feelings of job insecurity can be associated with symptoms of survivor syndrome, in particular survivor sickness, which is where remaining employees experience negative feelings and/or concerns about their job or workplace (Appelbaum et al., 1997). The behaviours and feelings exhibited by remaining employees after downsizing are often a function of how fair, or unfair, they perceive the outcomes of organisational downsizing (Macky, 2004).

A practical implication of this finding is that organisations who have recently been through organisational downsizing or layoffs may need to be putting interventions in place to ensure that the surviving employees feel more secure in their jobs. Additionally, for organisations who are planning to downsize in the future, doing so in a way that is perceived as being fair by remaining employees is likely to lessen the harmful effects of downsizing.

**Job Satisfaction and Early Retirement Preferences.** Hypothesis 6 was supported: job satisfaction was negatively related to early retirement preferences. This indicates that as job satisfaction increased, early retirement preferences decreased. This hypothesis was based on previous research that has found that job satisfaction is an important factor underlying intentions to retire (Kautonen et al., 2012; Sibbald et al., 2003), and thus it was predicted that it would also influence

preferences for early retirement. This result is important as it indicates that job satisfaction is an important work variable influencing the retirement decision making process.

**Job Security and Early Retirement Preferences.** Hypothesis 7 was supported: job security was negatively correlated with early retirement preferences. This result indicates that as job security increased, early retirement preferences decreased. This hypothesis was based on previous research which has found that job insecurity is related to increased turnover intentions (Emberland & Rundmo, 2010), thus it was assumed that job security would also be related to early retirement preferences. This finding has implications for organisations, particularly for those who have recently been through organisational downsizing, or are planning to in the near future. As was mentioned earlier, perceived threat from organisational downsizing was related to job security. Therefore, although organisational downsizing was not directly related to early retirement preferences, this finding suggests that it may be indirectly related through job security. Thus, organisations should be striving to create workplaces where older workers feel secure in their jobs, particularly during times of organisational downsizing.

### **Unsupported Hypothesised Findings**

Several of the proposed hypotheses were unsupported. These were hypotheses 2a, 3a, 4a, 5a, 3b, 4b 1c, 2c, 3c, 4c, and 5c. Potential reasons why these hypotheses were not supported will be discussed below.

**Direct Hypothesised Relationships.** The direct hypothesised relationships that were not supported were 2a, 3a, 4a, 5a, 3b, and 4b. There are a number of potential reasons as to why these hypotheses were not supported and these include the potential influence of external factors, the complex definition of retirement, and the measure used to assess early retirement preferences. These reasons will be expanded on below.

On the whole, the majority of participants in this study had early retirement preferences. In total, 90.9% of respondents preferred to retire earlier than, or at the same age as what they expected to, compared with 9.1% of respondents who

preferred to retire later. It is important to consider the reasons why these participants had early retirement preferences. Due to the high occurrences of early retirement preferences, it is important to consider why the direct hypothesised relationships were not supported. One of these reasons could perhaps include the influence of external factors, such as pull factors, not explored in this study. It is a possibility that these external factors may have been more important to the participants' in this study, and thus could have had more weight in influencing retirement preferences than did the work related factors that were examined.

Examples of these external factors that may have potentially impacted the early retirement preferences in this study include 'pull' factors. As was discussed in chapter one, pull factors are generally thought of as factors which draw older workers out of the workforce and into retirement, such as the desire to pursue leisure activities (Shultz et al., 1998), or the appeal of spending more time with family (Jex & Grosch, 2012). It is possible that individuals in this study perceived pull factors as being more influential in affecting retirement preferences than the push factors explored. That is, these employees may be "... pulled towards retirement more by what they believe awaits in the future after retirement than pushed away from work by thoughts of the current workplace" (Beehr et al., 2000). Pull factors and other personal factors, such as finances, were not explored in this study as the focus was solely on the work-related predictor variables, which could be influenced directly by organisations.

The way individuals define retirement is different for everybody. As was noted in chapter one, defining retirement is complex, as not only is there disagreement between researchers as to what retirement actually is, but retirement is also defined differently at the level of the individual. For example, when looking at the definition of early retirement, whether a person defines themselves as retiring early or not depends on at which age they initially expected to retire ( Wang & Shi, 2014). Thus, early retirement is, at least in part, subjective. Ekerdt and Deviney (1990) also state that people can be considered retired "... if they say they are" (p. 216). In addition to this, transitional working arrangements, namely bridge employment, are becoming increasingly common. Bridge employment, which is also difficult to define, is a transitional working arrangement made by older workers (Weckerle & Shultz, 1999), which acts as a 'bridge' between fulltime employment

and full retirement. It is employment that takes place after an older worker has left their fulltime working position, but before they withdraw permanently from the labour force (Kim & Feldman, 2000). Bridge employment often involves moving from higher skilled employment to lower skilled employment (Quinn & Kozy, 1996), however this is just one of many options for workers engaging in this type of employment. Other options include a reduction in hours and more flexible working times. Therefore, due to there being alternative options when approaching retirement, rather than just fulltime employment and fulltime retirement, it is difficult to determine when an individual is actually retired.

The blurred lines surrounding the definition of retirement have implications for this study, as it could have potentially impacted on the outcome variable, early retirement preferences. The measure used for this study did not accommodate participants' expectation or preferences regarding bridge employment or phased retirement. Therefore, this could have impacted on the overall results of the early retirement preferences measure.

The measure used for this study to assess retirement preferences was chosen as it allowed for a more subjective definition of early retirement: early retirement preferences were present if the individual indicated they would prefer to retire earlier to what they would expect, regardless of age. In other words, this measure did not focus on social norms regarding retirement age, rather individual expectations and preferences. Therefore, this allowed for the measure of early retirement preferences to be calculated based solely the individual's inclinations. This measure also focused on the first part of the decision making process (preferences for retirement) which Beehr (1986) describes as being the 'thinking' surrounding retirement. Therefore, although this measure was chosen for its suitability in this study and its subjective nature, the hypotheses were formulated based on previous research that assessed early retirement *intentions*, which follows on from retirement preferences in Beehr's (1986) model of retirement. Consequently, this could account for some of the non-supported hypotheses in this study. Other reasons for the hypotheses potentially not being supported are discussed below.

*Job Flexibility Satisfaction and Early Retirement Preferences.* Hypothesis 2a predicted that satisfaction with job flexibility would correlate negatively with early retirement preferences, however this hypothesis was not supported. This result illustrates that satisfaction with job flexibility does not impact the retirement preferences of older workers. This hypothesis was formulated based on previous literature which asserts that job flexibility is correlated with later intentions to retire (Davidson et al., 2001; Jex & Grosch, 2012), and thus it was assumed that it would also be related with early retirement preferences. Davidson and colleagues (2001) examined the retirement intentions of doctors in the United Kingdom and found that more flexible working patterns may encourage later retirement intentions. One explanation for the differences between this study and Davidson and colleagues' (2001) study is that different measures were used to assess the relationship between job flexibility and early retirement preferences, which could have impacted on the results.

This result however is similar to some previous research. van Solinge and Henkens (2014) also did not find a significant association between workplace flexibility and later retirement intentions. Herrbach, Mignonac, Vandenberghe and Negrini (2009) also failed to find a significant relationship between job flexibility and the intention to retire. Herrbach and others (2009) suggest that one of the reasons for the non-significant relationship between job flexibility and intentions to retire is that older workers "... may actually want to escape from the stereotype of older workers' needing specific attention because of declining skills and performance" (p. 907), and thus job flexibility satisfaction is not an important factor when considering retirement. These older workers may not want to be treated as though they need special attention, as in doing so, common stereotypes surrounding older workers may be reinforced (Herrbach et al., 2009). This result has implications for organisations: if managers and employers are offering flexible working arrangements to older workers, they should consider the implications of specifically targeting older workers. Offering these arrangements to all employees, regardless of age, may be more beneficial.

*Attitudes towards ICTs and Early Retirement Preferences.* Hypothesis 3a predicted that negative attitudes towards ICT use would correlate positively with

early retirement preferences, however this hypothesis was not supported. This hypothesis was based on research that has found that changes in ICTs (Jex & Grosch, 2012), and the challenges involved with keeping up with these changes (Wang & Shultz, 2010), can affect retirement decisions, and also how older workers' attitudes towards ICTs can affect the way they use them (Elias et al., 2012). Previous research however does not explore the direct link between negative attitudes towards ICTs and early retirement preferences. An explanation for this finding may be that the participants in this study reported relatively low levels of negative attitudes towards ICTs (average response of 2.74). There may be several reasons for this such as older workers becoming more adaptable to technological change. E. S. W. Ng and Law (2014) examined how older workers keep up and adapt to workplace changes. Findings from their study suggest that older workers use various strategies to adapt to changes in the workplace, and that these strategies often help them to maintain their functioning within the workplace. E. S. W. Ng and Law (2014) also found that "although some of the workers were worried about "keeping up" especially with technology, they also displayed remarkable adaptation" (p.10).

*Perceptions of Techno-complexity and Early Retirement Preferences.* Hypothesis 4a predicted that perceptions of techno-complexity would correlate positively with early retirement preferences, however this hypothesis was not supported. Previous research has found that older workers are more likely to suffer from techno-complexity as they often have trouble adjusting to new technologies (Tu et al., 2005), which can lead to increased role overload (Tarafdar et al., 2011). However, previous research has not examined the direct link between perceptions of techno-complexity and early retirement preferences. This hypothesis was based on the assumption that older workers who have perceptions of techno-complexity are less satisfied with their jobs, and may also be more stressed, thus leading to early retirement preferences.

The support an individual receives when using new technology may also be a reason why a relationship between perceptions of techno-complexity and early retirement preferences was not present. The techno-complexity measure examined how capable individuals feel about using technology in the workplace. However,

it may not be the complexity surrounding the technology per se that may influence retirement preferences, but rather the support the individual receives when using new technologies. The feelings an older worker has surrounding how much support and information they receive when new technologies are introduced, as well as whether they receive help when they need it, may be a factor associated with retirement preferences. Research has shown that employees who perceive strong managerial support have later retirement preferences (van Solinge & Henkens, 2014), and thus if they perceive this type of support when using new technologies, then this may factor into the retirement decision making process.

*Perceived Threat from Organisational Downsizing and Early Retirement Preferences.* Hypothesis 5a predicted that perceived threat of job loss from organisational downsizing would correlate positively with early retirement preferences, however this hypothesis was not supported. This hypothesis was based on previous research that recognises the adverse effects that organisational downsizing may have on older workers (Armstrong-Stassen, 2001), and thus it was predicted that older workers may prefer to retire earlier to escape the negative effects of organisational downsizing. Previous research has also found that organisational downsizing is related to turnover intentions (Spreitzer & Mishra, 2002; Susskind, 2007), and thus it was assumed that organisational downsizing would also be related to retirement preferences. This hypothesis was not supported however, and this may be due to the difference between retirement preferences and turnover intentions in general. This finding is similar to Beehr and colleagues (2000), who failed to find a relationship between workforce reductions and the intention to retire.

### **Mediator Hypotheses.**

*Job Satisfaction as a Mediator Variable.* Hypotheses 1c, 2c, 3c, and 4c were not supported as job satisfaction did not act as a mediator variable between any of the predictor variables (perceived age discrimination, job flexibility satisfaction, attitudes towards ICTs, and perceptions of techno-complexity) and early retirement preferences. Job satisfaction did not mediate the relationship between perceived age discrimination and early retirement preferences, as the indirect effect of perceived age discrimination on early retirement preferences,

through job satisfaction, was nonsignificant. This indicates that job satisfaction did not explain the relationship between perceived age discrimination and early retirement preferences. This result indicates that perceived age discrimination affects early retirement preferences, regardless of job satisfaction.

In regards to the other variables – job flexibility satisfaction, attitudes towards ICTs, and perceptions of techno-complexity – job satisfaction did not act as a mediator variable as there were no significant relationships found between these predictor variables and early retirement preferences. According to Preacher and Hayes (2004), the first condition of mediation analysis is that the predictor variable must significantly predict the criterion variable; thus, job satisfaction did not act as a mediator in these relationships, due to the reasons discussed above.

*Job Security as a Mediator Variable.* Hypothesis 5c was not supported as job security did not mediate the relationship between perceived threat of job loss from organisational downsizing and early retirement preferences. This was because perceived threat of job loss from organisational downsizing did not significantly predict early retirement preferences, thus job security did not act as a mediator variable.

## **Supplementary Findings**

**Perceived Age Discrimination, Satisfaction with Job Flexibility, Job Security, and Threat from Organisational Downsizing.** Because perceived age discrimination is an important factor affecting older workers, relationships between this variable and additional variables in this study were examined. Perceived age discrimination was found to correlate negatively with job flexibility satisfaction, indicating that as perceived age discrimination increased, job flexibility satisfaction decreased. This finding has implications for organisations. This result potentially indicates that older workers who do not feel as though they have much flexibility surrounding their jobs experience age discrimination. Allowing older workers to have more flexibility with their jobs, and encouraging this flexibility as normal, may lead to less age discrimination towards these workers. Thus, making flexible arrangements commonplace could provide a more optimal working environment for older workers. Additionally, increasing flexibility in the workplace may lead to

phased retirement programs becoming more popular (Chen & Scott, 2006). However, as was mentioned earlier, job flexibility satisfaction was not significantly related to early retirement preferences, and an explanation for this result was that older workers do not want to be perceived as needing special treatment. Therefore, having flexible arrangements available for all staff may also decrease the occurrence of age discrimination.

A significant negative correlation was also found between perceived age discrimination and job security, indicating that as perceived age discrimination increased, job security decreased. This reiterates how important it is for employers to ensure that older workers are not experiencing age discrimination, as it can impact negatively on other work aspects, such as an employee's job security. Previous research has also found that an employee's job insecurity can have negative implications for organisations, such as lowered organisational commitment, as well as work withdrawal behaviours (Emberland & Rundmo, 2010).

Perceived age discrimination also correlated positively with perceived threat of job loss from organisational downsizing. Thus, as perceived age discrimination increased, threat of job loss from organisational downsizing increased. This result is not surprising, as previous research has found that employees experiencing age discrimination are more at risk of organisational downsizing, as organisations have been found to use redundancies and layoffs to disguise age discrimination (Billett et al., 2011a). This finding is important as past research has found that older workers are already more likely to be the victims of involuntary job loss (Armstrong-Stassen, 2001), and therefore for those experiencing age discrimination, organisational downsizing/restructuring is likely to be a very traumatic and stressful experience.

**Job Satisfaction, Job Security, and Threat from Organisational Downsizing.** Job security was positively related to job satisfaction, indicating that as job security increased, job satisfaction increased. The relationship between these two variables was examined as both of these variables correlated negatively with early retirement preferences. It is also important to look at the relationships between these two variables as past research has shown that job security can impact job satisfaction over time (Heaney, Israel, & House, 1994). Additionally, both job

satisfaction and job security were negatively related to threat of job loss from organisational downsizing. Thus, as threat of job loss from organisational downsizing increased, job satisfaction decreased, as did job security. These results have implications for organisations, particularly those undergoing, or planning on undergoing, organisational downsizing. The relationships between these three variables illustrate the impact that organisational downsizing can have on the job security and the job satisfaction of older employees in the organisation. Thus, employers should be mindful of the negative impacts of this type of organisational restructuring strategy on job security and job satisfaction, and should put procedures in place to mitigate these harmful effects.

### **Practical Implications**

This research examined factors that potentially influenced the early retirement preferences of older workers. From the results, there are some notable findings. Firstly, perceived age discrimination correlated negatively with early retirement preferences, indicating that as age discrimination increased, early retirement preferences decreased. A practical implication from this result is that organisations should be wary of potential age discrimination in their organisations. The result indicates that for older workers who perceived age discrimination also had earlier retirement preferences. Due to organisations needing to retain older workers for longer, this finding could potentially shed some light on ways to retain these workers in employment. Additionally, age discrimination has been found to be associated with harm to psychological well-being with older workers (Garstka, Schmitt, Branscombe, & Hummert, 2004), including psychological disengagement from their work (Desmette & Gaillard, 2008).

Job satisfaction was also found to correlate negatively with early retirement preferences, indicating that as job satisfaction increased, early retirement preferences decreased. This has important implications for organisations. For organisations aiming to keep older workers in employment, regular organisational surveys amongst older workers which assess job satisfaction may be of some benefit. Job security was also correlated negatively with early retirement preferences, indicating that as job security increased, early retirement preferences decreased. For organisations going through organisational downsizing, it is

important that employers and managers ensure that remaining employees, particularly older workers, feel secure in their employment. This may impact the early retirement preferences of these individuals.

The relationships between perceived threat from organisational downsizing, job security, and job satisfaction were also significant. These relationships show the potential impact that organisational downsizing, whether past or future, could be having on the job satisfaction and job security levels of older workers. Job insecurity and job dissatisfaction can negatively impact both the employee and the organisation. Therefore, for organisations who have recently been through downsizing, HR managers and employers should be ensuring that those remaining employees, especially older workers, feel both secure and satisfied in their positions. Employers could consider putting procedures in place to lessen the harmful effects of organisational downsizing, which would be both beneficial to the employer and employee.

Another implication of these results is that employers and HR managers should address the diversity of older workers, and take into account individual preferences surrounding retirement. It is important to note that not all older workers will want to stay in paid employment, but for those who do, flexibility in both work and attitudes will be vital to help foster the potential of those who do (Ministry of Social Development, 2011). Decision makers need to keep this in mind when developing programs surrounding retirement, or workplace flexibility.

To conclude, organisations should be aware of the retirement preferences of older workers in their organisations. This study showed that a large proportion of the participants preferred to retire earlier than or at the age they expected (91%). Employers should keep in mind however that certain organisational factors, such as perceived age discrimination, job satisfaction, and job security could be impacting on these early retirement preferences. Thus, it may be possible for organisations to encourage later retirement of older workers by ensuring that organisational conditions and worker attitudes do not impact too heavily upon this age group.

### **Theoretical Implications**

The hypotheses in this study were formulated using the theoretical model which was developed based on findings from previous research. Research has

examined work related factors that are related to early retirement, and thus these studies were used to develop the theoretical model for this study. Several of the proposed hypotheses were supported, and these add to further understanding of factors relating to early retirement preferences.

Perceived age discrimination, job satisfaction, and job security were all related to early retirement preferences in the predicted direction. These findings contribute to previous literature which has also found that these factors are related to early retirement preferences. This research therefore has value as it adds to existing understandings of factors that may be influencing early retirement preferences amongst older workers in New Zealand.

The hypotheses that were not supported also add to the existing knowledge surrounding early retirement preferences. It was hypothesized that job flexibility satisfaction, negative attitudes towards ICTs, perceptions of techno-complexity, and perceived threat from organisational downsizing would all be related to early retirement preferences. However, the analyses failed to show significant correlations, which may indicate that these work related factors may not be as important to New Zealand employees as previous research has found.

## **Strengths**

One of the strengths of this study was that it surveyed participants from a variety of industries across New Zealand, such as agriculture, educational services, government, finance, healthcare, and scientific, just to name a few. This allows for greater generalizability of the results to a wide range of organisations within New Zealand. My research focused on a variety of work related factors that can potentially influence retirement decisions. While previous research has explored one or two of these factors and their influence on retirement decision making, my research aimed to incorporate these factors into one study to assess which ones are the most influential on early retirement preferences.

## **Limitations**

One of the major limitations of this study was that it only examined work related factors that potentially influenced retirement preferences, and not personal factors. Work related factors were the focus as these are more likely to be factors

that can be directly influenced by organisations. However, because only one of the work related factors that were investigated was related to early retirement preferences in the predicted direction, one can only speculate about the personal factors that may have led to early retirement preferences. Additionally, “the potential causes of the retirement decision do not divide easily into individual and organisational causes” as “... individuals’ decisions are often based on inseparable combinations” or personal and organisational factors (Beehr, 1986, p. 44). Thus, it is likely that these two types of factors interact with each other when older workers are considering retirement.

Another limitation of this study was its cross-sectional design, which does not allow for conclusions about the causal relationships to be drawn from the correlations between variables (Field, 2013). This also does not allow for information to be gathered on the *development* over time of variables that could potentially be affecting early retirement preferences. Additionally, the measures in this study were all self-report scales which can lead to common method bias (Donaldson & Grant-Vallone, 2002).

The measure used to assess early retirement preferences (Zappalà et al., 2008) in this study may have also contributed to the lack of significant relationships between the predictor and outcome variables. As was described earlier, the measure used in this study asked the participants for their expected age of retirement and their preferred age of retirement. Their preference for early retirement was calculated by subtracting the preferred age from the expected age. Thus if a participant had a positive value, they were considered as having early retirement preferences, and if they had a negative value, they were considered as having late retirement preferences. This measure was developed by Esser (2005), and it is quite different from how previous studies, who have not used this measure, have assessed retirement decision making. This preference for early retirement measure was chosen for this study for several reasons. The first of these reasons was that other methods of assessing retirement preferences from previous studies were not suitable for the current study. For example, in Snape and Redman (2003), the measure focused on retirement intentions in general, rather than early retirement intentions. Additionally, Snape and Redman's (2003) study was based in Hong Kong, and thus the measure was not suitable for the New Zealand context, as a question in the

measure was based on China's social security system, which is remarkably different from New Zealand. Several other studies examined early retirement intentions in the context of whether an older worker intended to retire before the national age of retirement (Boumans, De Jong, & Vanderlinden, 2008; von Bonsdorff et al., 2009). However, since New Zealand does not have a mandatory retirement age, this measure was also not appropriate for this study. Thus, this measure was chosen as it was the most suitable for this study. This measure however could have had an influence on the results of the study, and so could, within this context, be considered a limitation of this study.

### **Future Research Suggestions**

Areas for future research could address some of the limitations of this study such as a comparison of work related and personal factors to determine which influence the retirement preferences of older workers more heavily. It may also be interesting to explore the effects that work-related push factors have on post-retirement life. Previous research has found that push factors can lead to lowered satisfaction in retirement (Shultz et al., 1998), however there is not a lot of research on this topic.

Due to bridge employment and phased retirement becoming more common, further research could examine the impact that work-related factors have on this type of employment. Research has shown that phased retirement and bridge employment have vast benefits for older workers, including both physical (Rau & Adams, 2005) and psychological benefits (Zhan, Wang, Liu, & Shultz, 2009). Compared to those who transition from full time employment to full retirement, employees who undergo phased retirement have greater life satisfaction, and adjust better to retirement (Rau & Adams, 2005). These individuals also have fewer major diseases and greater function ability than those who retire from work abruptly (Ministry of Social Development, 2011). Research has also found that a large number of New Zealanders would prefer gradual transitions than abrupt retirement (Dixon, 2008). Therefore, research could examine factors that influence the decision to engage in phased retirement, in an attempt to encourage more workers to take up this kind of employment.

## **Conclusion**

This study investigated the work related factors potentially influencing the early retirement preferences of older workers in New Zealand organisations. The findings show that the work related factors thought to predict early retirement preferences are perhaps not currently as important to New Zealand employees as past research has shown. Only perceived age discrimination, job security and job satisfaction correlated significantly with early retirement preferences. The findings also show that some of the predictor variables correlated with job satisfaction and/or job security. Perceived threat from organisational downsizing was found to correlate negatively with both of these variables.

Overall, the results indicate that there are likely to be other factors not explored in this study influencing the retirement preferences of older workers in New Zealand organisations. These could include personal factors, and pull factors, such as health, leisure activities, and family time. The results have implications for New Zealand organisations. For organisations who have recently been through organisational downsizing, employers and managers should be mindful of the negative impacts this restructuring strategy has on older workers, namely job security and job satisfaction. New Zealand organisations should strive to create working environments that take into consideration the needs of older workers, and which encourage older workers to want to stay working, even past the normally expected age of retirement. Older workers who feel as though they have limited choice when it comes to making decisions surrounding their retirement may have difficulty adjusting to post-retirement life, thus organisations should be doing all they can to encourage flexible transitions to retirement. Organisations could potentially encourage later retirement preferences by creating work environments that promote job satisfaction and job security, and also workplaces that foster positive attitudes towards older workers.

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## Appendix A

### Letter to Organisations Requesting Participation

Dear Sir/Madam

My name is Toni Fowlie and I am a post graduate student at the University of Waikato in the Masters of Applied Psychology programme. My area of study is Industrial/Organisational Psychology, and for my thesis I am undertaking research exploring the factors affecting the retirement intentions of the older worker (workers aged 55+). I am seeking your permission for your organisation to take part in my upcoming research in order to complete my Master's degree.

My research focuses on the work related factors that may lead some individuals to consider early retirement. The aims of this research are to generate findings that will contribute to the understanding of the work related and involuntary factors that may be causing older workers to leave the work force and retire early. This is an important topic as previous research has shown that retirees who believe they were “pushed” out of the workforce before they were ready have a harder time adjusting to post-retirement life. The results of this study have the potential to provide organisations and employers with valuable information about certain work related factors that may be causing employees to retire earlier than they would prefer. I believe that the results of this study could potentially be useful to your organisation as they could provide insight into ways in which you may be able to retain your older employees for longer. The results may also be insightful in providing you with information about norms and attitudes in the New Zealand organisations that may be impacting negatively on older employees.

The extent of your organisation's involvement in my study would be by employees in your organisation, who are aged 55 years and older and working full time in your organisation, completing an anonymous survey. The questions in this questionnaire will ask participants their perceptions regarding satisfaction levels with certain work place factors such as job flexibility, their attitudes surrounding using Information and Communication Technologies, and feelings of inadequacy due to technology complexity.

The invitation to participate in the survey will ideally be emailed by your organisation to staff aged 55 years and older for completion, and will take approximately 10 minutes to complete. The data collected from this questionnaire will remain confidential, and your organisation and the participants will remain anonymous. At the completion of this study, a summary of the results will be provided to your organisation.

I greatly appreciate you taking the time to consider my request and look forward to hearing your response soon. Further information regarding this research can be obtained from myself [tjf15@students.waikato.ac.nz](mailto:tjf15@students.waikato.ac.nz), or my supervisor, Professor Michael O'Driscoll at [psyc0181@waikato.ac.nz](mailto:psyc0181@waikato.ac.nz), or phone 07 838 4080 ext. 8899. This research has been approved by the School of Psychology Research and Ethics Committee of the Faculty of Arts and Social Sciences, University of Waikato. Any questions about the ethical conduct of this research may be sent to the convenor of the Research and Ethics Committee (currently Dr James McEwan, phone: 07 838 4466 ext. 8295, email: [jmcewan@waikato.ac.nz](mailto:jmcewan@waikato.ac.nz)).

Kind regards,

Toni Fowlie

## Appendix B

### Letter to Participants

Dear Participant

My name is Toni Fowlie and I am a post graduate student at the University of Waikato in the Masters of Applied Psychology programme. My area of study is Industrial/Organisational Psychology, and for my Master's thesis, I am undertaking research exploring the factors that affect the retirement intentions in older workers (workers aged 55+). This research study has been approved by the Ethical Committee at the University of Waikato.

If you are aged 55 years or older, and are working full time in your organisation (30 or more hours per week), I would like to request your participation in a questionnaire for my project titled *Work Factors and Retirement Intentions Survey*. The purpose of this questionnaire is to generate findings that will provide understanding of particular factors that may cause older workers to intend to retire earlier than what they would prefer to. In particular, this research is focusing on the work environment factors that may affect individuals' retirement intentions. The following questionnaire asks questions regarding your perceptions and satisfaction levels with certain factors such as age discrimination, job security, attitudes towards Information and Communication Technologies, job flexibility, and feelings towards complexities surrounding technology.

Your participation in this questionnaire is highly valued and is essential to my research. The questionnaire should take you approximately 15 minutes to complete. The survey is anonymous and confidential, and there are no identifiable risks to you as the participant by completing this questionnaire. For more information regarding this research, please feel free to contact myself, Toni Fowlie at [tjf15@students.waikato.ac.nz](mailto:tjf15@students.waikato.ac.nz) or my supervisor, Michael O'Driscoll at [psyc0181@waikato.ac.nz](mailto:psyc0181@waikato.ac.nz), or phone 07 838 4080 ext.8899. This research has been approved by the School of Psychology Research and Ethics Committee of the Faculty of Arts and Social Sciences, University of Waikato. Any questions about the ethical conduct of this research may be sent to the convenor of the Research and

Ethics Committee (currently Dr James McEwan, phone: 838 4466 ext.8295, email: [jmcewan@waikato.ac.nz](mailto:jmcewan@waikato.ac.nz)).

If you would like to know the final results of the research at the conclusion of this study, please send an email to the address provided after you have completed the survey.

Thank you for taking part in my research, your help is greatly appreciated.

Regards,

Toni Fowlie

# Appendix C

## Questionnaire

### Work Factors and Retirement Intentions Survey

Thank you for taking part in this survey. The purpose of this questionnaire is to generate findings that will provide understanding of particular factors that may cause older workers to intend to retire earlier than what they would prefer to. In particular, this research is focusing on the work environment factors that may affect and individual's retirement intentions. This survey is anonymous and confidential.

*Please read the following instructions carefully before proceeding*

- All information that you provide in this questionnaire is confidential to the researcher.
- Please only complete this questionnaire if you are aged 55 years or older **and** in full time employment with this organisation (30 or more hours per week).
- If you are employed by more than one organisation, please answer the questionnaire in reference to your **primary** job (i.e the organisation you work the most hours for).
- You will not be asked for your name or place of work therefore your identity will remain anonymous to the researcher.
- The questionnaire will take you approximately 10 minutes to complete.
- Please respond to the items by clicking on the button (online version)/ticking the box (hardcopy) that best indicates your response to the scale provided.
- If you would like a summary of the results at the conclusion of this study, please send an email to the address provided at the end of this survey with the subject line 'research results', and a copy of the results will be emailed to you when they are available.
- Please respond to all items in each section.
- Please note, due to the way the survey is administered, once you have completed the online questionnaire or returned the hard copy in the mail, you

**will not be able** to withdraw from the research. You may choose to not complete the online questionnaire once started in which case your responses up to the point of withdrawal will not be included.

- If you have any questions regarding this questionnaire, or the study itself, please do not hesitate to contact the researcher at [tjf15@students.waikato.ac.nz](mailto:tjf15@students.waikato.ac.nz) or her supervisor, Michael O’Driscoll at [psyc0181@waikato.ac.nz](mailto:psyc0181@waikato.ac.nz), or phone 07 838 4080 ext.8899.
- This research has been approved by the School of Psychology Research and Ethics Committee of the Faculty of Arts and Social Sciences, University of Waikato. Any questions about the ethical conduct of this research may be made to the convenor of the Research and Ethics Committee (currently Dr James McEwan, phone 07 838 4466 ext.8295, email [jmcewan@waikato.ac.nz](mailto:jmcewan@waikato.ac.nz)).

<b>1. Are you aged 55 years or older?</b>	<b>Yes</b>	<b>No</b>
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<b>2. Do you work 30 or more hours per week in this organisation?</b>	<b>Yes</b>	<b>No</b>
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### A. Experiences of Age Discrimination

This section addresses your personal experiences with age discrimination. Please answer the questions in this section in reference to the scale below.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Strongly Agree	Agree	Slightly Agree	Neither Agree nor Disagree	Slightly Disagree	Disagree	Strongly Disagree

To what extent do you agree with the following statements?

<i>1. I personally have never experienced age discrimination in my job</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>2. Because of my age, the people I work with treat me less favourably</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>3. Because of my age, my immediate supervisor treats me less favourably than other workers</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>4. Because of my age, I have been treated unfairly in relation to job applications</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>5. Because of my age, I have been treated unfairly relation to promotions</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>6. Because of my age, I have been treated unfairly in relation to opportunities for training</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

7. <i>Because of my age, I have been treated unfairly in relation to performance appraisals</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
8. <i>Because of my age, I have been treated unfairly in relation to work assignments</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
9. <i>Because of my age, I have been treated unfairly in relation to redeployment</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

**B. Retirement Intentions**

This section addresses your retirement intentions. Please answer in years to the following questions.

1. What is your **expected** age of retirement? \_\_\_\_\_ years

2. What is your **preferred** age of retirement? \_\_\_\_\_ years

**C. Job Satisfaction**

This section addresses how satisfied you are with your current job. Please answer the questions in this section in reference to the scale below.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree

1. <i>All in all, I am satisfied with my job</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
2. <i>In general, I don't like my job</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
3. <i>In general, I like working here</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

**D. Job Flexibility**

This section looks at your satisfaction with flexibility options in your workplace. Please respond to the questions in the section in reference to the scale below.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Strongly Dissatisfied	Moderately Dissatisfied	Slightly Dissatisfied	Neither Satisfied nor Dissatisfied	Slightly Satisfied	Moderately Satisfied	Strongly Satisfied

How satisfied are you with...?

<i>1. The extent to which management accommodates family responsibility needs without any negative consequences?</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>2. The opportunity to perform your job well and yet be able to perform home-related duties adequately?</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>3. The ability to get time off for family as needed?</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>4. The opportunity you have to do part-time or flexitime work without being penalized?</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>5. The amount of flexibility in work scheduling?</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

**E. Job Security**

This section looks at your perceptions of job security in your current job.

Please respond to the following statements in accordance with the scale below

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree

I am worried about...

<i>1. Becoming unemployed</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>2. New technology making me redundant</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>3. It being difficult to find another job if I became unemployed</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<i>4. Being transferred to another job against my will</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

## F. Organisational Downsizing

Organisational downsizing refers to reducing the overall size and operating costs of a company, most directly through a reduction in the total number of employees.

Please answer the following statements in reference to the scale below

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree

1. <i>I feel that I am risk of losing my job due to organisational downsizing.</i>	1	2	3	4	5	6	7
2. <i>I have been affected by organisational downsizing in the past 12 months.</i>	1	2	3	4	5	6	7

## G. Attitudes towards Information and Communication Technologies (ICTs)

This section addresses your opinions towards Information and Communication Technologies (ICTs). ICTs refer to technologies that provide access to information through telecommunications. This includes the internet, wireless networks, cell phones, and other communication devices. Please respond to the following statements in reference to the scale below.

1	2	3	4	5	6	7
Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Moderately Agree	Strongly Agree

1. <i>If given the opportunity to use an ICT I am afraid that I might damage it in some way</i>	1	2	3	4	5	6	7
2. <i>I hesitate to use ICTs for fear of making mistakes I cannot correct</i>	1	2	3	4	5	6	7
3. <i>I don't feel apprehensive about using ICTs</i>	1	2	3	4	5	6	7

4. <i>ICTs make me feel uncomfortable</i>	1	2	3	4	5	6	7
5. <i>Using ICTs does not scare me at all</i>	1	2	3	4	5	6	7
6. <i>I hesitate to use ICTs in case I look stupid</i>	1	2	3	4	5	6	7
7. <i>I could probably teach myself most of the things I need to know about ICTs</i>	1	2	3	4	5	6	7
8. <i>I can make ICTs do what I want</i>	1	2	3	4	5	6	7
9. <i>If I get problems using ICTs, I can usually solve them one way or the other</i>	1	2	3	4	5	6	7
10. <i>I am not in complete control when I use ICTs</i>	1	2	3	4	5	6	7
11. <i>I need an experienced person nearby when I use ICTs</i>	1	2	3	4	5	6	7
12. <i>I do not need someone to tell me the best way to use ICTs</i>	1	2	3	4	5	6	7
13. <i>I do not know enough about ICTs to handle my job satisfactorily</i>	1	2	3	4	5	6	7
14. <i>I need a long time to understand and use new ICTs</i>	1	2	3	4	5	6	7
15. <i>I do not find enough time to study and upgrade my skills</i>	1	2	3	4	5	6	7
16. <i>I find new recruits in this organisation know more about ICTs than I do</i>	1	2	3	4	5	6	7
17. <i>I often find it too complex for me to understand and use new ICTs</i>	1	2	3	4	5	6	7

## H. Demographic Data

This information is being collected to describe the general characteristics of the people who take part in this research and not to identify individual participants. All of your responses are anonymous and are confidential to the researcher.

1. <i>What is your gender?</i>	Male	Female
2. <i>What is your age in years? (eg. 58)</i>		

3. <i>What ethnic group do you mostly identify with?</i>	New Zealand European	
	Other European	
	New Zealand Maori	
	Asian	
	Pacific Peoples	
	Other	
4. <i>How long have you worked for your organisation? (please specify in years).</i>		
5. <i>What industry/sector do you work in?</i>		
6. <i>What is your current position?</i>		
7. <i>How long have you worked in your current position? (please specify in years).</i>		

Thank you for completing this questionnaire. If you would like to know the results of this study, please send an email to this address: [tjf15@students.waikato.ac.nz](mailto:tjf15@students.waikato.ac.nz) and a summary of the results will be emailed to you at the conclusion of this study.

## Appendix D

### Scree Plots

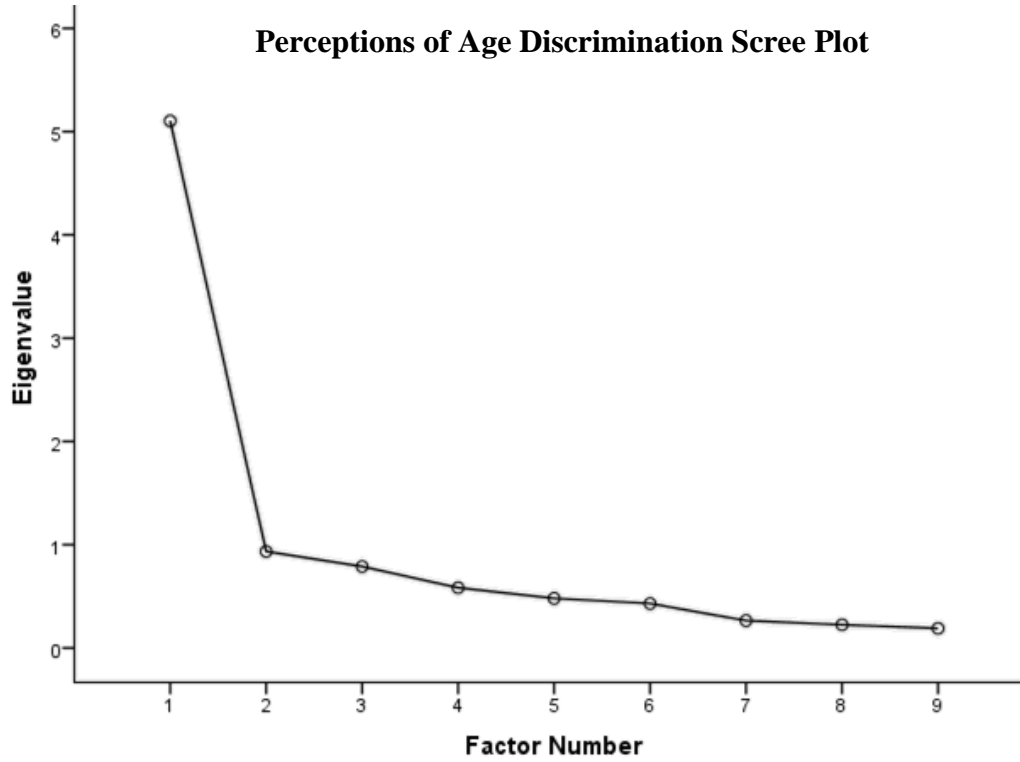


Figure 10. Scree plot for perceptions of age discrimination.

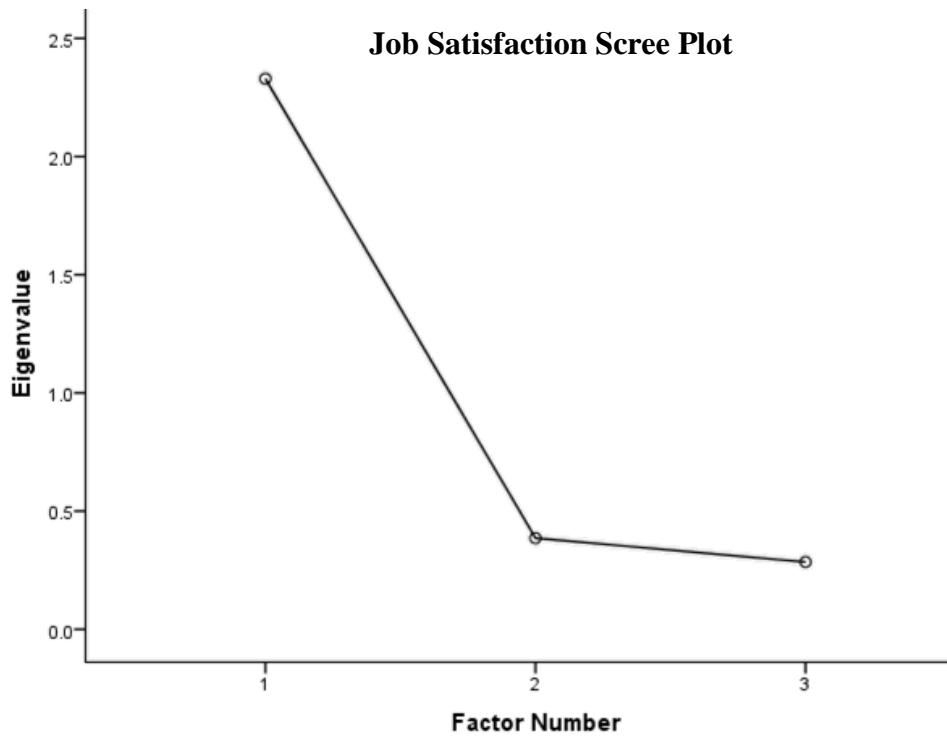


Figure 11. Scree plot for job satisfaction.

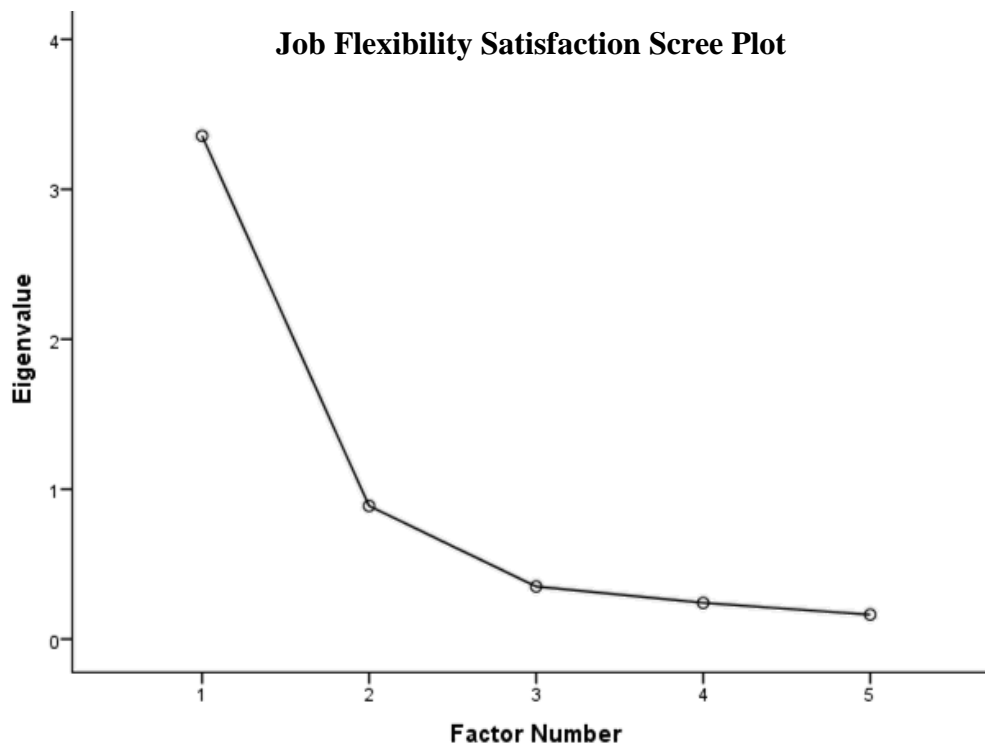


Figure 12. Scree plot for job flexibility satisfaction.

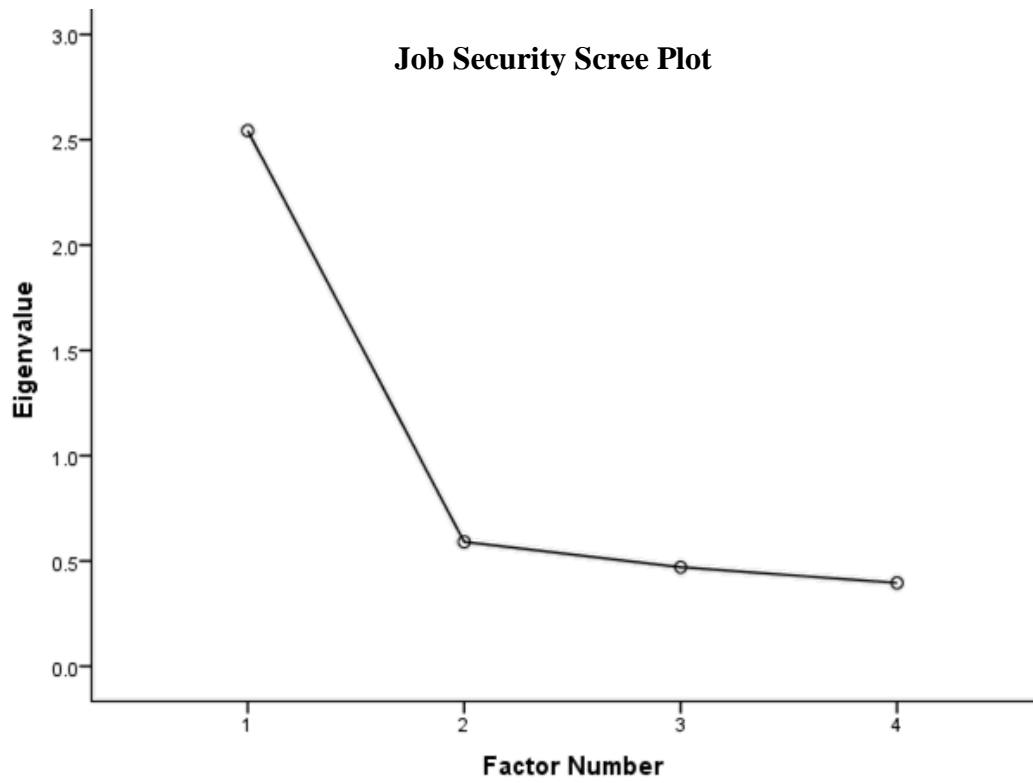


Figure 13. Scree plot for job security.

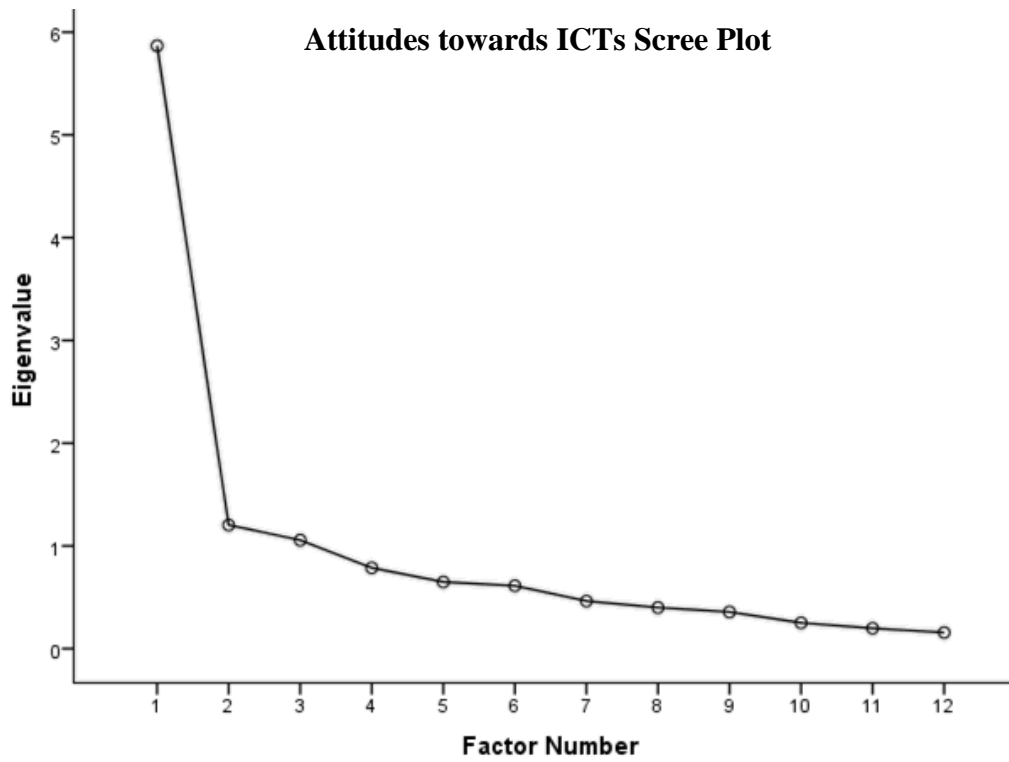
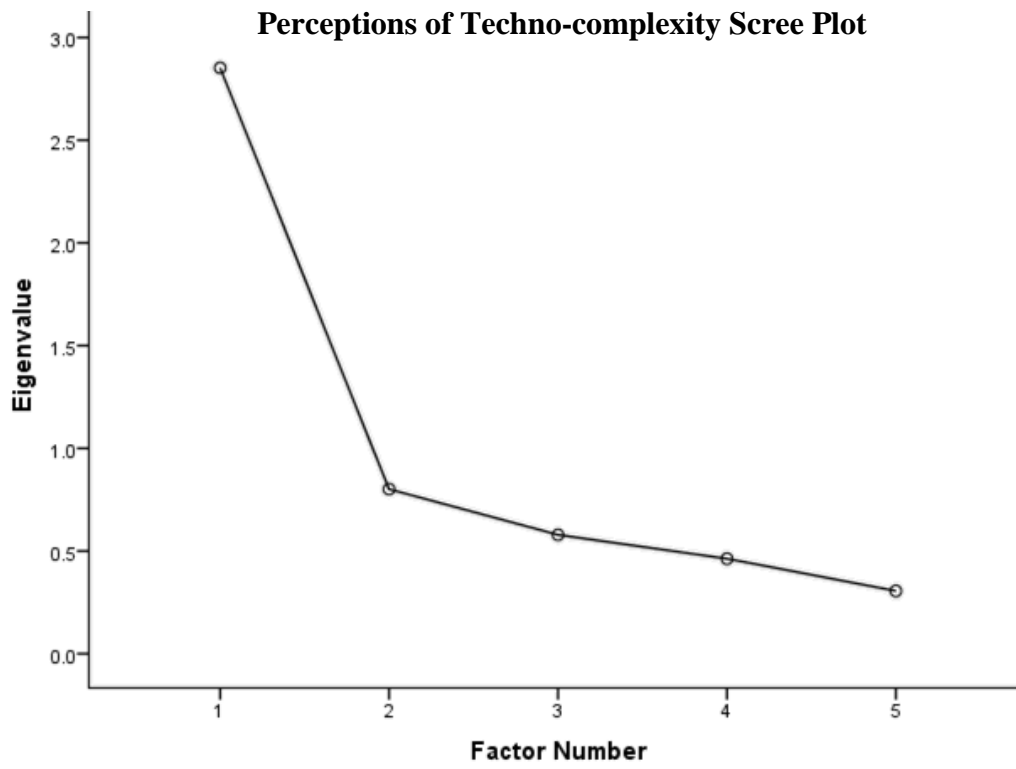


Figure 14. Scree plot for overall attitudes towards ICTs.



*Figure 15.* Scree plot for perceptions of techno-complexity.

## Appendix E

### Distribution Graphs

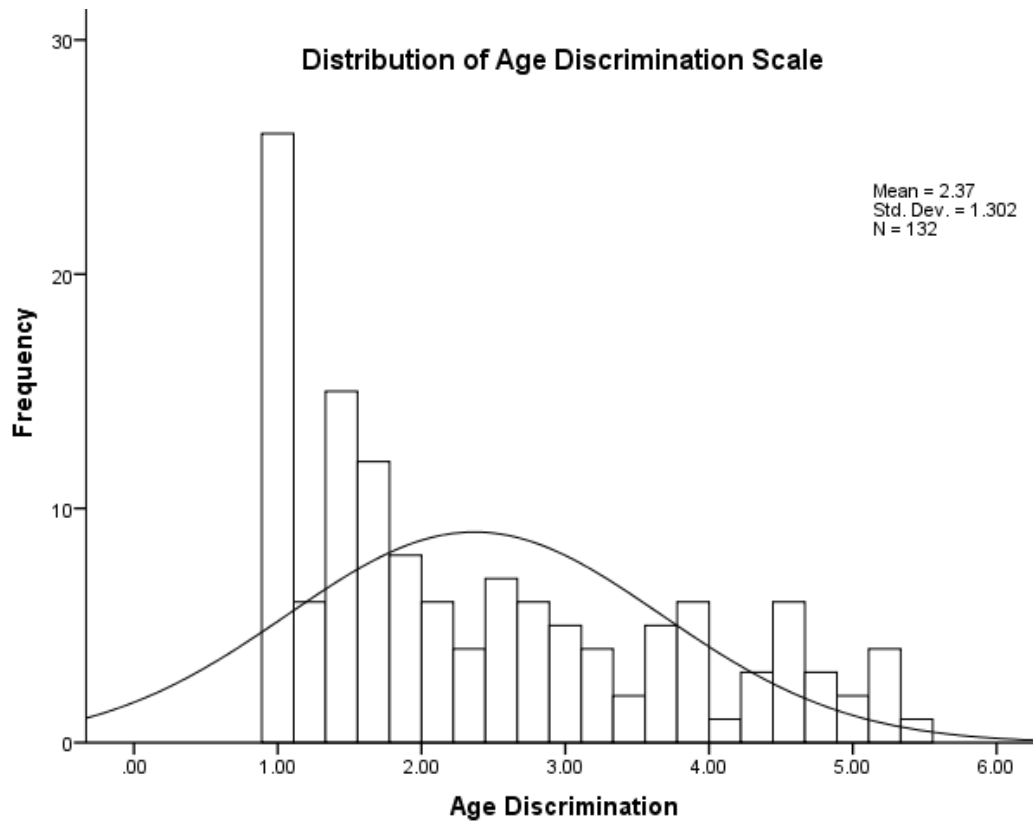


Figure 16. Distribution of perceived age discrimination variable.



Figure 17. Distribution of job satisfaction variable.

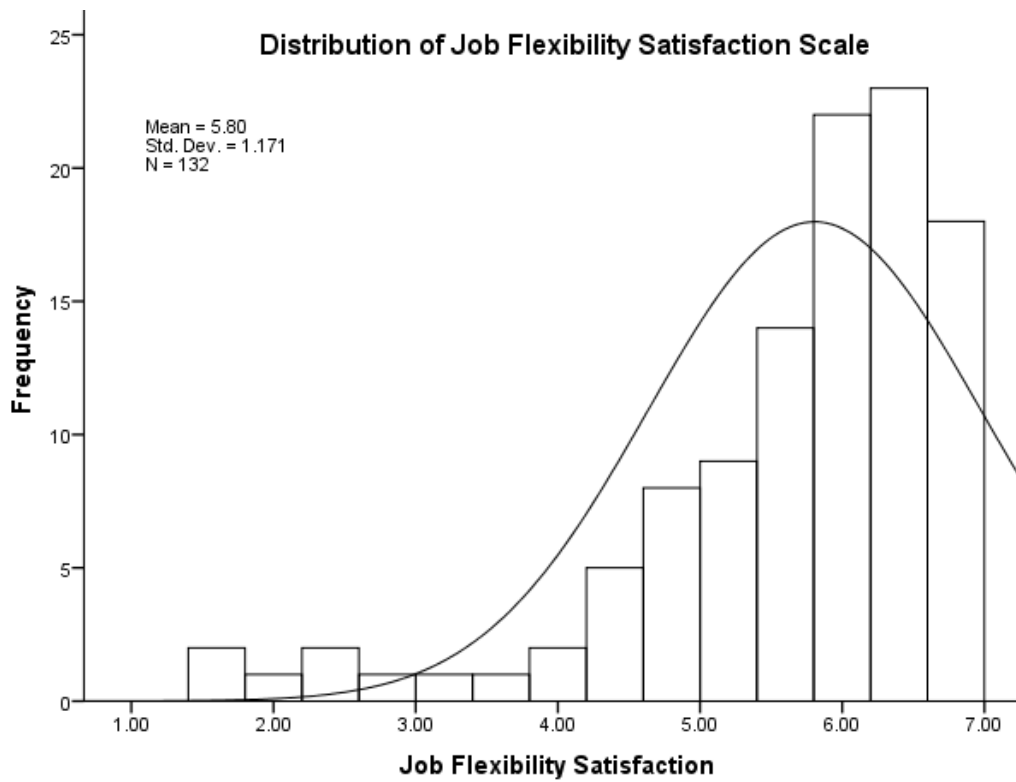


Figure 18. Distribution of job flexibility satisfaction variable.

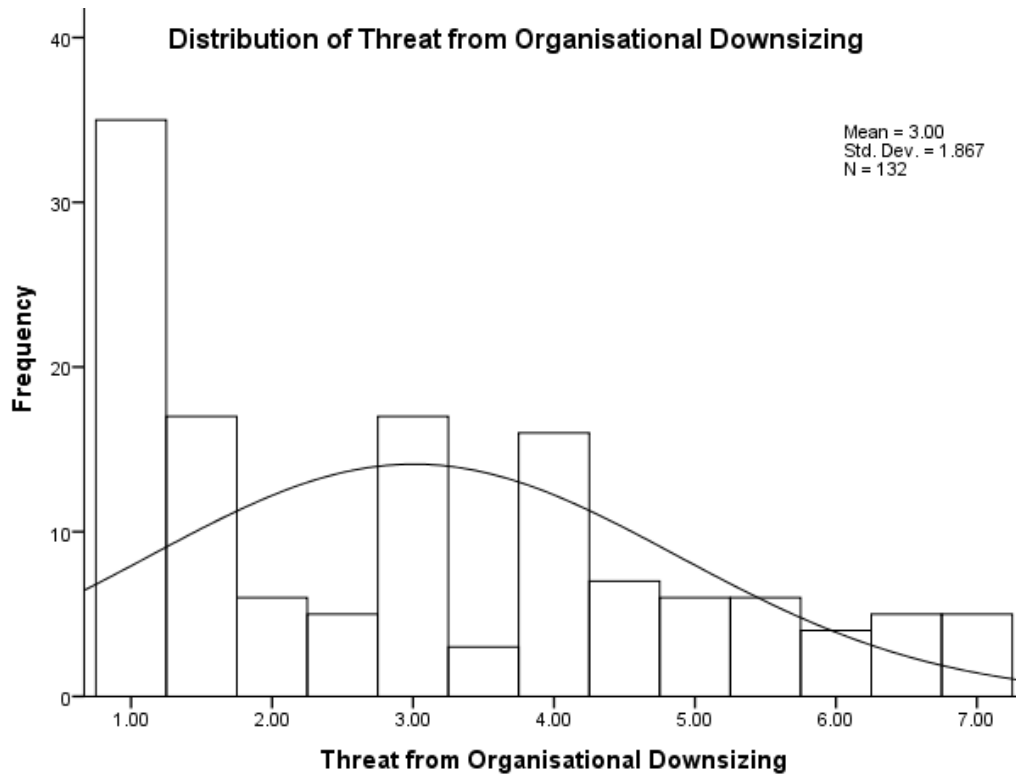


Figure 19. Distribution of perceived threat from organisational downsizing variable.

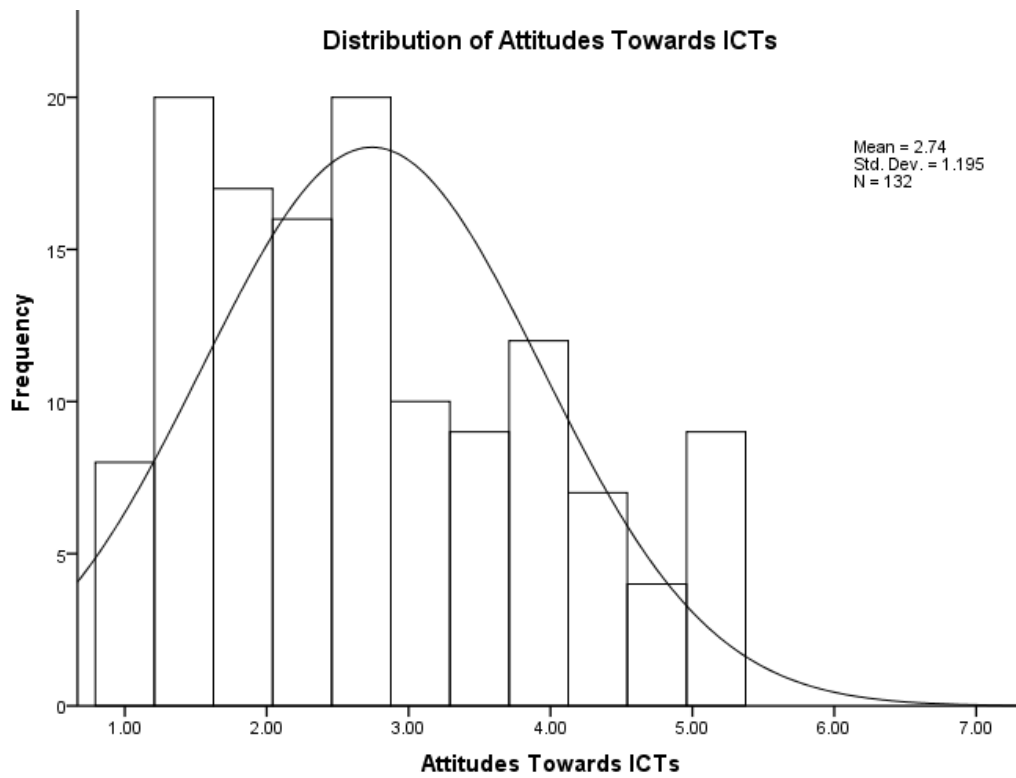


Figure 20. Distribution of negative attitudes towards ICTs variable.

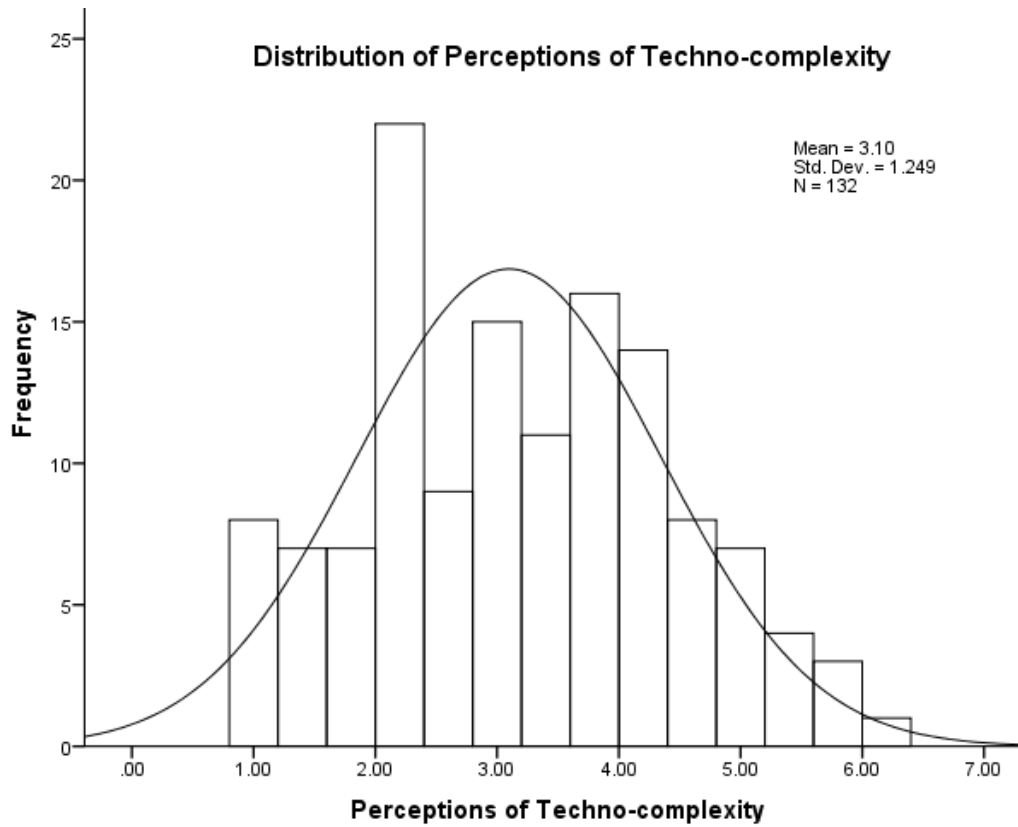


Figure 21. Distribution of perceptions of techno-complexity variable.

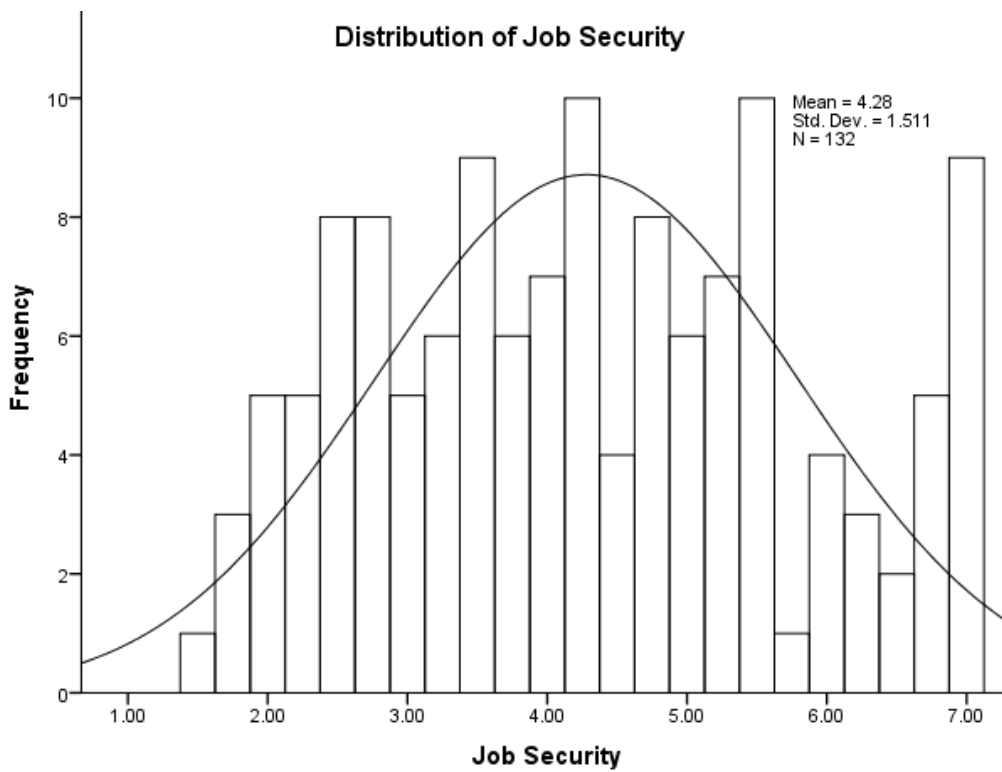


Figure 22. Distribution of job security variable.