Employer attitudes towards older workers in Australia
Christopher Caedmon McLoughlin
B.Sc M.Sc

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Abstract

This research was concerned with the management of Australia’s labour supply, considering prospects for extending working lives against the backdrop of demographic change. Numerous factors have thrust the prolongation of Australians’ working lives to the forefront for policy-makers, researchers, non-government organisations and employers, including: the ageing of the Australian population; issues of social welfare, for example, warnings regarding the imminent retirement of so-called baby boomers expected to reduce available skilled workers, reduce labour force participation rates and raise dependency ratios; macroeconomic factors; and social justice factors, for example, discrimination against older workers in personnel decisions. Commentators argue the key policy challenges presented by population ageing are connected. The solution lies in increasing the engagement of older people in activity and dispelling the ageist views of an ageing population as inaccurate and counterproductive; this demographic shift should be viewed as an opportunity. Discrimination on the basis of age has been noted as an important barrier to labour force participation of older workers. Older workers’ labour market experiences have attracted research interest for decades. One facet has been employers’ attitudes. Eighteen studies have assessed employers’ attitudes towards older workers since initial work in the mid 1970s. The results of this research have been far from consistent in the demonstration of differences in employer attitudes across demographic and organisational characteristics and how these attitudes are associated with organisational practices. In the present study, 595 employers in medium and large organisations were surveyed on a range of workforce management issues. This study simultaneously assessed employer attitudes towards workers in age groups spanning a working life. Attitudes towards older workers were compared across organisational and individual characteristics and their association with organisational practices were assessed. Employers’ responses indicated positive and negative attitudes toward older workers that were interpreted overall as suggesting specific approaches to remove attitudinal barriers hindering the prolongation of working lives.
Author’s declaration

This thesis contains no material that has been accepted for the award of any other degree or diploma in any university or other institution. To the best of the candidate's knowledge the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Christopher McLoughlin

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Chapter One: Introduction

This research was concerned with the management of Australia’s labour supply, through considering prospects for extending working lives against the backdrop of demographic change. Population ageing has been predicted to have profound economic, political and social effects throughout the 21st century (United Nations Population Division, 2015; Keese, 2005). Extending working lives has been accepted as one of the critical social changes required to meet the challenges associated with this demographic change. Numerous factors have aligned to push the prolongation of Australians’ working lives to the forefront for policy-makers, researchers, non-government organisations and employers. The factors included for detailed discussion are: demographic factors, primarily the ageing of the Australian population; macroeconomic factors, for example, the global financial crisis (GFC) and the trend towards globalisation; social welfare issues, for example, the imminent retirement of so-called baby boomers which is expected to reduce the availability of skilled workers, reduced labour force participation and raised dependency ratios; and social justice factors, for example, discrimination against older workers in personnel decisions. With the importance of extending working lives acknowledged, many have questioned the experiences and challenges to be faced by those at the forefront of this change in labour market participation.

Other developed nations are experiencing population ageing along with manifestations of the macroeconomic factors and social welfare issues mentioned above. This has motivated extensive research into older workers’ labour market experiences, including a specific stream focussed on employer attitudes towards older workers. This study focuses on this aspect of the realities of extending working lives. In the broadest terms, the questions explored are: what are the attitudes held by Australian employers towards workers of different ages and how do these attitudes relate to organisational practices that encourage the continued participation of older workers?

In order to introduce the broad context within which this study sought to answer specific questions, it is necessary to consider a number of issues. This chapter
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presents a description of these. First, a description of the antecedents of population ageing is offered and then contrasted to the ‘demographic dividend’, a period of favourable economic outcomes resulting from population age structure preceding population ageing. Second, the commonly cited challenges presented by population ageing are described. These challenges manifest in three domains: retirement income systems, healthcare expenditure and the labour market. Third, two macroeconomic phenomena, the GFC and the globalisation of economies, are described in terms of their role in exacerbating the challenges presented by population ageing.

The fourth issue described concerns the opportunities presented by population ageing. These opportunities include: reduced expenditure on education, the potential to replace labour with technology and automation without displacing workers, and changes to normative saving and consumption patterns that benefit economies. It is suggested that the assumption that the beneficial outcomes of these opportunities will outweigh the challenges associated with population ageing, is too optimistic.

Action in response to population ageing and the confounding macroeconomic phenomena is needed. Extending working lives is one of these responses. The calls to action by influential international bodies and recommendations by prominent commentators regarding extending working lives are referred to. This highlights a critical factor to the success of the public policy push to extend working lives, namely how favourably organisations and personnel decision-makers orient towards older workers who are experiencing changes to career trajectories. With the broad context for the research interest described, the final issue considered is the concept of who is an ‘older worker’. This term is problematic for a number of reasons but holds usefulness such that researchers and policy makers continue to employ it. The final section of this chapter details the content of each subsequent chapter of this thesis.
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1.1 Demographic change

Australia is experiencing population ageing. Individuals in older age groups are becoming a larger proportion of total population (United Nations Population Division, 2015). This has been problematised as ‘the demographic time-bomb’ (Hugo, 2005), but is largely the result of a great achievement of the past century: increasing life expectancy in developed nations. Increasing life expectancy and declines in birth rates have increased the median age. The declining birth rate is attributed to: reduced infant mortality, urbanisation, increased education and labour force engagement for women, the connected reduction in the uncritical acceptance of childrearing and motherhood as indicators of women’s status, and advancements in contraception (Caldwell, 2006). The trend of population ageing is predicted to continue and intensify (Lutz, Sanderson and Scherbov, 2008).

The ubiquity of this change among the developed nations puts Australia’s experience in the context of the most profound demographic characteristic of the twentieth century. This will affect economic, political and social conditions throughout the 21st century. The Australian Bureau of Statistics (ABS, 2006a) produced a visual representation of the shift in age structures projected over coming decades. This is presented in Figure 1. To summarise, the 2006 population age pyramid shows a relatively wide base and middle with a sharply narrowing top, in contrast to the 2056 age pyramid that shows a relative narrowing of the younger age population and a broadening at the older ages.
Population ageing marked the end of ‘the demographic dividend’ for developed nations (Bloom, Canning and Sevilla, 2003, p. 39). The demographic dividend is economic growth fostered by the age structure of a population. Such growth was achieved because economies temporarily had a larger proportion of individuals of working age relative to those of either young or old dependent age. A coalescence of factors produced this demographic dividend. First, there was an increased density of an age cohort resulting from the post World War II ‘baby boom’ and a declining birth rate since this time that reduced the normative family size. The ‘baby-boomers’ describes the large cohort of some four million Australians born between 1946 and 1961 (ABS, 2014a). Much of the developed world also experienced soaring birth rates during the post war period. This cohort is considered by some commentators to share a range of cultural characteristics and specific historical impacts, for example social movements such as feminism (Owram, 1997). Second, for women, increased engagement in the labour force and participation in education strengthened the workforce and influenced a tendency towards small family sizes. Third, a tendency towards saving by these highly productive members of the labour force as they moved beyond their parenting years and prepared for retirement also improved nations’ prospects for growth and investment. This third factor was particularly influential for workers facing an
extended retirement as the realities of increased life expectancy, longer periods of good health and reduced potential for family support and caring in retirement became apparent (Lee, Mason and Miller, 2000).

Arguably, the most important factor for producing the demographic dividend was the growth of human capital, that is, the growth of individuals’ contributions to national growth and productivity. This growth was the culmination of greater investments in education, of children having greater familial resources available to them, and of better health outcomes across their lifespan. Regardless of the influence of different nations’ policies, the demographic dividend has made significant contributions to growth and productivity in recent decades. Population ageing marks the end of this period. The shifting age structure brings new challenges.

1.2 Challenges of population ageing

Prominent international bodies, such as the Organisation for Economic Co-operation and Development (OECD) and the United Nations (UN) agree that population ageing will have profound economic, political and social effects throughout the 21st century (United Nations Population Division, 2015; Keese, 2005), although there is not a complete consensus (Mullan, 2002). The fundamental challenge of population ageing is the prospect of funding social welfare systems for an increasing number of beneficiaries with fewer labour market participants to support it. This challenge is thrown into sharp relief by the sustained experience of the demographic dividend (Bloom, Canning and Sevilla, 2003). In Australia, the first social welfare system that will be stressed by population ageing is the Age Pension. This provides older people with income support and access to a range of concessions. The first of the so-called ‘baby boomers’ began to access the Age Pension in recent years. A detailed description of the unique retirement income system in Australia, labelled superannuation, is presented in the next chapter. Another facet of the challenge to social welfare systems presented by population ageing is an increasing burden on the health care system. The final challenge described relates to the predicted effect of population ageing on labour markets.


1.2.1 The retirement income system

Concerns about the sustainability of the Age Pension persist despite Australia’s adoption of the optimal private retirement savings program (World Bank, 1994), the increasing age at which the Age Pension can be accessed and the introduction of income and asset test limits for eligibility for the Age Pension. These concerns rest on the anticipated imbalance between the relative proportion of beneficiaries of the Age Pension, and other age related welfare payments, compared with the number of active contributors to these schemes. As the baby boomer cohort begins to disengage from the labour market, superannuation funds are still maturing (Clare, 2011). Clare noted that the modest average superannuation balances of recent retirees indicate that most will rely substantially on the Age Pension in their retirement. The Australian government acknowledged the gap between Australians’ retirement expectations and their likely retirement incomes, and noted that private savings or retirement deferral would need to be adopted to offset such a gap (Australian Government, 2004). This insufficient saving for retirement mirrors international experiences and projections (Skinner, 2007; Benartzi, 2012). Uncertainty prevails in predictions of how much will be enough to fund adequately a comfortable retirement for Australia’s ageing population (Burnett, Davis, Murawski, Wilkins and Wilkinson, 2014). The incidence of superannuation inadequacy and paucity of the Age Pension suggests increasing engagement in paid work after retirement may be the reality for many older Australians.

1.2.2 Health care expenditure

An increasing burden on the health care system is an additional and widely acknowledged challenge presented by population ageing (United Nations Population Division, 2015). The increasing stress on the health care system is predicted due to a larger proportion of the population in older age groups. The existence of a smaller proportion of labour force participants contributing to funding the health care system confounds the increased usage (Christensen, Dobhhammer, Rau and Vaupel, 2009).
Parallel to these concerns are uncertainties regarding increasing life expectancy. The magnitude of stress placed on the health care system depends on whether these longer lives will include fewer or more years of chronic morbidity and severe disability. The unprecedented increases in life expectancy present an uncertainty regarding demands placed on health care expenditure. Studies reveal complicated associations between age, ill health and health care expenditure: some suggest longer life expectancy will increase health care costs, others argue it will have little influence (Van Baal, et al., 2008; Zweifel, Felder and Meiers, 1999). Some commentators argue that advancing technology will offset the expense of providing health care, although quantifying this remains speculative (Yang, Norton and Stearns, 2003). Others highlight the decreasing number of traditional caregivers from family structures in contrast to a growing demand from increasing numbers of ageing family members. This will lead to a real reduction in the capacity to supplement services offered by the health care system and is exacerbated by increased labour force participation of women who have been traditional caregivers (United Nations Population Division, 2015). Taking these considerations as a whole, it is suggested that the increasing burden on the health care system will be problematic, although the extent and timing of its peak is more difficult to predict.

1.2.3 Labour supply

Across developed economies, another predicted challenge presented by population ageing will be its influence on the labour market (Börsch-Supan, 2003). Workforce ageing has been predicted to lead to a weakening of the labour force, caused by an extensive and contemporaneous retirement or reduction in labour market connection by the ‘baby boomers’ (United Nations Population Division, 2015). Different industries and occupations are likely to experience the dynamic labour supply pressures at different times and in different intensities. This is already occurring in industries previously populated by younger workers and those with non-ideal, particularly physically demanding, working conditions (Taylor, McLoughlin, Brooke, Di Biase and Steinberg, 2013).
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The retirement of a large proportion of the labour force poses particular concerns for Australia’s economy. Taylor and colleagues (2013) contend the effect of the GFC on the Australian economy was mild compared to European and North American economies. An important outcome of Australia’s economic buoyancy has been that employers’ concerns about labour supply have persisted. Employers’ concerns about maintaining productivity and competitive advantage through preserving workforce talent are coinciding with recruitment and retention experiences that suggest a shortage of candidates to fill roles. This labour market climate accentuates concerns regarding the impending retirement of a large proportion of the labour force (Taylor and McLoughlin, 2015). Medium- to long-term predictions about the deleterious effects of tightening labour supply have been voiced (Strack, Baier, Marchingo and Sharda, 2014). Strack and colleagues used projections based on growth rates to estimate the required labour supply over the coming decades in Australia. Their analysis suggests that a labour shortage of more than 2 million workers will emerge by 2030. Such a shortage, they argue, will dampen economic growth and potentially exacerbate the challenges of supporting social welfare systems associated with population ageing. Strack and colleagues suggest the improvement of productivity through skills advancement, increased skilled migration and the prolongation of working lives will all be required to achieve balanced labour supply in coming decades.

Systematic changes in the demands for goods and services have been predicted to confound the contraction of labour supply resulting from workforce ageing (Börsch-Supan, 2003). Börsch-Supan described the reorientation of consumption that typically occurs across a lifespan, as illustrated by the results of a cross-sectional survey of consumption in Germany. Younger age groups had greater costs for education, entertainment, communication and transportation. Older age groups, however, had greater consumption of goods and services related to health and hygiene, and shelter. As population age structures change, these shifts in consumption are predicted to change employment in some sectors. These changes are also predicted to present challenges to labour markets that have difficulties with sectoral mobility, leading to sub-optimal alternatives such as short-term precarious employment arrangements. Finally, the predicted movement of capital away from the oldest labour markets within an ageing global population suggests
further sectoral employment shifts towards high-skill and service industries, and increased reliance on imports. This third indirect influence on the labour market may be of more immediate concern for relatively aged nations such as Germany and Japan. This issue will also challenge the more moderately aged nations such as Australia in the near future.

1.3 Macroeconomic phenomena

1.3.1 The global financial crisis

Macroeconomic phenomena exacerbate the concerns arising from population ageing discussed above. The primary contribution of these macroeconomic factors is to issues of labour supply and the Age Pension system. One of these macroeconomic phenomena is the GFC. The International Monetary Fund (IMF, 2009) described the GFC as the worst economic crisis since the Great Depression of the 1930s. The crisis originated in the United States of America and resonated throughout Europe and advanced Asia. Some commentators have argued that developing nations have also suffered (Adams, 2012). The GFC resulted from the coalescence of high-risk mortgage lending, regulatory failure, inflated credit ratings and abuses by investment banks in the United States of America.

Although for the Australian economy the effects of the GFC were attenuated, one consequence was critical: an estimated 75 billion dollars in losses experienced by privately managed retirement funds (Main, 2011). The effects of such losses on individuals’ retirement savings were varied and the retirement intentions of many were likely to have been affected. If prolongation of working were not a feasible option, a revision of post retirement lifestyle would be a likely outcome. The crisis may yet lead to increased usage of the Age Pension. Individuals approaching retirement may have experienced a large reduction in the value of their retirement savings as a result of the GFC's devaluations of stock markets. Couple this with an inability to return to, or continue work, due to caring responsibilities, ill health or lack of relevant skill sets and such workers are faced with little option but dependence on the Age Pension. The devaluation of privately managed retirement
savings is likely to have ongoing effects on the level of take-up, and so the cost of the Age Pension. Added to these costs are the hardships encountered by individuals for whom returning to or continuing in work was a forced choice, post 2008, especially in the context of demotion or ill health. Further, in recent decades, this population segment has seen their predecessors enjoy early retirement. From this observation, workers approaching retirement age may have formed expectations about their own early retirement (Van Dalen and Henkens, 2005).

Adding difficulty to this proposition is evidence that employer policies continue to favour the flexibility of early retirement (Conen, Henkens and Schippers, 2011; Vickerstaff, Cox and Keen, 2003). In Australia, observers suggest that there will be occupation types and industries where such continuation or re-engagement in employment will not be possible (Taylor, Earl and McLoughlin, 2015).

### 1.3.2 Globalisation

Another macroeconomic phenomenon to confound population ageing is the trend towards globalisation. Economic globalisation is the increasing interdependence of national economies by the movement of goods, services, technology and capital across borders. A feature of current economic globalisation is the integration of developed economies with developing economies through direct foreign investment, reductions in trade barriers and other economic reforms and immigration (Joshi, 2009). As a result of these processes, and also reductions in transport and communication costs, industrial production has shifted to new centres.

The emergence of global production networks, supported by direct foreign investment accessing large pools of low-cost labour, has reshaped the push for competitive advantage through the management of an optimised workforce, culminating in an international search for talent (Teitel, 2005). Ready access to highly skilled, educated and innovative employees is now of immense value to industry. Changing global demography will both complicate and fuel the broadening international search for talent. The changing age structure of the global population will influence this search among developed nations. The global pool of highly skilled workers will become more scarce and dispersed throughout
the global economy as a result of the partial or complete detachment from the labour market by the baby boomer cohort (Zaletel, 2006).

Nations that have relied upon skilled migration in the past are expected to find new shortages among these highly desirable workers, confounded by the international demand for such workers who have been home grown. The resulting dynamic strain on labour supply is likely to exacerbate the concerns associated with population ageing. This is predicted to operate in tandem with the ongoing effects of the GFC discussed above. In response to these concerns, an ongoing push towards the prolongation of working lives has been made in most developed nations. This push and the motivations behind it are enumerated below.

1.4 The benefits of population ageing

The dominance of the perspective of those whom Mullan (2006) called a ‘collection of alarmists’ (p. 215), who argue that population ageing will profoundly affect social, political and economic situations in coming decades, is undeniable. Dissenting voices acknowledge the reality of the challenges enumerated above but have a more optimistic outlook about society’s path to resolving them. They highlight potential benefits of population ageing. The essence of these arguments is succinctly stated by Mullan: ‘A modern society’s normal capacity to grow economically will provide more than sufficient resources to sustain an ageing society and allow continued increases in living standards for all’ (p. 131).

An economic benefit of population ageing, may be, for example a reduced burden of funding the education system. This effect has two aspects. There will simply be fewer people of an age at which they would ordinarily be in the education system. There is also the potential that labour force demand for younger workers for certain occupations and industries may intensify to the extent that the incentives offered for entering the labour market may outstrip the potential benefits of continuing through higher education. This situation would reduce expenditure on tertiary education (United Nations Population Division, 2015).

Baby boomers’ impending contemporaneous withdrawal from the labour force has also been argued as an opportunity to deploy advancing technology to replace
certain occupations without displacing workers and, without, as a result, increasing unemployment (Benson and Debroux, 2013). This advantageous outcome may be most likely for physically intensive manufacturing and construction-type occupations. These occupations are ideal for such a deployment as they are the least likely to entail the prolongation of working lives. The cumulative effect on physical health associated with long-term engagement in this type of work makes it a difficult occupation type for the ageing body (Brooke, Taylor, McLoughlin and Di Biase, 2012).

In addition, consumption and saving patterns vary with age, suggesting a potential for more stable and sustainable economic growth in the future. Older people tend to have higher accumulated savings and lower consumption rates. Future proportional increases in these types of consumption and saving patterns may reduce inflation and lower interest rates, which in turn foster sustainable economic growth (Lee, Mason and Miller, 2000).

Despite these arguments, researchers, policy-makers and advocacy groups remain vociferous about the need for committed and prompt responses to population ageing. It is suggested that for Mullan’s (2006) ‘collection of alarmists’, including the author of this thesis, the pre-GFC assertion that economic growth will sufficiently accommodate demographic changes is too optimistic. Quantifying the reduction in spending on education against the burden of an increasing number of social welfare beneficiaries with adequate accuracy would appear practically impossible. Considering the unprecedented increase of life expectancy and the uncertainties regarding the number of these years that will be subject to chronic morbidity and severe disability, much remains indeterminable. This is also true for the uncertainty regarding the adequacy of private retirement funding that is so susceptible to market turbulence. Finally, the automation made possible by the advancement of technology will undoubtedly be of wide benefit, particularly in areas that remain unpredicted (Taleb, 2010). The uncertainty and difficulty in accurately quantifying these effects fail to subdue the doom saying of Mullan’s ‘alarmists’. The challenges of population ageing prevail over the benefits and action is required. A proposed response – the extending of working lives – is considered in terms of its role in meeting these challenges.
1.5 The role of prolonging working lives

As the problems of declining labour supply appear to be manifesting, influential bodies such as the OECD (Keese, 2005) have called for greater efforts from developed nations to extend working lives. More than two decades have passed since the first serious calls to action were made to policy-makers to capitalise on the demographic dividend by devising policy responses to population ageing. Policy responses have been emerging throughout developed nations, although Australia’s response has been behind similarly aged European nations (Taylor, Steinberg and Walley, 2000; Taylor, 2006). Policy responses have been aimed at increasing the labour force participation of older workers and extending working lives. By extending working lives, societies can address the ‘age/employment paradox’ (Walker, 2005, p. 686). This paradox encapsulates the extension of life expectancy that has accompanied falling levels of labour force participation in recent decades for people over the age of 50. Walker (2002) has argued that the key policy challenges presented by population ageing, sustaining social welfare systems and concerns about labour supply, are inherently connected. A solution to the challenges resides in increasing the engagement of older people in activity, that is, a holistic ‘active ageing’ (p. 122) strategy. Walker, among others (World Health Organization, 2001), have argued that a pejorative and ageist view of population ageing is inaccurate and counterproductive, and should be replaced with a view of this demographic shift as an opportunity.

The appeal of extending working lives has proven irresistible for policy-makers. Seemingly, this can alleviate the challenges associated with population ageing. Being charged with reorganising the trajectories of individuals’ working lives requires policy-makers to have a thorough knowledge of the challenges of this adjustment and those who will undertake it. The strength of organisational orientation towards accepting changing career trajectories is critical to the success of the public policy push to prolong working lives. Negative perceptions of this change could be detrimental to the labour market experiences of older workers, particularly if they are perceived in stereotypical and ageist ways. Discrimination on the basis of age, when enacted by employers or others in the workplace setting, has been noted as an important barrier to labour force participation. The author of
this thesis tends to agree with Bennington (2001; 2004) and the Australian Human Rights Commission (AHRC, 2010), among others, who argue that this is the least acknowledged and least understood barrier to the labour force participation of older workers. Understanding the challenges to extending working lives involves considering those who find themselves at the frontline of this public policy change. Below is a detailed definition of the term ‘older worker’ and some of the more salient issues that have emerged from the study of this group.

1.6 Defining an older worker

There is no uniform definition of an ‘older worker’. The ABS has used the term to refer to workers aged over 55 in some reports (ABS, 2010) and over 45 in others (ABS, 2005). The federal Age Discrimination Act (2004) makes age discrimination against anyone unlawful and as a consequence does not define an ‘older worker’. The Australian Human Rights Commission (AHRC, 2010) notes that the majority of age discrimination employment complaints have been from workers aged over 45. Others have suggested that 50 years is when an individual becomes an older worker, justified by consistently observed sharp declines in labour force participation rates for those 50 and over (Taylor, 2006). Complicating these disagreements is the finding that women have been considered to be older workers at younger ages than men (Encel and Studencki, 1997; Handy and Davy, 2007), suggesting a need to consider age in combination with other characteristics.

Different industries also have different notions of what it means to be ‘old’. Those with high proportions of high-skill occupations are more likely to have a stronger orientation towards older workers. Increased educational attainment is associated with higher labour force participation at older ages (ABS, 2010). Figure 2 highlights the variation in normative age distributions across Australian industries that makes defining older workers problematic. Each boxplot represents the age distribution of each Australian industry at the 2011 census (ABS, 2012). The minimum and maximum age of individuals in each industry are at the bottom and top of the lines. The top and bottom edges of the boxes represent the upper limit of the third quartile and the upper limit of the first quartile, respectively. The height of each of the boxes captures the range of ages for half the employees in each
industry. The lines on either end represent the oldest and youngest quarter respectively. The line in the middle of the box marks the median age. This figure conveys the youthfulness of the retail trade, the accommodation and food services industries, and the information, media and telecommunications industry. There are several industries with larger proportions of older workers: agriculture, forestry and fishing; transport, postal and warehousing; education and training; and health care and social assistance. The remaining industries have relatively comparable age distributions.

![Box Plot of Age Structure by Industry](image)

**Figure 2**: Five-statistic summary of the age structure of employed persons by industry

### 1.6.1 Definitions and chronological age

The uncritical use of chronological age as a defining criterion is problematic. Bytheway (2005) argued that ageing is socially and culturally constructed and
represented by the body. Other investigators endorse this representational embodiment (for example, Achenbaum, 2005; Brooke, Taylor, McLoughlin and Di Biase, 2012). Using a chronological age criterion ignores individual variation in biological changes and validates institutional regulations that over-rule individual differences, based on chronological age. Coupland, Coupland and Giles (1991) described how the label ‘elderly’ includes an age range of at least three decades. Literature on older workers and more generally the ‘young-old’ (Atchley 1987, p. 15) advance issues for this group at the expense of those who have transitioned beyond this stage. Bytheway argued categorisation homogenises characteristics of individuals, particularly for open-ended categories. Andrews (1999) examined ‘agelessness’ (1999, p. 302) research and concluded that it is a discriminatory perspective as it denies the realities of changes in old age. Imbalanced perspectives about the social and cultural construction of ageing (Hareven, 1995; Bytheway 1995) deny circumstances and experiences that individuals accumulate. Andrews (p. 302) states: ‘...there is not much serious discussion about eliminating infancy, adolescence or adulthood from the developmental landscape but a prevailing gerontological perspective called for an end to the current view of old age.’ Bytheway's (2005) alternative frameworks looked to voluntary participation, using transitional rather than chronological markers or locations and intergenerational positions. Researchers and policy-makers must avoid further entrenching discriminatory perspectives in their attempts to understand issues faced by older workers.

1.6.2 Problematic nomenclature

The literature notes problems with the term ‘older workers’ (Taylor, 2006; Riach, 2010). The range of individuals encapsulated by the term ‘elderly’ mirrors the unjustified homogenisations of individuals with the term ‘older worker’. The fear of biological changes correlated with chronological age described by Bytheway (2005) may contribute to the cultural position of the term ‘older workers’. Recent trends in labour market participation may bear responsibility for negative perceptions of older workers. More than a decade of public policy work to increase labour market participation of older workers follows several decades of early
withdrawal from the labour market. Taylor (2008) combined various OECD datasets to show declines in labour force participation by workers aged 55–64 among industrialised nations. Widespread industrial re-organisation in most developed economies has resulted in segments of the workforce being jettisoned, such as occurred in manufacturing and financial services. Taylor observed that jobs and entire portions of industries simply disappeared, either offshore or were discontinued. Redundancy packages, commonly available and generous, were enticing paths to retirement for many. Some nations were encouraging of early exit through the provision of state support. Taylor argues this financial support was conducive to early exit but should not obscure the critical factors of declining demand for older workers and the loss of industries in which they predominated. Decline in demand for older workers is central to the cultural and historical positioning of the term ‘older workers’. This is problematised by researchers interested in this group’s labour market experiences. Despite the limitations of the term ‘older workers’, almost all researchers and policy-makers interested in these issues have found this shorthand useful (Taylor, 2006). In the following discussions then the term ‘older workers’ is used as convenient shorthand. This follows the predominant naming convention but does not disregard the criticism and potential stigma attached to the term.

1.7 Structure of the thesis

The six remaining chapters of this thesis cover the following subjects: context for the study, review of relevant literature, methodology, results, discussion of results and conclusions. A brief description of the content of each chapter is offered below.

The discussion of the context of this study covers four domains. First, a description of the evolving conditions of the Australian labour market is offered. This is supplemented with brief notes on the general economic conditions given the recent turbulence of the GFC and policy responses to this crisis. With a general picture of prevailing economic conditions, recent trends in labour force participation, disaggregated by age and gender are described. Labour market conditions are described further by considering rates of different employment types and labour market challenges including unemployment and skill shortages.
Chapter One: Introduction

The second section describing the context of this study, considers more specifically the long-term trends in participation of older workers disaggregated by age and gender. The third section describes important policy changes in relation to employment and retirement, and notes commentary on activities that challenge age discrimination barriers that effect the employment of older workers. The fourth section refers to international experiences relating to older worker labour market participation. International experiences were considered in order to contextualise and understand the results of this study by positioning the discussion within international literature. This was required because of the limited amount of Australian research available that measured employer attitudes towards older workers.

The third chapter of this thesis reviews relevant literature. In order to clarify foundational concepts, the review begins by briefly outlining prevailing perspectives on attitudes and stereotypes from social psychology literature. Next, the evidence that workplace ageism exists is discussed. Manifestations of workplace ageism that have been studied are described. The discussion then moves to specific research into ageism in the workplace and studies of employer attitudes towards older workers. To facilitate a review of these studies, the barriers to proposing a framework for comparing international research on theories, methodologies and analytical procedures is presented. An alternative approach, seeking a basis to compare the findings of international research with that of the present study is advanced. Descriptions of the eighteen studies of employer attitudes towards older workers are presented, followed by commentary on this body of literature. Noting the absence of theoretical perspectives to explain and predict attitudes towards older workers, argumentation for the utility of a perspective only recently applied to research into ageism is made. With the commentary on the previous literature highlighting gaps in current knowledge, the specific research questions investigated in this study are defined and operational hypotheses are stated.

The fourth chapter describes the approach used to address the research questions. The chapter begins with a summary of a key piece of literature that raises the need for studies of labour market age discrimination to consider the attitudes of
employers. The need to understand the complications of studying employers, and particularly those difficulties present when discussing issues of discrimination, are highlighted. The research methodology is presented, including the rationale for the choice of methods. The procedures for data analysis are also outlined. This section describes the analytical techniques used, explaining how the analysis addresses the relationships being investigated. This is followed by a discussion of the reliability, validity and generalisability of this study. The procedures used to ensure the research was undertaken in accordance with ethics guidelines are described. Finally, limitations of the methods and analytical approaches used, and the extent to which these place boundaries on the confidence in the results, are discussed.

The fifth chapter presents the results of statistical analyses addressing each hypothesis. This chapter is divided into four sections. The first considers the within-subjects analysis of respondent attitudes towards workers in different age groups. The second explores the results of data reduction analysis applied to the attitude items. The third describes the results of linear regression analyses comparing attitudes towards older workers across different organisation and respondent characteristics. The fourth reports the changes in probability of certain organisational behaviours relevant to older workers based on differing attitudes towards this group and organisation characteristics.

The sixth chapter discusses the results described in the preceding chapter. The discussion is structured around the four research questions. This focuses on how the findings complement and contradict those of previous Australian and international studies. The discussion first compares employer attitudes towards workers in different age groups, particularly noting the support for the social role theory as an explanatory principle for these attitudes. A discussion of the data reduction analysis focuses on comparison to the findings of previous research. Analysis facilitated by the novel approach to measuring employer attitudes in this study provides the opportunity to consider the perceived age-dependence of the qualities evaluated by respondents. Discussion of the respondent and organisation characteristics that were associated with attitudes towards older workers are considered and possible explanations for the range of associated factors are
proposed. The final component of the discussion chapter addresses the association of attitudes with the probability of organisational behaviour that encourage the continued participation of older workers.

The final chapter outlines the implications of the findings presented in this study. This chapter briefly states the substantive new knowledge produced in this study. Next, the implications for policy and practice are enumerated making particular note where the implications are also supported by consistent findings of previous research. The limitations of this study are discussed and their consequences acknowledged. Finally, approaches to overcome these limitations and directions for future research are suggested.

1.8 Conclusion

This chapter has introduced the broad problematic within which this study sought to answer specific questions. The chapter presented a description of the commonly cited challenges of population ageing. These challenges were framed in relation to three domains: retirement income systems, healthcare expenditure and the labour market. Two macroeconomic phenomena, the GFC and the globalisation of economies, were described in terms of their role in exacerbating the challenges presented by population ageing. The opportunities presented by population ageing were described. The need for action in response to population ageing and the confounding macroeconomic phenomena was highlighted. The calls to action by influential international bodies and recommendations by prominent commentators, regarding extending working lives, were considered. This culminated in highlighting a critical factor to the success of this public policy push to extend working lives, namely, how favourably organisations and personnel decision-makers orient towards older workers experiencing changes to career trajectories. The concept of who is an ‘older worker’ was described. The final section of this chapter detailed the content presented in each subsequent chapter of the thesis. This discussion mentioned the context of the study, which is described in the following chapter.
Chapter Two: Context

This chapter provides a context for the study. The discussion covers four domains. First, a description of the evolving conditions of the Australian labour market is offered. This is supplemented with brief comments on the general economic conditions during the recent turbulence of the global financial crisis (GFC) and the responses of government. Along with the general picture of prevailing economic conditions, recent trends in labour force participation, disaggregated by age and gender are described. Labour market conditions are described by considering rates of different types of employment and labour market challenges including unemployment and skill shortages.

The second section of this chapter considers long-term trends in the labour force participation of older workers disaggregated by age and gender. The third section describes policy changes in relation to employment and retirement, and refers to commentary on actions that have aimed to tackle discrimination against older workers. The fourth section refers to international experiences relating to older worker labour force participation. These are considered in order to contextualise and understand the results of this study by positioning the discussion within the international literature. This was required because of the limited amount of Australian research that has measured employer attitudes towards older workers.

2.1 The Australian labour market

2.1.1 Recent economic conditions

The Australian economy fared better than most developed economies during the GFC. Economic growth was greater during the GFC in Australia than in other developed economies, although this slowed to approximately half a per cent (ABS, 2011). Australian financial institutions were resilient to market turbulence; they did not require capital injections from the government and remained profitable. Contrary to policy approaches employed in other modern economies, the response
to the GFC in Australia was slower and less aggressive in seeking a return to budgetary surplus (Wanna, 2015). 2.1.2 Response to recent macroeconomic challenges

Wanna (2015) described the economic conditions and policy responses before, during and after the GFC in Australia. The economy fared comparatively well through the GFC downturn. The robust position of the economy immediately prior to the crisis played an insulating role and so delayed policy responses. Policy makers were uncertain whether the crisis would influence the Australian economy, to the extent that, in early 2008, an expansionary budget was announced. A response to the crisis, including four large stimulus packages, was announced outside the budget cycle between late 2008 to early 2009 and then supplemented by further spending in the 2009-10 budget. The packages totalled almost $95 billion in spending over five years. The Australian government purchased $8 billion in residential mortgage backed securities as a fail-safe but did not need to subsidise banks with taxpayer dollars, which was the case in the United States of America.

Australian economic policy shifted after the stimulus packages and the peak of the crisis, in order to flatten spending and return to surplus as quickly as possible. This represented a return to neo-liberal, prudent fiscal management that critics argued bordered on unnecessary preoccupation with successive post-crisis deficits (Wanna, 2015). This position was similar to the more aggressive policy approaches used in other nations that sharply curtailed spending after the crisis zenith. The spending cuts have sometimes been labelled austerity measures.

This flattening of spending was achieved through revisions to a wide range of programs over four successive budgets from 2009-10. The changes reflect the extent of the government’s adoption of austerity measures. Savings were obtained through:

- A reduction in government department expenditure
- Equalising the age at which men and women could access the Age Pension
- Increasing the age at which the Age Pension could be accessed (67 years of age by 2017)
- Introduction of means testing for access to the Age Pension
• Tightening of eligibility for disability pensions
• Care-provider pension recipients moved to less generous unemployment benefits
• Welfare entitlements tightened:
  o Tougher mandatory work rules for the unemployed
  o Up-front payments to long-term unemployed to replace welfare
  o Deferred or cancelled incremental increases
  o ‘Baby bonus’ cancelled
• Defence force spending cuts
• Fringe benefits tax tightened
• Dependent spouse tax reduced
• Lower limitations on health service access and payments
• Reduced subsidies for solar power installation
• Cuts to universities, research centres and school reading programs
• Taxation on high income earners to incentivise obtaining private health insurance.

The Australian economy was buoyed through the GFC in part by a ‘resources boom’. This historic boost to the Australian economy saw the world price of Australian mining exports triple over the past decade and investment spending by the mining sector grew from two per cent of GDP to eight per cent (Downes, Hanslow and Tulip, 2014). Downes and colleagues’ estimates indicate that the resources boom made significant improvements to household incomes in Australia and cemented the robust economic position before and during the GFC. Indicators suggesting shifts towards an ending of this boom, including the slowing of the Chinese economy, emerged during 2014. Uncertainty regarding the performance of the Australian economy, in the context of tighter global markets, without the buttress of strong and high value demand for primary industry resources, reduces the confidence gained through the effective economic management during, and in the recovery from, the GFC.

2.1.3 Labour force participation

According to the definition followed by the Australian Bureau of Statistics (ABS, 2013b), a labour force participant is anyone actively engagement in economic work or actively seeking work for which they are available to start. Trends in labour force participation rates have demonstrated considerable variation across
age groups and have differed markedly for men and women over the last two decades. The participation rates for different age groups, disaggregated by gender, are presented graphically in Figure 3 and Figure 4 (OECD, 2014). The largest change in participation rates is evident among both men and women aged between 55 and 64 years. The long-term trends in labour force participation by older workers are described in detail below (section 2.3) and so the recent trend is only briefly described here.

The overall increase in labour force participation among Australians aged between 55 and 64 in the past two decades is predominantly the results of greater participation by women. In 1997, 31 per cent of women in this age group were in the labour market. This group’s participation rate increased in an approximately linear trend to 56 per cent in 2014. Over the same period, participation rates for men in this age group increased by 11 percentage points, from 61 per cent. The trend towards the increasing labour force participation of women in other age groups, although uniformly weaker than the trend described above, is also evident, except for the youngest. Participation among women aged between 25 and 45 increased by approximately five percentage points and a similar increase was observed among women aged over 65. A larger increase in participation is evident among those aged between 45 and 54. Participation among the youngest age group of women remained comparatively constant until 2008 and then fell by four percentage points by 2014.

Increased labour force participation is only evident among the two oldest age groups of Australian men. Participation among those aged over 65 increased by seven percentage points over approximately two decades, a marginally smaller increase than for those aged between 55 and 64. Participation rates remained constant for men aged between 25 and 54. The trend in labour force participation among the youngest age group of men mirrors that for women of the same age. This rate remained constant to 2008 when participation fell by five percentage points by 2014. The timing of changes in these two trends perhaps suggests an effect of the GFC, for instance, in perhaps encouraging young people to disengage from the labour market in order to seek further education. It is noted that participation rates more generally appear to have been unaffected by the GFC.
2.1.4 Alternative employment arrangements

The evolving nature of labour force participation in Australia is indicated by changes in the rates of permanent and temporary employment, and by increasing implementation of flexible work arrangements. Temporary employment comprises work under a fixed-term contract, in contrast to permanent work where there is no end-date. Employment under temporary contracts can entail a different set of legal obligations for employers for example, leave entitlements and sick leave (OECD, 2014). Comparing across broad age groups, as presented in Figure 5 and Figure 6 (OECD, 2014), the rates of permanent and temporary employment are largely similar for different age groups, except for workers aged over 65, where larger proportions of workers are in temporary employment and estimates are unstable due to the small numbers of participating workers in this category. It is evident from these figures that the share of employment temporarily increased for those under the age of 65 years between 2004 and 2007. This change may reflect increasing underemployment; a situation where individuals work less than 35 hours per week, want additional work hours, and are available to work additional hours but are unable to attain work (ABS, 2013b).
2.1.5 Flexible work arrangements

The increasing use of flexible work arrangements indicates changing nature of work, application of technologies, changing workforce demographics and new expectations about the importance of work/life balance (McNall, Masuda and Nicklin, 2009). The ABS (2013c) assessed the prevalence of flexible work arrangements for Australian employees between 2006 and 2012. The assessment used a single indicator, the proportion of employees with flexible work hours agreements with their employers. Over the six-year period, the proportion of employees that had such agreements increased from 23 per cent to 31 per cent. This increase occurred predominantly between 2006 and 2009, with the proportion remaining constant until 2012. The plateauing in this proportion coincided with the GFC, suggesting employers may have been less inclined to acquiesce to employee requests for flexible arrangements during a period of greater economic uncertainty. Male and female employees in full-time positions had similar increased uptake of flexible working hours over this period, increasing from 23 per cent to 29 per cent and 24 per cent to 30 per cent respectively. Considering the limited definition of flexible work arrangements used in the ABS study, it is likely that a larger proportion of workers have access to flexible work arrangements without a formal agreement being in place. Some arrangements, for
example may involve different forms such as telecommuting. It is uncertain however, whether such arrangements were equally affected by the economic turbulence and uncertainty related to the GFC.

2.2 Labour market challenges

The Australian labour market can also be described in terms of two challenges: unemployment and skills shortages. Each is described in turn below.

2.2.1 Unemployment rates

The rate of unemployment has followed relatively consistent trends for men and women since the turn of the century. Falling from the long-term peak in the early 1990s of approximately 12 per cent, rates have approached structural unemployment levels for much of the last two decades. As presented in Figure 7 (ABS, 2014), since the advent of the GFC in 2008 the general trend for unemployment rates has reversed from decreasing unemployment to increasing unemployment rates for both men and women. The ongoing economic effect of the end of the resources boom is expected to exacerbate the trend towards increasing rates of unemployment (Downes, Hanslow and Tulip, 2014).

The different effects of the GFC on unemployment for specific age groups is evident in Figure 8, which shows trends in unemployment for broad age groups from 2000 to 2013 (OECD, 2014). Since 2001 young Australians have experienced the sharpest decline in unemployment rates, with a fall of four percentage points. This age group, along with those aged 25 to 34, were the most strongly affected by the recent economic downturn, both experiencing a two percentage point increase in unemployment between 2008-09. Unemployment rates among the older age groups were less turbulent. However, the extremely low unemployment rate for the oldest age group indicates the propensity for workers in this age group to seek support from alternative social welfare programs, such as disability pensions and the Age Pension, if separated from employment (Chan and Huff Stevens, 2001).
The relatively positive unemployment figures do not indicate problems regarding issues of underemployment and long-term unemployment. Long-term unemployment is defined by the ABS (2013b) as a period of unemployment exceeding one year. Approximately one-third of unemployed Australians over the age of 55 are long-term unemployed, compared to one-fifth of those aged 35 to 44, and one-tenth of those aged under 24 (ABS, 2011). While underemployment is present at a greater rate among younger Australians, the 11 per cent of all underemployed, who are aged over 55 years, tend to be underemployed for longer. Of the approximately 100 thousand underemployed older workers, 41 per cent had been underemployed for more than a year. Twenty per cent of these older, underemployed workers indicated that the main barrier to finding additional hours was ‘being considered too old by employers’ (ABS, 2011).

Figure 7: Seasonally adjusted unemployment rate from January 2000 to December 2014
2.2.2 Skill shortages

The Australian Commonwealth Government’s Department of Employment (2015) uses the Survey of Employers who have Recently Advertised to monitor skill shortages across approximately 100 occupations predominantly among professionals, technicians and trades, but also managers and other occupations. Presented in Figure 9 are three indicators of the scarcity of skilled labour. These indicators are the number of applicants per vacancy, the number of suitable applicants per vacancy and the proportion of vacancies filled within a six week period. The most recent analyses indicate that a marked drop in skill shortages has occurred since a recent peak in 2007-08. On average, approximately three-quarters of positions advertised were filled within six weeks over the 2014-15 survey period. During this period, employers reported an average of 13.6 applicants for each vacancy and 2.2 suitable applicants. The approximately linear increase in each of these indicators between 2010 and 2013-14, is driven predominantly by changes in demand. An increasing supply of professional workers through growing training output also plays a role in reducing skill shortages. The Department of Employment notes that approximately 30 per cent of assessed occupations are in shortage, compared with almost 90 per cent in 2007-08. Despite the marked shift, specific occupations and regions continue to experience significant, widespread shortages.
2.3 Older workers and the Australian labour market

Labour force participation among older workers has increased in recent years, this being trend non-linear and different for men and women (OECD, 2014). Described here are long-term trends in participation of older workers up to the time of data collection for this study. For older men, labour force participation declined through the 1980s and 1990s but has begun to increase since the turn of the century. The changes in participation rates were small for males aged 45 to 54. Participation peaked in the 1960s at 96 per cent before falling to 87 per cent in the 1980s and increasing again to 90 per cent in the period to 2011 (OECD, 2014). This trend was more turbulent for males aged 55 to 64. Participation peaked in the 1960s at 86 per cent, fell to 60 per cent in 1997 and rose to 72 per cent in 2011. Participation rates for males aged over 65 had equivalently timed peaks and troughs but ranged from 23 per cent to 8 per cent before increasing again to 16 per cent in 2011.

Participation rate trajectories for older female workers were different. For those aged 45 to 54, participation rates increased from 37 per cent in 1966 to 54 per cent in 1987 and then to 78 per cent in 2011. For females aged 55 to 64, participation rates were relatively stable through to the 1980s, marginally above
20 per cent, before increasing to 55 per cent in 2011. An increase in the participation rates of women over the age of 65 was observed over this timeframe. Industry restructuring has been argued to be a primary determinant of the decreases in male participation through the 1980s and 1990s (OECD, 2014). The increasing participation of older women was influenced by a cohort effect of women who joined the labour market earlier and who have now entered older age groups (OECD, 2014). Financial incentives encouraged early retirement for men and women through the 1980s and 1990s. The adoption of this is more evident among the falling participation rates observed for males (Australian Law Reform Commission, 2013). The overall increase in participation among older female workers masked their adoption, at the same time as males, of early retirement pathways (Australian Law Reform Commission, 2013). Current participation rates are below the historic optimum for males and successive Intergenerational Reports (Australian Government Department of Treasury, 2010, 2015), which assesses the long-term sustainability of current Government policies and how changes to Australia’s population size and age profile may impact on economic growth, workforce and public finances over the next 40 years, has called for more to be done to encourage increases in older worker participation.

Recent commentary has cautioned against expectations based on a simple cause and effect model that assumes ageing populations will transform the age profile of the workforce (Taylor and McLoughlin, 2013). Analysis of organisations’ preferred actual and prospective responses to labour shortages suggested that policy efforts to reduce the early exit of older workers might result in increasing age polarisation of the workforce. Indications of organisations in segments of the private sector, particularly those experiencing intensifying competition for market share and labour from national and international sources, seeking to maintain competitive advantage and minimise costs by retaining younger workforces were interpreted as signalling a partitioning of older to certain parts of the workforce. Greater labour force participation by older workers may be confined to specific sectors, for example the public sector, and older workers may gravitate to low-wage and insecure jobs as early exit pathways are closed off, if unable to compete with younger workers. Taylor and McLoughlin (2013) suggest careful monitoring of
older workers transitions will be required to ensure that poor quality jobs, early exit or unemployment are not the only choices available to older workers.

2.4 Policy relating to employment, retirement and workplace discrimination

2.4.1 Employment policy

In Australia, the policy challenge presented by population ageing was met with a response focused on the ‘three Ps’: productivity, population and participation, as outlined in recent Intergenerational Reports (Australian Government Department of Treasury, 2010, 2015). There have been several facets to the ‘participation’ element. These include: legislating against age discrimination in employment; the appointment of an age discrimination commissioner; raising the age at which individuals become eligible for the Age Pension and the addition of income and assets tests to determine the rate of the Age Pension for individuals (Australian Government Department of Human Services, 2013); dissemination of best practice guidelines for employers through the Australian National Training Authority (see www.valuingolderworkers.gov.au); government-supported training and the translation of skills, previously developed through on-the-job training, into formal qualifications through employers; and wage subsidies for the ongoing employment of older workers (Australian Government Department of Education, Employment and Workplace Relations, 2013).

2.4.2 Retirement policy

Changes have been made to Age Pension eligibility and rates of payment in response to population ageing. The current age at which individuals can access the Age Pension is 65. This will be increased to 65 and a half by 2017 and then 67 by 2023, an increase of six months every two years (Australian Government, 2009). Measures have been proposed in 2014 to further increase the pension age to 70 by 2035 (Australian Government, 2014). Eligibility for the Age Pension is dependent on income and assets tests, which can reduce and/or eliminate an individual’s
access to the Age Pension (Australian Government Department of Human Services, 2013).

Mandatory employer contributions to privatised retirement savings programs, called superannuation, were introduced in Australia in 1992. As a result, Australians have a higher rate of investment in privately managed retirement funds per capita than any other nation (Jimenez, 2006). Australia and Iceland have legislated for compulsory employer contributions to privately managed retirement funds for all employed persons. This legislative uniqueness explains Australia's advanced position in investment in privately managed retirement funds (Bonasia and Napolitano, 2006). The reality of income disparity taints this seemingly positive picture. Bonasia and Napolitano argue the per capita average masks the disparity in retirement savings between men and women and for low income groups who experience compounded income disparity through long-term differences in a pay-as-you-go system. The superannuation system is also fraught with risks for beneficiaries susceptible to losses of retirement savings due to erosion from inflation, legal transgressions and incompetence of fund managers, exchange rate risks, policy changes shifting taxation of these monies, the vagaries of international financial markets, and longevity risks. This last is relevant as retirees choose between purchased pensions, lump-sum payments and annuities that offer different levels of certainty about the maintenance of retirement income in the case of longer-than-average life expectancy (Borowski, 2013).

2.4.3 Equal opportunity policy

Arguably one of the most important policy responses aimed at increasing the labour force participation of older workers has been legislation proscribing age discrimination in employment. The majority of Australian states introduced such legislation by 1996 (Australian Human Rights Commission, 2010) but it was not until 2004 that the federal Age Discrimination Act made it illegal to discriminate, including in employment, on the basis of age. Australia’s legislative response was made before a similar response in the United Kingdom, but almost four decades after action was taken in the United States of America, which proscribed discrimination against older workers in 1967 in the Age Discrimination in
Employment Act (Feder, 2008). Australia’s legislation protects workers of all ages from discrimination on the basis of age (Age Discrimination Act, 2004).

Commentary on these policy responses has been largely in approval of governmental responses to looming challenges presented by population ageing (Encel, Nelson, Stafford and Field, 2011). Overall, Australia’s efforts regarding the prolongation of working lives have been criticised for a failure to incorporate learning from international experiences with demographic change and because, it is argued, there has been an uncoordinated plethora of responses, lacking in strategic coherence (Taylor, 2008; Encel, Nelson, Stafford and Field, 2011).

2.5 Older workers and the labour market: International experiences

2.5.1 Population ageing: A global phenomenon

Population ageing is a global phenomenon. There are a very small number of nations, considered demographic outliers, which are not expected to experience population ageing. However, the rate and degree of ageing that is expected varies. It is predicted that nations beginning to age later will have shorter timeframes to adapt to this change. The increasing absence of migration as a resource for population growth is cited as one contributing factor to the increased difficulties facing later-ageing nations. High-income nations with populations projected to be later ageing may be exceptions to this, for example the United States of America, Canada, the United Kingdom and Australia, as they are expected to continue to draw large numbers migrants (United Nations Population Division, 2015).

The rate and degree of population ageing in Australia compared to other developed nations can be described as moderate. Presented in Figure 10 are population projections for selected OECD nations and non-OECD countries (OECD, 2011). The projections show the proportion of the population in these countries aged over 50 between the years 2000 and 2050. In Australia, this age group will increase from approximately 28 per cent of the population in the year 2000 to 40 per cent by 2050. Figure 10 shows that Japan and Germany will have the largest
proportions over the age of 50 of the selected countries. The People’s Republic of China had the lowest proportion of their population over the age of 50 at the start of the century. This population will have the steepest ageing gradient, moving the proportion of their population over the age of 50 to the third highest, behind Japan and Germany. The steepness of this gradient can be attributed to the People’s Republic of China’s one-child policy.

Three nations have moderate ageing gradients similar to Australia’s. The United Kingdom’s (UK) ageing gradient is slightly flatter than that of Australia and the United States of America (USA), whereas there is a slightly larger increase in New Zealand’s over-50 population. Australia has a larger proportion of the population aged over 50 compared to the global population throughout the projected period. The ageing gradient of the global population is, however, much steeper, reflecting ongoing and intensifying population ageing, as described by Lutz, Sanderson and Scherbov (2008). These comparisons suggest that although Australia will face challenges associated with population ageing, this will be less intense than for other nations and it will be distributed over a longer timeframe. This provides the opportunity to emulate successful policy responses employed in other, earlier and more intensely ageing nations, and to develop and administer moderate responses to the more gradual ageing that is predicted.

![Figure 10: OECD population projections; the proportion of the population aged over 50 for selected OECD and non-OECD countries](image-url)
2.5.2 Prolongation of working lives: International contexts

This study makes extensive use of international literature as comparators for the findings uncovered. This is motivated by the limited number of studies in the Australian literature, relevant to the study of employer attitudes towards older workers; the consistency in content of attitudes towards older workers across time and different national contexts; and the limitations of previous literature in terms of a standard approach for comparing international literature that considers theories deployed, methodological approaches and analytical methods used. These issues are explored at length in the next chapter and are mentioned here to justify the following discussion of international experiences relating to older worker participation. A broad range of national contexts are compared, including: Canada, United States of America, United Kingdom, The Netherlands, a Special Administrative Region of China (Hong Kong) and New Zealand. This discussion refers to the enactment of legislation proscribing employment discrimination on the basis of age, as an indicator of the critical awareness of workplace ageism in the national consciousness.

An important policy demarcation of different national contexts is the use of legislation to prohibit workplace age discrimination. Lahey (2010) listed the timing of enactment of such legislation across Europe and North America. The United States of America was the first of the aforementioned countries to proscribe discrimination on the basis of age in employment in 1967. Later revisions extended this legislation to practically eliminate mandatory retirement ages. In Canada, regional legislative bodies proscribed age discrimination, a process that granted protections to older workers during the 1980s. The comparative advanced state of equal opportunity legislation in Canada is notable in contrast to the continued acceptance of mandatory retirement ages in Canada that were not banned until late 2012.

European nations, Australia and New Zealand did not implement such legislation until considerably more recently. In New Zealand, the Human Rights Act enacted in 1999 forbade employers from discriminating against qualified job applicants on the basis of age and included provisions related to different stages of the employment
cycle: recruitment, selection, remuneration, training, promotion, transfers, retirement and termination. Compulsory retirement was also outlawed.

Following European Union Directive 2000/78, member nations were required to implement legislation prohibiting discrimination on the basis of age by 2006. The Netherlands enacted such legislation in 2002. It allows a retirement age of 65 years where it is objectively justified in terms of occupational requirements (Lahey, 20101). The United Kingdom and a number of other European nations did not enact legislation until 2006, closer to the deadline imposed for member nations. The legislation enacted in the United Kingdom includes a broad range of exemption circumstances where discrimination in recruitment is permissible, beyond those included in occupational requirements as stipulated in Directive 2000/78. For example, there are provisions regarding company planning and training goals where age discrimination is permissible. Hong Kong, as a Special Administrative Region of China, is the unique example of an advanced economy without any legislation prohibiting employment discrimination on the basis of age. Despite the fact that equal opportunity legislation regarding gender, race and residential (hu kou) status were implemented between 2005 and 2007, banning of age discrimination has not been written into legislation.

With these policy changes in mind, it is noted that every study of employer attitudes towards older workers reviewed in this study that was undertaken in North America was done so in the context of legislation against age discrimination in employment. This also applies to one of the three studies in Australia and the study of New Zealand employers. In contrast, only two of the studies originating in a European context were completed after the enactment of legislation proscribing age discrimination in employment. Both of these studies were completed in The Netherlands. This suggests that the findings of the various international studies discussed in this thesis were completed in distinct legislative climates and the comparative interpretations of their findings should proceed cautiously. The need for this caution is expanded upon in the following chapter.
2.6 Conclusion

This chapter described the context of this study. A description of the evolving conditions of the Australian labour market, including a description of the general economic conditions was presented. Recent trends in labour force participation, rates of permanent and temporary employment, increasing deployment of flexible work arrangements and labour market challenges, including unemployment and skill shortages, were described. Long term trends in labour force participation of older workers, disaggregated by age and gender, were also outlined. Important policy changes in relation to employment and retirement, and commentary on actions that challenge age discrimination that affects the employment of older workers, were noted. International experiences relating to older worker labour force participation were referred to, specifically focusing on those national contexts that serve as general comparison points for the present study.

In the following chapter, a selection of the existing literature regarding labour market experiences of older workers, their experiences as targets of age discrimination, the importance of attitudes held by employers as gatekeepers to recruitment, retention and the provision of training, are discussed. This discussion highlights the need for the study described in this thesis, helps determine the most useful approaches and theoretical perspectives that were used in the study, and also facilitates positioning this work among the existing literature.
Chapter Three: Review of previous literature

This chapter presents a review of relevant literature related to the study of employer attitudes towards older workers. In order to clarify foundational concepts, the review begins by briefly outlining the concept of ageism and prevailing perspectives on attitudes and stereotypes from social psychology literature. The discussion then reviews the evidence that workplace ageism exists. Manifestations of workplace ageism that have been studied are described. This discussion then considers a specific stream of research into ageism in the workplace, studies of employer attitudes towards older workers. To facilitate a review of these studies, the barriers to proposing a framework for comparing international research on theories, methodologies and analytical procedures are presented. An alternative approach, seeking a basis to compare the findings of international research with that of the present study is advanced. Descriptions and commentary on eighteen studies of employer attitudes towards older workers are presented next. Noting the absence of theoretical perspectives to explain and predict employer attitudes towards older workers, argument is made for the utility of a perspective only recently applied to research into ageism. With the commentary on the previous literature highlighting gaps in current knowledge, the specific research questions investigated in this study are defined and operational hypotheses are stated. This outlines the contribution of this study.

3.1 Ageism

Older workers' labour market experiences have attracted research interest for decades. One of Australia's foremost commentators on this issue, Emeritus Professor Sol Encel, highlighted that Australia's research community has been discussing issues of older people's employment since the 1980s (Encel, 1998). One area of interest has been ageist stereotypes held by employers and their attitudes towards older workers. These are the central topics of this study. The motivation for this study is the systemic and institutionalised ageism observed in society (Wilkinson and Ferraro, 2002). Such ageism partially explains declines in demand for older workers. The declining demand has been the impetus behind previous
trends towards early exit (Taylor, 2008), barriers to older workers’ re-employment and reduced access to training and retention (Australian Human Rights Commission, 2010). Ageism is critical for the success or failure of the public policy push to prolong working lives and increase older workers’ labour market participation. Robert Butler coined the term ‘ageism’ in 1969. He described it as ‘a deep-seated uneasiness on the part of the young and middle-aged – a personal revulsion and distaste for growing old, disease, disability, and fear of powerlessness, uselessness and death’ (Butler, 1969, p. 243). Butler defined ageism as three interconnected facets. First, prejudicial attitudes towards older persons, old age, and the ageing process, which includes attitudes held by older persons themselves. The second facet is discriminatory practices against older people. Third, institutional practices and policies that perpetuate stereotypes against older people, reduce their opportunity for life satisfaction, and undermine their personal dignity (Butler, 1980).

Commentators argue that ageism has not received as much attention from researchers as sexism and racism, particularly in relation to work and employment (Riach, 2011). The potential for substantial economic benefit from increased labour force participation of older workers undoubtedly bears some responsibility for policy-makers’ and researchers’ growing interest. International bodies including the World Health Organization have outlined the factors that facilitate increased labour market participation of older workers. These include: increases in average life expectancy; changes in the nature of work towards a knowledge-based economy; and increasing understanding of the relationship between good work and good health. Yet ageism is ingrained in cultural and institutional aspects of society (Wilkinson and Ferraro, 2002). It is evident in shared cultural perceptions that ageing makes people less attractive, intelligent, sexual and productive (Atchley, 1997; Brooke, Taylor, McLoughlin, Di Biase, 2012). The inclination for older people to be judged on their appearance propagates these beliefs (Bytheway, 2005) and problematises the natural processes of ageing (Gerike, 1990). This is never more clearly evident than in media representations of older people (Palmore, 1999; Atchley). Wilkinson and Ferraro argued that the core values of society align against older people. As people age, their productivity is increasingly oriented to familial and civic spheres; society under-values these
spheres of activity and they are perceived to foster dependency (Herzog and Morgan, 1992).

The most salient evidence for institutionalised ageism comes from the workplace, the health care system and social services (Wilkinson and Ferraro, 2002). Wilkinson and Ferraro argued that ageist stereotypes are systemic and institutionalised in society. It seems illogical to presume employers would be any different in this regard. The role of employers is pivotal in determining the labour market experiences of older workers because they are gatekeepers to recruitment, retention and the provision of training. The current generation of older workers are on the frontline of the public policy push to extend working lives. If the labour market is unreceptive to their continued participation, the outcomes of public policy initiatives, such as raising the age at which one may access the Age Pension, may be disastrous. If employer attitudes towards older workers are based on ageist stereotypes, the prospect of extending working lives is bleak. The importance of employer attitudes is emphasised when the connection between attitudes and behaviour is considered.

3.2 Attitudes

It is critical to understand the connection between attitudes and behaviour to appreciate the role ageism plays in impeding the push to extend working lives. An attitude is defined as a positive or negative evaluation of a person, object, event, idea, activity or almost any thing in the perceivable environment (Allport, 1935). McGuire (1969) proposed that attitudes were comprised of three parts: cognitive, affective and behavioural. However, empirical research has failed to demonstrate independent components of attitudes representing each theorised facet (Eagly and Chaiken, 1998). Evidence of incompatible attitudes being held simultaneously precluded the possibility of a consistent cognitive, affective and behavioural structure underpinning attitudes (Wood, 2000). Fazio and Olson (2003) argued that the tripartite view is partially correct. Attitudes form through cognitive, affective and behavioural routes. Attitudes formed through one route need not affect the other two. Attitudes interact with higher order personality components such as values and ideals (Tesser and Shaffer, 1990). Katz (1960) argued that
attitudes are essentially functional, serving either the utilitarian, knowledge, ego-defensive and value-expressive functions. This functional view proposed that in order to change attitudes it is necessary to understand the function they serve. Three theoretical models of the relationship between attitudes and behaviour have been dominant: the theory of reasoned action (Ajzen and Fishbein, 1980); the theory of planned behaviour (Ajzen, 1991); and the motivation and opportunity as determinants theory (Fazio, 1990). Each incorporates similar concepts. These are perhaps best understood as theories progressively evolving from each other as new evidence was integrated. Fazio's (1990) theory of motivation and opportunity as determinants follows the contentions of the preceding theories that individuals consider their attitudes towards a behaviour, the subjective norms and their ability to successfully obtain the desired outcome through enacting their behavioural intention. Fazio's additional contention was that this would only happen when individuals are sufficiently motivated and there is opportunity to do so. This brings theories of attitudes into harmony with contemporary theories of information processing that propose high-effort and low-effort routes of information processing (see Chaiken and Eagly, 1989; Petty and Cacioppo, 1986). The significance of Fazio's revision to attitude–behaviour theories is that, unless a decision-maker is sufficiently motivated and provided with the opportunity to make effortful use of relevant, available information, then stereotypes, as efficient, existing cognitive elements, will be deferred to.

For researchers interested in workplace ageism, this points to a problem of overcoming employer susceptibility to defer to cognitive shortcuts (stereotypes) that represent an efficient decision-making pathway. This is particularly challenging in the context of systemic and institutionalised ageism that is so pervasive that it can go unrecognised (Wilkinson and Ferraro, 2002). It is argued that employer attitudes are based on stereotypes learnt from ageist views ingrained in modern society. The notion of a stereotype is described briefly to inform the later discussion of older workers’ labour market experiences.

3.3 Stereotypes

The term ‘stereotype’ was originally used in the printing industry in the 1700s to
describe the plate used to duplicate an original typography. The word is derived from the Greek for ‘solid impression’ (Sargeant, 2011). Two centuries later, ‘stereotype’ was used in the way it is currently understood, in *Public Opinion*, by Walter Lippman (1922). Lippman (p. 51) wrote:

> For the most part we do not first see, and then define, we define first and then see. In the great blooming, buzzing confusion of the outer world we pick out what our culture has already defined for us, and we tend to perceive that which we have picked out in the form stereotyped for us by our culture.

This aptly captures the notion of stereotypes. A stereotype is a specific thought adopted about a particular group of people or an approach to certain undertakings, shared by members of a social group (Brief, 2008; Kleg, 1993), and has varying degrees of basis in reality (Judd and Park, 1993).

At the beginning of research into stereotypes, they were thought of as unequivocally pejorative. Stereotypes were antipathetic about members of other groups. It was argued that those who employed stereotypes in their conceptual networks were authoritarian, rigid and repressed individuals incapable of recognising the fallacy of generalised beliefs (Fiske, Cuddy, Glick and Xu, 2002). Katz and Braly (1933) concluded that racial prejudices held by non-marginalised groups were uniformly negative. This promoted interest in relationships between social groups and the formation and propagation of prejudicial attitudes based on stereotypes. A dominant theory of intergroup relations was social identity theory that focussed on the ‘own group’ and ‘other group’, proposed by Tajfel and Turner (1979). This theory has found application beyond analysis of prejudice between social groups, for example, in the analysis of sociological principles of power and leadership (Postmes and Branscombe, 2010). Other theories of stereotypes have emerged in response to criticism of social identity theory, for example, Fiske, Cuddy, Glick and Xu’s (2002) stereotype content model, and Eagly and Steffen’s (1984) social role theory. Contemporary theories of stereotypes have rejected the monovalent negativity of earlier work on stereotypes and incorporated positive and ambivalent content. These theories are discussed further in the context of their relevance for age stereotypes.
Stereotypes are cognitive representations of social groups that have varying degrees of basis in reality. This study is concerned with employers’ stereotype based attitudes about older workers. The ageing of developed societies has resulted in interest in optimising the labour market participation and utilisation of older workers. A facet of this optimisation is eliminating wasted potential. This is squandered when inaccurate stereotypes are the basis of negative attitudes towards this group. Inaccurate perceptions lead to the failure to recruit, retain or provide training to these workers. Knowledge of the attitude–behaviour relationship suggests these representations influence decisions employers make about older workers, as stereotypes are efficient cognitive heuristics.

3.4 Ageism in the workplace

Workplace ageism is one of the most important institutional aspects of systematic ageism (Wilkinson and Ferraro, 2002). Research into ageism’s role in determining older workers’ labour market experiences spans several decades. One of the earliest studies was undertaken in the 1950s (Welford, 1958). The field has advanced with increasingly complex questions, more sophisticated analytical techniques and comprehensive theoretical structures. In nations that have relevant legislation proscribing age discrimination, researchers have considered the frequency with which individuals have sought compensation for being discriminated against by employers. Others have interviewed older workers and recent retirees to obtain narratives of their experiences. Others have interviewed older jobseekers about their experiences of recruitment processes. Some researchers have surveyed and interviewed employers. Some employer surveys, such as this study, were concerned with employer attitudes towards older workers.

Adams and Neumark (2006) reviewed North American research that demonstrated the existence of workplace ageism. They argue that results have been equivocal. Common stereotypes of older workers include perceptions of resistance to change, less flexibility, being less likely to receive training and career development support, and less likely to be promoted in certain jobs. The authors suggest that there is an undue focus on a facet of work where ageism is particularly
difficult to identify: recruitment. The rate of applications for compensation on the grounds of age discrimination by employers suggests that decisions about dismissal and employment termination are the most common expression of workplace ageism. Adams and Neumark contend that the existence of such compensation claims proves the existence of workplace age discrimination. They argue that many cases of age discrimination are likely to go unpursued and unnoticed because the legislation allows for some age consideration in employment and the low probability of winning an age discrimination compensation claim discourages pursuit of compensation.

Evidence suggests that older workers face difficulties finding new work if made redundant. Indicative evidence of this can be seen in average duration of unemployment (ABS, 2011). Adams and Neumark (2006) acknowledged the potential validity of other explanations besides ageism for this finding. The authors cited a number of studies undertaken in the United States of America that demonstrated an increasing concentration of older workers among involuntarily displaced workers. This finding has been highlighted in other international studies (Taylor and Walker, 1998a). While Taylor and Walker observed this trend in ‘declining industries’ (p. 61) Cappelli, (2000) found that it also extended to include corporate restructuring. Among involuntarily displaced workers, the probability of re-employment is lower for older workers (Farber, 1993). When displaced older workers do find re-employment, it is more likely to be in temporary or part-time roles (Gardner, 1995).

Adams and Neumark (2006) considered studies investigating the belief that older workers are passed over for promotion because of their disfavour with employers. They concluded that the literature has failed to uncover explicit evidence. Existing evidence was drawn from hypothetical situations (Rosen and Jerdee, 1977). Studies have uncovered associations between promotion and other factors such as the receipt of training, supervisory responsibilities and wage growth, but not age (Pergamit and Veum, 1999). Adams and Neumark were sceptical about conclusions based on respondents’ judgement of hypothetical situations. The studies were often founded on judgments made by participants with little
experience in actual employment decisions; student samples were particularly problematic.

McVittie, McKinlay and Widdicombe, (2003) found that human resource managers were highly motivated to espouse their organisations’ commitment to equality of opportunity. Employers with and without anti-age discrimination policies were criticised for avoiding the acknowledgment of the underrepresentation of workers over the age of 40 years in their organisation. Accounts of the imbalance in age distributions in the workforce were based on a uniform set of responses: it was someone else’s actions that led to the age imbalance; jobs were unsuitable for older workers; unknown and unintended consequences of the organisation’s reasonable selection process led to an underrepresentation of older workers. McVittie, McKinlay and Widdicombe concluded that the explanations offered by their participants made the organisation’s role invisible.

Loretto and White (2006) interviewed 40 Scottish employers. The vast majority of interviewees indicated their organisations had anti-discrimination policies that included age. Bias against older workers was uncovered in practice at each stage of the employment cycle in these organisations. Participants indicated that older workers often filled a role as a second, less preferred choice. Age diversity was extolled in a form where employers used positive stereotypes as a proxy for role selection. For example, older workers were perceived to be suitable for those roles requiring stability and reliability, were perceived as desiring a slowing of work pace and not seeking to move up the ranks. These stereotypical perceptions effectively confined older workers to the periphery of the organisations’ workforce. Stereotypes were also used to justify decisions that departed from the organisation’s anti-discrimination policy. For example, one employer considered older workers unsuitable for physically demanding work. At the same time, younger workers were considered to have equivalent organisational commitment but were unable to provide any exemplary evidence, except to say, ‘you just get a feeling for that sort of thing’ (p. 320). Participants conceded that there was a substantial gap between their anti-discrimination policies and the realities of employment practices. This was attributed to variations in line managers’ commitment to the policy and the decentralised structure of organisations. Those
employers where manual work predominated indicated that lighter duties were offered to older workers, though begrudgingly. Little evidence of job redesign to accommodate older workers in non-manual work environments was found. When asked to account for this, productivity concerns were cited.

Loretto and White (2006) concluded that employers rely on stereotypes when making recruitment decisions and in decisions about managing performance and development. Conversely, they concluded that employers rely on policy when making decisions about retirement and redundancies. Differentiation in the types of employment cycle decisions influenced by employer attitudes was confounded by employer experiences with older workers. Positive outcomes for older workers were associated with employer reports of positive experiences with older workers. Employers who favoured stereotyped views, however, reported less positive outcomes for older workers. Loretto and White suggested that large organisations used structural mechanisms, for example, the absence of pension schemes and early retirement programs, to apply ‘new ageism’. New ageism was described as a manifestation of ageism justified by rationales that are acceptable to liberal tolerant societies aspiring to egalitarian ideals (McVittie, McKinlay and Widdicombe, 2003). The authors contended, pessimistically, that government, business and individuals contribute to the maintenance of biased attitudes that have been shown to affect recruitment. Further, it is unclear, they argued, how these attitudes will be changed.

Karpinska, Henkens and Schippers (2013) found that market conditions were a primary determinant of the strength of employer orientations towards older workers. Older workers are often targeted when organisations downsize because the seniority principle results in these workers commanding higher wages. Some evidence suggests that society finds the redundancy of older workers more acceptable than making younger workers redundant. Karpinska and colleagues found recommendations of retaining older workers approaching retirement age were more common among employers facing structural or incidental workforce shortages. The disposition of managers towards the older workers was also important. Employers’ beliefs about an appropriate normative retirement age and the types of skills older workers possess influenced their retention.
Chapter Three: Review of previous literature

recommendations. Employers were more likely to recommend the retention of an older worker in a hypothetical situation if they evaluated older workers favourably on soft qualities. These qualities included ‘organisational citizenship behaviours’ (Ng and Feldman, 2008), such as social skills, commitment to organisation and reliability.

In a further study, Conen, Henkens and Schippers (2011) analysed survey data collected in several phases over the previous decade. Older workers were faring better compared with other underrepresented groups in the labour market, such as female workers, non-native workers and disabled workers, as assessed by the percentage of employers recruiting these workers in response to labour shortages over the successive phases of the survey. There was no clear evidence that employers had become ‘favorably disposed’ (p. 155) to recruiting older workers. Recruitment and retention of older workers was again found to be heavily dependent on market conditions.

Van Dalen, Henkens and Schippers (2010) investigated the stereotype that older workers are less productive than younger workers. A dual modal typology of qualities that underpin stereotypes about older workers’ lower productivity was uncovered. The two modes were labelled ‘soft’ and ‘hard’ qualities. Soft qualities included social skills, reliability and organisational commitment. Hard qualities included physical and mental capacity, flexibility and willingness to learn new technology skills. Van Dalen, Henkens and Schippers concluded that perceptions of older workers’ lower productivity were dependent on the relative importance of hard qualities in performance assessments. Both sets of qualities were associated with perceived productivity, but employers viewed hard qualities as more important. The authors concluded that this points to deeply rooted ageism in the labour market, reinforced by employer perceptions.

A literature review undertaken by Bennington and Tharenou (1996) found no evidence to support stereotypes that older workers have more frequent absences, more frequent, more costly injuries and poorer job performance. The studies these authors reviewed, conducted in Australia, refuted other stereotypes of older workers. For example, the perception of lower intelligence and an inability to fit in with workers of other ages was not supported. Bennington and Tharenou
conceded that the evidence suggested training older workers may take longer. Also, declining creativity appeared to be associated with age. Nonetheless, the authors concluded that these findings fall far short of justifying the discrimination against older workers that is observed.

Bennington (2001) reviewed four studies that produced converging evidence of widespread age discrimination in Australian workplaces. The four studies used different approaches: analysis of position descriptions, matched candidate responses to recruitment agencies, employer telephone interviews and telephone interviews of jobseekers. The job advertisements were considered to be covertly ageist through the use of ‘age connotation words’ (p. 128), such as ‘recent graduate’ and ‘fast paced’, but specific age criteria were absent. None of the reviewed advertisements used age connotations that favoured positive stereotypes of older workers. Matched candidate responses to recruitment agencies revealed that almost one third of employers had indicated an unadvertised age preference to the recruitment agency. Applicants with older ages were more frequently told they had a lower ‘chance of success’ with the employer. Telephone interviews with employers revealed more than one third of employers asked about age in recruitment situations and that this information was regularly sought through application forms. Telephone interviews with jobseekers revealed perceptions that being younger was an advantage in recruitment situations. Bennington concluded that these four studies provide converging evidence of ageism in Australian workplaces. Most concerning was jobseekers’ internalisation of ageism, which further promotes its acceptability.

Patrickson and Ranzijn (2003) argued that ageism may play some role in the persistent difficulties faced by older workers. However, the authors contended that human capital factors may be the foundation of these problems. They argued that older workers have not adopted new employability paradigms that value self-direction, labour market mobility and opportunism compared with previous models of loyalty, reliability and organisational commitment. Two observations led to this conclusion based on their study of older jobseekers. First, those who had successfully re-entered the labour market capitalised on their informal personal networks to tap into employment opportunities. Second, successful older
jobseekers entered re-training in a domain that was facing a shortage of workers, allowing them to market their skills with fewer competitors. The success of the first approach could be attributed to the removal of stereotype based attitudes from employer decision-making processes. According to models of information processing, decision-making based on effortful processing rather than knowledge stored in memory (stereotypes) requires motivation and opportunity (Fazio and Towles-Schwen, 1999). The fact that an employer personally knows a jobseeker could provide the motivation to undertake effortful processing of their application. This motivation would therefore displace the reliance on stereotypes in the recruitment decisions. If this motivation was not present, an employer could be expected to use a more efficient, heuristic-based mode of information processing that would rely on knowledge stored in memory, namely stereotypes. If capitalising on a personal relationship did in fact remove an employers’ reliance on attitudes in their recruitment decisions, then Patrickson and Ranzijn’s arguments that it was older workers’ human capital deficit that produced unsuccessful job seeking outcomes, appear unfounded.

The other approach that Patrickson and Ranzijn’s (2003) successful older jobseekers employed was targeted, strategic re-skilling. This author argues that Patrickson and Ranzijn’s conclusion that this validates the perception that older workers’ skills are out-dated, is erroneous. A number of studies have produced evidence to show that employers will recruit older workers in the absence of other alternatives, as secondary, less preferred options (Taylor, McLoughlin, Brooke, Di Biase and Steinberg, 2013; Loretto and White, 2006). Older workers who strategically re-skilled into occupations and industries that are experiencing skills shortages, may have had successful recruitment outcomes because of a lack of alternatives. This does not, however, prove that their skills were inadequate before their strategic re-skilling.

3.5 Studies of employer attitudes towards older workers

A sub-section of the literature investigating workplace ageism focuses on employer and attitudes. Employer endorsement or rejection of stereotype based attitudes is critical to the success of public policy pushes to extend working lives and increase
the participation of older workers (AHRC, 2010). Eighteen studies have used comparable approaches to investigate these attitudes. Employers have been asked to rate workers in specific age groups on a variety of qualities. Studies undertaken by Rosen and Jerdee, the first of which was published in 1976 and 1977, initiated this stream of research in the United States of America. Around this time, European researchers were also beginning to investigate employer attitudes towards older workers. For example, Slater and Kingsley (1976) investigated individual, organisational and location factors associated with employer attitudes towards older workers. The results of these studies are now described. Rosen and Jerdee’s studies were based on a social equity perspective rather than the combination of economic imperatives and social justice perspectives that drive contemporary research in this area. By contrast, Slater and Kingsley focused on the consequences of wasted potential that results from labour market separation of large numbers of high-skilled older workers.

3.5.1 Framework for comparing studies of attitudes towards older workers

Devising a framework to compare international research measuring employer attitudes towards older workers is a challenge aided little by previous studies. The primary function of comparing international research is to identify theories, methodologies and analytical approaches used. This purpose is problematic in the case of the 18 previous studies of attitudes towards older workers considered in this study. The problematic characteristics are described in detail below (section: 3.5.2), and are noted here in order to justify the focus on the comparison of findings from international research.

International research offers little basis for comparison of theories. Social identity theory has been cited in two previous studies to explain own-age group favouritism by older employers who made more favourable evaluations of older workers. Other studies applied notions of ‘out-group negativity’, a widely criticised erroneous application of social identity theory, to explain attitudes towards older workers. None of the eighteen studies considered a theoretical perspective to explain the range of findings regarding attitudes towards older workers.
Though neither were deployed in studies of employer attitudes towards older workers, two other theories have relevance and are noted: job contingency theory and normative changes with age in the ‘big five’ personality traits. Job contingency theory contends that workplace age discrimination across the lifespan depends on the congruence between the age stereotype of an individual and the age stereotypes of a job. Truxillo, McCune, Bertolino and Fraccaroli (2012) suggested normative life course changes in the ‘big five’ personality traits (Costa and McCrae, 1992), individual differences in proactive personality types and cognitive abilities are responsible for the differing treatment of older and younger workers. The deficiencies of these theoretical perspectives are outlined in section 3.6 below.

Given the general absence in the previous literature of theoretical perspectives that explain and predict employer attitudes towards older workers, this was considered as a potential area for the present study to contribute to knowledge. Seeking to make this contribution to knowledge, section 3.6 outlines the deficiencies of theories deployed in previous studies and sections 3.6.1-2 present arguments for the endorsement of an alternative theoretical perspective. This alternative theoretical perspective, social role theory, has only recently been applied to understanding ageism. In this study, social role theory was used to develop directional hypotheses regarding employer attitudes towards older workers.

The 18 reviewed studies of employer attitudes towards older workers all adopted a self-report survey method of data collection. They analysed data using descriptive statistics, data reduction techniques and univariate analysis of variance or regression models. Despite the similarity in data collection approaches, the studies surveyed samples with different levels of representativeness and generalisability to employers in the respective national contexts. Within the largely similar characteristics, methodological diversity was manifested in the definition of an ‘older worker’ used, in the types of respondents, the qualities considered and in the way questions were posed. Each facet of this methodological diversity is described below in terms of the limits this placed on comparisons of the findings of international studies. In the international literature, given the uniformity of data collection methods and analytical approaches, and the absence of theoretical
discourse, circumspect comparison of findings was considered the most beneficial way to engage with previous studies.

**3.5.2 Comparing findings of previous studies**

Diverse national contexts limit the confidence with which the findings of international studies of employer attitudes towards older workers can be compared. These contextual factors remain largely unaccounted for in this field of research; the exception to this is described below. Only one study has attempted to make direct international comparisons, between Hong Kong and the United Kingdom (Chiu, Chan, Snape and Redman, 2001). This study seemed similarly confronted by the absence of theoretical frameworks for comparing attitudes towards older workers from different national contexts. These authors considered broad cultural and regulatory environment observations to underpin an ‘East-West’ comparison. For example, Chiu and colleagues cited the ‘high degree of deference to age’ (p. 635) in Chinese culture as a potential restraint on age discrimination. In terms of regulatory factors, neither location in the study had anti-age discrimination legislation in place at the time of the study and so other regulatory factors were considered. The indirect costs of employment such as higher health insurance premiums, sometimes associated with ageist stereotypes, were considered a less important factor in Hong Kong in context of its ‘laissez-faire approach to the economy’ (p. 631). This lack of ‘economically based [sources of] age stereotypes’ (p. 635) was argued to be an additional restraint on workplace age discrimination in Hong Kong. A further example of social factors potentially influencing the endorsement of age stereotypes offered by Chiu and colleagues were the realities of a collectivist society possibly placing less importance on individuals’ rights.

Ultimately, Chiu, Chan, Snape and Redman (2001) concluded that there was insufficient existing evidence to formulate a priori hypotheses regarding the role of national context on attitudes towards older workers. Results suggested national context was more important than respondent or organisational characteristics. However, these results offered little ground for firm conclusions about which national context factors were influencing attitudes towards older workers. Given
the high contextual contrasts, Chiu and colleagues’ significant study had the opportunity for perhaps the sharpest of comparisons. Clear examples include Chinese cultural deference for age compared to Western obsession with youth; Hong Kong’s relaxed economic regulations compared to the ‘more extensive social security and pension provisions’ (p. 652) in the United Kingdom; and comparison between the collectivist and individualist societies. Even so, their results were unclear on the role that such extremely different national contexts played when using identical measures of attitudes towards older workers.

The author of this thesis tends to agree with Chiu and colleagues (2001) that so little is known about the role factors originating in the national context that to construct a framework to compare international research would be speculative at best. Even with such a framework, a barrier to its application is presented by the nature of previous research on attitudes towards older workers. Arguably, systematic comparison employing a framework is currently of limited applicability because of methodological diversity. Such a framework would need to include careful consideration of social and cultural factors enabling or discouraging of ageist stereotypes, along with regulatory frameworks proscribing workplace age discrimination. This is not to question the value, or indeed necessity, of the development of a framework for drawing international comparisons of studies of employer attitudes towards older workers, but rather to suggest that, given the current state of the field, no comprehensive framework is available. The diversity of methods used in the 18 studies is manifested in a number of critical characteristics: the definition of an ‘older worker’, the types of respondents and the qualities considered, and in the way questions were posed.

3.5.3 Methodological diversity in studies of employer attitudes towards older workers

The previous studies in question have defined the concept of an ‘older worker’ in different ways. The most common approach was to simply ask respondents to make judgements about ‘older workers’; this was used by 11 of the previous studies. Other studies have used specific age ranges, similar to that used in the present study, yet even in this approach variation occurred. For example, three
studies asked respondents to make evaluations of workers over the age of 50 years (Van Dalen, Henkens and Schippers, 2010; Hassell and Perrewe, 1995; and Henkens, 2005). Warr and Pennington (1993) and Lyon and Pollard (1997) used even wider age groups designating older workers as those over the age of 40. Gringart, Helmes & Speelman (2005) used the narrowest of the specifically defined age ranges of older workers, 55 to 70 years of age. Yet another approach was used in one of the earliest studies of this kind, Rosen and Jerdee (1976a) asked respondents to make evaluations of ‘the average 60 year old male worker’.

Distinguishing the role of various national contexts when such varied definitions of ‘older worker’ are being applied, is problematic. Different results may be explained by respondents being asked to evaluate even marginally different age groups of workers, or in the case of the ‘older worker’ label, this potentially means different things to different respondents. This methodological diversity makes comparison, at best, an exercise fraught with uncertainty.

Previous studies have sought to examine employer attitudes towards older workers but have sampled different populations of respondents. Various studies evidenced associations between respondent age, gender and occupation with attitudes towards older workers for example. One may wonder how much variation in attitudes was introduced through the use of even slightly different sample populations. Perhaps the most concerning manifestation of this type of methodological diversity has been in the use of student samples. Sampling responses from undergraduate students was evident among the earliest studies of attitudes towards older workers (Rosen and Jerdee, 1976a and b) and even in a more recent study (Loretto, Duncan and White, 2000). Rosen and Jerdee (1976a) tested for differences between students and employers, and demonstrated that students held significantly more negative attitudes towards older workers. Lyon and Pollard (1997) and Chiu, Chan, Snape and Redman (2001) sampled arguably more representative student samples, graduate business students including MBA students. Although the managerial experience of respondents in these studies was more easily demonstrated, attitudes were found to be systematically more negative towards older workers than those of in-situ employers (Lyon and Pollard, 1997).
Beyond the issue of student samples, unpicking the role of variations in respondent and organisational characteristics from that of national context factors in studies sampling actual employers, presents great uncertainty. It seems unlikely, for example, that the role of national context may be reasonably accounted for when comparing a study of employers in settings of even slightly different organisational situations or sample characteristics, be it industry, organisation size or demographic characteristics of respondent.

The different ways studies have measured attitudes towards older workers also makes the prospect of untangling the role of national context factors difficult. Studies have varied in their approach to how they ask respondents to evaluate older workers; they have used different sets of qualities and item response options. The use of different sets of qualities to evaluate older workers reduced the overall picture of attitudes that may be compared across different studies. Additionally, the way these items are worded introduced variation that could potentially confound analysis of national context differences. For example, Henkens (2005) asked respondents to rate agreement with the statement 'Older workers are less interested in participating in training programs than younger workers' and in the present study respondents were asked about older workers' 'willingness to learn'. While there are similarities in the attitudes measured by these items, it seems reasonable to assert that the differences in 'interest in participating in training' and 'willingness to learn' could confound attempts to compare and assess the role of national context factors in these two studies.

The use of different response options for attitude items also introduced potential confounding variation for assessments of the role of national context factors. Continuing with the example of Henkens' (2005) study, a standard Likert-type response scale was used whereas in the present study a four-point response scale asked respondents to indicate the extent to which older workers demonstrated the quality in question. Comparing the evaluations in these studies is possible in terms of a general favourable, ambivalent or unfavourable categorisation but determining an extent of favourability or otherwise would be problematic because of the different scales of measurement. In the case of attempting to estimate the
role of national context factors, the various response options used in the studies of attitudes towards older workers introduced a further confounding factor.

For the reasons enumerated above, constructing a framework for comparing the 18 existing studies of employer attitudes towards older workers is suggested to be of little value for developing understanding of the knowledge created by these studies and the new knowledge offered by the present study. The reasons for this assertion relate to the current lack of knowledge regarding the role of national context factors in influencing attitudes towards older workers. Also, the methodological diversity among existing studies precludes any attempt to accurately audit studies in order to assess the role of national context factors. These barriers could be overcome with a relatively small number of international comparison studies with equivalent methodologies. Such studies would need to be implemented in strategically selected national contexts that enabled the assessment of the salient social, cultural and regulatory factors expected to be associated with attitudes towards older workers. If such a series of studies could be complemented with longitudinal studies assessing attitude change over time, variations in step with economic conditions and with regulatory environment changes, considerable advancement of knowledge could be achieved. Without the benefit of studies of this kind however, some general principles may be advanced to consider how the findings of previous research from distinct national contexts may facilitate understanding of the results reported in this study. The approach used in this study is described below.

The present study seeks to contribute to and build upon the knowledge and findings of previous studies. However without the benefit of a comparative framework to structure the description and analysis of the previous studies, an alternative approach has been taken. First, a tabulated index of the findings of each study presents the most commonly reported aspects of these studies. This tabulation facilitates a relatively easy understanding of the facets of attitudes towards older workers that were frequently assessed, which studies reported counter-current findings and any novel findings reported by specific studies. For example, the tables present those qualities of older workers that were evaluated favourably or unfavourably, results of the exploration of the latent structure
underpinning attitude items, associations between individual and organisational characteristics and attitudes towards older workers, and any recommendations for remedial actions offered in light of the results of a given study. These are presented in Table 1, Table 2 and Table 3.

Presented in Table 1 are the definitions of older workers presented to respondents, content of favourable and unfavourable evaluations, and latent factors underpinning attitude items identified. Presented in Table 2 are the most frequently assessed comparisons of associations between respondent characteristics and attitudes towards older workers, being respondent age, occupation and gender. Presented in Table 3 are the types of comparisons of multiple worker age groups made in different studies, associations between attitudes towards older workers and organisational behaviour, other notable findings and recommendations for challenging the consequences of attitudes towards older workers. The notable ‘other findings’ of each study, listed in Table 3, highlights a range of specific topics of interest to researchers in this area.

To compliment the ‘at a glance’ comparisons enabled by the tabulation of findings, a brief description of each study is offered. These descriptions cover the practical aspects of these studies, including sample characteristics and makes special note of those studies that clearly describe their development from preceding studies. For example, special attention is payed to the study reported by Lyon and Pollard (1997) who attempted a direct replication of an earlier study (Warr and Pennington, 1993). The descriptions maps the increasing complexity of methods and analytical procedures evident as the studies progress from the earliest work by Rosen and Jerdee (1976a) to the most recent study by Van Dalen, Henkens & Schippers (2010). Following this description of the 18 existing studies, comments on the limitations on this body of research are offered. This commentary is subsequently connected to the recommendations for future research that could potentially address some of the limitations of the existing body of literature and the limitations of the present study.

In positioning the present study’s findings among the existing literature, and in the context of the specific limitations of comparisons with international research as
described above, a cautious approach has been used. This cautious approach followed three general principles in order to minimise any extraneous factors that may have been introduced by considering, in equivalent ways, research from varying national contexts. The first principle was to prioritise findings that had been replicated by a number of studies, preferably a majority of previous studies. For example, when positioning a favourable evaluation of older workers on a specific quality, it was considered incongruous to previous literature if a greater number of studies found unfavourable or ambivalent evaluations. This was the case even if there were some studies reporting a favourable evaluation on the quality; preference was given to the majority. Concurrent to the preference for the more frequently replicated findings, more recent studies were considered to be more relevant to interpreting the findings of the present study.

The preference for more recent studies is based on an observation and an assumption regarding previous studies of attitudes towards older workers. The observation that encourages the preference for more recent research is that the more recent studies have tended to be more sophisticated in their methodologies and analytical procedures. The assumption that encourages the preference for more recent research is that even if attitudes towards older workers have remained constant over the almost four decades since the pioneering work by Rosen and Jerdee (1976a) the nature of the workplace has certainly changed. This assumption cannot be tested using the findings of previous research, for the same methodological diversity reasons that developing a framework for structuring international comparisons was problematic. As such, this study places additional weight on more recent studies, based on this assumption.

The final general guiding principle used in considering the present study's findings among the existing literature was to prioritise further the findings from those studies judged to be the most methodologically robust. For example, those studies using student samples, whether undergraduate or graduate, were considered to provide less valid reflections of employer attitudes towards older workers. Despite the fact that those studies using samples of graduate students with greater claim to demonstrable managerial experience were arguably more representative of an employer population, empirical evidence suggests they were systematically more
negative towards older workers than in-situ employers (Lyon and Pollard, 1997). Other study characteristics that were important for considering methodological strength were sample size and representativeness. For example, a random sample of respondents such as that used in Henkens’ (2005) study was preferred over a convenience sample of members of a professional association such as that used in Schmidt (2000). With the general guiding principles of most frequently replicated findings, preference for more recent studies and a preference for findings from more methodologically robust studies, positioning the findings of the present study among the previous literature proceeded despite the absence of a structured framework comparing literature from various national contexts.
### 3.5.4 Tabulated Summary of Findings

**Table 1: First Summary Table of Findings of 18 Studies of Employer Attitudes Towards Older Workers**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Latent Factors</th>
<th>Workers Qualities</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosen &amp; Jerdee (1976)</td>
<td>-</td>
<td>Resistance to change</td>
<td>Older worker</td>
</tr>
<tr>
<td>Slater &amp; Kingsley (1976)</td>
<td>-</td>
<td>Resistance to change</td>
<td>Older worker</td>
</tr>
<tr>
<td>Rhine (1984)</td>
<td>-</td>
<td>Resistance to change</td>
<td>Older worker</td>
</tr>
</tbody>
</table>

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<tr>
<th>Authors</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Rosen &amp; Jerdee (1976)</td>
<td>-</td>
<td>Resistance to change</td>
<td>Older worker</td>
</tr>
<tr>
<td>Rhine (1984)</td>
<td>-</td>
<td>Resistance to change</td>
<td>Older worker</td>
</tr>
</tbody>
</table>

#### Notes:
- Presence: Better informed, and do not have more absenteeism, consistent effort and showing less laziness and high involvement of older men. More late or early arrivals, late or early departures, and less participation in management. The primary factor in PCA was labelled 'dependability' and included items indicating older men were more conscientious, cooperative, gave more effort, and were more punctual. This factor was not described.
- Resistance to change: Items not stated but factors listed: Stability, Performance capacity, Potential for development, and Interpersonal skills. Resistance to change (lack of creativity) was labelled 'dependability' and included items indicating older men were more conscientious, cooperative, gave more effort, and were more punctual. This factor was not described.

### 3.5.5 Second Summary Table of Findings of 18 Studies of Employer Attitudes Towards Older Workers

<table>
<thead>
<tr>
<th>Authors</th>
<th>Latent Factors</th>
<th>Workers Qualities</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosen &amp; Jerdee (1976)</td>
<td>-</td>
<td>Resistance to change</td>
<td>Older worker</td>
</tr>
<tr>
<td>Rhine (1984)</td>
<td>-</td>
<td>Resistance to change</td>
<td>Older worker</td>
</tr>
</tbody>
</table>

#### Notes:
- Presence: Better informed, and do not have more absenteeism, consistent effort and showing less laziness and high involvement of older men. More late or early arrivals, late or early departures, and less participation in management. The primary factor in PCA was labelled 'dependability' and included items indicating older men were more conscientious, cooperative, gave more effort, and were more punctual. This factor was not described.
- Resistance to change: Items not stated but factors listed: Stability, Performance capacity, Potential for development, and Interpersonal skills. Resistance to change (lack of creativity) was labelled 'dependability' and included items indicating older men were more conscientious, cooperative, gave more effort, and were more punctual. This factor was not described.
Chapter Three: Review of previous literature

Warr & Pennington (1993) [Workers over the age of 40] Have useful experience, Are loyal, Think before they act, Are reliable, Have interpersonal skills, Accept new technology, Adapt to change, Learn quickly.

Taylor & Walker (1994) ['Older worker' label] Productivity, Reliability, Are not marking time to retirement, Desire training, Have a lot of mileage left in them, Creativity, Flexibility, Have fewer accidents.

Hassell & Perrewe (1995) [Workers over the age of 50] Harder to train, Absent more often, Fewer serious accidents, Choose to work with OW, Occupational disease less likely, More dependable, Can’t keep pace with technology, Most loyal, Do not want responsibility, Not interested in learning new skills, Should step aside for younger workers, Would quit if could afford, Outgoing and friendly, Prefer less challenging jobs than when younger, Work as hard as younger workers, Would choose to work with older workers, Performance declines significantly with age.

Marshall (1996) ['Older worker' label] Productivity, Can do heavy physical work if given, Serve as mentors, Want to receive training, Can adapt to new technology and are not harder to train, Have more accidents, Can adapt to organisational change.

Stienberg et al. (1996) ['Older worker' label] Make better decisions, Reliable in a crisis, Dependable, Creativity, Less cooperative, Quality of work and Adaptability to new technologies.

Loretto, Duncan & White (2000) ['Older worker' label] Less absenteeism, Productive, Do not have low expectations, are mature, Less cooperative, Learn as easily as younger workers, Poor investment for training.

Note: The table above summarizes the findings of various studies on the attributes and characteristics of older workers. The studies suggest that older workers have valuable experience and are loyal, but may also be less cooperative and resistant to change. However, they are often more reliable, adaptable, and capable of making better decisions.
Chapter Three: Review of previous literature

Lyon & Pollard (1997)

Workers over the age of 40

- Have useful experience
- Are loyal
- Think before they act
- Have interpersonal skills
- Are confident
- Accept new technology
- Adapt to change
- Learn quickly
- Grasp new ideas
- Want to be trained

Schmidt (2000)

'Older worker' label

- Enjoy learning new skills
- Learn new skills easily
- Training is cost effective
- Important to train older workers
- Interested in learning new skills
- More often absent due to ill health
- Absenteeism not linked to age
- More often absent
- Take more time off
- Younger worker less likely to get sick
- Age not a consideration in recruitment decisions
- Prefer not to work with older workers
- Younger employees make better decisions
- Prefer not to work with older workers
- Younger employees make better recommendations, prefer younger older colleagues
- Younger employees, more likely to get sick
- More often absent
- More likely to be injured
- Injuries unrelated to age
- Cannot keep up with modern industry
- Handle the pace of work
- Older workers cannot handle work pace
- Younger workers should not be given increased responsibilities


'Older worker' label

- Reliable
- Loyal
- Committed
- Willing to stay longer in a job
- Good examples
- Productive
- Flexible
- Less willing to work long hours
- Less willing to learn less promotable, have less responsibility
- Fit with organisation, people skills, team work
- Better performers, better people skills, better performance, other roles better
- Less willing to learn less promotable, have less responsibility
- Fit with organisation, people skills, team work

Lyon & Pollard (1997)

- Accept new knowledge, adapt to change
- Have useful experience, are local think

Workers over the age of 40

- Learn quickly, grasp new ideas and want to be trained
- Have useful experience, are local think
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Age Group</th>
<th>Positive Attributes</th>
<th>Negative Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiu, Chan, Snape &amp; Redman</td>
<td>50+</td>
<td>Hard working (UK), Loyalty (HK)</td>
<td>Work effectiveness, adaptability (Difficulty factors)</td>
</tr>
<tr>
<td>Henkens (2005)</td>
<td>50+</td>
<td>Enterprises, creativity, Productivity, Mental capacity</td>
<td>Less capable of doing physically taxing work on the age of 70</td>
</tr>
<tr>
<td>Berger, Marshall and Ashbury</td>
<td>50+</td>
<td>Adaptable, Integrated, Trained, Strong</td>
<td>High absentee, with mental retardation</td>
</tr>
<tr>
<td>Gringart, Helmes &amp; Speelman</td>
<td>55-70</td>
<td>Cost effective, Cooperative, Job quality, Reliable, Productive, Communication skills</td>
<td>Have few accidents, Marking time until retirement, Have difficulty working overtime</td>
</tr>
<tr>
<td>Van Dalen, Henkens &amp; Schippers</td>
<td>70+</td>
<td>Reliability, Commitment to the organisation, customer-oriented skills, Social skills</td>
<td>Have more adaptability to organizational change, Good communicaton skills, Motivation, Expectation, Reliable, Productive</td>
</tr>
</tbody>
</table>

*Favourable and unfavourable evaluations were defined as significantly higher or lower ratings for older workers than younger workers.
Table 2: Second summary table of findings of 18 studies of employer attitudes towards older workers presenting the most frequently comparisons of respondent characteristics of Age and Occupation Groups. The table includes details about the authors, respondents, and comparisons found in each study.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Gender</th>
<th>Occupation Groups</th>
<th>Respondent characteristic comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marshall (1996)</td>
<td>No</td>
<td>No</td>
<td>No significant effect detected.</td>
</tr>
<tr>
<td>Stienberg et al (1996)</td>
<td>No</td>
<td>No</td>
<td>No significant effect detected.</td>
</tr>
<tr>
<td>Loretto, Duncan &amp; White (2000)</td>
<td>No</td>
<td>No</td>
<td>No significant effect detected.</td>
</tr>
<tr>
<td>Hassell &amp; Perrewe (1995)</td>
<td>No</td>
<td>No</td>
<td>No significant effect detected.</td>
</tr>
<tr>
<td>Warr &amp; Pennington (1993)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Rhine (1984)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Slater &amp; Kingsley (1976)</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Rosen &amp; Jerdee (1976)</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Legend: Y - Yes, N - No, A - Age, O - Occupation, E - Employment, L - Leadership, S - Skills, R - Respondent, O - Other, C - Comparisons

Chapter Three: Review of Previous Literature
Chapter Three: Review of previous literature

Five studies were excluded from this table as they did not investigate the association between these respondent characteristics and employer attitudes towards older workers:

<table>
<thead>
<tr>
<th>Study</th>
<th>Factor</th>
<th>Older Respondents More Favourable Towards Older Workers on the Factor</th>
<th>Employers Were Less Favourable Towards Older Workers on the Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiu, Chan, Snape &amp; Redman</td>
<td>Work effectiveness, Adaptability</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Older respondents more favourable attitudes towards older workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female respondents more favourable attitudes towards older workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Henkens (2005)</td>
<td>Reliability and Productivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Older respondents more favourable attitudes towards older workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female respondents less favourable attitudes towards older workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berger, Marshall and Ashbury</td>
<td>Reliability and Productivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Older respondents more favourable attitudes towards older workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gringart, Helmes &amp; Speelman</td>
<td>No significant difference detected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Dalen, Schippers</td>
<td>No significant difference detected</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Five studies were excluded from this table as they did not investigate the association between these respondent characteristics and employer attitudes towards older workers:

Table 3: Third summary table of findings of 18 studies of employer attitudes towards older workers presenting types of multiple worker age groups made, associations between attitudes towards older workers and organisational behaviour, other notable findings and recommendations for challenging the consequences of attitudes towards older workers

<table>
<thead>
<tr>
<th>Authors</th>
<th>Comparison of worker age groups</th>
<th>Other findings</th>
<th>Organisational behaviour</th>
<th>Remedial recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosen &amp; Jerdee (1976)</td>
<td>Average 30 year old and average 60 year old</td>
<td>No significant difference between evaluations of interpersonal skills on the younger and older worker</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Slater &amp; Kingsley (1976)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Chapter Three: Review of Previous Literature

Rhine (1984) - Employer attitudes towards older workers were similar for 3 different worker occupation groups: managers, professionals and technicians; other white collar workers; and blue-collar workers on all qualities except 5. These qualities were: resistant to change, less productive, less creative, less up to date with developments in the field and take longer to train. Evaluations were more negative towards blue-collar workers on these five qualities.

Warr & Pennington (1993) - Several characteristics were listed as having no difference between younger and older workers: are conscientious, are confident, work hard, take things easy, are effective, want to be trained, and work well in teams. The latent factors identified are potentially 'difficulty factors'. Respondents in large organisations were less favourable towards older workers on 'adaptability' factor. Respondents 'unfavourable attitudes focus on adaptability issues and as such organisations need to facilitate the development of these qualities among older workers. Also the speed with which employers turn to redundancy in response to recession or downturns should be reduced and where possible replaced with flexible working hours, job sharing and other alternatives.

Taylor & Walker (1994) - Recruiting older workers in response to labour shortages was a less preferred strategy despite the prevalence of favourable attitudes. Construction and Production sector organisations were less favourable than service sector employers on older workers' productivity, trainability and creativity. Respondents who recalled an industry body document outlining guidelines on the employment of older workers held more favourable attitudes towards older workers. Respondents disagreed on a range of attitudes towards older workers, particularly on characteristics including: likelihood of promotion, difficulty in training, trainability, and other issues. Respondents' attitudes were believed to influence the speed with which employers turn to redundancy in response to recession or downturns. The favoured educational approach to encouraging employers to give older workers a fair chance will need to penetrate multi-layered organisations to influence personnel decisions. One approach to achieving this is publicising the issue more widely. This should be supported by specialised training and dissemination of best practice guidelines to encourage positive attitudes towards older workers. The issue should be given more prominence in employer and worker training and development of these qualities among older workers. Employers should be encouraged to change their attitudes towards older workers.
Chapter Three: Review of previous literature

Hassell & Perrewe (1995) -
Respondent education level was not associated with attitudes towards older workers. More frequent interaction with older workers was associated with more favourable attitudes for younger respondents. Respondents indicated disagreement on a number of qualities including: accident proneness, quality of work, resistance to change, interest in challenging work and being better workers. If stereotypes are a necessary component of cognition then managers need to refine stereotypes to less diffuse groups in order to maximise their accuracy. By maximising the accuracy of stereotypes held by organisation’s decision-makers reduces inefficiencies introduced by decisions made based on inaccurate information.

Marshall (1996) -
The aggregate effects of individual corporations restructuring appear to have societal wide effects of destabilising the career planning, retirement incomes and identity of workers. This disproportionately affects older workers. Corporations need to balance seeking profitability and their moral obligation to the broader social good. Recognising this obligation will include engaging older workers more objectively.

Stienberg et al. (1996) -
In nominating 9 favourable qualities as characteristic of four age groups of workers respondents more frequently chose workers aged 25-39. Workers aged over 45 years were characterized as more frequently choose workers in nominating 9 favourable qualities as

Hassel & Perrewe (1995) -
Respondent education level was not
Chapter Three: Review of previous literature

Loretto, Duncan & White (2000) - Respondents indicated disagreement on a number of qualities, including: team work, interpersonal skills, patience, conscientiousness, reliability, commitment, and flexibility. Cluster analysis revealed two typologies of respondents; those with strong opinions who tended to evaluate older workers favourably and another group who endorsed the 'not sure' category more frequently but tended to have less sympathetic views towards older workers. Membership of these clusters was not associated with gender, age, work experience, or membership of those clusters was not predictive of whether respondents had completed more or less of their business degree (3rd and 4th year). Those with more business degree completed more of their business degree were more sympathetic to the less sympathetic views towards older workers. Respondents that had completed more of their business degree were more sympathetic to the less sympathetic views towards older workers. Encouraging employers to change their attitudes towards older workers is needed to address the inequality in attitudes towards older workers. An inclusive, inclusive, gender-neutral approach to policy development is needed to address gender-neutral employment policies. These policies should be supported by workplace training and education. A lack of policies to support employees, with strong sympathy towards older workers, who endorse the 'not sure' category, more frequently but tended to have less sympathetic views towards older workers. It is important to address these disparities in attitudes with educational programs that focus on encouraging employers to change their attitudes towards older workers.}

Lyon & Pollard (1997) - The largest proportion of respondents indicated no difference between age groups on a number of qualities, including: are reliable, are conscientious, work hard, take things easy, are effective, and work well in teams. Only legislation prohibiting age discrimination in employment will break the cycle of employers' negative attitudes towards older workers.
Chapter Three: Review of previous literature

Schmidt (2000)

Respondents were asked to rate their agreement with 13 statements about older workers but these were not directly comparable to items about younger workers. For example, 'older workers can learn new skills as easily as other workers' and 'training younger workers is easier than training older workers'.


Respondents expressed ambivalent attitudes on the following characteristics: Harder to train, Better investment to train younger workers, Reliable turn up to work, Easier to train younger workers, Take more sickies, Prefer to employ older workers, Older job applicants have more to offer, Older employees make better employees, Younger recruits are better investments, More interested in challenging jobs, Respond well to increased responsibilities, Have fewer accidents, Occupational diseases more common for younger workers, Younger workers have more serious accidents, Resist change, Reactive to workforce change, Difficulty adapting to new technology, Younger workers not necessarily the first to embrace new technology, HR Professionals need to cease using age as a proxy for the ‘right’ to train, and predict desire to train.
Chiu, Chan, Snape & Redman (2001) - Along with various individual and organisational variables, Respondents' beliefs about older workers' adaptability was associated with more favourable responses about behaviours effecting older workers including training, promotion, retention, co-working and preference over younger workers. Respondents expressed ambivalent attitudes on the following characteristics: interest in learning new skills, do not desire increased responsibility, cannot keep up with modern industry, prefer less challenging work, learn responsibility, cannot keep up with modern industry, perform less challenging work, learn responsibility, cannot keep up with modern industry. 

Formalised equal opportunity policies have a role to play in adjusting employer attitudes, as they were found to be associated with more favourable attitudes towards older workers, reducing endorsement of stereotypes and preventing negative views on the presence of older workers in the workplace. HK respondents held more negative views on modern industry, prefer less challenging work, learn responsibility, cannot keep up with modern industry, perform less challenging work, learn responsibility, cannot keep up with modern industry. UK respondents held more positive views on modern industry, prefer more challenging work, learn responsibility, can keep up with modern industry, perform more challenging work. Country differences more important than individual and organisational factors. Organisation size and industry were not significant. Presence of equal opportunity policies associated with more favourable attitudes towards older workers, reducing endorsement of stereotypes and preventing negative views on the presence of older workers in the workplace. Occasional contact with older workers associated with more positive views on modern industry, preference over younger workers, reducing endorsement of stereotypes and preventing negative views on the presence of older workers in the workplace. Supervisors had weaker association between age and favourable attitudes on modern industry, preference over younger workers, reducing endorsement of stereotypes and preventing negative views on the presence of older workers in the workplace.

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Henkens (2005) - Less favourable attitudes towards older workers were associated with greater support for early retirement. Respondents indicated disagreement on the following qualities: Interest in training, interest in technological change, adaptability to technological change, prefer not to be assigned tasks by younger managers, loyalty, meticulousness, reliability, social skills, carefulness.

More frequent contact with older workers was associated with more favourable attitudes on the Productivity factor. Respondents indicated disagreement on the following qualities: Interest in training, interest in technological change, adaptability to technological change, prefer not to be assigned tasks by younger managers, loyalty, meticulousness, reliability, social skills, carefulness.

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Berger, Marshall, and Ashbury (2005) - Respondents indicated disagreement on the following qualities: Interested in technological change, too cautious, have trouble with shift work, hard to train, dislike taking orders from younger employees, cannot do heavy physical work.

Respondents in smaller organisations held more favourable attitudes towards older workers. No difference across industries, respondent education level, or the proportion of older workers employed in the organisation.

Targeted education programs for those employers who have been identified as having the most negative attitudes towards older workers represents the most practical starting point for programs designed to improve employer attitudes towards older workers.
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Gringart, Helmes & Speelman (2005)
More favourable attitudes towards older workers associated with greater likelihood of recruiting older workers.
Respondents expressed ambivalent attitudes on the following characteristics: Energetic, Healthy, Creative, Functional memory, Mentally alert, Flexible, Fit in, Productive, Motivated, Efficient, and Performance. Respondent education level was not associated with attitudes towards older workers.
No significant difference detected in employer attitudes whether older workers were male or female.

Van Daalen, Henkens & Schippers (2010)
Simultaneous evaluations of workers over the age of 55 years and workers under the age of 35 years.
The association between Respondent's age, gender, and occupation status were fully mediated and partially respectively when their evaluations of hard and soft skills were controlled for. This suggests that attitudes towards older workers are more important in predicting productivity evaluations than the mechanisms described in SIT. Attitudes towards older workers hard skills were more important predictors of productivity evaluations than attitudes about soft skills. Younger workers were evaluated systematically more favourably on hard skills.
Older workers will be more fairly evaluated in a system that considers soft skills.

Citampater, Helmes & Speelman (2005)
Workers' recollection of older workers associated with attitudes towards older workers. Recollection of older workers also influenced older workers' evaluations of their own productivity, efficiency, and performance. The study also showed that older workers' own evaluations of their productivity, efficiency, and performance were associated with attitudes towards older workers. Respondents expressed ambivalent attitudes.
3.5.5 Advancement of studies of employer attitudes towards older workers

In the first of their two studies published in 1976(a), Rosen and Jerdee found that employers and business students held both negative and positive stereotypes about older workers. They asked 50 undergraduate business students and 56 realtors to indicate how accurate, on a ten point scale, 65 statements were about a 60 year old man and a 30 year old man. These 65 statements were arranged into four categories: performance capacity, potential for development, stability and interpersonal skills. Negative employer attitudes towards the older worker included views about performance capacity, potential for development and some facets of social skills; positive stereotypes included views about stability, such as reliability, dependability and trustworthiness. They contended that some negative perceptions, including cognitive ability, emotional stability, sociability and accident proneness, were not supported by empirical evidence.

Rosen and Jerdee concluded that inconsistencies existed between current and future employers’ (student participants) stereotypes and the research evidence on the effects of ageing. They asserted that older workers faced unfounded negative attitudes or prejudice that would have negative effects on their labour market experiences. This study which was the first to use this research approach; asking participants to evaluate younger workers and older workers simultaneously. Such an approach was not revisited until Van Dalen, Henkens and Schippers’ (2010) study, which is discussed below. Rosen and Jerdee’s choices in reporting this research limited the contribution of this innovative study. The field would have potentially benefited from greater detail about their approach than the brief description of their method that was offered. The authors only reported the four categories of items and only analysed aggregated category scores for significant mean differences.

A second study by Rosen and Jerdee in 1976(b) asked 129 American undergraduate business school students about hypothetical employment situations. Participants were asked to consider the appropriate managerial response to six hypothetical situations for either a younger or an older employee. These situations were constructed to assess perceptions of typical older worker
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stereotypes about issues of resistance to change, creativity, cautiousness, physical capacity, technological change and trainability. This study found that participants assumed decline in older workers’ cognitive and physical capacities. This resulted in bias against older workers in personnel decisions. In the hypothetical situations, participants elected to withhold investment in training for older workers. When workers’ skills were identified as out-dated, participants chose termination rather than re-training older workers. Rosen and Jerdee concluded that ageist stereotypes influenced managerial decisions.

Evidence of contradictory behaviour and attitudes towards older workers among employers emerged in one of the earliest studies in this field. Rosen and Jerdee’s (1977) study was among the first to demonstrate that employer attitudes were contradictory. This study was based on a survey of 1570 respondents across North America. These respondents were from a diverse range of industries and occupations and were accessed through their subscription to the Harvard Business Review. On the one hand, a large proportion were concerned about the plight of older workers in the labour market. They indicated policies similar to affirmative action were appropriate to reconcile business practices with behaviours towards older workers. These employers were, on the other hand, influenced by ageist stereotypes about older workers in their managerial decisions, including those relating to the provision of training and approaches to engaging older employees in the case of organisational change. Also, biases against older workers for selection for promotion established a self-fulfilling prophecy regarding motivation. By removing the incentives for continued improvement through a lower likelihood of promotion, employers induced deficits in older workers’ motivation.

Slater and Kingsley (1976) considered the ‘issue of manpower wastage’ (p. 121) that results from ageism in employment. They attempted to uncover whether any of a range of individual and organisational characteristics were associated with employers holding negative attitudes towards older male workers. They advanced a unique approach by specifically focusing on employer attitudes to older workers among professional, technical, managerial and executive employees. In order to achieve this, evaluations of three groups were obtained: older workers in the high-skilled ‘white collar’ occupations, older workers in ‘blue collar’ occupation groups...
and older men in general. Slater and Kingsley obtained survey responses from more than 600 medium and large employers in Wales. They reported that survey participant age was the best predictor of negative attitudes towards older workers, with younger employers holding more negative attitudes. In addition, they found evidence suggesting homogeneity in the evaluations of older workers across higher and lower skilled occupations, and older men in general. Slater and Kingsley interpret this homogeneity as indicative of a common discriminatory basis for employer attitudes towards older workers. Unfortunately, the authors did not report the content of the attitudinal items they presented to employers, nor the latent factors they reported extracting from the 32 attitudinal items. The authors also did not report the average values that were obtained for each of the attitudinal items, making it virtually impossible to compare these findings with those of subsequent studies that used a similar approach.

More than a decade later, the economic imperatives hinted at by Rosen and Jardee became more apparent to policy-makers. Researchers’ assessments of employer attitudes appeared in the literature more frequently and in a more standardised format. A popular approach emerged which asked employers to rate older workers on a range of work-related qualities. Aside from the aforementioned studies that were reported in an incomplete fashion, the first evidence of this approach appeared in a study carried out by Warr and Pennington (1993). Employers were asked to rate older workers on a set of qualities. These included: experience, utility, loyalty, ability to think before acting, interpersonal skills, confidence, hard working, whether they take things easy, effectiveness, team-working abilities, adaptability to change and new technology, speed of learning, ability to grasp new ideas, desire for training and conscientiousness. The authors reported on the relative position of workers over the age of 40 compared to workers under this age on 16 qualities based on evaluations made by almost 1200 employers. Warr and Pennington uncovered a two-factor latent structure among the attitudinal items that they interpreted as work effectiveness and adaptability. This interpretation of the factors appears logical, based on the items that constituted the factors. However, an alternative explanation exists for the configuration of these factors that was not mentioned by the authors.
The two factors consisted of items that were either high scoring or low scoring evaluations of older workers. Such latent factors have been called 'difficulty factors' (Gringart, Helmes and Speelman, 2013, p. 113) because they represent item groups based on either high or low raw scores rather than representing underlying themes uncovered by factor analyses. The fact that Gringart and colleagues’ subsequent study, discussed further below, also uncovered difficulty factors in the latent structure of more than 30 evaluation statements administered to employers, suggests this may be a highly plausible interpretation. Without this insight into the factors extracted from their data reduction analysis, Warr and Pennington reported employer attitudes in terms of the work effectiveness and adaptability factors. They reported that employers perceived older workers to be more effective workers but perceived a deficit in their adaptability. The authors also noted that younger employers held more negative views about older workers and that employers from larger organisations held more negative views about older workers among the items included in the adaptability factor.

An important advancement in the sophistication of studies of employer attitudes towards older workers emerged in the second half of the 1990s. Researchers investigated the potential for systematic changes over time in attitudes towards older workers by replicating an earlier study. Lyon and Pollard (1997) adopted the 16 statements from the work of Warr and Pennington (1993), with the goal of making direct comparisons between the findings of the two studies. A questionnaire containing the attitudinal items reported by Warr and Pennington was administered to 221 Scottish Masters of Business Administrations (MBA) students. Lyon and Pollard were critical of Warr and Pennington’s interpretations, arguing that they ignored those employers who indicated that age made no difference to the work-related qualities on which they were asked to evaluate older workers. More than half the employers indicated this response for nine of the attitudinal statements in Warr and Pennington’s study.

Participants in Lyon and Pollard’s study were more negative about the qualities of older workers. For example, these participants perceived older workers to be less adaptable to change and new technology, to not work well in teams and to be less interested in training than participants in Warr and Pennington’s study.
For the qualities found in Warr and Pennington’s study that favour older workers, participants in Lyon and Pollard’s study indicated no difference between younger and older workers. For example, while participants of Warr and Pennington’s study indicated older workers were more conscientious, respondents in Lyon and Pollard’s study suggested there was no difference in this quality across age groups. Lyon and Pollard concluded that the attitudes reported in their study more closely reflected older workers’ experiences. They argued that the concentration of personnel managers among the participants in Warr and Pennington’s study meant the attitudes expressed may not have reflected those from ‘elsewhere in the organisation’ (p. 253). Despite this plausible assertion, it is suggested that the use of a student sample in Lyon and Pollard’s study was equally flawed. To ask such participants to evaluate hypothetical employees may have elicited highly stereotypical responses because of their lack of ‘real world’ experience with older workers. Confounding this concern is the concentration of younger employers among the sample of MBA students in Lyon and Pollard’s study. Younger evaluators have been shown to hold more negative views of older workers.

In a further study, Loretto, Duncan and White (2000) employed the same methodology used by Lyon and Pollard. These researchers surveyed 460 Scottish undergraduate business students. They investigated the relationship between attitudes towards older workers and age, gender, level of study and job experience. It was found that participants believed older workers were prone to declines in job performance. The age at which this decline began depended on older workers’ involvement in manual labour. Respondent age, gender and beliefs about the utility of age-discrimination legislation in employment influenced judgments concerning older workers. As with Lyon and Pollard (1997), Loretto and colleagues found positive, negative and neutral attitudes towards older workers. For example, less than one in ten participants considered older workers to be less productive. Almost three quarters believed older workers were resistant to change. On average across the 13 qualities, one quarter of respondents were unsure if these had any associations with age.

Loretto, Duncan and White (2000) proposed a dual-modal typology of respondents: one group that held more negative views of older workers and
indicated greater uncertainty in judging the effect of age on the qualities; and another holding more sympathetic views about older workers but holding stronger opinions, indicated by a tendency not to endorse neutral response options. Although the student sample limits the confidence that can be placed in the findings this was the first study to classify respondents in this fashion.

Loretto and colleagues suggested that similarities existed between the opinions of their participants and managers by comparing their results to the MBA students surveyed in Lyon and Pollard’s study. Also, older students were less pessimistic about older workers, which is argued to be similar to Warr and Pennington’s (1993) age-related finding. However, their findings appear incongruent to the responses of actual employers surveyed in the earlier studies by Warr and Pennington, and Taylor and Walker (1994), which is described below. For example, compared to studies with student samples, studies using employers observed different views about older workers’ flexibility and trainability. In addition, employers from these earlier studies tended to hold more neutral or moderate views.

A meaningful advancement in the rigour of studies of employer attitudes towards older workers was made with the first administration of a survey to a representative sample. Taylor and Walker (1994) asked 304 employers from organisations with more than 500 employees to indicate their agreement with 15 statements about older workers. These employers were sampled from a nationally representative list of British organisations of this size. The statements are given in full below:

1. Are hard to train
2. Do not want to train
3. Have a lot of mileage in them
4. Lack creativity
5. Are too cautious
6. Are employees marking time until retirement
7. Are very productive employees
8. Cannot adapt to new technology
9. Are more reliable than younger employees
10. Cannot do heavy physical work
11. Are interested in technological change
12. Are inflexible
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13. Dislike taking orders from younger workers
14. Have fewer accidents
15. Are less likely to be promoted in this company

Taylor and Walker (1994) suggested employer beliefs about older workers’ suitability for low-skill jobs, based on a perception of a lack of relevant skills, combined with employers’ tendency to not make training available to workers over the age of 50, created a ‘self-fulfilling prophecy’ (p. 588). The authors argued that ageist attitudes held by employers play a role in the deteriorating labour market position of marginalised older workers. Favourable and unfavourable attitudes towards older workers were reported. Favourable attitudes on qualities such as loyalty, reliability and productivity were endorsed by larger proportions of respondents than unfavourable attitudes on qualities such as new technology skills, cautiousness and flexibility.

Taylor and Walker (1994) contended that, in practice, however, it was the unfavourable that outweighed the favourable, particularly as they were confounded by extraneous factors. For instance, an employer’s shedding of older workers may be driven by incentives to target these workers in redundancy programs in spite of favourable attitudes towards these valued older workers. The apparent gap between employer attitudes and behaviour was also partially attributed to the decentralisation of personnel decision-making, so that the attitudes of senior managers reported in Taylor and Walker’s study may not have reflected the attitudes of relevant decision-makers. A small proportion of responses to the attitudinal items were found to vary across employers from different industry sectors. Service sector employers were more favourable towards older workers’ productivity, trainability and creativity. Taylor and Walker concluded pessimistically about the fortunes of groups of older workers despite some employers reporting favourable attitudes. They suggested that unfavourable attitudes were clustered on qualities that were more likely to hinder older workers’ opportunities in higher skill occupations where the prospects for development and advancement are greater. Subsequent studies adopted Taylor and Walkers’ (1994) approach, or a version of their approach.
A further advancement in the sophistication of research questions connected to the study of employer attitudes towards older workers was made when these attitudes were tested for associations with enacted organisational behaviour. Taylor and Walker (1998b) extended their earlier analysis by evaluating the relationship between employer attitudes and employment practices. This was the first study to demonstrate a direct association. The analysis revealed that it was predominantly unfavourable evaluations of older workers that were associated with employer decisions about recruitment, promotion and the provision of training. This extended the findings of their earlier study that argued other factors outweighed employers’ positive attitudes towards older workers.

Employers who stated age was an important consideration in recruitment decisions were more likely to report that older workers were hard to train and could not do heavy physical work. Employers seeking to recruit older workers stated that they had a lot of mileage left in them and desired training. Employers who did not provide training to managers aged over 50 were more likely to report that older workers did not want to train, did not like taking orders from younger workers and were less likely to report older workers as having fewer accidents. Employers who did not provide training to staff aged over 50 were more likely to report that older workers did not want to train and were marking time until retirement. Employers who stated age was related to promotion opportunities were more likely to report older workers did not have a lot of mileage left in them, lacked creativity, were too cautious and were marking time until retirement. Taylor and Walker (1998b) noted the complexity of the construction of age in the workplace. For example, employers hold different attitudes towards older workers in different occupations. This study was one of the first studies to call for a nuanced view of groups of older workers who had hitherto been discussed as a homogenous group.

Research interest in employer attitudes towards older workers also gained momentum in North America during the mid 1990s. Only one study was published in the two decades between Rosen and Jerdee’s (1976) study and the swell of studies that emerged in the mid 1990s. Rhine (1984) explored the policies, practices and attitudes present in organisations in manufacturing, utilities,
insurance, banking and retail industries that encouraged or discouraged the trend towards early retirement evident at that time. A survey of 363 senior human resource executives considered attitudes towards older workers on thirteen qualities across four broad occupation categories: managers, professionals and technicians, other white-collar workers and blue-collar workers. Rhine used interpretations of descriptive statistics to argue that attitudes towards older blue-collar workers were less favourable, specifically on issues of resistance to change, productivity, creativity, ability to stay up to date with advancements in their field and time taken to complete training. Respondents under the age of 45 made even more negative evaluations of older blue-collar workers. This was the first study to consider multilevel occupation classifications of older workers in the measurement of attitudes.

Three studies were completed during the mid to late 1990’s in North America, though in one case, systematic analysis of employer attitudes towards older workers was not reported until 2005. Each of these studies is described briefly below.

Hassell and Perrewe (1995) surveyed 179 employees in three organisations – a medium-sized newspaper company, an electricity cooperative and a governmental state agency in the United States of America – and proposed a 27 item ‘beliefs about older workers’ scale. Eighty-five participants held managerial positions, ranging from first-line supervisors to top management. Older employers held more negative views about older workers than younger employers. Older workers held more favourable views towards other older workers. These findings were explained in terms of an in-group bias, that is, employers viewed themselves as a group distinct from the older workers in their organisations. Responses were more favourable towards older workers on a range of qualities compared with employer only based studies. Qualities such as adaptation to new technology, interest and ability to be trained, and resistance to change were evaluated more favourably than in the majority of other studies using only employers as participants. This suggests employers may be more likely to hold less favourable attitudes towards older workers than the general population.
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The second of the studies was undertaken in Canada and the United States of America. Marshall (1996) considered employer attitudes towards older workers as part of in-depth case studies of five Canadian organisations and two American organisations. These organisations included telecommunication firms, small manufacturing companies and life and health insurance companies. A survey, completed by 462 managers, was one facet of the case studies. Participants reported favourable and unfavourable attitudes towards older workers. These workers were perceived as highly productive and as mentors to younger workers. They were concurrently perceived as difficult to train, not wanting training, unable to adapt to new technology and unable to keep up with the pace of work. Contrary to Warr and Pennington’s (1993) and Lyon and Pollard’s (1997) studies, employers made favourable evaluations of older workers’ ability to adapt to organisational change. Contrary to Taylor and Walker’s (1994) study, employers perceived older workers to be more accident-prone. Employers reported that the main barrier to the recruitment of older workers was a lack of skills and qualifications, and shortfalls in returns on training investment. Marshall concluded that optimal solutions to employers’ ageist attitudes would entail collaborative revision of public sector and organisational policies.

Extending findings regarding attitudes towards older workers held by Canadian employers, Berger, Marshall and Ashbury (2005) undertook detailed analysis of attitudinal data originally obtained in a survey of 500 employers conducted by Underhill, Marshall and Deliencourt (1997). Employer evaluations were largely favourable towards older workers, except in terms of interest in new technology and ability to complete physically demanding work.

Berger, Marshall and Ashbury (2005) uncovered a three-factor latent structure among the attitudinal items: (1) ‘age related decline’ (difficulty working overtime, hard to train, cannot do heavy physical work and have trouble with shift work), (2) ‘positive experiential attributes’ (good mentors, strong communication skills, can adapt to organisational change, highly respected) and (3) ‘reliable and productive’ (reliable employees, productive employees).

This latent structure was similar in some respects to that reported by Warr and Pennington (1993). Two of Berger and colleagues’ (2005) factors, age related
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decline and positive experiential attributes, included qualities of older workers
evaluated either favourably or unfavourably by employers. These two factors
could reasonably be argued to align with the ‘difficulty factors’ interpretation of
the adaptability and work effectiveness factors identified by Warr and Pennington.

The third factor identified by Berger and colleagues (2005), ‘reliable and
productive’, consisted of two items that favoured older workers and was not
identified in the earlier Warr and Pennington study. This third factor is
questionable as it based on few items and the author of this thesis does not see a
common underlying theme explaining the association of these two items.

Berger and colleagues (2005) also found that employers in small organisations
were more favourable towards older workers on the ‘positive experiential’
dimension. Older employers were more likely to favour older workers on the
’reliable and productive’ dimension, while female employers were more likely to
favour older workers on all three dimensions.

Gray and McGregor (2003) investigated the correspondence between employers’
and older workers’ attitudes in New Zealand. The authors surveyed 1012
employers; 30 per cent of these were from organisations with four to 49
employees and 60 per cent were from organisations with 50 to 499 employees.
These employers were accessed via membership to the Engineering, Printing and
Manufacturing Union, the largest union in New Zealand. Employer attitudes were
consistently less favourable than those held by older workers. Attitudes were
consistent with much of the preceding work in this area. Older workers were
perceived as stable, reliable and productive but also as resistant to change and as
having difficulties with new technology. Employers almost unanimously asserted
that training should be available to workers irrespective of age, however, they
demonstrated a clear tendency for age bias in selecting workers for training. Gray
and McGregor concluded, similarly to Taylor and Walker (1994), that vulnerable
low-skilled workers can expect little improvement in their employment prospects
and skilled older workers face barriers arising from employer attitudes.

Chiu, Chan, Snape and Redman (2001) used the statements developed by Hassell
and Perrewe (1995) and applied the ‘adaptability’ and ‘work effectiveness’ latent
structure proposed by Warr and Pennington (1993) in an international comparison of graduate business students’ attitudes in Hong Kong and the United Kingdom. The 302 participants in the Hong Kong sample were all employed in organisations with more than 500 employees and were more than two thirds female. Two thirds of the 256 participants in the United Kingdom sample were employed in organisations with more than 500 employees and approximately half were female. Chiu and colleagues assessed the association between a range of demographic and organisational characteristics and attitudes about older workers.

In this study, national context was found to be an important predictor of attitudes towards older workers. In comparison to the Hong Kong participants, participants in the United Kingdom reported less favourable evaluations on the adaptability factor but more favourable on work effectiveness. This effect remained when other independent variables were introduced to regression modelling. Organisation size and industry had no association with respondents’ attitudes but the presence of an organisational level age-discrimination policy was associated with more favourable evaluations of adaptability. Older respondents had more favourable views of older workers across both typologies of qualities. Female participants evaluated older workers’ adaptability more favourably, and greater contact with older workers was associated with slightly more favourable evaluations of work effectiveness. The positive association between age and evaluations was smaller for participants who held supervisory roles, replicating the findings of Hassell and Perrewé (1995). Participants’ attitudes towards older workers’ adaptability was positively associated with beliefs about older workers in relation to training, promotion, retention, workforce fit and co-working preferences.

Chiu and colleagues (2001) concluded that the cross-national differences are likely to have roots in the different social welfare structures, but some cultural factors may encourage employers in Hong Kong to engage in age discrimination. Differences based in national contexts were found to be more important than individual and organisational factors. One aspect that remains unclear from the study is why the authors chose to administer the 27 statements developed by Hassell and Perrewé but only report on the ten that conformed to the dichotomy proposed by Warr and Pennington.
Two studies exemplifying the advancements in sophistication of research questions and analytical approaches in this research area were completed in the Netherlands in the last decade. Henkens (2005) surveyed 796 Dutch employers across public and private sector organisations with at least ten employees. One third of these respondents were over the age of 50. These respondents were board members, managing directors, owners, plant managers and human resource managers and were employed in several different industry sectors. Henkens' survey asked about employer attitudes and organisation practices towards older workers. He uncovered a robust three-factor latent structure underlying 15 attitudinal statements. The first dimension related to issues of productivity. The second related to issues of reliability. The third was concerned with issues of older worker adaptability. These factors had clear underlying themes. A range of high and low raw scores within factors were also present, eliminating the possibility that they were based on difficulty factors, as had been the case with other studies, for example Warr and Pennington (1993) and Berger, Marshall and Ashbury (2005). Henkens' factors did not align with those obtained in earlier studies.

Consistent with other research, respondents evaluated older workers' reliability and productivity favourably and were less favourable in their assessments of adaptability. More frequent contact with older workers was associated with more favourable evaluations of their productivity. Older employers reported more favourable attitudes concerning older workers' productivity and reliability, and female respondents reported less favourable views of older workers.

The type of industry sector was variously associated with attitudes. Government employers evaluated productivity more favourably than health sector employers. Health, service and construction/production sector employers evaluated reliability more favourably than government employers. Health and service sector employers evaluated adaptability more favourably than government employers.

Henkens (2005) also found that training provisions, education level of the workforce and the extent of manual work all had no or marginal associations with attitudes. Attitudes about productivity and reliability were associated with employer beliefs about retaining older workers.
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The second and most recent of the Dutch studies reported employer attitudes towards younger and older workers. Van Dalen, Henkens and Schippers (2010) studied the qualities that employers perceived to underpin productivity. A disproportionate, stratified random sample of 443 Dutch employers responded to a postal survey covering topics of age management and retirement transitions. These respondents were board members, managing directors, owners, plant managers and human resource managers, and were employed in several different industry sectors. Almost two thirds of respondents were male and approximately 30 per cent were aged over 50.

This was the first study to ask employers to rate older workers and another age group simultaneously. Participants evaluated older and younger workers on 11 qualities and the evaluations of the two age groups were found to be diametrically opposed. The qualities on which older workers were evaluated favourably were those on which younger workers were evaluated unfavourably (social skills, customer orientation, commitment, accuracy and reliability). The qualities on which younger workers were evaluated favourably were qualities on which older workers were evaluated unfavourably (mental and physical capacity, willingness to learn new skills, adaptability to new technology and flexibility). Younger workers were also perceived to be more productive than older workers. Van Dalen and colleagues (2010) interpreted the evaluations as identifying two factors, representing hard and soft qualities, as described above. However, the latent structure that was uncovered based on these items arguably reflected difficulty factors. For both age groups, the items were extracted in groups that had high or low raw scores respectively.

Employer evaluations of both hard and soft qualities were positively associated with perceptions of older workers’ productivity. This association was stronger for hard qualities. Van Dalen and colleagues (2010) concluded that hard qualities were given greater weight in the perception of productivity and this led to employer perceptions of younger workers as more productive. Older workers would therefore benefit from performance appraisals that consider soft qualities, the qualities on which they are rated more favourably. It remains to be seen whether
the perception of productivity will change as increasingly healthy and educated groups of older workers move through the workforce.

Three Australian studies have assessed employer attitudes in this way. The first was a comparison of employer and employee attitudes towards older workers carried out by Steinberg, Donald, Najman and Skerman (1996). These authors concluded that employers and employees held similar ageist attitudes towards older workers. Employers held positive attitudes towards older workers’ ability to perform in crises and to make good decisions. On the other hand, older workers were also perceived to be less creative, less adaptive to new technologies and harder to train.

The authors used a unique approach, asking employers which age group of workers was optimal on a range of qualities. Employers selected prime-age workers, those aged between 25 and 55, almost invariably as the optimal age group. This favourability was confirmed by employers’ indication of recruitment preferences for younger age groups. Across a range of occupations, employers indicated that workers over the age of 45 were never the preferred recruitment targets.

Steinberg and colleagues’ (1996) study provided useful insights about employer perceptions and preferences. However, the choice of approach, asking employers to indicate the optimum age group of workers for a range of qualities, provides little comparative insight. This approach yields little information about the relative difference between age groups beyond which is the best. There is no way to compare these responses with employer perceptions from other studies using the approach initiated by Warr and Pennington (1993).

The second Australian study was a narrowly disseminated research report (Schmidt, 2000). Some 250 human resource professionals from Western Australia were surveyed on a range of attitudes towards older workers. This study did not adopt the statements used in any of the earlier studies. Participants reported comparatively favourable attitudes towards older workers’ interest in training and trainability, physical health and absenteeism, suitability for promotion, accident
proneness, resistance to organisation change and adoption of new technology. Participants' responses can be described as surprisingly moderate and uniformly rejecting the common negative stereotypes of older workers. Schmidt suggested that participants were acutely aware of the potential to appear discriminatory and moderated their responses to avoid this. These results do not provide exhaustive information about recruitment, retention and promotion of older workers, particularly with the trend towards the decentralisation of these personnel decisions to line managers and others outside the human resource department.

A more recent study employed a new set of statements about older workers (Gringart, Helmes and Speelman, 2005). These were later developed into a standardised scale by these authors. The new standardised measure incorporated versions of items developed by Taylor and Walker (1994). Other items were derived from various studies already mentioned (Gringart, Helmes and Speelman, 2013). This study surveyed 128 employers from medium-sized organisations. They evaluated older workers on 28 qualities. Participants evaluated the qualities of male and female older workers separately. The authors concluded that employer attitudes were equivalent across genders. They also concluded that employers demonstrated ‘systematic negative stereotyping of older workers’ (p. 96). On average employers rated older workers as performing worse than younger workers on 12 of the 28 qualities. These were: adaptability to new technology, interest in technological change, trainability, ambitiousness, energy, health, creativity, physical strength, memory, mental alertness, flexibility and suitability for promotion. This study made two particular contributions to knowledge: it initiated the development of a standard measure of employer attitudes towards older workers and it effectively demonstrated the homogeneity with which their participants evaluated male and female older workers.

3.5.6 Commentary on previous studies of employer attitudes towards older workers

To summarise the evidence, commonalities in employer attitudes have been found in the previous studies examined. These studies were undertaken in several nations and different economic environments, adding weight to the importance of commonalities. Nine of the studies assessed the effect of respondents' age on
attitudes. Seven found a positive association between age and favourable evaluations. This was interpreted as an expression of own-age group favouritism (Slater and Kingsley, 1976; Warr and Pennington, 1993; Loretto, Duncan and White, 2000; Marshall, 1996; Chiu, Chan, Snape and Redman, 2001; Berger, Marshall and Ashbury 2005; Henkens, 2005; Van Dalen, Henkens and Schippers, 2010). Conversely, one study found that older employers held more negative attitudes towards older workers than younger employers (Hassell and Perrewe, 1995). Another study found no effect of respondent age (Gringart, Helmes and Speelman, 2005). Senior managers and human resource managers have been found to report more positive attitudes than line managers (Warr and Pennington, 1993; Taylor and Walker, 1994; Chiu, Chan, Snape and Redman, 2001; Marshall, 1996; Loretto, Duncan and White, 2000; Gray and McGregor, 2003).

There were some attitudes, of both negative and positive content, which were ubiquitously reported. For example, older workers were considered more reliable and loyal in every study reviewed. A majority of studies reported that older workers were at least as productive, had fewer absences and fewer on-the-job accidents than younger workers. Van Dalen, Henkens and Schippers’ (2010) study was the only one to report that participants rated the productivity of younger workers more favourably than older workers. Older workers were perceived as resistant to, or as having difficulty with, adapting to organisational change and learning new technology skills. A majority also reported that older workers were not interested in training and were difficult to train. In three studies, employers were more favourably disposed towards older workers’ ability to adapt to organisational change (Marshall, 1996; Berger, Marshall and Ashbury, 2005; Schmidt, 2000). Participants considered age to be irrelevant for a range of qualities as evident in the consistent disagreement in evaluations of these qualities. Examples of qualities employers considered to be unrelated to age, or unrelated to being an older worker, were willingness to work long hours, working well in teams and working well with customers.

The above discussion demonstrates that even in the context of near consensus on an attitude, contrary responses are usually uncovered in one or more studies. One explanation is that different attitudes exist across industries, age groups, cultures,
nationalities, and even occupations of respondents. For example, Chiu, Chan, Snape and Redman’s (2001) study of employers in Hong Kong indicated that older workers were as adept at developing and learning new skills as younger workers. This contradicted the results of the other studies mentioned here and suggests a cultural element may be influencing the finding. Some of these studies demonstrated unique findings that were not assessed in other studies or relationships went unreported because of failures to achieve statistical significance. For instance, Henkens reported that employers with more experience with older workers had more positive attitudes towards older workers. This is perhaps explained by a mere exposure effect (Zajonc 1968).

There are other notable characteristics of the body of literature described above. The study of employer attitudes towards older workers has lacked the coherence that a consistent measure of work-related qualities would provide. This has hindered the comparison of cross-sectional studies completed over the years since the initial work in the 1970s. A prime example is Slater and Kingsley (1976). The authors reported using 32 attitudinal statements, which were reduced to seven latent factors. Neither the items nor the factors were described in their paper. Rosen and Jerdee (1976a) do not list their items either. These two contemporaneous studies from Europe and North America were the first to apply the method of asking employers to rate older workers on a range of work-related qualities. Because these studies do not describe the items they used, however, it is difficult to position them among the flurry of studies, beginning with Warr and Pennington (1993) that used this approach approximately two decades later. The problem of variations in the application of this approach, of asking employers to evaluate older workers on a range of qualities, continued through to the turn of the century. It is not until Gringart, Helmes and Speelman (2013) that a standardised measure was proposed in a paper that reported the appropriate testing of psychometric qualities.

Criticism of the previous literature regarding the lack of a consistently applied measure of employer attitudes towards older workers is not meant to imply carelessness in survey development. Variations in the application of this approach may be related to the specific goals of the research studies. For example, Slater and
Kingsley (1976) were interested in the experiences of high-skilled older workers in response to concerns about ‘manpower wastage’. Conversely, Van Dalen, Henkens and Schippers (2010) were interested in the relationship between employer attitudes about productivity and how these related to other attitudes about older workers. Both these studies were concerned with understanding the labour market experiences of older workers, and so a standardised measure would enhance both studies, even though they focused on distinct facets of the issue.

All previous studies of employer attitudes towards older workers, with the exception of Van Dalen, Henkens and Schippers (2010), were only able to consider the relative favourability of attitudes towards older workers. These studies used phrasing such as ‘are older workers more productive than younger workers?’ with Likert-type response scales of varying ranges (Likert, 1932). The problems with this approach are manifold. Take, for example, the above item about productivity. If an employer disagrees with this statement, it is impossible to determine if they are indicating older workers are equally productive or more productive than younger workers. One cannot determine the absolute position of either age group. If an employer agrees with the statement above, the meaning changes depending on the perceived level of younger workers’ productivity. An employer could be expressing the opinion that, on average, younger workers’ productivity is high and older workers’ is moderate, or that younger workers’ productivity is moderate and older workers’ is poor. The inability to position evaluations relatively and absolutely is a limitation of the existing literature with clear implications for the interpretation of findings. By contrast, Van Dalen and colleagues asked employers to first rate younger workers on 11 qualities and then rate older workers on the same qualities.

The use of student samples is too frequent and specifically problematic. These samples are not in-situ employers, which necessitates the respondents drawing on hypothetical workers and situations to make their evaluations. Lyon and Pollard’s (1997) comparative work exemplified the difference between student samples and employer samples. Despite the fact that all had previous management experience, the student participants of Lyon and Pollard’s study consistently reported more negative views about older workers than Warr and Pennington’s (1993) employer
sample. An earlier study demonstrated the systematic differences in perceptions of managers and students on the importance of age in recruitment decisions (Singer and Sewell, 1989). The age of evaluator has been shown to influence evaluations of older workers. Some of the studies using student samples included evaluators with broad age ranges. However, none of these studies had the breadth of age ranges of similar studies that surveyed actual employers. The inappropriateness of the use of student samples is accentuated when their opinions about hypothetical personnel decisions are tested for associations with attitudes towards hypothetical workers. Examples of such studies include Rosen and Jerdee (1976a and b) and Loretto, Duncan and White (2000). Taylor and Walker (1998b), among others, demonstrated that employer attitudes were related to their decisions about recruitment, retention and promotion of older workers. This finding was edifying for the field. Demonstrating that hypothetical decisions are related to attitudes about hypothetical workers held by students, whose management experience is difficult to verify, appears to be of less utility.

The attitudes expressed about older workers vary depending on the characteristics of the participants and how the qualities are described. This exacerbates problems created by heterogeneous approaches to measuring these attitudes. Numerous studies have identified a positive association between employer age and favourable attitudes to older workers. Some studies found that female employers held more favourable attitudes (Loretto, Duncan and White, 2000; Berger, Marshall and Ashbury, 2005; Chiu, Chan, Snape and Redman, 2001) and others found the opposite, or no evidence of an association between gender and attitudes (Henkens, 2005; Gringart, Helmes and Speelman, 2005). Hassell and Perrewe (1995) and Chiu, Chan, Snape and Redman, (2001) found that participant’s occupation was also associated with attitudes towards older workers.

The description of the qualities also appears to influence evaluations. For example, Rosen and Jerdee (1976a) reported that employers perceived a deficit in the performance of older workers while almost all other studies reported favourable attitudes towards older workers’ productivity, their ability to work hard and to keep up with the pace of work. This inconsistency has been detrimental to the advancement of this field of research by limiting the potential for comparisons of
different studies. The publication of Gringart, Helmes and Speelman's (2013) standardised measure, reported with sufficient details of its psychometric properties, provided an avenue to address the inconsistencies arising from variation in the description of qualities.

Yet other inconsistencies are evident in the results of studies of employer attitudes. Contradictory findings have been reported regarding the associations between organisational characteristics, such as workforce size, industry and the presence of anti-discrimination policies, and employer attitudes (Warr and Pennington, 1993; Taylor and Walker, 1994; Berger, Marshall and Ashbury, 2005; Chiu, Chan, Snape and Redman, 2001; Henkens, 2005). The latent factors extracted from the analysis of employer attitudes are inconsistent across almost all studies reporting such analyses. Warr and Pennington reported 'work effectiveness' and 'adaptability'. Berger, Marshall and Ashbury reported 'age related decline', 'positive experiential attributes' and 'reliable and productive' factors. Chiu, Chan, Snape and Redman provided a forced solution that replicated Warr and Pennington's factors but excluded more than half the items presented to employers.

Henkens (2005) reported perhaps the most analytically robust data reduction, yielding a three-factor solution labelled 'productivity', 'reliability' and 'adaptability'. This analysis was not without limitations, which are described in detail below. Van Dalen, Henkens and Schippers (2010) reported two factors that reflected hard and soft qualities respectively. Gringart, Helmes and Speelman (2013) found a two-factor solution that they argued reflected difficulty factors. Such factors reflect item groupings based on high or low raw scores rather than a meaningful underlying theme among the item content. A number of the preceding studies have potentially misinterpreted difficulty factors as meaningful groups of items. In that case, interpretations of factors made in these studies are problematic. This potential misinterpretation is the worst-case scenario but highlights the range and inconsistency of latent factors that have been reported in the assessments of employer attitudes.
The preceding discussion demonstrates that the study of employer attitudes is problematical. This undertaking requires a nuanced consideration of influences on attitudes. The conditions where these determine the labour market experience of older workers must be considered. The aforementioned studies have made contributions to the development of research in this field. The complexity of questions asked and the sophistication of methods used have grown over time based on these studies. Before outlining the research questions investigated in this study, a critique of the theoretical perspectives on employer attitudes deployed in previous research and justifications for the adoption of an alternative theoretical perspective are presented.

3.6 Theoretical perspectives concerning employer attitudes

Theoretical explanations of employer attitudes are absent from the above-mentioned literature. It is suggested that in order for the study of employer attitudes towards older workers to continue to advance, as it has in recent decades, discourse on the theoretical explanations of the formation and maintenance of these attitudes should be included in empirical studies. As more sophisticated research questions, and organisational and public policy responses are implemented, deeper understanding of employer attitudes towards older workers is required to inform continued advancement. In response to this contention, a range of theoretical perspectives are described below in terms of the suitability for the study of employer attitudes towards older workers.

Considered first is the piecemeal, and occasionally erroneous, use of social identity theory in studies of these attitudes. Two other theories which purport to explain employer attitudes towards workers of different ages, are then described: An application of the ‘big five’ personality traits and job contingency theory. These have yet to be deployed in studies of employer attitudes towards older workers. Agreement with other commentators’ arguments about the deficiencies of these theoretical perspectives is outlined. Another theoretical perspective that has been used to explain other forms of discriminatory attitudes, the ‘behaviours from intergroup affect and stereotypes’ framework (Cuddy, Fiske and Glick, 2007) is mentioned with the reasons why it is considered unsuitable for application in the
case of age based attitudes. This discussion leads to a description of social role theory, a theory developed to explain gender stereotypes. This theory has only recently been applied to the study of ageism. It is applied in this study of employer attitudes in a rather exploratory fashion to assess its suitability for explaining attitudes towards different age groups in the labour market.

A number of investigators have suggested that an in-group bias, a principle from social identity theory (Tajfel and Turner, 1979), produced a positive association between respondent age and favourable evaluations of older workers (Slater and Kingsley, 1976; Warr and Pennington, 1993). Respondents' supervisory status mediated this association in two studies (Hassell and Perrewe, 1995; Chiu, Chan, Snape and Redman, 2001). This was explained as out-group negativity, a concept in the social identity theory of intergroup relations that appears to have been mistakenly applied in these studies, a not uncommon error (McGarty, 2001). None of the 18 studies of employer attitudes considered here, proposed a theoretical mechanism to explain the formation, maintenance or propagation of these attitudes. This is a fundamental limitation of the literature.

Various conceptual frameworks have been suggested by other researchers but appear deficient. For example, Truxillo, Mccune, Bertolino and Fraccaroli (2012) suggested normative life course changes in the 'big five' personality traits (Costa and McCrae, 1992) and individual differences in proactive personality types and cognitive abilities, were responsible for the differing treatment of older and younger workers. Truxillo and colleagues surveyed 142 undergraduate psychology students, asking them to evaluate either younger or older workers on standard big five measures, perceived proactive personality measures and multidimensional measures of perceived task performance. Respondents perceived older workers as more conscientious, less neurotic, less extraverted and less open to experiences. Older workers were also perceived as having less proactive personalities and fluid intelligence, but greater crystallised intelligence. No differences in perceived task performance were detected that were congruent with the perceived deficiencies of older workers. Truxillo and colleagues interpreted these finding as supporting the notion that perceptions of older workers are best explained by widely
acknowledged and studied normative changes in the big five personality traits and differences in cognitive abilities.

However, the authors ignored findings about employer attitudes towards older workers that make it unlikely that the perceptions have a basis in an objective reality (Bottomley, 2001; Charness, Kelley, Bosman and Mottram, 2001; Czaja, 2001; Forbes and Hirdes, 1993; Hill and Leonard, 1993; Mayhew and Swindell, 1996; Pasupathi, Carstensen and Tsai, 1995; Schaie, 1996; Schooler, Mulatu and Oates, 1999; Seedsman, 1996; Simon, Morse, Speier and Osofsky, 1993; Sterns and Milkos, 1995, and Yearta and Warr, 1995). Older workers are the most diverse age group of workers by virtue of their age range, which may span three or four decades, and their range of life course experiences. Employer attitudes are inconsistent, varying across cultures, organisation types and individual characteristics of employers themselves. Most importantly, employer attitudes have been found to be at odds with empirical evidence of older workers’ qualities. Truxillo and colleagues do not demonstrate substantial differences in task performance and cognitive abilities that would explain differences in age stereotypes. The failure of the study to uncover congruent perceived task performance is attributed to confounding factors by the authors. Truxillo and colleagues’ findings have limited generalisability to employers as they used a sample of undergraduate students. This theoretical explanation of attitudes towards workers of different ages was considered unsatisfactory.

Theoretical frameworks that have been influential in the study of other forms of discrimination were also considered unsatisfactory when considered as explanations of employer attitudes towards older workers. Social identity theory’s reliance on static group membership is problematic in the case of age groups, which are dynamic (Oswick and Rosenthal, 2001). Also, the in-group bias and its connotations of a privileged versus marginalised schism, with its inability to explain stereotype content that is not universally unfavourable, is incompatible with stereotypes about age groups (Fiske, Cuddy, Glick and Xu, 2002). Additionally, the frequent incorrect application of the mechanisms of in-group bias (McGarty, 2001) led some to criticise social identity theory for failing to provide predictive power equivalent to its explanatory power.
Fiske, Cuddy, Glick and Xu’s (2002) ‘stereotype content model’ and the related ‘behaviours from intergroup affect and stereotypes’ (BIAS) framework (Cuddy, Fiske and Glick, 2007) were also considered unsatisfactory. The fundamental problem with this model is that it fails to provide an explanation for the formation of stereotypes. It simply states that stereotypes arise from individuals’ need to understand others’ intentions. Understanding the way stereotypes are formed would give direction to efforts to promote stereotype change – a critical goal of researchers interested in the role stereotypes play in continuing discrimination.

Oswick and Rosenthal (2001) offered a unified explanation for workplace age discrimination across the lifespan, with mechanisms based on the congruence between the age stereotype of an individual and the age stereotypes of a job, labelled ‘job contingency theory’. This theory was considered unsatisfactory because it fails to explain the process of the age-typing of jobs and the resultant formation of stereotypes.

As argued by Lorreto and White (2006), job contingency theory makes an important contribution to explaining workplace ageism but is insufficient because it does not provide a theoretical mechanism for stereotype formation. Another theory of stereotypes, social role theory, offers an explanation of the mechanisms behind employer attitudes and is described in detail below.

3.6.1 Social role theory

Researchers interested in stereotypes’ association with discrimination have endorsed the explanatory capacity of social role theory. Social role theory of stereotypes was proposed by Eagly and Steffen (1984) and explored further by Eagly (1987), Eagly and Chaiken (1993) and Eagly, Wood and Dickman (2000). Stereotypes are formed based on the social roles that members of groups are perceived to predominantly populate. For example, according to stereotypes, males are more agentic and less communal than females. Bakan (1966) argued that agentic qualities were manifest in behaviours of self-assertion, self-expansion, and the urge to master. Communal qualities were manifest in selflessness, concern for others and by a desire to be at one with others. Social role theory contends that
this perspective is formulated on perceptions that the average male and the average female are predominant constituents of employee and homemaker roles respectively. Women are perceived to be more likely to hold positions of lower status and authority than men. Eagly and colleagues acknowledged the process of gendered socialisation into these roles. They provided a convincing case, however, that the characteristics typical of a social role were ascribed as characteristics of primary constituents of that role. The historical predominance of males in the more agentic employee roles and females in the more communal homemaker roles determined the stereotypes held about these groups.

Eagly and Steffen's (1984) work is an elegantly conceived series of experiments. Although complex, they are explained clearly. The experiments involved describing an individual to participants and asking them to designate the characteristics of that individual. The descriptions were experimentally manipulated. Participants were sought for this series of experiments from two American university campuses. Participants were selected at random in public spaces on the university campuses, including coffee shops and libraries. The five experiments reported in their paper had samples ranging from 1500 participants to approximately 200 participants. The descriptions that were experimentally manipulated were of either men or women, with job titles that were high status or low status or no job title at all. Four occupational settings were used: a bank, a supermarket, a medical clinic and a university biology department. Job titles signalled high or low status: bank vice-president compared to bank teller, supermarket manager compared to cashier, physician compared to X-ray technician and professor compared to lab technician. This 2x3x2 design was varied in different administrations of the experiments. The amount of information provided was also manipulated. For example, a 2x3 design described stereotype targets as either men or women who were either employed, homemakers, or of no employment status. A 2x2x2 design compared employed men and women who were either married or unmarried and were either parents or childfree. A 2x3 design compared men and women employed full-time either by choice, employed due to necessity, or no information was provided regarding the reasons for employment.
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The experiments demonstrated that stereotypes of high status employed individuals resembled the agentic qualities assigned to the average male stereotype. The stereotype of low status employed individuals did not resemble high communality qualities stereotypically assigned to the average female stereotype. Eagly and Steffen (1984) manipulated agency level by varying occupation status. No difference in perceived communality was observed across status levels. Contrary to the stereotyped perception that women hold lower status jobs, have lower earnings and that persons who hold such positions are less agentic, women were perceived as more communal within status levels and when no occupation details were provided. Eagly and Steffen proposed that levels of agency can be attributed to two causes. Participants perhaps desired to conform to egalitarian ideals of gender equality. Alternatively, women were perceived to have more choice in adopting the employee role. Women were therefore subject to higher standards by employers and themselves. The implication was that these individuals were highly selected (or self-selected) for a role and had greater endowment of role-relevant characteristics. This explanation was tested in a subsequent experiment.

The later experiment supported this conclusion. Participants reported that the average female was more likely to be employed by choice than the average male. Participants perceived these women as more agentic than the average employed man. The observation of greater communality among employed women compared to employed men across status levels was explored further. A subsequent experiment compared the employed to homemakers by gender. Eagly and Steffen (1984) demonstrated that male and female homemakers were perceived to be equally communal. These findings demonstrated role is more important than gender in determining beliefs about communal and agentic characteristics. Stereotypes are associated with gender because gender co-varies with role. Beliefs about what is typical of homemakers and employees override beliefs about what is typical of women and men, whereas the converse does not occur.

Social role theory accommodates other principles of stereotype research. General information about individuals’ social role caused revision in stereotypes about gender. This suggests that social role is a more basic categorisation than gender.
The prototypes of women and men consist of attributes that co-vary with role assignments of women and men (Eagly and Steffen, 1984). Other studies have found results supporting this conclusion. Locksley, Hepburn and Ortiz (1982) used complex Bayesian modelling to assess differences in perceived assertiveness of the genders when participants were primed with information about the previous levels of assertiveness of a target. This information produced revisions to participant perceptions of sex differences in relation to assertiveness.

This is congruent with social role theory but fails to identify the personal or behavioural attribute diagnostic of the characteristics ascribed to a target. Social role theory assumes that stereotypes are valid representations of the social structure, for example, the division of labour in a society. This is consistent with arguments offered by commentators on stereotype research. Such factors have been termed the 'kernel of truth' of ethnic stereotypes (Brewer and Campbell, 1976) and gender stereotypes (Williams and Best, 1982). This implies that changes to social structures will result in changes to stereotypes. For example, changes to divisions of labour or participation rates across age groups of workers shift stereotypes more effectively than information campaigns or legislation. Motivating changes in structures before the change in stereotypes can occur is the challenge for overcoming ageism and other forms of discrimination.

Social role theory overcomes the criticisms of other theoretical perspectives on stereotypes. It accommodates positive, negative and ambivalent stereotype content. Such diverse stereotype content is widely accepted compared with the rigid dichotomy of in-group favouritism versus out-group antipathy. Social roles are rarely homogenously negative or positive, for example, the employee role and homemaker role. The employee role evokes perceptions of agency, mastery and activity but equally egocentricity, competitiveness and neglect of other facets of life, the extreme embodiment of being Karōshi in Japan; that is, the phenomenon of sudden death due to over-working (Iwasaki, Takahashi and Nakata, 2006). The homemaker role evokes perceptions of selflessness, a desire for harmony in social environments and interpersonal warmth but equally passiveness and submissiveness, incompetence in wider social environments and limited knowledge and intelligence. Diverse stereotype content was demonstrated in the
study of stereotype content model (Fiske, Cuddy, Glick and Xu, 2002).

Social role theory incorporates mechanisms that explain stereotype formation. Individuals form stereotypes through a process of observation and cognition. This process erroneously attributes motivation for behaviour to the traits of the stereotype target. An example would be to attribute high communality as a stereotypical trait of females while ignoring the division of labour that positioned females in roles requiring high communality. There is a failure to consider situational influences of the target’s behaviour. Misattributing behaviour to an individual’s disposition, labelled ‘correspondence bias’, is a widely researched principle. Despite some disagreement (Gawronski, 2004), correspondence bias is synonymous with ‘fundamental attribution error’, a term coined by Lee Ross (1977). This was based on a classic study into attitudes and behaviour reported by Jones and Harris (1967).

Correspondence bias is absent when individuals explain their own behaviour, as they are aware of limiting situational factors. This asymmetry in the actor-observer bias has been challenged in more recent studies. New evidence suggests only certain types of behaviours conform to this view (Malle, 2011). A new model described by Malle maintained there is an asymmetry in self or other behavioural explanations. Social role theory contends this tendency towards weighting the explanation of others’ behaviour, based on disposition rather than situation, produces generalised schema of traits assigned to social groups. Understanding the mechanisms leading individuals to formulate stereotypes offers a framework for approaches to changing stereotypes. Many studies have focused on the pathways to overcoming correspondence bias. These can facilitate the development of interventions to disconfirm a stereotype.

3.6.2 Social role theory in ageism research

Researchers interested in ageism have used social role theory to explain their findings (Kite, Stockdale, Whitley and Johnson, 2005). This acknowledges its suitability for research aiming to address prejudice, because it includes an exposition of stereotype formation. Social role theory accommodates favourable,
unfavourable and ambivalent stereotype content. This is critical for an explanation of age-based stereotypes. Perceptions of older people have conformed to consistent and identifiable sub-types, potentially better explained by social roles than age groups (Cuddy and Fiske, 2004; Hummert, Garstka, Shaner and Strahm, 1995; Hummert, 1990; Hummert, 1993). These are described in detail below.

Stereotypes about older people have mixed favourable and unfavourable content and occasionally are contradictory. Older people may be perceived as inflexible, ill tempered and miserly. They may be perceived as founts of wisdom obtained through experience, custodians of the past’s narratives and being unfailingly understanding (Hummert, 1990). Fiske, Cuddy, Glick and Xu (2002) demonstrated this heterogeneity on their warmth-competence continuum. Older people were the prototypical example of the high warmth-low competence category. Individuals of different ages hold similar stereotypes about older people (Brewer and Lui, 1984). Brewer and Lui reported that only when an older participant identified a category of older people as ‘like me’ (p. 590) were their views less stereotypical than other participants. This evidence of heterogeneous stereotype content, held by people of all ages, combined with the need for a theoretical framework that accounted for the mechanisms of stereotype formation, has encouraged researchers interested in ageism to adopt social role theory.

The emergence of consistent and identifiable stereotype sub-types of older people has persuaded ageism researchers to adopt social role theory. This stream of ageism research began with Schmidt and Boland (1986) and was continued by Hummert (1990; 1993) and Hummert, Garstka, Shaner and Strahm (1995). These authors isolated a set of sub-types of older people perceived in stereotypes with favourable and unfavourable content. These were described through groups of single adjective indicators, for example, ‘the perfect grandparent’ (Hummert, 1990, p. 185). This group had more indicator adjectives than any other sub-type. Hummert interpreted this as indicating that this sub-type had the most consistent cognitive representations and is a robust, shared cultural definition. Examples of positive sub-types were the ‘liberal matriarch/patriarch’ and ‘John Wayne Conservative’ (p. 185). Negative sub-types were identified. These included the ‘severely impaired’ (p. 184) older person, ‘shrew/curmudgeon’, ‘inflexible senior
citizen’, ‘self-centred’, ‘recluse’, ‘despondent’ and the ‘vulnerable’. Similarly to Brewer and Lui (1984) and Fiske, Cuddy, Glick and Xu (2002), the sub-types were not perceived in singularly favourable or unfavourable ways. Participants of Hummert’s study considered the negative and positive sub-types as equally representative of older people. The consistent and identifiable cognitive representation of older people in stereotyped sub-types was an advance in conceptualisations of the sub-structures of ageism. This prompted investigators to employ social role theory to explain their findings. The relationship between these sub-types and the social roles filled by older people was emerging.

The stereotyped sub-groups of older people are inexorably tied to the roles that they fill in society. The clear example is the ‘perfect grandparent’ sub-type. The grandparent role is practically bound by biologically determined age constraints, although it is mathematically possible that individuals aged in their early 30s could find themselves in this role (Albrecht, 1954). The adjective indicators that describe this stereotype sub-type have little to do with age. These adjectives are tied to the grandparent role within culturally defined family structures. The ‘severely impaired’ sub-type is more related to social role than age. The adjective indicators of this sub-type are dependent on an individual’s illness or disability, not age. The biologically determined decline in physical capacity and increased ill health associated with ageing produces perceptions that traits of the severely impaired social group are traits of older people. These sub-types exemplify how the characteristics of social roles are ascribed to groups that predominantly populate those roles.

Other sub-types identified in Hummert’s study do not conform to this mechanism. For example, the ‘self-centred’ sub-type does not correspond to a social role. Other sub-types are more akin to social roles. For example, the ‘despondent’ sub-type has characteristics such as being neglected and a burden to society. This sub-type could describe a welfare recipient of any age. The sub-types of older people described by Hummert and others have a strong association with social roles. This association is perhaps stronger than the association with age.
A subsequent study investigated the relative importance of age and social role in determining stereotyped sub-types. This examined different age groups’ perspectives on boundary permeability of the sub-types. Hummert Garstka, Shaner and Strahm (1995) found sub-type role information was a more effective predictor of evaluative judgments than age. This finding supports arguments for the relevance of social role theory to explain ageist stereotypes. Kite and colleagues (2005) acknowledged the superiority of role information as a predictor of evaluations. The contention that role information was a more effective predictor of evaluative judgments is presumably based on two of Hummert and colleagues’ findings. These authors did not draw this conclusion, Kite and colleagues made this interpretation. The first of the coalescing findings was the evaluations of sub-types. The evaluative attitudes that participants held varied harmoniously with the content of stereotyped sub-types. Participants held unfavourable attitudes toward sub-types described using negative adjectives in Hummert’s (1990) first study. For example, participants held the most unfavourable attitudes towards the ‘shrew/curmudgeon’ and ‘vulnerable’ (p. 175) sub-types, which were described with pejorative adjective indicators in Hummert’s categorisation. The equivalent pattern was observed for positive sub-types, for example, the ‘golden ager’ and the ‘perfect grandparent’ (p. 175) sub-types.

Kite and colleagues’ finding was considered in the context of evaluations of age typicality of different sub-types. Participants were asked to indicate the typical age of individuals in the sub-types. Age was classified as ‘young old’ (60–69), ‘middle old’ (70–79) and ‘old-old’ (over 80; p. 183). Sub-types related to ill health, for example, the ‘severely impaired’, were categorised in the older groups. Positive sub-types did not elicit homogenous age judgments, for example, the ‘perfect grandparent’ sub-type. Meaningful proportions of participants indicated typical members of this sub-type were aged over 80. Taking these two findings together, Kite and colleagues’ conclusions appear logical. The negative sub-types were judged to be typical of the ‘old-old’. Positive sub-types were judged typical of a much broader ranges of ages. This indicates that social role rather than age determines the evaluative judgements. This follows the mechanisms described in social role theory.
The evidence described above suggests that social role theory can be used to explain age stereotypes, but it is uncertain whether the mechanisms of correspondence bias can be reasonably expected to apply to different age groups within the working population. It is unclear whether, for example, age group related patterns in forms of employment, occupation predominance and normative life course events, such as participation in education, are sufficiently consistent to mirror robust social roles considered originally by Eagly and Steffen (1984) and subsequently by Kite, Stockdale, Whitley and Johnson (2005).

This study sought to assess the extent that directional hypotheses, driven by theoretical mechanisms proposed in social role theory, were supported by employer attitudes towards workers in different age groups. Without the benefit of previous research to guide contentions about those factors that may conform to the mechanisms of correspondence bias, in relation to attitudes towards different age groups of workers, the generation of these hypotheses is perhaps best considered as an exploratory exercise. The directional hypotheses that underlie the first research question in this study have their theoretical grounding in the mechanisms described in social role theory. The hypotheses are first discussed and then enumerated in full below.
Chapter Three: Review of previous literature

3.7 Research questions

Considering the literature addressing employer attitudes towards older workers, there are a number of contributions that this study seeks to make. The study also addresses gaps in the literature. Below, each research question is stated and then a description of how this addresses an identified gap in the literature is offered.

3.7.1 Research question one

What are Australian employer attitudes towards older workers, in terms of a selection of salient work-related individual qualities, and how do these attitudes compare to those towards workers of other ages?

Only three studies have assessed employer attitudes towards older workers in Australia. One of these studies is almost two decades old and used an approach that offered limited comparability to other studies (Steinberg, Donald, Najman and Skerman, 1996). Another of these works was a narrowly disseminated research report (Schmidt, 2000) that is more than a decade old. The more recent study (Gringart, Helmes and Speelman, 2005) made contributions by comparing attitudes towards male and female older workers. This study was based on a sample of small- and medium-sized organisations employing between ten and 50 employees. This represented a highly selective group of organisations. The proportion of Australian businesses, of which this would be representative, is difficult to determine. The study reported in this thesis surveyed employers in medium and large organisations, with at least 50 employees. Such organisations have never been surveyed on these issues in Australia before.

The timing of Gringart, Helmes and Speelman’s (2005) study potentially influenced employers’ orientation towards older workers. It preceded the GFC, the most important economic event of the last several decades. This economic collapse had consequences for older workers. Australia’s economy fared better than many other developed nations through this period, with no widespread shifts in unemployment rates. Nevertheless, the uncertainty during this time had the potential to influence demand side factors in the labour market. The tightness of
labour supply is critical for the marketability of older workers’ human capital (Remery, Henkens, Schippers and Ekamper, 2003). Labour market conditions were more advantageous for older workers before the GFC. The GFC potentially weakened employer disposition towards older workers. Such weakening is unlikely to have generated a whole new schema of attitudes about older workers. However, it may have been sufficient to induce disengagement from egalitarian responses in favour of economic pragmatism. In considering the human capital value of workers of different ages, these conditions may yield more pejorative employer attitudes towards older workers.

A question that is not addressed by almost all preceding studies of employer attitudes is: how do attitudes towards older workers compare to those held towards other age groups? Studies have asked questions such as ‘how do older workers compare to younger workers on x quality?’ (for example, Gringart, Helmes and Speelman, 2005). Only one study has asked employers to rate older workers and younger workers on the same qualities (Van Dalen, Henkens and Schippers, 2010). Van Dalen and colleagues’ study was specifically focused on attributes that underpin perceived productivity. Some researchers using this approach acknowledge the limitations of relative evaluations; one such limitation is that a less favourable evaluation does not equate to a negative evaluation (Henkens, 2005). For example, younger workers may be considered to be in excellent physical health. Older workers may be considered very good in terms of physical health. Using the comparative question formula, older workers’ physical health would be presented in a negative light, which is misleading. This study went further by asking employers about younger, older and middle-aged workers, that is, those in their prime working years. These evaluations can be used as a benchmark. This approach has not been used previously. It provides new insights into employer attitudes about workers of different ages.

The hypotheses about the content of employers’ evaluations were based on multiple sources, including existing studies of employer attitudes. The predictions conform to the mechanisms described in social role theory. Prior to the recent study undertaken by Gringart, Helmes and Speelman (2013), no standard measure had been proposed to follow the approach pioneered by Taylor and Walker (1994)
and Warr and Pennington (1993). This study asks about 12 qualities. The selection was designed to facilitate comparisons with the contemporaneous work by Van Dalen, Henkens and Schippers (2010) on employer attitudes. Fewer qualities were used in the previous Australian studies. Space limitations in a lengthy questionnaire were exacerbated by the fact that participants were required to consider the 12 qualities three times. The 12 qualities that were chosen were:

1. Flexibility
2. Social skills
3. Loyalty
4. Reliability
5. Productivity
6. Creativity
7. Management skills
8. Willingness to learn
9. Physical health and stamina
10. New technology skills
11. Ability to cope with stress
12. Coping with work/life balance issues

Kite, Stockdale, Whitley and Johnson (2005) contended that one of the most important social roles individuals hold is that of an employed person. Their study is one of the most significant in advocating the use of social role theory to understand workplace ageism. The importance of the employee role is evident in changes it produces in the endorsement of stereotypes. Changes in attribution of negative stereotypes were observed when participants knew the older person they were evaluating was employed. This individuating information reduced the application of stereotype based attitudes. This has implications for applying social role theory to understand employer attitudes towards older workers. This theoretical perspective has not been applied to this setting before. A combination of employers’ observations determine their attitudes towards older workers. These conform to the mechanisms described in social role theory. Sources of these observations are older workers’ disproportional representation in certain occupations and changes in valued qualities of employees in modern labour markets.

The first of the 12 qualities considered was ‘flexibility’. Arguably, flexibility to meet the changing needs of organisations has become a more critical quality for
successful employees in recent times. As other qualities were previously more important, older workers have operated in environments where flexibility was not as crucial. Social role theory would contend that, through the process of correspondence bias, role-based behaviour would be attributed to individuals’ dispositions. Social role theory would therefore predict that employer attitudes would evaluate older workers as less flexible than younger and prime working-age workers. Older workers would be considered less flexible because of their participation in previous systems of organisation of work in which lifelong tenure was normal rather than problematised. The role-based behaviour, that is, demonstrating previously desirable worker qualities of stability and long tenure employment, is erroneously ascribed to the disposition of the workers who were observed in this role. As well as supporting the propositions of social role theory, negative evaluations of older workers’ flexibility would be in line with previous research (Taylor and Walker, 1994; Henkens, 2005).

Evaluation of the flexibility of younger workers and prime-aged workers, in this study, was an unprecedented comparison. Social role theory can facilitate predictions. If flexibility were a fundamental quality of the successful employee, prime working-age employees would be predicted to be the most flexible. Through the process of correspondence bias, the most successful employees are ascribed the dispositional qualities of this role. The flexibility required to be successful in modern labour markets is therefore ascribed to their disposition. Younger workers would be evaluated as more flexible than older workers because of the latter’s participation in previous organisations of work but less flexible than prime-age workers because of correspondence bias effects.

Social skills was the next quality evaluated. Social role theory does not facilitate a prediction of employers’ evaluations of this quality. Previous research has investigated employer attitudes about older workers’ social skills. Warr and Pennington (1993) found employers considered older workers to work well in teams. Marshall (1996) echoed this finding. Rosen and Jerdee (1976a) found employers held unfavourable attitudes towards older workers’ social skills. Moss and Tilly (2006) suggested that employer evaluations of subjectively assessed soft skills, such as social skills, would continue to manifest discriminatory perspectives
while objectively measured qualities would be free from this influence. The absence of objective measurement of such qualities compared to others, for example, productivity, allows the expression of prejudice. These mixed findings make prediction difficult. This author followed Moss and Tilly’s argument. Older workers would be evaluated as having poor social skills based upon the lack of objective evidence dissuading employers from adopting a stereotype based attitude.

Turning to employers’ evaluation of prime-age workers, it is suggested that, in this case, social role theory can facilitate a prediction. Social skills are considered important for employee success, a contention supported by Moss and Tilly (2006). Social role theory would predict that the prime-age group would be evaluated most favourably on this employee quality. In the case of the youngest age group, it is similarly suggested that social role theory does not facilitate the prediction of the direction of this relationship. Without the benefit of previous research to provide a guide, it was hypothesised that younger workers’ social skills would be evaluated as being poorer than prime-age workers but better than those of older workers based on a notion of a generalised preference among employers for younger workers over older workers.

The third quality evaluated was loyalty. The hypothesis regarding age group and loyalty follows mechanisms of social role theory. Labour market mobility and low organisational attachment are qualities that, similarly to flexibility, have more recently become indicative of a successful employee. In contrast, previous organisational structures produced long tenures and demanded organisational commitment and loyalty. Therefore, it was hypothesised that employer attitudes towards older workers would produce favourable assessments of loyalty. Contrary to this, prime-age workers and younger workers would be viewed similarly as less loyal. This is because of their contemporaneity to the modern labour market orientation towards mobility and low organisational attachment. Modern organisational orientation towards opportunism and self-direction would produce the same direction of relationships for the fourth quality evaluated, which was reliability.
The fifth individual quality evaluated was productivity. The relationship between productivity and age is complicated. The majority of the reviewed studies suggested that older workers were at least as productive as workers of other ages. This was not completely unanimous (Van Dalen, Henkens and Schippers, 2010). The prediction that would be made based on the social role perspective, was that prime-age workers would again be viewed most positively. This is because of this group’s predominance in the employee role and the centrality of productivity to the employee role. Younger workers have typically been evaluated more favourably on hard qualities than older workers and the only preceding study to assess employers’ absolute evaluations of the productivity of these two groups favoured younger workers (Van Dalen, Henkens and Schippers). Therefore, younger workers would be evaluated as more productive than older workers.

The sixth individual quality evaluated was creativity. One previous study found strong indications of employers’ perception of variations in creativity by age (Henkens, 2005). Others found employers made more unfavourable evaluations of older workers’ creativity (Taylor and Walker, 1994; Gringart, Helmes and Speelman, 2005). These latter findings are congruent to predictions based on social role theory perspective. It was hypothesised that employers would evaluate older workers negatively in terms of creativity. This was compared with the two other age groups. The idealised perception of prime-age workers would yield a perception of greater creativity than younger workers.

The seventh individual quality evaluated was management skills. Social role theory facilitates the prediction of employer attitudes. This depends on the occupational specificity of this quality. Ascription of idealised management skills by employers to certain age groups can be predicted by the predominance of one age group in that occupation group. According to the Australian Bureau of Statistics, almost one-fifth of all employed persons over 50 are in the ‘manager’ occupation group (ABS, 2012). This is considerably more than the 15 per cent of those aged 35 to 50 years and the nine per cent of those aged less than 35 years (ABS, 2013c). Employers have observed that older workers primarily populate the manager role and would therefore ascribe their role-based behaviour to personal traits. It is predicted that evaluations of this group would be most favourable on the
management skill quality. Extrapolating this argumentation, prime-age workers would be evaluated as having superior management skills to younger workers.

The eighth individual quality evaluated was willingness to learn. Social role theory can facilitate prediction of employer attitudes. Education is the domain of young people in a normative view of the life course. Learning through the developmental and early adulthood years, followed by a working life and culminating in retirement and end-of-life stages, define a normative life course. The well-known phrase 'you can't teach an old dog new tricks' is one of the most persistent proverbial phrases in the English language. For example, one text from the sixteenth century refers to it as an old phrase (Fitzherbert, 1531). There is evidence that older workers take longer to learn and respond better to tailored training (Charness, Kelley, Bosman and Mottram, 2001). Stereotypes about older workers’ difficulties and willingness to engage in learning go beyond these well-bounded maxims. It is suggested that older workers would be evaluated most negatively on willingness to learn, followed by prime-age workers and younger workers, who would be evaluated most favourably on this quality.

The ninth individual quality evaluated was physical health and stamina. Social role theory can facilitate the prediction of employer attitudes. Socially constructed perspectives are buttressed by biologically determined changes in physiology that vary with age. It was hypothesised that older workers would be evaluated as having the poorest physical health and stamina, followed by prime-age workers. The younger age group would be evaluated most favourably on this quality. Normative biologically determined changes in physical health that vary with age are not reflective of individual variations in physical health. If the hypothesised directionality of employer evaluations were observed, it should be interpreted as an endorsement of an age stereotype. Such an observation would conform to the mechanisms described in social role theory.

The tenth individual quality evaluated was new technology skills. Social role theory can facilitate the prediction of employer attitudes. It is suggested that new technology skills are a central quality for the successful employee in the modern workplace. It is argued that, following the mechanism described in social role theory, prime-age workers would be evaluated most favourably, followed by
younger workers and older workers. This can be seen as coalescing with the perspective about older workers’ perceived orientation towards learning. This group would be evaluated most negatively on this quality.

The penultimate individual quality evaluated was ability to cope with stress. Social role theory can facilitate the prediction of employer attitudes. Job stress is a multifaceted concept (Marmot, Rose, Shipley and Hamilton, 1978). The ability to cope with the stress resulting from precarious work, more common in modern labour markets, may be related to overall evaluations of managing stress. It was hypothesised that prime-age workers would be evaluated most favourably followed by younger workers. Employer perceptions of older workers as having a dispositional suitability to more certain employment arrangements would result in the least favourable evaluations being assigned to older workers. Older workers’ extensive experience in the workforce may increase their resilience to workplace stressors. However, employer attitudes are not expected to reflect this because of their basis in stereotypical views rather than an objective reality. It is noted that this quality has only been assessed in one previous study (Gray and McGregor, 2003) that found favourable attitudes towards older workers.

The final individual quality evaluated was coping with work/life balance issues. Social role theory can facilitate the prediction of employer attitudes. From a normative perspective of life courses, the years of prime parenting and subsequent caring responsibilities emerge in middle age and continue through to older ages. It was reasoned that employers would have observed prime-age workers and older workers managing multiple demands on their time through various familial or community commitments, and that employers would attribute the role-based characteristics of managing multiple roles as a dispositional quality. They would conclude that individuals in these age groups would have superior skills in balancing these demands. This would be coupled with the perception that prime working-age employees are generally more successful in organisations. It was hypothesised that employers would most favourably evaluate the prime-age group on balancing work/life issues followed by older workers. Younger workers would be evaluated least favourably on this quality.
Additional analyses of the 12 individual qualities were applied. The analysis of the individual qualities was extended to include assessment of the variance in employer evaluations attributed to the effect of age. Comparing the three age groups made it possible to determine the amount of variation in employer evaluations that could be attributed to age group. This would provide indicative evidence about which of these qualities employers considered to be more or less dependent on age. This approach has not been undertaken in any preceding study. This approach offers a potential new stream of research. Such research would not consider which qualities employers were most unfavourable about but rather, which qualities were dependent on age. Understanding perceived aged dependence of work-related qualities removes an emphasis on combating unfavourable stereotypes, which has often been approached by championing positive qualities of a marginalised group. Advocates could therefore move beyond espousing such positive qualities. These are problematically based on positive age stereotypes. Instead, the use of stereotypes as unsupported decision heuristics could be targeted. This is another unprecedented analytical approach and it is difficult to formulate hypotheses regarding the qualities that employers would perceive as most dependent on age. As such, this set of analyses also adopted an exploratory, descriptive approach.

3.7.2 Research question two

Is there a latent variable structure among attitude items that reflect a meaningful typology of qualities comparable to those uncovered in previous studies?

This Australian study was the first of its kind to report the latent structure underlying the qualities of multiple age groups. Assessment of the latent structure among evaluations of older workers was also completed by Warr and Pennington (1993), Chiu, Chan, Snape and Redman (2001), Berger, Marshall and Ashbury (2005), Henkens (2005) and Van Dalen, Henkens and Schippers (2010). This study was the first to assess the consistency or heterogeneity in the latent structure of qualities for evaluations of prime-age and younger worker groups. This assessment can illuminate the consistency or otherwise of the stereotypes employers hold about workers of different ages. The comparability of the latent structures compared to a European study (Henkens, 2005) was assessed. It was
Chapter Three: Review of previous literature

hypothesised that the latent structure of the qualities would broadly reflect the dimensions uncovered by Henkens in his 2005 study. This study was selected over the other aforementioned studies because of the robust latent structure it uncovered. The other studies reported latent structures that appeared to be confounded by analytical difficulties. It was unclear whether employers would demonstrate consistent dimensionality across age groups. Therefore, this element of the study was exploratory in approach.

3.7.3 Research question three

How do Australian employers vary in their attitudes to older workers according to individual characteristics and the characteristics of their organisation including workforce demographics, occupation composition and labour market situations faced?

The influence that contact with older workers has on attitudes has not been elucidated. For example, Henkens (2005) found that greater contact with older workers attenuated endorsement of unfavourable attitudes. In contrast, Moss and Tilly (2006) found that employers with greater experience with marginalised groups were inclined to make less favourable evaluations, considering their experience as expertise in judging these groups. This was interpreted as expertise justifying a rejection of more egalitarian, socially desirable responses. From the social role theory perspective, contact with the stereotype target would predict reduced reliance on stereotypes when making judgments. Reduced reliance on stereotypes is based on the influence of the perceiver holding greater individuating information about the stereotype target (Kite, Stockdale, Whitley and Johnson, 2005). It was hypothesised that employers in organisations with higher proportions of older workers would report more favourable attitudes towards older workers.

Different industry sectors have norms and perceptions regarding older workers based upon the nature of the work and the structuring of the organisations in that industry. This may lead to favourable or unfavourable dispositions towards older
workers. It was hypothesised that respondents from different industry sectors would have different configurations of attitudes towards older workers. Research investigating the intersection of ageism and sexism has contended that women experience greater difficulties in their transitions as older workers. Commentators point to a tendency for women to be considered older workers at younger ages (Encel and Studencki, 1997; Handy and Davy, 2007). It was predicted that employers in organisations with workforces with high proportions of women would have more negative attitudes towards older workers.

Large organisations are more likely to have well-resourced human resource departments that can optimise formal recruitment process and adherence to organisational and legislative equal opportunity policies. Older workers, under these conditions of recruitment and retention, are likely to represent a highly select group, whose presence in the organisation is based, as much as may be expected, on merit centred personnel decisions. Given the contention about the role of well-resourced human resource departments in larger organisations, it was hypothesised that employers in larger organisations would have more positive attitudes about older workers than employers from medium-sized organisations.

The occupational composition of a workforce was expected to be associated with employer attitudes towards older workers. Slater and Kingsley (1976) found no differences between evaluations of older workers, whether they were white- or blue-collar workers. Rhine (1984) found a specific configuration of less favourable evaluations of older workers in blue-collar occupations compared to various categories of white-collar occupations. Henkens (2005) found that employers whose workforces had high education levels, held more favourable attitudes towards older workers. Taking these results together, it was hypothesised that respondents from organisations with larger proportions of high skilled workers would report more favourable attitudes towards older workers.

The role of labour market conditions in influencing employer attitudes towards older workers was uncertain. Slater and Kingsley (1976) was the only study to assess the role of such a factor using indirect indicators labelled ‘locality variables’ that considered: unemployment by age, population growth, migration flows,
industrial and commercial building programs, social and economic status and population age distribution by occupation groups. These authors found no association between these factors and attitudes towards older workers. Karpinska, Henkens and Schippers’ (2013) contended that labour market conditions were among the most important factors for determining employment outcomes for older workers. It is unclear how this may relate to attitudes towards older workers. As such, it was hypothesised that no relationship between labour market conditions and employer attitudes towards older workers would be found.

The individual characteristics of employers have been shown to influence their perceptions of older workers. For example, some studies have found that older employers were more favourable about the qualities of older workers (Slater and Kingsley, 1976; Warr and Pennington, 1993; Loretto, Duncan and White, 2000; Berger, Marshall and Ashbury, 2005 and Henkens, 2005). Another found older employers held more negative views of older workers (Hassell and Perrewe, 1995). Studies have found that female participants reported more positive attitudes towards older workers (Loretto, Duncan and White 2000; Berger, Marshall and Ashbury, 2005 and Chiu, Chan, Snape and Redman, 2001). However, in his 2005 study, Henkens found that female participants held more negative attitudes. Others have found that the occupation of the participant was associated with attitudes, such that being a co-worker was associated with more favourable attitudes and being a supervisor was associated with less favourable attitudes (Hassell and Perrewe, 1995; Van Dalen, Henkens and Schippers, 2010).

None of these relationships have been assessed in Australia previously. Social role theory can facilitate the prediction of the effects of participant characteristics. Older employers have the most convincing source of individuating information about older workers available to them. Their own experiences in the workplace are likely to reduce the influence of correspondence bias. It was hypothesised that older respondents would express more favourable attitudes towards older workers.
There does not appear to be a reasonable basis to conclude that one gender would have systematically different attitudes towards workers of different age groups. Therefore, it was hypothesised that no such difference would be uncovered.

Some previous research suggested that the desire to comply with anti-discrimination legislation encourages employers to report more favourable attitudes towards older workers. It was hypothesised that respondents employed in human resource and senior management roles would report more favourable attitudes towards older workers than line managers and respondents in other, less senior roles. Line managers and respondents in other less senior roles were argued to be more likely to be concerned with day-to-day operational concerns than compliance with anti-discrimination legislation and would therefore be more susceptible to a stereotypical view about older workers.

3.7.4 Research question four

Do employer attitudes towards older workers play a role in influencing organisational behaviour around the recruitment and retention of older workers and what is the relative importance of these attitudes compared to organisational characteristics?

The association between attitudes towards older workers and organisational practices was also assessed. This analysis focused on practices that affected the labour market experiences of older workers. Numerous studies have assessed the association between attitudes towards older workers and organisational policies. Studies have also assessed the actual practices of organisations relating to these issues; for example, the innovative work of Taylor and Walker (1998b). The authors found that predominantly negative evaluations of older workers were associated with employer decisions about recruitment, promotion and the provision of training. Taylor and Walker noted the complexity of the construction of age in the workplace. For example, employers held different attitudes towards older workers in different occupations.
Subsequently, Loretto and White (2006) identified bias against older workers in practices at each stage of the employment cycle in participating organisations. Participants conceded that there was a substantial gap between their anti-discrimination policies and the realities of employment practices. Little evidence of the oft-advocated job redesign for older workers, in non-manual work environments, was found. Employers relied on stereotypes when making recruitment decisions and in judgments about managing performance and development. In addition, positive practice outcomes for older workers were associated with employer reports of positive experiences with older workers. On the other hand, employers who favoured stereotyped views that were unchallenged by first-hand experiences with older workers, reported less favourable treatment of older workers. Loretto and White suggested that large organisations used structural mechanisms to apply new ageism.

More recently, Conen, Henkens and Schippers (2011) found that the recruitment and retention situation for older workers has improved in the Netherlands. The authors argued that the recruitment and retention of older workers appeared more dependent on market conditions than employer attitudes. The study reported here was the first in Australia to connect employer attitudes and organisational behaviour towards older workers. Other studies have reported on organisational practices relevant to older workers’ labour market experiences but have not considered their association with employer attitudes (Taylor, McLoughlin, Brooke, Di Biase and Steinberg, 2013). It was hypothesised that employer attitudes towards older workers can be considered a barometer of the organisational climate in which they are employed. As such, it was predicted that those employers who reported more favourable attitudes towards older workers would be employed in organisations that had more favourable disposition towards older workers, as indicated by organisational practices.

3.8 Conclusion

This chapter presented a review of relevant literature regarding the study of employer attitudes towards older workers. In order to clarify foundational concepts, this review began by briefly outlining prevailing perspectives on
attitudes and stereotypes from social psychology literature. The discussion then reviewed the evidence that workplace ageism exists. Manifestations of workplace ageism that have been studied were described. The discussion then engaged with a specific stream of research into ageism in the workplace; studies of employer attitudes towards older workers. In order to facilitate a review of these studies, the barriers to proposing a framework for comparing international research on theories, methodologies and analytical procedures, were presented.

An alternative approach for comparing the findings of international research with that of the present study was advanced. Descriptions of eighteen studies of employer attitudes towards older workers were presented, followed by commentary on this literature. Noting the absence of theoretical perspectives to explain and predict employer attitudes towards older workers, argumentation for the utility of a perspective only recently applied to research into ageism was made. With the commentary on the previous literature highlighting gaps in current knowledge, the specific research questions investigated in this study were defined and operational hypotheses were stated. This underscored the contribution of this study and that are explicitly connected to the research questions and hypotheses addressed. These were outlined. Presented in Table 4 are the hypotheses that have been introduced above. The methods used in the study are described in the following chapter.
Table 1: Statement of null and alternative hypotheses

<table>
<thead>
<tr>
<th>Hypothesis number</th>
<th>Null and alternative hypotheses</th>
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<tbody>
<tr>
<td>H1a: Flexibility</td>
<td>Older workers will be evaluated to be equally or more flexible than workers in the younger and prime-age categories.</td>
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<tr>
<td>H0a: Flexibility</td>
<td>Older workers will be evaluated to have equivalent or better social skills than workers in the younger and prime-age categories.</td>
</tr>
<tr>
<td>H1b: Flexibility</td>
<td>Prime-age workers will be evaluated to have better social skills than workers in the older category.</td>
</tr>
<tr>
<td>H0b: Flexibility</td>
<td>Prime-age workers will be evaluated to have equivalent or poor social skills than workers in the older category.</td>
</tr>
<tr>
<td>H1c: Flexibility</td>
<td>Younger workers will be evaluated to have better social skills than workers in the older category.</td>
</tr>
<tr>
<td>H0c: Flexibility</td>
<td>Younger workers will be evaluated to have equivalent or better social skills than workers in the older category.</td>
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<tr>
<td>H1a: Social skills</td>
<td>Older workers will be evaluated to have poorer social skills than workers in the younger and prime-age categories.</td>
</tr>
<tr>
<td>H0a: Social skills</td>
<td>Older workers will be evaluated to have equivalent or better social skills than workers in the younger and prime-age categories.</td>
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<tr>
<td>H1b: Social skills</td>
<td>Prime-age workers will be evaluated to have better social skills than workers in the older category.</td>
</tr>
<tr>
<td>H0b: Social skills</td>
<td>Prime-age workers will be evaluated to have equivalent or poorer social skills than workers in the older category.</td>
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<tr>
<td>H1c: Social skills</td>
<td>Younger workers will be evaluated to have better social skills than workers in the older category.</td>
</tr>
<tr>
<td>H0c: Social skills</td>
<td>Younger workers will be evaluated to have equivalent or poorer social skills than workers in the older category.</td>
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<td>H1a: Loyalty</td>
<td>Older workers will be evaluated to be more loyal than workers in the younger and prime-age categories.</td>
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<tr>
<td>H0a: Loyalty</td>
<td>Older workers will be evaluated to be equally or less loyal than workers in the younger and prime-age categories.</td>
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<td>H1b: Loyalty</td>
<td>Prime-age workers will be evaluated to be equally loyal as workers in the younger category.</td>
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<td>H0b: Loyalty</td>
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<tr>
<td>H1c: Loyalty</td>
<td>Younger workers will be evaluated to be more loyal than workers in the older category.</td>
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<tr>
<td>H0c: Loyalty</td>
<td>Younger workers will be evaluated to be less loyal than workers in the older category.</td>
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<table>
<thead>
<tr>
<th>Category</th>
<th>Hypothesis</th>
<th>Description</th>
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<tbody>
<tr>
<td>Loyalty</td>
<td>H0c: Younger workers will be evaluated to be equally or more loyal than workers in the older category and less or more loyal than those in the prime-age category.</td>
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<tr>
<td></td>
<td>H1c: Younger workers will be evaluated to be more loyal than workers in the older category and less or more loyal than those in the prime-age category.</td>
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<td></td>
<td>H2c: Older workers will be evaluated to be less or more loyal than those in the prime-age category.</td>
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<tr>
<td>Productivity</td>
<td>H0a: Older workers will be evaluated to be less productive than workers in the prime-age and younger categories.</td>
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<tr>
<td></td>
<td>H1a: Older workers will be evaluated to be more productive than workers in the prime-age and younger categories.</td>
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<td></td>
<td>H2a: Prime-age workers will be evaluated to be more productive than workers in the younger and older categories.</td>
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<td></td>
<td>H3a: Prime-age workers will be evaluated to be equally or less productive than workers in the younger and older categories.</td>
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<tr>
<td>Reliability</td>
<td>H0b: Older workers will be evaluated to be less reliable than those in the prime-age category.</td>
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<td></td>
<td>H1b: Older workers will be evaluated to be more reliable than those in the prime-age category.</td>
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<tr>
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<td>H3b: Prime-age workers will be evaluated to be equally or more reliable than workers in the younger and older categories.</td>
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<tr>
<td>Creativity</td>
<td>H0c: Younger workers will be evaluated to be less creative than workers in the older category.</td>
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<td></td>
<td>H1c: Younger workers will be evaluated to be less creative than workers in the older category.</td>
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<tr>
<td></td>
<td>H3c: Older workers will be evaluated to be equally or less creative than workers in the younger category.</td>
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Chapter Three: Review of previous literature

H0a: Older workers will be evaluated to be equally or more flexible than workers in the younger and prime-age categories.

H6b: Older workers will be evaluated to have less willingness to learn than workers in the younger and prime-age categories.

H0b: Prime-age workers will be evaluated to have equivalent or poorer management skills than workers in the younger category and prime-age categories.

H7b: Prime-age workers will be evaluated to have superior management skills than workers in the younger age category and poorer management skills than workers in the older category.

H0c: Prime-age workers will be evaluated to have equal or superior management skills than workers in the older category and equal or more management skills than workers in the prime-age categories.

H8a: Older workers will be evaluated to have less willingness to learn than workers in the younger and prime-age categories.

H6c: Younger workers will be evaluated to have less willingness to learn than workers in the older category and prime-age categories.

H0c: Younger workers will be evaluated to be equivalent or superior management skills than workers in the older category.

H7c: Younger workers will be evaluated to have inferior management skills than workers in the older category and prime-age categories.

H8c: Older workers will be evaluated to have greater or equal willingness to learn than workers in the younger and prime-age categories.

H6d: Prime-age workers will be evaluated to be equally or less creative than workers in the younger and older categories.

H0d: Prime-age workers will be evaluated to be more creative than workers in the younger and older categories.

H7d: Prime-age workers will be evaluated to be more creative than workers in the younger and older categories.
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H8c: Willingness to learn
Younger workers will be evaluated to have greater willingness to learn than workers in the older age categories.

H10a: Younger workers will be evaluated to have superior new technology skills than workers in the older age categories.

H0c: Younger workers will be evaluated to have equivalent or less willingness to learn than workers in the older age categories.

H9a: Physical health and stamina
Older workers will be evaluated to have poorer physical health and stamina than workers in the younger and prime age categories.

H0a: Older workers will be evaluated to have equivalent or superior physical health and stamina than workers in the younger and prime age categories.

H9b: Physical health and stamina
Prime age workers will be evaluated to have poorer physical health and stamina than workers in the younger age category and superior physical health and stamina than workers in the older category.

H0b: Prime age workers will be evaluated to have equivalent or superior physical health and stamina than workers in the younger age category and equivalent or poorer physical health and stamina than workers in the older category.

H9c: Physical health and stamina
Younger workers will be evaluated to have superior physical health and stamina than workers in the older and prime age categories.

H0c: Younger workers will be evaluated to have equivalent or poorer physical health and stamina in the older and prime age categories.

H10a: New technology skills
Older workers will be evaluated to have poorer new technology skills than workers in the younger and prime age categories.

H0a: Older workers will be evaluated to have equivalent or superior new technology skills than workers in the younger and prime age categories.

H10b: New technology skills
Prime age workers will be evaluated to have superior new technology skills than workers in the younger and older categories.

H0b: Prime age workers will be evaluated to have equivalent or poorer new technology skills than workers in the younger and older categories.
Chapter Three: Review of previous literature

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Workers in the prime-age category will be evaluated to have equal or superior ability to cope with work/life balance skills than older workers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H11a</td>
<td>Older workers will be evaluated to have poorer ability to cope with work/life balance skills than those in the prime-age category.</td>
</tr>
<tr>
<td>H11b</td>
<td>Prime-age workers will be evaluated to have superior ability to cope with work/life balance skills than younger workers in the prime-age category.</td>
</tr>
<tr>
<td>H11c</td>
<td>Younger workers will be evaluated to have poorer ability to cope with work/life balance skills than older workers in the prime-age category.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Ability to cope with stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>H11a</td>
<td>Older workers will be evaluated to have poorer ability to cope with stress than those in the prime-age category.</td>
</tr>
<tr>
<td>H11b</td>
<td>Prime-age workers will be evaluated to have superior ability to cope with stress than younger workers in the prime-age category.</td>
</tr>
<tr>
<td>H11c</td>
<td>Younger workers will be evaluated to have poorer ability to cope with stress than older workers in the prime-age category.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Coping with work/life balance issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>H12a</td>
<td>Older workers will be evaluated to have poorer coping with work/life balance skills than younger workers in the prime-age category.</td>
</tr>
<tr>
<td>H12b</td>
<td>Prime-age workers will be evaluated to have superior coping with work/life balance skills than workers in the younger and older categories.</td>
</tr>
<tr>
<td>H12c</td>
<td>Younger workers will be evaluated to have poorer coping with work/life balance skills than workers in the prime-age category.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Qualities' latent structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>H13</td>
<td>The latent structure of the qualities of older workers will broadly reflect the dimensions uncovered by Henkens (2005).</td>
</tr>
<tr>
<td>H0</td>
<td>A latent structure of the qualities of older workers, which is dissimilar to that of Henkens (2005), is uncovered.</td>
</tr>
</tbody>
</table>
Chapter Three: Review of previous literature

**H14a:** Contact with age group
Respondents whose organisation has a higher proportion of older workers will report more favourable attitudes towards older workers.

**H14b:** Contact with age group
Respondents whose organisation has a diverse workforce age profile will report more favourable attitudes towards older workers.

**H0a:** Contact with age group
Respondents whose organisation has a higher proportion of older workers will report equivalent or less favourable attitudes towards older workers.

**H0b:** Contact with age group
Respondents whose organisation has a diverse workforce age profile will report equivalent or less favourable attitudes towards older workers.

**H15:** Organisation characteristics
Respondents from different industry sectors will have different configurations of attitudes towards older workers.

**H0:** Organisation characteristics
Respondents from different industry sectors will have equivalent configurations of attitudes towards older workers.

**H16:** Organisation characteristics
Respondents from organisations with larger proportions of female employees will have less favourable attitudes towards older workers.

**H0:** Organisation characteristics
Respondents from organisations with larger proportions of female employees will have equivalent or more favourable attitudes towards older workers.

**H17a:** Organisation characteristics
Respondents from larger organisations will have more favourable attitudes towards older workers.

**H17b:** Organisation characteristics
Respondents from larger organisations will have less favourable attitudes towards older workers.

**H0a:** Organisation characteristics
Respondents from larger organisations will have equivalent or less favourable attitudes towards older workers.

**H0b:** Organisation characteristics
Respondents from larger organisations will have equivalent or more favourable attitudes towards older workers.

**H18:** Organisation characteristics, Workforce occupation composition
Respondents from organisations with larger proportions of high skilled workers in their workforces will report more favourable attitudes towards older workers.

**H0:** Organisation characteristics, Workforce occupation composition
Respondents from organisations with larger proportions of high skilled workers in their workforces will report equivalent or less favourable attitudes towards older workers.

**H19:** Organisation characteristics, Labour market conditions
Respondents will make equivalent evaluations of older workers irrespective of the labour market conditions their organisation was experiencing.

**H0:** Organisation characteristics, Labour market conditions
Respondents will make different evaluations of older workers varying according to the labour market conditions their organisation was experiencing.

**H20:** Respondent characteristics
Older respondents will have more favourable attitudes towards older workers.
Chapter Three: Review of previous literature

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Hypothesis 1</th>
<th>Hypothesis 2</th>
<th>Hypothesis 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Older respondents will have equivalent or less favourable attitudes towards older workers.</td>
<td>Respondents who report more favourable attitudes towards older workers will be employed in organisations that have (evidenced in the probability of certain organisational practices) stronger orientation towards older workers.</td>
<td>Respondents who report more favourable attitudes towards older workers will be employed in organisations that have (evidenced in the probability of certain organisational practices) strong orientation towards older workers.</td>
</tr>
<tr>
<td>Gender</td>
<td>Male and female respondents will report equivalent attitudes towards older workers.</td>
<td>Respondents employed in human resource and senior management roles will report equivalent or less favourable attitudes towards older workers than line managers and respondents in other less senior roles.</td>
<td>Respondents employed in human resource and senior management roles will report more favourable attitudes towards older workers than line managers and respondents in other less senior roles.</td>
</tr>
<tr>
<td>Occupation</td>
<td>Male and female respondents will report equivalent attitudes towards older workers.</td>
<td>Respondents employed in human resource and senior management roles will report equivalent or less favourable attitudes towards older workers than line managers and respondents in other less senior roles.</td>
<td>Respondents employed in human resource and senior management roles will report more favourable attitudes towards older workers than line managers and respondents in other less senior roles.</td>
</tr>
</tbody>
</table>

H0: Male and female respondents will report equivalent or less favourable attitudes towards older workers.
H1: Male and female respondents will report more favourable attitudes towards older workers.
H2: Respondents employed in human resource and senior management roles will report equivalent or less favourable attitudes towards older workers than line managers and respondents in other less senior roles.
H2: Respondents employed in human resource and senior management roles will report more favourable attitudes towards older workers than line managers and respondents in other less senior roles.

H0: Respondents who report more favourable attitudes towards older workers will be employed in organisations that have (evidenced in the probability of certain organisational practices) equivalent or weaker orientation towards older workers.
H1: Respondents who report more favourable attitudes towards older workers will be employed in organisations that have (evidenced in the probability of certain organisational practices) strong orientation towards older workers.
Chapter Four: Methodology

This chapter describes the approach used to address the research questions outlined in the previous chapter. The chapter begins with a summary of a key piece of literature discussing the need for studies of labour market age discrimination to study employers. The need to understand the complexities of studying this population and particularly those difficulties present when discussing issues of discrimination are highlighted. The research methodology is presented, including the rationale for the choice of methods. The procedures for data analysis are also outlined. This section describes the analytical techniques used, explaining how the analysis addresses the relationships being investigated. This is followed by a discussion of the reliability, validity and generalisability of this study. The procedures used to ensure the research was undertaken in accordance with ethics guidelines are described. Finally, limitations of the methods and analytical approaches used and the extent to which these place boundaries on the confidence in the results are discussed.

4.1 The value of talking to employers about workplace discrimination

Moss and Tilly (2006) argue that it is critical to talk to employers to understand labour market discrimination. They observe that there are typically four approaches to assessing discrimination in employment: household surveys, employer surveys, administrative data that involves comparisons across groups of employees on indicators of preferential treatment such as payroll data, and behavioural studies or experiments. The advantage of employer surveys is that they can assess the goals, endorsed stereotypes and attitudes of those in a position to discriminate. This is done in the context of organisational structure, characteristics and procedures.

However, Moss and Tilly (2006) argue that employer surveys about issues of discrimination are bedevilled by six problems: sampling; difficulties accessing respondents; uncertainty about which jobs to enquire about; uncertainty about whom to interview in the organisation; assessment of respondent honesty in the
context of the anti-discrimination legislative environment; and disentangling supply side (that is, average skill of a group) versus demand side (that is, discriminatory attitudes based on stereotypes) – factors that determine differing observable outcomes for different social groups.

There are advantages of employer surveys. It is possible to assess the differences in personnel decisions by discriminatory factors. It is possible to determine managers’ goals, preferences and perceptions. For example, beliefs about the need to respond to population ageing for both social equity and economic reasons can be assessed. These perceptions can be then used to predict personnel decisions. Researchers can ascertain and then compare organisational variables, for example, size and industry for associations with discriminatory factors. Also, the details of recruitment processes, job structuring and adherence to policy in day-to-day operations can be assessed. These can be incorporated into models predicting the observed personnel decisions.

Moss and Tilly (2006) recommend a variety of sampling and design factors to overcome the problems they identify. The employer survey used in this study will be evaluated in reference to these recommendations and other standard criteria. In terms of the first difficulty they identify, that of sampling, large-scale national surveys require larger samples than what is generally the case in existing research. This is to account for regional variation in relevant or confounding factors. Both generalisable, large-scale studies and small-scale detailed studies are required. Studies of medium and large organisations are usually more costly but are preferred. Micro and non-employing business represent theoretically different universes that have different sources of error. Therefore, employer surveys benefit from stratified sampling. The second difficulty that hinders employer surveys is obtaining access to participants. Organisational barriers are designed to allow senior and middle management to continue working while lower-level employees deal with non-essential communications. This hinders researchers’ access to these respondents. Moss and Tilly conclude that response rates are tied to survey length. Some methods, for example, Computer Assisted Telephone Interviews, produce better response rates but are more costly.
The third difficulty is deciding which jobs to ask about (Moss and Tilly 2006). There is considerable evidence about job-typing (Oswick and Rosental, 2001; Singer, 1986). Some jobs are deemed more appropriate for one social group than another. Jobs with high physical demands tend to be considered more suitable for younger workers. Asking about a specific social group without reference to job type can be of questionable meaning. Asking about a variety of specific jobs captures management attitudes about these positions and the candidates most appropriate to fill them. The fourth difficulty is deciding which organisation representative to survey. Generally there are multiple stakeholders involved in making personnel decisions and this complicates understanding the universals of the process. Some researchers have triangulated information from multiple recruitment stakeholders. Others have focused on the manager responsible for recruitment in the sample job. Different levels of management, however, have differing goals. For example, cost control versus ease of management, valuing employee hard qualities versus soft qualities, and the level of contact these decision-makers have with employees may lead to differing attitudes across managerial levels. An alternative approach is to compare respondents from different positions across organisations, for example line managers compared with directors and executives.

The penultimate difficulty is respondent honesty. The sensitivity and legal implications of issues of discrimination lead to respondents giving safe, ‘pat’, answers (Moss and Tilly, 2006). For some participants, such responses are truthful, but this cannot be unequivocally stated. The consistent evidence of participants’ inclination towards giving socially desirable responses to surveys makes these issues difficult to dismiss (Crowne and Marlowe, 1960). One approach has been to ask about social groups as potential workers, which has had little success. Another has been to ask participants to rate the most recently hired employee compared to the average employee. A separate question with a sufficient interval is then asked about the social group membership of the most recently hired person. Moss and Tilly conclude that employers are reluctant to make generalised statements about gender and racial groups outside of in-depth interviews. The ubiquitous acceptance of ageism in societies and workplaces suggests employers may more freely and honestly generalise about age groups.
Moss and Tilly (2006) suggest that disentangling supply and demand side factors that determine employment-related outcomes for different social groups is an ongoing difficulty for studies assessing discrimination in employment. Supply side factors describe the average skill or human capital of a social group. Demand side factors describe discriminatory attitudes based on stereotypes. Moss and Tilly argue that little evidence exists that demand versus supply side causes of organisations’ employment preferences can be untangled. Some of the approaches that have been used have variously controlled selected factors to isolate supply and demand factors. For example, studies have controlled the pool of applicants, matched skills, measured promotion, starting wage and wage increases, and compared education levels within jobs. Although these approaches have provided some indicative evidence, there are difficulties with each. For example, information about application pools is particularly problematic to accurately attain.

Researchers have drawn the conclusion that employer views about different social groups should be seen as a mix of accurate perceptions, cultural gaps and stereotypes (Moss and Tilly, 2006). The limitations of the available data make this a reasonable conclusion. This view is advanced cautiously in the context of the sweeping generalisations evidenced in some studies. Such generalisations are rightfully attributed to employer stereotypes about social groups. Moss and Tilly argue that the study of soft qualities will provide more evidence about the influence of demand versus supply side factors. Soft qualities facilitate the set of relationships with colleagues and supervisors. Assessments of these qualities are greatly influenced by others’ attitudes. Assessments of employer evaluations of these qualities have been critical to research in workplace racial discrimination. It is more complicated for workplace ageism. Commentators argue that the manifestation of workplace ageism is evident in perceptions about hard qualities (Van Dalen, Henkens and Schippers, 2010). Employers perceive the qualities more frequently present among older workers (soft qualities) to be less important for work performance than those more frequently present among younger workers (hard qualities). Moss and Tilly suggest that experience in managing particular social groups encourages employers to voice group differences. Such employers perceive their experience with marginalised groups as a source of authority in departing from egalitarian and formulaic responses. These authors conclude that
the employer survey method has limitations. Nevertheless, applications of this method have consistently advanced the understanding of workplace discrimination.

Taking these insights into account, an employer survey was designed to optimise the balance between the need to discuss issues of workplace discrimination and to survey a range of other areas of interest. Described in detail below, the Computer Assisted Telephone Interviews used to collect data in this study had features such as careful item ordering, specific response scale design and professional telephone interviewers to minimise extraneous factors such as socially desirable response bias and maximise possible response rates, completeness of data and respondent honesty.

4.2 Data collection

In this study, the methodology took the form of survey research. A Computer Assisted Telephone Interview (CATI) survey was administered to Australian employers in early 2010. In a CATI survey an interviewer asks a predetermined script of questions presented to them using computer software into which responses are entered simultaneously. The computer program is able to modify the questions presented to the interviewer based on the participant’s responses. The interviewer is able to clarify any questions that arise and to ask respondents to clarify answers. This approach has better response accuracy because interviewers can overcome any confusion that participants encounter in completing the questionnaire. It is reputed to achieve higher response rates than online or postal surveys and is less expensive and requires shorter timeframes than face-to-face interviews. This approach is, however, more expensive than online and postal surveys. The primary expense is the training and employment of interviewers and the purchasing of lists of telephone contact details. Individuals tend to take longer to complete CATI surveys, as explaining the questions and response options over the phone is time-consuming, compared to reading the questionnaire.

The choice to use the CATI method necessitated two compromises: operating within a finite budget placed strict limits on both the numbers of employers who
Chapter Four: Methodology

could be surveyed and the survey length. Overly long surveys potentially influence participant responses or discourage them from completing the questionnaire in its entirety. The CATI method was chosen despite these compromises because of concerns that employers might not be interested in participating in a research study that coincided with a severe economic downturn. Administration of the survey took place at the tail end of the GFC. Retrospectively, Australia’s economy fared better than most other major economies during the GFC and the recovery was shorter and less burdened by uncertainty. However, at the time of administration of the survey, economic prospects were uncertain. The precarious economic climate raised concerns of extremely low response rates from employers, a group renowned for their tendency for non-response to surveys (Baruch and Holtom, 2008).

This program of data collection formed part of a larger Australian project – ‘Working Late and the Spectre of Uselessness: Sustaining labour supply in a globalising economy’ – that considered the employment of older workers in a globalising economy. The project was funded by the Australian Research Council (LP0884065) and industry partners: the Australian Population Institute, Success Factors and the Department of Employment, Economic Development and Innovation in Queensland. The survey asked a range of questions about labour supply management, including the employment of older workers. On average, it was completed in approximately 35 minutes. The survey instrument is included in Appendix 1. A private company specialising in telephone interviewing was contracted to administer the survey. For the majority of participant organisations, the interviewer made an initial telephone call to the organisational ‘gatekeeper’, generally a personal assistant, secretary or an administrative assistant. In this call the interviewer attempted to engage the ‘gatekeeper’. The optimal outcome was their engagement as an internal advocate for participation of the relevant member of the organisation. Attempts were made to schedule a time to conduct the CATI survey. If successful first contact was made, then participants were sent an email or fax providing details about the reasons to participate and a small selection of questions about the demographic profile of the organisation. This provided the opportunity for participants to obtain estimates or exact figures for organisational characteristics prior to the interview.
Two reasons for participation were presented to employers. One was an altruistic motivation. Employers who participated were facilitating the development of policies and procedures aimed at optimising labour force usage that benefits both employers and workers. A pragmatic motivation was also presented. Participation was incentivised through the offer of an exclusive report on the aggregated findings of the survey that would provide unique insights into labour usage. The email or fax sent to participants before the CATI interview is included in Appendix 2. Table 5 provides information concerning the outcomes of contacts made with potential survey respondents. A total of 595 interviews were completed. Among other outcomes, most notable was the almost 1000 contact attempts that led to one of two types of unsuccessful contacts: the contact attempt led to no contact being made or the organisation had no interest in participating in the study. Approximately equal numbers of organisations agreed to participate in the study as those that declined. It is suggested that this justifies the more costly and time-consuming survey method because of its tendency to achieve higher response rates. It also raises questions about the selectivity of participants. This issue is explored further below.

Table 5: Outcomes of the 1867 contact attempts made by the contracted CATI survey administrator

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call-back request</td>
<td>6</td>
</tr>
<tr>
<td>Disconnected</td>
<td>31</td>
</tr>
<tr>
<td>Does not qualify to participate</td>
<td>70</td>
</tr>
<tr>
<td>Duplicate</td>
<td>7</td>
</tr>
<tr>
<td>Fax number</td>
<td>9</td>
</tr>
<tr>
<td>Left organisation and has not been replaced</td>
<td>30</td>
</tr>
<tr>
<td>No contact made</td>
<td>452</td>
</tr>
<tr>
<td>No interest in participating</td>
<td>543</td>
</tr>
<tr>
<td>Reception refused participation request</td>
<td>36</td>
</tr>
<tr>
<td>Survey completed</td>
<td>595</td>
</tr>
<tr>
<td>Unavailable for duration of campaign</td>
<td>54</td>
</tr>
<tr>
<td>Voicemail/answering machine</td>
<td>1</td>
</tr>
<tr>
<td>Wrong number</td>
<td>33</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1867</td>
</tr>
</tbody>
</table>
The author of this thesis collaborated with the chief investigators of the larger project on the design of the employer survey. The funding of this doctoral research was a portion of that allocated for the larger research project. This presented two options. The first was to collect data independently. The second was to collaborate with the chief investigators on the employer survey that was a primary feature of the larger research project. Both options had advantages and limitations, outlined in the methodological limitations section at the end of this chapter, and the decision was made to collaborate on the employer survey. The author was not solely responsible for the inclusion of the attitudinal items but did take a large role in the design of this part of the survey. The selection of the 12 qualities was a collaboration between the author and the chief investigators. The author promoted the inclusion of attitude items about age groups spanning working ages. Other decisions, for example the design of the response options for these items were made collaboratively. The author also made recommendations on other sections of the survey, particularly item and response options design, based on expertise as a statistician.
4.3 Questionnaire structure

The survey was made up of five sections. Each section and the issues covered within them are listed in Figure 11 below:

- **Section 1: Screening for fit with sampling criteria.**
  - Number of employees;
  - Respondent’s occupation;
  - Type of ownership of the organisation;
  - Location of sources of competition;
  - Industry of primary activity;
  - Sector.

- **Section 2: Nature of employment in the organisation.**
  - Demographics of the workforce (gender balance and the age distribution);
  - Modes of employment (part-time, shift work);
  - Proportion of the workforce in different occupation groups;
  - Residency status of employees;
  - Recent and expected changes in workforce composition.

- **Section 3: Human resource management practices.**
  - Recent difficulties in recruitment and retention;
  - Personnel problems;
  - Responses to the experiences of labour shortages;
  - Benefits offered to employees;
  - Self-rated management of human resources issues;
  - Recent changes in work demands, workforce size and levels of production.

- **Section 4: Older workers and the ageing of the Australian workforce.**
  - Attitudes towards workers of different ages;
  - Imminence of the ageing of their organisation’s workforce;
  - Timeframe to respond to workforce and population ageing;
  - Responses to workforce ageing adopted and those expected to be adopted;
  - Anticipated human resource management consequences of workforce ageing.

- **Section 5: Respondent characteristics.**
  - Age;
  - Gender.

*Figure 11: Sections and the issues covered in the employer survey*

4.4 Sampling procedure

Participants were sought from organisations with more than 50 employees. The organisations were categorised as either medium-sized organisations, with 50 to 199 employees, or large organisations, with 200 or more employees. This differentiation was based on the observation that employment prospects for Australian older workers appear more promising in small and medium-sized organisations (Bittman, Flick and Rice, 2001). On the other hand, these organisations were expected to have limited processes and practices compared to large organisations due to the latter having functions of human resource management professionals and the endorsement of anti-discrimination policies, which might lead to greater efforts to employ older workers (Gringart, Helmes and
In order to apply this selection criterion and obtain sufficient numbers of respondents to facilitate robust comparative statistical analysis, stratified random sampling was used. In this approach, the population of interest is classified into mutually exclusive categories, called 'strata'. A random sample is then drawn from within strata. In this study, the proportion of the sample drawn from each stratum did not reflect the proportion of the sub-populations in the real population and is therefore termed ‘disproportionate stratified random sampling’ (Kline, 2005). Disproportionate stratified random sampling is the most commonly applied stratified sampling approach. The primary justification for employing stratified sampling is to ensure strata sample sizes are sufficient to undertake robust multivariate statistical analysis. Also, taking a proportionate stratified random sample would achieve similar results to a correctly applied simple random sample. It is more parsimonious to use simple random sampling in cases where proportionate representation of groups in a population is desired and is therefore the preferred approach.

In this study, the disproportionate stratified random sample was derived from two lists of Australian businesses. These are developed and maintained by a private organisation that then rents or sells the lists to private organisations and researchers. One is described by its owners as a general list of all businesses within Australia. The second is a more targeted list of businesses, focused on large organisations. Both are maintained through a process of contacting listed business and verifying relevant details and updated new business entrants annually. The expense of purchasing access to these lists was weighed against simply contacting businesses listed in freely available business directories. It was decided that it would be more cost-efficient to have interviewers contact a verified list of businesses rather than expending time following uncertain contact information. Responding organisations were selected at random from these lists and were contacted until the goal of 30 per cent response rate with relatively even proportions of medium and large organisation strata was achieved.
4.5 Sample characteristics

Employers from Queensland were surveyed. The regional specificity was necessary due to the involvement of the Queensland Government as a funding partner of the grant. This state government has been particularly active in developing policy responses to workforce ageing (Taylor, McLoughlin, Brooke, Di Biase and Steinberg, 2013). The location of the sample raises important questions about the generalisability of the findings and this issue is discussed later in this chapter.

Large organisations, with 200 or more employees, accounted for 53 per cent of responding organisations, with organisations with between 50 and 199 employees accounting for the remaining 47 per cent. ‘For profit’ organisations constituted 73 per cent of the sample. The remaining 27 per cent were government and not-for-profit organisations (17 per cent and 10 per cent respectively). Organisational gender balance was somewhat skewed towards males. On average, 57 per cent of employees were men. The spread of the percentage of genders in responding organisations was approximately normally distributed across the sample. These distributional characteristics are presented in Figure 12, which shows the frequency of the different proportions of male employees in responding organisations. The proportional percentages of male employees have been collapsed into categories of ten per cent groups. Thus the first category on the left represents the number of responding organisations that had up to ten per cent male employees.
Figure 12: The frequency of organisations with different proportions of male employees representing the gender balance of organisations that participated in the study

Turning to the distribution of age groups within organisations, 20 per cent of employees were aged over 50 and 27 per cent were aged under 30, with the remaining 53 per cent aged between 30 and 50.

Another set of sample characteristics is the demographic characteristics of respondents. Respondents were characterised as predominantly male (64 per cent), with an average age of 45, ranging from 22 to 69 years. Respondent age was approximately normally distributed within this range. Respondents indicated their occupation, with 41 per cent in human resource manager or human resource officer or recruitment functions, 17 per cent in director, chief executive officer, chief financial officer or managing director roles, 14 per cent were regional or department managers, 12 per cent were in general manager roles and 10 per cent were heads or directors of a department. Finally, approximately six per cent of respondents were employed in administrator or ‘other’ roles.
The sample does not contain patterns of participant characteristics that raised concerns about a failure of the disproportionate stratified random sampling approach. This approach yielded a sample that was representative of medium and large Australian employers, with evidence supporting this assertion offered below. The subsequent discussion of the generalisability of this study also enumerates the potential deficiencies of this sample. These deficiencies place boundaries on the generalisability of findings based on these employer survey responses.

4.6 Approach to maintenance of ethical research practices

This study was undertaken following the standard guidelines of ethical research practices. The Human Research Ethics Committee at Swinburne University of Technology approved the approach used to administer the CATI survey. The chief investigators of the project were affiliated with this institution at that time. This approval process endorsed the content of the questionnaire and the procedures to protect participant anonymity and confidentiality. Upon agreeing to participate in the CATI survey, participants were given a plain language statement of the nature of the project, the role they would play and how their responses would be used. This statement outlined the completely voluntary nature of participation and acknowledged their right to withdraw from the study at any time during data collection up to when the data were pooled with other responses. If the respondent was in agreement with all of these details, verbal informed consent was obtained and the CATI survey was administered. The data have been used in accordance with standard human research ethics conditions for data handling. They have been stored in secured digital format and only used for purposes expressed in the application for research ethics approval and the plain language description of the research given to participants.

4.7 Statistical analyses

The analytic processes used to address the hypotheses of this study are outlined below. The statistical analyses were conducted using the software Statistical Package for the Social Sciences (SPSS) version number 20. This software was
chosen because it contained the suite of analytic techniques that were required to test the hypotheses. The analytic techniques required for this study are among the most commonly applied in the analysis of survey data.

The first set of hypothesis related to employer attitudes towards workers of different ages across 12 individual qualities. The direction of the relationships between the individual qualities and age was predicted to vary but the analytical approach adopted was the same. For hypotheses $H_1$ through $H_{12}$, within-subjects analysis of variance with pairwise comparisons were used to determine whether there was a statistically significant difference in the average evaluation of different age groups made by respondents. This analysis also assessed the amount of variation in employer evaluations that was accounted for by age. The pairwise comparisons indicated the direction of the average difference in employer evaluations across age groups. It also indicated whether this difference was statistically significant. Various data characteristics are required to apply within-subjects analysis of variance. Assessment of the satisfaction or violation of these assumptions is also reported with the discussion of these analyses.

The next listed hypothesis addressed the latent structure of the attitudinal items, which draws specifically on the analysis reported by Henkens (2005). Henkens uncovered three latent factors among 15 individual qualities on which employers evaluated older workers. The three latent factors represented productivity, reliability and adaptability. The study reported in this thesis did not use an identical pool of individual qualities but there were sufficient overlaps in the content to anticipate at least partial replication of the latent structure reported by Henkens. The data reduction analysis therefore began by replicating the approach used by Henkens. This was a principle components analysis with a promax rotation. It has been suggested that this approach may suffer from the problematic characteristics of Kaiser's 'little jiffy' (Kaiser, 1970, p. 402). That is, there is no indication of psychometric justifications for employing a data reduction technique that computationally exaggerates the importance of the first factor extracted, for example, a theoretical justification for presuming that the set of items have a unidimensional latent structure. Hence, it is useful to also apply a data reduction technique that does not do this. As such, two sets of data reduction techniques
were applied to the set of individual qualities on which employers evaluated workers of different ages. This enabled assessment of any distinctions that resulted from the computational approach selected.

First, the analytical approach employed by Henkens was replicated for employer evaluations of older workers. The second data reduction technique employed was principle axis factoring initially with an oblique rotation, supplemented with an orthogonal rotation technique in the case of uncorrelated latent factors. Principle axis factoring was selected over the more commonly applied maximum-likelihood data reduction approach because of the maximum-likelihood computational sensitivity to departures from normality (Tabachnick and Fidell, 2001). This was a potential problem because of the number of response options used to capture employer evaluations of workers of different ages. Employers were asked: ‘To what extent do you think the following characteristics apply to workers aged...’ after which the age groups were designated as either ‘50 years and over’, ‘35 years and under’ and ‘between 35 years and 50 years’. After these prefacing statements, employers were presented with the list of 12 individual qualities to evaluate workers in different age groups. Four response options were available: ‘not/low extent’, ‘some extent’, ‘high extent’ and ‘very high extent’.

The response options were a variation on typical Likert-type response scales. These modifications were made to suit the specific evaluations required in this study. The standard phrasing of a Likert-type response scale ranging from ‘strongly agree’ to ‘strongly disagree’ was rejected. The preference was to obtain employer evaluations of the extent they thought workers of different ages possessed the qualities rather than agreement with a statement about the presence or absence of the qualities. The four-point response option was chosen to avoid providing a neutral response option. Such an option could have signalled to employers that the socially desirable response was to evaluate a group of workers neither positively nor negatively. This creates difficulties in the application of certain data reduction procedures such as the maximum-likelihood approach. It has been demonstrated with Monte-Carlo experiments, when fewer than five response options are used, that there is reduced variability typically exemplified through an underestimation of Pearson’s product-moment correlations
In the context of this reduced variability, the principle axis factoring approach to data reduction was preferred. It is more robust in the context of non-normal distributions and asymptotical correlations.

The hypotheses $H_{14}$ through $H_{22}$ were tested using a linear regression model. These hypotheses related to the association between organisational and respondent characteristics and attitudes towards older workers. The organisation characteristics considered were: workforce size, workforce age distribution, workforce gender balance, workforce occupation composition, industry sector and labour market conditions. The respondent characteristics considered were: age, gender and occupation. The two-step linear regression model was constructed to first test the association between organisation characteristics and employer attitudes and then respondent characteristics were added to the model. The modelling procedure was designed to detect any mediation, moderation or suppression effects between the two blocks of independent variables. Also, this analysis assessed the relative importance of associations each organisation and employer characteristic had with employer attitudes. This approach aimed to uncover whether organisation characteristics or respondents characteristics had greater influence on attitudes towards older workers.

Hypothesis $H_{23}$ was concerned with the association between respondent attitudes and certain organisational behaviours. Binary logistic regression was used to test whether attitudes towards older workers were associated with the probability of adoption of actions related to recruiting or retaining older workers. This regression modelling also tested whether attitudes or organisation characteristics were stronger predictors of the likelihood of undertaking these actions. Four organisational behaviours were considered: whether organisations had offered employees approaching retirement ‘flexible withdrawal strategies’ as a response to workforce ageing, whether organisations had recruited older workers in response to labour shortages, whether organisations had encouraged employees to retire later in response to labour shortages and, whether organisations had recruited workers who had already retired in response to labour shortages. A two-step regression model was used in order to assess the relative explanatory power of the attitude variables compared to organisation characteristic variables. The
independent variables used in this model were the 12 attitude items used to evaluate older workers and the organisation characteristics used in the linear regression described above.

To expand on the description of the statistical analyses used in this study, below in Table 6 are the four research questions proposed and the type of evidence that was used to investigate them.
### Chapter Four: Methodology

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Hypothesis Number</th>
<th>Type of evidence sought</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are Australian employer attitudes towards older workers and how do these attitudes compare to those towards workers of other ages?</td>
<td>H1 - H12</td>
<td>Statistically significant mean differences in within-subjects analysis of variance using post hoc comparisons. The direction of the mean differences is stated in the various permutations of hypothesis set out for each quality and age group.</td>
</tr>
<tr>
<td>Is there a latent variable structure among attitude items that reflect a meaningful typology of qualities comparable to those uncovered in previous studies?</td>
<td>H13</td>
<td>A statistically significant association between item scores while controlling for the effect of all other respondent and organisational characteristics and attitude item scores while controlling for the effect of all other respondent and organisational characteristics.</td>
</tr>
<tr>
<td>How do Australian employers vary in their attitudes towards older workers according to individual and organisational characteristics and the characteristics of their organisation including workforce demographics, occupation composition, and labour market situations faced?</td>
<td>H14 - H22</td>
<td>Statistically significant association between respondent and organisational characteristics and attitude item scores while controlling for the effect of all other respondent and organisational factors.</td>
</tr>
<tr>
<td>Do employer attitudes towards older workers play a role in influencing organisational behaviour around the recruitment and retention of older workers and what is the relative importance of these attitudes compared to organisational characteristics and the characteristics of their organisation including workforce demographics, and labour market situations faced?</td>
<td>H23</td>
<td>Statistically significant association between attitudes towards older workers and the probability that organisations had adopted certain practices encouraging older worker participation. The relative importance of attitudes compared to organisational characteristics and the characteristics of their organisation including workforce demographics, and labour market situations faced is assessed by comparing the explanatory power of these variables.</td>
</tr>
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</table>

| Explanatory power of these variables: | Organisational characteristics was assessed by the comparison of statistically significant associations between attitudes towards older workers and the characteristics of the organisation including workforce demographics, occupation composition, and labour market situations faced. The relative importance of attitudes compared to organisational characteristics and the characteristics of their organisation including workforce demographics, and labour market situations faced is assessed by comparing the explanatory power of these variables. |

The comparison of statistically significant associations between attitudes towards older workers and the characteristics of the organisation including workforce demographics, occupation composition, and labour market situations faced.
4.8 Reliability, validity and generalisability

4.8.1 Reliability

This section considers the reliability, validity and generalisability of the results of this study. The following section considers the limitations of the approaches employed, noting the extent that these place boundaries on the applicability and confidence held in the results. The reliability of a study describes the extent to which, under comparable conditions, others could reproduce its findings at a different time (Kline, 2005). The central consideration for the reliability of the findings is the sample of employers that were surveyed. It is necessary to reflect on how well participant responses represent responses given by individuals employed in similar organisations throughout Australia.

This author contends that the sample is largely representative of medium and large organisations in Queensland and Australia. This assertion is based on several factors. First, Queensland, as with the rest of Australia, has been experiencing relatively low levels of unemployment, with ongoing employer concerns about labour shortages (Taylor, McLoughlin, Brooke, Di Biase and Steinberg, 2013). Second, participants were selected at random within stratum. Third, the response rate of approximately 30 per cent was substantially higher than those generally found in corporate surveys (Henkens, Remery and Schippers, 2008; Baruch and Holtom, 2008). Fourth, a concrete approach to assess the representativeness of the sample was considered. This was to compare the proportion of individuals employed across industries and organisation sizes between national data and the sample. It was difficult to establish the proportion of individuals employed across industries while accounting for organisation size at a national level. The problem was excluding small and micro-size organisations that are the predominant business type in Australia with publically available data that is intentionally limited to protect individuals’ rights to privacy.

A further attempt was made to assess the representativeness of the sample used in this study. This alternative approach compared the proportion of employed
persons by industry in the sample to both the national and state proportions of employed persons by industry derived from the 2011 census (ABS, 2012). This is shown in Figure 13, with the number of respondents from each industry presented in brackets. Evident in this figure are both an underrepresentation and overrepresentation of some industries in the sample. The proportions of the manufacturing, retail and mining industries were particularly divergent. It is suggested, nonetheless, that the survey responses were a close representation of the Australian workforce. All industries were adequately represented and the proportions of employed persons by industry were predominantly comparable. This assertion, the high response rate and the arguably similar labour market conditions in Queensland and the national workforce are significant indicative evidence that participant responses would be reproduced under comparable conditions by other researchers. Some characteristics of the sample, however, could have been optimised in order to have stronger claims to the reliability of the findings. These are enumerated in the forthcoming discussion of the limitations of this study.
Figure 13: The proportion of employed persons by industry, in the Australian workforce, the Queensland workforce and the survey sample, with the number of responding organisations from each industry presented in brackets

4.8.2 Validity

The validity of a study is an assessment of whether the results are an evaluation of the concepts that the researchers intended to measure (Kline, 2005). A varied set of factors established the indicative evidence of the validity of this study. The accurate measurement of concepts, operationalised in the CATI survey, the sources of these measures and their adaptation for the present study have important implications for their validity. The items addressing employer evaluations of 12 individual qualities of workers of different ages were of particular importance. These were novel adaptations of items that had been used in previous studies. The other items used in analyses were standardised demographic and organisational characteristics items considered to have unquestioned face validity.

Various options were available when choosing survey items to assess the individual qualities included in the CATI survey. An Australian study proposed a comprehensive list of individual qualities of older workers that have been assessed
in previous research (Gringart, Helmes and Speelman, 2013). Gringart and colleagues developed these into a standardised scale. This study had not been published at the time of the development of the questionnaire. The list of 33 qualities proposed by Gringart and colleagues was also too extensive for the design employed in this study. The present study added to existing research by assessing employer attitudes towards workers of different ages on the same pool of individual qualities. This allowed the direct comparison of older workers to younger workers and workers in prime working years. This unprecedented approach to the assessment of employer attitudes towards workers of different ages created the practical difficulty of tripling the number of attitude items. The practical consequence of this design was that a smaller selection of individual qualities was used.

The final list of 12 individual qualities was not identical to any used in previous studies. The majority had been used in one or more of the previous studies. These were selected because they were considered salient to attitudes towards older workers, for example, loyalty and new technology skills, or had demonstrated mixed assessments in previous studies, for example, creativity, or were particularly salient for the successful fulfilment of the employee role, for example, productivity and flexibility. The validity of this approach cannot be asserted, therefore, based upon its track record in previous studies. This author contends that the individual qualities adopted represent a valid selection of attitudes towards workers in different age groups. Two qualities had not been used in previous studies: management skills and the ability to cope with work/life balance issues. The former was included because of the large proportion of older workers employed in management positions (ABS, 2012). The latter was included because of growing interest in interaction between extending working lives and the potential for older workers filling multiple caring roles (Flynn, 2010). This study adopted a novel approach to measuring employer attitudes, specifically the simultaneous assessment of attitudes towards multiple worker age groups. This approach necessitated a departure from the standard practice of replicating methodology of previous studies.
Responses may have been biased by a participant’s desire to present a positive image of their organisation and to appear to conform to egalitarian ideals for some items. These two distinct forms of bias can influence respondents when responding to survey questions (Moss and Tilly, 2006). The desire for a respondent to modify their answers to present an optimised representation of their organisation is the more difficult of these two biases to reject. This type of bias is dependent on the disposition of the respondent. The only safeguard against this type of bias is the assurance of both individual and organisational anonymity, which was provided. This fails to justify the unequivocal rejection of the influence of this bias on responses. Social desirability bias may also systematically modify participant responses. This could manifest as a desire to present an image of themselves or their organisations as conforming to the egalitarian ideals of social equality. This could lead to underreporting the extent of ageism in their organisation and obscure stereotype based attitudes held towards workers of different ages. This social desirability bias has been widely researched in relation to discrimination in employment. For example, Moss and Tilly provided recommendations for overcoming this bias to assess discriminatory employer attitudes and practices on the basis of race.

This author contends that the differences between ageism and other forms of workplace discrimination have relevance for the influence of socially desirable bias. Numerous commentators cited in the previous chapter have considered ageism in the workplace as systematic, institutionalised and legitimised. This occurs through the confounding of biologically determined physiological changes and socially constructed stereotype based attitudes about the homogeneity of characteristics and motivations of older workers. The uncritical acceptance of the ‘kernel of truth’ of workplace ageism, unlike the stereotypes held as the basis of racism and sexism, may liberate respondents from the social desirability bias.

The shared cultural agreement of the truth of ageism may allow participants to express freely the nature of the stereotype based attitudes they hold towards workers of different ages. Their description of organisational practices that unjustifiably deploy different treatment to workers of different ages may also be free of this bias. Nevertheless, steps were taken to reduce the probability of
employers systematically modifying their responses to present a more egalitarian representation of their attitudes and their organisational practices. These methodological safeguards included: standard assurances of individual and organisational anonymity, and the careful construction of introductory statements that did not signal the researchers’ focus on issues of workforce ageing and workplace ageism. The survey was instead contextualised in the need to study growing concerns about labour force management and skills shortages. The ordering of items in the questionnaire was arranged such that those that would have indicated the study’s particular interest in issues of employer orientations towards older workers and issues of ageism were placed at the end of the questionnaire. These biases have therefore been acknowledged and controlled for as much can be reasonably expected in the context of an employer survey, a population that is notoriously difficult to study (Baruch and Holtom, 2008).

4.8.3 Generalisability

Generalisability describes the extent to which the results of research can be applied to other populations. The question of generalisability for this study is whether the findings are applicable to employers across Australia. The regional specificity of the sample raises questions about the generalisability of the study. It is impossible to state unequivocally that regional specificity did not produce responses that invalidated the generalisation of responses to all Australian medium and large employers. For example, an analysis of these data uncovered a trend in orientations towards older workers among employers that were experiencing recruiting and retention difficulties. This was confined to a certain occupation and was interpreted as a unique outcome that was dependent on the dominance of the mining industry in Queensland (Taylor, McLoughlin, Brooke, Di Biase and Steinberg, 2013).

There are a number of other factors worthy of consideration in making a determination on this issue. First, for larger employers, adherence to standardised organisational structures made it unlikely that being located in Queensland would make them markedly different from similar organisations located elsewhere in Australia. Second, the response rate was comparatively high. Third, organisations
were sampled at random within stratum. These procedures guarded against unintended systematic patterns of responses that reduce generalisability. The proportionate representation of employed persons across industries in the sample was comparable with the national and Queensland workforces. Commentators have suggested that Queensland is a state of two economies. One is centred on the primary industries of agriculture and mining that covers the vast rural and remote regions of this state, which for the sake of context is more than twice the size of Texas. The second is located in the south-eastern corner of the state, centred on the state capital, Brisbane, the third largest city in Australia that has many economic similarities to centres of business on the eastern seaboard. The vast majority of survey respondents were participating in the second of these two economies. These are, of course, linked to the economic activity of the mining and agriculture industries, but have operations identical to organisations anywhere in Australia. This author therefore contends that the findings reported can be reasonably generalised to medium and large organisations throughout Australia.

4.9 Methodological limitations

There were important methodological limitations evident in this study. These limitations were related to reliability and validity and influenced the generalisability of the study. During the administration of the CATI survey, nearly as many organisations as participated in this study had no interest in participating. This has important implications. Refusal to participate is an expected response when conducting organisation surveys. Even when the response rate is comparatively high, as in this study, the rate of refusal begs the question: are the organisations that chose to participate systematically different from those who refused? This question is difficult to answer because upon refusal it is impossible to ascertain the motivation for this. Nor are details about the organisations that may yield some descriptive analysis to explore a pattern of response and non-response available. Participation was incentivised through the offer of an exclusive report on the aggregated findings of the survey. Clearly, for many employers, this incentive was insufficient to induce participation. The failure to offer a more effective incentive is a limitation of this study with unknown effects on the reliability and generalisability of the findings reported.
The next methodological limitation of this study relates to the method of accessing employer attitudes, namely assessment of their explicit attitudes. Research has demonstrated that both implicit and explicit attitudes can influence behavioural intentions (Gawronski and Bodenhausen, 2006). Many researchers have preferred to focus on implicit attitudes because their influence on behavioural intentions is sub-conscious and therefore beyond effortful cognitive control. Implicit cognitions are not susceptible to the effect of response biases such as social desirability. As such, some researchers consider the measurement of implicit cognitions to be better representations of the true attitudes of individuals in the context of modern society with strong egalitarian ideals. It is a limitation of this study that only employers’ explicit cognitions were assessed. This omission was for practical rather than theoretical reasons. The assessment of implicit cognitions is far more complicated and time consuming than simple self-reports. The population of interest for this study are time poor and well known for their readiness to decline participation in research studies. It was deemed impractical and potentially impossible to access this population for such a time consuming and complicated measurement processes. Nevertheless, this one-sided assessment of the known types of attitudes is acknowledged as a limitation of this study.

The approach to measuring attitudes in this study had characteristics that limit the usefulness of findings. The foremost of these limitations was the use of broad age ranges. Asking respondents to provide evaluations of qualities of workers aged ‘under 35 years’, ‘between 35 and 50 years’ and ‘50 years and over’ signals to respondents that commonalities exist among individuals in these groups. This obviously ignores the heterogeneity among those labelled in these groups. Using narrower age groups may have revealed interesting variations in employer attitudes acknowledging more nuanced views towards workers of different ages. Pilot surveys using smaller age-range groups across working ages may have uncovered age thresholds where respondents perceive commonalities to exist. For example, splitting working ages into five-year categories would allow the comparisons of age groups to determine at what age thresholds perceived similarities with younger age groups were outweighed by similarities with older age groups. This approach could then use the normative perceptions of employers to categorise worker age groups where these ‘similarity thresholds’ crossed.
Although this method is a promising approach to use respondent perceptions to dictate age groups, it is practically unfeasible in the data collection used in this study. Consider asking respondents to evaluate nine age groups of workers on a pool of qualities; significant participant disengagement would be certain. This approach could certainly be explored in future studies but in the context of the CATI survey used in this study was not a realistic option.

The author defends the decision to reject using refined categories of older workers in favour of the younger, prime-age, older categorisation used in this study for two reasons. The first is that the ability to determine the absolute and relative position of employer attitudes towards different age groups is currently of greater value to this field. All preceding studies, excluding one (Van Dalen, Henkens and Schippers, 2010), have compared older workers (variously defined) to more or less specifically defined groups of younger workers. These studies were not able to state, for example, that respondents perceive older workers to be highly productive but less productive than younger workers by a difference of $x$ amount. Adding this absolute and relative position to the knowledge gained in previous studies offers new understanding that should be prioritised, even at the expense of necessitating broad age groups of attitude targets.

The second reason is that respondents’ generalisations reflect information that is likely to influence personnel decisions, based on what is known about cognitive information processing. Asking for evaluations of workers based on broad age groups leaves respondents little option but to make generalisations about these groups. Options were even further constrained through the use of response options that forced favourable or unfavourable evaluations. These generalisations reflect respondent attitudes and unquantifiable extraneous factors such as socially desirable response bias, but do not represent the nuanced entirety of their perceptions of specific individuals in these age groups. These generalisations rely, in part, on stored information (stereotypes). This is the reason that studying these attitudes is important.

In terms of attitude formation, it is unlikely that the role of experiences with specific age groups compared to age stereotypes can be untangled (Moss and Tilly,
Indicative evidence, such as strong agreement on the qualities of workers in specific age groups across respondents who may be expected to have experiences with different types of workers in these age groups, is perhaps the most that can be uncovered. For example, one may expect a respondent working in a highly physically demanding industry to observe the physical decline evident in an ageing body and, having compared this observation to younger workers, conclude that older workers have lower physical health and stamina. This attitude is informed by observation, without the need to refer to stereotypes. If another respondent from a knowledge intensive industry where physical capacity plays little role in the execution of work observed incidental absences due to illness from younger and older workers but holds the same attitude as the previously described respondent, one may question the source of this attitude.

In the context of a society criticised for widespread, uncritically accepted and institutionalised ageism it would seem naive to argue that employers represent a staunch island of objectivity, making their decisions free from biases and holding attitudes based only on, or even mostly on, their experiences. Nevertheless, even with the strongest indicative evidence of respondent attitudes being based on stereotypes it is impossible to determine the extent that decisions regarding recruitment, retention and the provision of training are influenced by attitudes beyond the guidance of models of information processing. Reasoning based on these models of information processing would contend that deferring to attitudes is likely in situations where incomplete information is available, if there is time pressure or other stressors affecting decision-making or if the decision-maker is not sufficiently motivated to actively process the information presented. From this perspective it would seem likely that the cognitive efficiency of deploying already stored information rather than processing new information would influence many personnel decisions.

The use of the modified Likert-type response scale was sub-optimal. The difficulty created by this choice includes determining the distance between the response options. It is widely accepted that standard phrasing of a Likert response scale has equal distances between the response options. This justifies the conversion of these categories into numeric values and then the analysis of these values as
interval or ratio levels of measurement (Stevens, 1946). In the present study, modified response option labels were used for which there is little evidence that there is an equal distance between the meanings of the labels. The labels that were used were: ‘not/low extent’, ‘some extent’, ‘high extent’ and ‘very high extent’. In the absence of evidence that the labels had an equal distance between them, this is necessarily assumed. It is assumed that these labels approximate evenly spaced evaluations of the extent of the presence of an individual quality. It is impossible to reject the possibility that there is an inequality in these distances, invalidating both the conversion of these response options to arbitrary numeric values and the subsequent analyses of these values.

A supplementary issue that must be highlighted regarding the response options concerned the first response option: ‘not/low extent’. This response option is problematic for two reasons, according to standard recommendations (Kline, 2005). This response option is double-barrelled. A participant wishing to respond that older workers were not at all creative would select the same option as a participant responding that older workers demonstrated creativity in their work, but to a low extent. These are substantively different statements. The second sub-optimal characteristic of this response option is that it included an absolute evaluation, that is the ‘not’ label. Such labels are generally considered problematic. Both items and response options that employ absolutes such as ‘never’, ‘always’, ‘constantly’ and ‘not at all’ have been shown to be difficult for participants to endorse, even when they wish to indicate the near complete absence or ubiquitous presence of a item topic. This observation was partial motivation for employing the combined response option label, in spite of the standard recommendations. From a practical standpoint, the complete absence of an individual quality may be equivalent to a low level of that quality in terms of the influence on employers’ overall assessments of workers of different ages. For example, an employer who considers older workers to be not at all productive is likely to have a very similar negative attitude as an employer who considers older workers to have low levels of productivity. Despite pragmatic motivations for the decision to employ this response option label, it is necessary to acknowledge this departure from the standard procedures for the use of Likert-type response scales.
It has been observed that employers have weaker orientations towards older workers in times of economic turbulence. For example, early retirement through voluntary redundancies has been used as a less painful way of pruning large workforces instead of laying off other workers en masse (for example, see Remery, Henkens, Schippers and Ekmper, 2003). This is salient for the timing of the administration of the survey. As mentioned already, the CATI survey was administered at the tail end of the GFC. Despite the fact that Australia’s economy fared comparatively well during this period, there was considerable uncertainty about the short-term economic climate. This author suggests that this uncertainty may have influenced perceptions of employers regarding workers of different ages. It is unclear how this influence may have varied across industries and across worker age groups. It is unclear whether the weakening orientation towards older workers observed in times of economic turbulence would be equivalent for younger workers. Younger workers are similar to older workers in that they have not traditionally formed the core of the workforce for large organisations (Kuhn and Bader, 1991). It may have been preferable to administer the survey at a time when employers were not subject to inflated, transitory economic uncertainty. Attempts were made to ensure the data collection yielded a robust sample of employer perspectives through other methodological choices, for example, the use of the more expensive CATI approach as opposed to a postal or online survey.

The decision to employ a quantitative approach in this study was made for two reasons. The primary reason was to ensure results could be compared to the 18 studies that used an almost uniform approach to assessing attitudes towards older workers since the mid 1970s. Researchers all over the world have found this approach edifying. Based on the assorted interests of these researchers and the state of the field at the time of implementation, these studies have variations in the details of their methods. However, as evident from the discussion in the previous chapter (section 3.5.3), these studies were at least partially comparable. More importantly, this stock of studies undoubtedly facilitated the growth of complexity in research questions and analytical approaches developed in later studies. The knowledge sought in this study, particularly the novel findings regarding the relative and absolute position of attitudes towards workers of different ages, has greater value when placed among these preceding studies.
The second reason a quantitative approach was employed was opportunistic and related to the availability of the data. This study formed a portion of a larger research project. A primary component of the larger research project was an employer survey designed to overcome a range of known barriers to accessing this population. Employers are a notoriously difficult population to induce to participate in research studies (Baruch and Holtom, 2008). The chief investigators on the larger research project granted the author the opportunity to participate in the development of the questionnaire presented to employers. The author collaborated with chief investigators on the survey design, including but not limited to the attitudinal items of interest for this study. Undertaking a separate survey would have allowed the author greater design control and the ability to focus solely on issues of employer attitudes. For example, using a separate survey would have allowed the inclusion of additional attitude items. However, this would have necessitated employing a postal or online survey given the funding restrictions placed on a research project such as that reported here. Such independent data collection, while possible, would likely not have produced such quality data or a high response rate.

The above discussion is not intended as an argument that the quantitative approach employed in this study is the only one that should be used when studying attitudes towards older workers. The consequences of the decision to adopt a quantitative strategy in this study are best described in terms of the advantages presented by using a qualitative or mixed method approach. Moss and Tilly (2006) argued that the best way to obtain honest answers from employers when discussing discrimination is to undertake in-depth interviews. During such interviews the researcher has the opportunity to establish rapport and trust with the respondent. An interviewer can gauge their openness to discussion of a topic that can be challenging or uncomfortable for some. In addition, effectively judging when a respondent is willing to discuss workplace discrimination can facilitate a comprehensive discussion beyond what might be discussed with other participants.

Studies of employer attitudes have obtained new knowledge using qualitative methodologies. By adopting a quantitative methodology in this study, important
insights and experiences from respondents may have been overlooked. For example, Loretto and White (2006) used interviews and focus groups in four locations in Scotland, with participants representing 40 organisations. The authors uncovered inconsistent endorsement of positive and negative age stereotypes used in role selection for older workers, strategic and potentially self-serving shifts in deference to organisational anti-discrimination policy in justifications for personnel decisions about older workers, and expressions of powerlessness regarding organisational responses to the then looming enactment of legislation proscribing workplace age discrimination. The depth and richness of the findings reported by Loretto and Whites exemplify the type of knowledge added to this field through qualitative research. The decision to use quantitative methods in this study was made on the grounds of the arguments given above. This author asserts that the prospect of extending the knowledge obtained in the stock of previous studies using this method and the opportunity to collaborate with other experienced researchers on a vastly better funded data collection exercise justify that choice.

4.10 Conclusion

This chapter has described in turn: important reasons for studying employers when interested in understanding workplace discrimination and considerations for effectively studying this population segment, the approach to data collection, the analyses of these data, the relevant characteristics of validity, reliability, generalisability and the limitations of this study. These have been provided in sufficient detail in order for an interested researcher to replicate this study. This author contends that despite the acknowledged limitations, this study contributes to knowledge in this area of research. These contributions are enumerated in the subsequent chapter and the interpretations, implications and recommendations that follow these results.
Chapter Five: Results

This chapter presents the results of statistical analyses addressing each hypothesis. This chapter is divided into four sections. The first considers the within-subjects analysis of respondent attitudes towards workers in different age groups. The second explores the results of data reduction analysis applied to the attitude items. The third describes the results of linear regression analyses comparing attitudes towards older workers across different organisation and respondent characteristics. The fourth reports the changes in probability of certain organisational behaviours relevant to older workers based on differing attitudes towards this group and organisation characteristics.

The first series of analyses reported below address hypotheses H1 through H12. These assessed the direction of employer attitudes towards workers of different ages. Hypothesis H13 was tested using data reduction techniques. This analysis compared the latent structure underlying the attitudinal items to those reported in previous studies. Hypotheses H14 through H22 were assessments of differences in organisational and individual characteristics and the associations these had with attitudes towards older workers. Hypothesis H23 tested whether attitudes towards older workers were associated with the probability that organisations utilised human resource strategies related to the recruitment and retention of older workers. A table noting the questionnaire items used in the analyses is presented in Appendix 3 so they can be identified in the questionnaire presented in Appendix 1.

5.1 Evaluations of worker qualities

The first set of analyses assessed attitudes towards workers of different ages, labelled H1 through H12. The hypotheses were tested using within-subjects analyses of variance. The data analysed satisfied the assumptions of this analytical technique, as described below. The assumptions are randomness, univariate and multivariate normality and sphericity (Tabachnick and Fidell, 2001). Randomness
refers to the need for responses to be drawn from a randomly selected sample and participants need to be independent of each other. This assumption was satisfied in the adoption of the disproportionate stratified random sampling procedure. Univariate and multivariate normality refer to the distribution of the dependent variable scores. Visual inspection of the distribution indicated significant departures from normality for a majority of the individual qualities scores. This suggested the assumption of multivariate normality was likely to be violated. The within-subjects analysis of variance technique is robust to violations of normality. The alternative solutions, data transformations, which result in increased analytical and interpretation complexity, were not justified. Sphericity refers to homogeneity of variance of difference scores calculated between any two comparison groups or levels of the independent variable. Violations of this assumption risk the increased erroneous acceptance of the null hypothesis. Using a modified version of within-subjects analysis of variance can counterbalance this.

Each of the 12 individual qualities demonstrated violations of assumed sphericity, indicated by Mauchly’s test (Mauchly, 1940). The most conservative correction to the standard analysis, the Greenhouse-Geisser correction (Greenhouse and Geisser, 1959) was applied. The assessment of the assumption led to approaches to overcome their violation. These compensations allowed the assessment of hypotheses $H_1$ through $H_{12}$.

The relationship between worker age and employer attitudes was investigated by comparing three different age groups on 12 work-related individual qualities. The mean scores for each age group on these 12 qualities are presented in Figure 14. These are presented in the order of the lowest to highest average evaluations of older workers. Younger and older workers had more heterogeneous evaluations across the 12 qualities than prime-age workers. For the majority of the qualities, evaluations of younger and older workers were diametrically opposed. The lowest evaluations equated to the ‘some extent’ response category. Comparing across young, prime-age and older worker age groups, statistically significant differences in the mean respondent evaluations were detected for each of the 12 qualities. Presented in Table 7 are means, standard deviations and statistical significance of pairwise mean difference comparisons.
The analysis design used in this section of the study allows the direct comparison of attitudes towards workers in different age groups, perhaps the most important contribution of this study to existing knowledge. Reporting this is, however, extremely repetitive. Listing the individual statistically significant differences and mean values for each comparison, 36 in total, does not provide additional information beyond that given by enumerating which hypotheses were supported and describing the pattern of results more generally. The group means, standard deviations, mean differences and statistical significance of these differences from the within-subjects analysis are presented in Table 7.

![Figure 14: Average respondent ratings of workers by age group](image)

As evident in Figure 14, different age groups were each favoured over others on several qualities. Older workers were favoured in terms of loyalty, reliability, management skills and the ability to cope with work/life balance issues. For younger workers, the most positive evaluations were in terms of new technology skills, physical health and stamina, creativity and willingness to learn. Prime-age workers were evaluated most positively on flexibility, the ability to cope with stress and productivity. The only case where two groups were evaluated evenly was the social skills of prime-age workers and older workers. The evaluations of older workers generally conform to the pattern of results obtained in previous
studies. The same cannot be said for the results regarding attitudes towards younger and prime age workers. Due to the comparative absence of evaluations of this kind for younger and prime-age worker groups in previous studies it is impossible to consider the results as compatible or incongruent to what has been found by others. On average, none of the age groups received an overtly unfavourable evaluation on any quality. It can be seen in Figure 14 that the average evaluation of younger workers on the loyalty quality was the lowest, at 2 or the ‘somewhat’ response category. This suggests that respondents held predominantly positive attitudes towards workers in each age group.

At the same time, a fairly consistent schema about workers in different age groups appears to have informed the pattern of evaluations of different qualities. The consistency of the attitudes towards different age groups is suggested in the relatively low standard deviation values, presented in Table 7. Each standard deviation value was less than the distance between two adjacent response options used for these items. This suggestion is also supported by small mean differences obtaining extreme probability values when comparing across age groups, signalling strong consistency in evaluations within worker age groups. These are presented in Table 7.
Table 7: Means, standard deviations and statistical significance of mean differences for within-subjects comparisons of evaluation of workers from 3 age groups

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Younger workers</th>
<th>Prime-age workers</th>
<th>Older workers</th>
<th>Mean difference</th>
<th>Prime-age workers</th>
<th>Mean difference</th>
<th>Prime-age workers</th>
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<tr>
<td><strong>Ability to cope with stress</strong></td>
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* p < 0.001

It is contended that the overall patterns of average evaluation scores indicate that respondent attitudes were most favourable towards prime-age workers and
approximately equally favourable towards younger and older workers. This assumes that each quality is approximately equally important, necessary because of the lack of a justifiable weighting approach for ranking the importance of different worker qualities. Evaluations of prime-age workers were comparably homogenous and the lowest average attitude scores for this age group were relatively favourable. This evenness is evident from visual inspection of Figure 14. Average evaluations of younger and of older workers were more diverse, particularly for younger workers. This age group received the highest average evaluation score on new technology skills and the lowest average evaluation score on loyalty. Though not as extreme, average evaluations of older workers were also heterogeneous. This set of results perhaps confirm suspicions about employer attitudinal favourability towards prime-age workers.

The possible novelty in these results is the evidence they provide that younger and older workers may be in rather more equal positions in respondents’ cognitive schema than previous studies have indicated. Factors such as occupation and industry sector variation play a role in prioritising different attributes but, at least in terms of the pool of qualities used in this study, it is concluded that both older and younger workers hold a less preferred position than prime-age workers. It was surprising to uncover evidence suggesting that younger workers were not strongly favoured, or even favoured at all over older workers. This conclusion received some support from additional analysis. Pooling all scores on the 12 qualities, giving a total attitude score, facilitated an overall comparison of workers in different age groups. Prime-age workers were favoured, followed by older workers and then younger workers, with each difference being statistically significant. These results, because of the unique design of this study, provide empirical evidence that employer attitudes towards older workers were in fact more favourable than those towards the youngest workers. Previous research uncovering negative attitudes towards older workers perhaps reflected the prime-age to older worker comparison. The results offered here are suggestive of a need for balanced (anti-discrimination) protection and advocacy for both older and younger workers. This would represent a dramatic shift in the state of current Australian policy that is overwhelmingly focussed on challenging discrimination against older workers.
The following section reports whether hypotheses regarding attitudes towards different worker age groups were supported or refuted. Each attitude item had an associated three-part hypothesis predicting the differences in evaluations of worker age groups. These are stated as briefly as possible to avoid unnecessary repetition.

The first hypothesis refers to ‘flexibility’. This quality had the lowest explained variance. Only three per cent of the variance was explained by differences in average evaluations across age groups. Hypothesis H\(_{1a}\) was partially supported, older workers being evaluated as less flexible than prime-age workers but equivalent to younger workers. Hypothesis H\(_{1b}\) was supported, prime-age workers being evaluated as more flexible than younger and older workers. Hypothesis H\(_{1c}\) was partially supported, younger workers being considered less flexible than prime-age workers but equivalent to older workers.

The second quality was ‘social skills’. This quality had low explained variance, with 12 per cent accounted for by the average difference across age groups. Respondent ratings were indicative of an assessment of deficits on this quality among younger workers. Hypothesis H\(_{2c}\) was partially supported, prime-age workers being evaluated more positively than younger workers on social skills. All other hypotheses regarding social skills of workers of different ages were rejected.

The third individual quality evaluated was ‘loyalty’. This quality had high explained variance, 53 per cent being accounted for by the average difference across age groups. Respondents perceived increased loyalty with age. Hypothesis H\(_{3a}\) was supported, older workers being evaluated as more loyal than younger and prime-age workers. Hypothesis H\(_{3b}\) was partially supported, prime-age workers being evaluated as less loyal than older workers and more loyal than younger workers. Hypothesis H\(_{3c}\) was partially supported, younger workers being evaluated as less loyal than older and prime-age workers.

The fourth individual quality evaluated was ‘reliability’. This quality had high explained variance, 44 per cent being accounted for by the average difference
across age groups. Respondents perceived increases in reliability with age. Hypothesis H_{4a} was supported, older workers being evaluated as more reliable than younger and prime-age workers. Hypothesis H_{4b} was partially supported, prime-age workers being evaluated as more reliable than younger workers and less reliable than older workers. Hypothesis H_{4c} was partially supported, younger workers being evaluated as less reliable than older and prime-age workers.

The fifth individual quality evaluated was ‘productivity’. This quality had low explained variance, 11 per cent being accounted for by the average difference across age groups. Hypothesis H_{5a} was partially supported, older workers being evaluated as less productive than prime-age workers and more productive than younger workers. Hypothesis H_{5b} was supported, prime-age workers being evaluated as more productive than younger and older workers. Hypothesis H_{5c} was partially supported, younger workers being evaluated as less productive than prime-age and older workers.

The sixth individual quality was ‘creativity’. This quality had moderate explained variance, 24 per cent being accounted for by the average difference across age groups. Worker creativity was perceived by respondents to decrease with age. Hypothesis H_{6a} was supported, older workers being evaluated as less creative than younger and prime-age workers. Hypothesis H_{6b} was partially supported, prime-age workers being evaluated as less creative than younger and more creative than older workers. Hypothesis H_{6c} was partially supported, younger workers being evaluated as more creative than prime-age and older workers.

The seventh quality was ‘management skills’. This quality had moderate to high explained variance, 35 per cent being accounted for by the average difference across age groups. Respondents perceived increases in management skills with age. All three hypotheses (H_{7a,b,c}) relating to perceived increases in management skills with age were supported.

The eighth quality was ‘willingness to learn’. This quality had low to moderate explained variance, 17 per cent being accounted for by the average difference across age groups. Evaluations of willingness to learn only indicated a perceived
Chapter Five: Results

deficit among older workers. Hypothesis $H_{8a}$ was supported, older workers being evaluated as having less willingness to learn than younger and prime-age workers. Hypothesis $H_{8b}$ was partially supported, prime-age workers being perceived as equally willing to learn as younger workers, but more so than older workers. Hypothesis $H_{8c}$ was partially supported, younger workers being evaluated as having greater willingness to learn than older workers, but as having equal willingness to that of prime-age workers.

The ninth quality was ‘physical health and stamina’. This quality had moderate to high explained variance, 36 per cent being accounted for by the average difference across age groups. Respondents perceived declines in physical health and stamina with increasing age. All three hypotheses ($H_{9a, b, c}$) relating to perceptions of decreases in physical health and stamina with age were supported.

The tenth quality was ‘new technology skills’. This quality had high explained variance, 53 per cent being accounted for by the average difference across age groups. Respondents perceived declines in new technology skills with increasing age. Hypothesis $H_{10a}$ was supported, older workers being evaluated as having poorer new technology skills than younger and prime-age workers. Hypothesis $H_{10b}$ was partially supported, prime-age workers being evaluated as having superior new technology skills than older workers but poorer new technology skills than younger workers. Hypothesis $H_{10c}$ was partially supported, younger workers being evaluated as having superior new technology skills than older and prime-age workers.

The eleventh quality was ‘ability to cope with stress’. This quality had low explained variance, nine per cent being accounted for by the average difference across age groups. Respondents perceived deficits in this quality among younger workers. Hypothesis $H_{11a}$ was rejected, older workers being evaluated as more able to cope with stress than younger workers and as having an equivalent ability as prime-age workers. Hypothesis $H_{11b}$ was partially supported, prime-age workers being evaluated as having superior ability to cope with stress than younger workers and as being equivalent to older ones. Hypothesis $H_{11c}$ was
Chapter Five: Results

partially supported, younger workers being evaluated as having weaker ability to cope with stress than prime-age and older workers.

The final quality was ‘coping with work/life balance issues’. This quality had low explained variance, nine per cent being accounted for by the average difference across age groups. Respondents perceived increased ability to cope with work/life balance issues with age. Hypothesis H_{12a} was partially supported, older workers being evaluated as coping better with work/life balance issues than younger and prime-age workers. Hypothesis H_{12b} was partially supported, prime-age workers being evaluated as coping better with work/life balance issues than younger workers but not as well as older workers. Hypothesis H_{12c} was supported, younger workers being evaluated as having poorer skills in coping with work/life balance issues than prime-age and older workers.

The pattern of support, partial support and rejection of the 12 hypotheses, developed from the mechanisms described in social role theory, have important implications for the endorsement of this theoretical perspective. These implications extend to future research into employer attitudes towards workers of different ages and are discussed in the next chapter.

5.2 Items’ latent structure

Hypothesis H_{13} stated that the latent structure of the qualities of older workers would broadly reflect the dimensions of productivity, reliability and adaptability uncovered by Henkens (2005). This hypothesis was rejected. While Henkens’ study employed more and a different set of qualities there was sufficient overlap to reasonably expect convergence on a comparable latent structure. As is evident in Table 8, eight of the qualities assessed in the two studies were overlapping. In some cases the wording was different but the substantive content of the items was equivalent. Among the eight items, each of the three components uncovered by Henkens were represented. This supported the supposition that the latent structure would be replicated.

In assessing the latent structure, the approach used by Henkens was replicated and subsequently a more methodologically robust technique was used. These
techniques were principle components analysis with a promax rotation and principle axis factoring with a direct oblimin rotation respectively. These approaches yielded equivalent factor models. The second approach is reported because of its robustness to data that are not normally distributed. The suitability of this technique for the dataset was evident in the comparison of inter-item correlations reproduced by the factor model compared to those observed based on item values. Using the preferred approach only 13 per cent of the residual differences between reproduced and observed correlations exceeded the critical value, whereas with the replication approach approximately half of these comparison residuals exceeded the critical value.
Table 8: Comparison of the qualities used to investigate the latent structure in Henkens’ (2005) study compared to the study reported in this thesis

<table>
<thead>
<tr>
<th>Henkens (2005)</th>
<th>This study</th>
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<tbody>
<tr>
<td>Older workers have greater <strong>social skills</strong> than younger workers (Reliability)</td>
<td>Social skills</td>
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<tr>
<td>Older workers are more <strong>loyal</strong> than younger workers (Reliability)</td>
<td>Loyalty</td>
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<tr>
<td>Older workers are less <strong>productive</strong> than younger workers (Productivity)</td>
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<tr>
<td>Older workers are less <strong>creative</strong> than younger workers (Productivity)</td>
<td>Creativity</td>
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<tr>
<td>Older workers are more <strong>reliable</strong> than younger workers (Reliability)</td>
<td>Management skills</td>
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<tr>
<td>Older workers are less interested in participating in <strong>training programs</strong></td>
<td>Willingness to learn</td>
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<tr>
<td>Older workers are less capable of doing <strong>physically taxing work</strong> (Adaptability)</td>
<td>Physical health and stamina</td>
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<tr>
<td>Older workers are less able to adapt to <strong>technological change</strong> (Adaptability)</td>
<td>New technology skills</td>
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<tr>
<td>Absenteeism is higher among older workers than among younger workers (Productivity)</td>
<td>Coping with work/life balance issues</td>
</tr>
</tbody>
</table>

The prerequisites for the application of data reduction techniques were satisfied. The Kaiser-Meyer-Olkin measure of sampling adequacy compares the magnitude of correlations between items compared to partial correlations. This indicates the extent to which correlations between items could be explained by another variable: a latent factor. Kaiser-Meyer-Olkin measure of sampling adequacy values above 0.05 are considered adequate with values approaching 1 considered ideal.
The value in this study was 0.92. Bartlett’s test of sphericity assesses the adequacy of correlations between items to warrant the use of factor analysis. This technique is based upon a chi-squared distribution and tests the hypothesis that the correlation matrix between items is populated with zeros. A significant probability value indicates there are adequate correlations between items to justify the use of factor analysis. The chi-squared test yielded the desired significant results ($\chi^2 (66) = 2754.3, p < 0.001$).

The latent structure uncovered among the individual qualities was dissimilar to that reported by Henkens (2005). Two unique factors were uncovered, the first consisting of six items and the second of four items. Two items failed to load on either factor. A forced three-factor solution was assessed as a form of confirmatory factor analysis attempting to replicate Henkens’ findings. This was deemed an inappropriate solution that failed to adequately account for variation in item responses. The preferred two-factor solution is presented in Table 9. The largest loading values are presented first within each factor. The structure of productivity, reliability and adaptability uncovered by Henkens did not accurately describe the content of the latent factors. The structure of ‘hard qualities’ and ‘organisational citizenship behaviours’ described by Van Dalen, Henkens and Schippers (2010) also fails to account for the item content in each factor. The first factor consisted of qualities on which respondents evaluated older workers more favourably than younger workers. The second factor consisted of qualities on which younger workers were evaluated more favourably. Both cross-loading qualities were among those with small proportions of explained variance across age groups and both younger and older workers received moderate evaluations on these qualities.
Chapter Five: Results

Table 9: Factor loadings for the preferred two-factor solution for the latent variables uncovered in the individual qualities upon which employers evaluated older workers

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>0.868</td>
<td>-0.127</td>
</tr>
<tr>
<td>Loyalty</td>
<td>0.791</td>
<td>-0.137</td>
</tr>
<tr>
<td>Social skills</td>
<td>0.654</td>
<td>0.064</td>
</tr>
<tr>
<td>Management skills</td>
<td>0.633</td>
<td>0.114</td>
</tr>
<tr>
<td>Productivity</td>
<td>0.548</td>
<td>0.299</td>
</tr>
<tr>
<td>Coping with work/life balance issues</td>
<td>0.444</td>
<td>0.227</td>
</tr>
<tr>
<td>Ability to cope with stress</td>
<td>0.398</td>
<td>0.375</td>
</tr>
<tr>
<td>Flexibility</td>
<td>0.345</td>
<td>0.28</td>
</tr>
<tr>
<td>New technology skills</td>
<td>-0.159</td>
<td>0.721</td>
</tr>
<tr>
<td>Physical health and stamina</td>
<td>0.115</td>
<td>0.597</td>
</tr>
<tr>
<td>Willingness to learn</td>
<td>0.226</td>
<td>0.581</td>
</tr>
<tr>
<td>Creativity</td>
<td>0.25</td>
<td>0.491</td>
</tr>
</tbody>
</table>

Exploratory factor analyses assessed the latent structure of the attitude items when applied to younger and prime-age workers. This uncovered very similar latent structures to those underlying the evaluations of older workers. This is evident in Table 10 and Table 11, which present the factor loadings for these analyses. The standard prerequisites for the assessment of the suitability for the application of factor analytic techniques to these datasets were satisfied, with Kaiser-Meyer-Olkin measure of sampling adequacy values of 0.924 and 0.882 and significant results for Bartlett’s test of sphericity ($\chi^2 (66) = 3610.2, p < 0.001$) and ($\chi^2 (66) = 2676.5, p < 0.001$) for the prime-age and younger workers respectively. The only distinction between the results of the two factor analyses and those obtained with evaluations of older workers was that the ‘ability to cope with stress’ quality loaded on the first factor rather than cross loading. The consistency in the factor structure for younger and prime-age workers suggests that these groups are perhaps more similar to each other than to older workers. The similarity of the three factor analyses suggests that this latent structure is robust and replicable. This is important in the context of a failure to replicate latent structures reported in previous studies. Based on the content of the two latent
factors uncovered, the first factor was labelled ‘qualities favouring older workers’ and the second factor was labelled ‘qualities favouring younger workers’.

Table 10: Factor loadings for the preferred two-factor solution for the latent variables uncovered in the individual qualities upon which employers evaluated prime-age workers

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>0.856</td>
<td>0.06</td>
</tr>
<tr>
<td>Loyalty</td>
<td>0.816</td>
<td>0.158</td>
</tr>
<tr>
<td>Management skills</td>
<td>0.67</td>
<td>-0.1</td>
</tr>
<tr>
<td>Social skills</td>
<td>0.508</td>
<td>-0.257</td>
</tr>
<tr>
<td>Coping with work/life balance issues</td>
<td>0.507</td>
<td>-0.09</td>
</tr>
<tr>
<td>Productivity</td>
<td>0.5</td>
<td>-0.36</td>
</tr>
<tr>
<td>Ability to cope with stress</td>
<td>0.47</td>
<td>-0.289</td>
</tr>
<tr>
<td>Flexibility</td>
<td>0.36</td>
<td>-0.317</td>
</tr>
<tr>
<td>New technology skills</td>
<td>-0.143</td>
<td>-0.865</td>
</tr>
<tr>
<td>Physical health and stamina</td>
<td>0.097</td>
<td>-0.723</td>
</tr>
<tr>
<td>Willingness to learn</td>
<td>0.178</td>
<td>-0.676</td>
</tr>
<tr>
<td>Creativity</td>
<td>0.21</td>
<td>-0.606</td>
</tr>
</tbody>
</table>
Table 11: Factor loadings for the preferred two-factor solution for the latent variables uncovered in the individual qualities upon which employers evaluated younger workers

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>0.843</td>
<td>-0.092</td>
</tr>
<tr>
<td>Loyalty</td>
<td>0.782</td>
<td>-0.224</td>
</tr>
<tr>
<td>Management skills</td>
<td>0.698</td>
<td>-0.033</td>
</tr>
<tr>
<td>Social skills</td>
<td>0.535</td>
<td>0.155</td>
</tr>
<tr>
<td>Coping with work/life balance issues</td>
<td>0.52</td>
<td>0.124</td>
</tr>
<tr>
<td>Ability to cope with stress</td>
<td>0.516</td>
<td>0.185</td>
</tr>
<tr>
<td>Productivity</td>
<td>0.484</td>
<td>0.278</td>
</tr>
<tr>
<td>Flexibility</td>
<td>0.348</td>
<td>0.295</td>
</tr>
<tr>
<td>New technology skills</td>
<td>-0.137</td>
<td>0.805</td>
</tr>
<tr>
<td>Physical health and stamina</td>
<td>-0.012</td>
<td>0.788</td>
</tr>
<tr>
<td>Willingness to learn</td>
<td>0.212</td>
<td>0.59</td>
</tr>
<tr>
<td>Creativity</td>
<td>0.28</td>
<td>0.546</td>
</tr>
</tbody>
</table>

The latent structure uncovered in attitude items in this analysis has similarities to those reported in previous studies. Despite the departure from hypothesised comparability to the factors reported by Henkens (2005), there are certain parallels with other studies. This is explored in detail in the following chapter. When positioned alongside previous work, the findings of this study make two important contributions. First is the addition of evidence suggesting that factors uncovered may have less to do with the content of attitude items and more to do with whether respondents evaluated older workers positively or negatively on those items. Second is the uniformity in the latent structure for attitude items evaluating different worker age groups. This analysis provides evidence of latent structure consistency largely absent from the literature. This evidence has implications for considering social role theory as a theoretical perspective to understand attitudes towards workers of different ages. These notions are discussed in the next chapter.
5.3 Individual and organisation characteristics, and attitudes towards older workers

A two-step linear regression model was constructed to explore the association that organisation characteristics and respondent characteristics had with attitudes towards older workers. The analysis first tested the association between organisation characteristics and attitudes towards older workers and then respondent characteristics were added to the model. A graphical representation of the two-step model is presented in Figure 15. The modelling procedure was designed to detect any mediation, moderation or suppression effects between the two blocks of independent variables. Also, this analysis assessed the relative importance of associations each organisation and respondent characteristic had with attitudes towards older workers. This approach aimed to uncover whether organisation characteristics or respondent characteristics had greater influence on attitudes towards older workers. The variables that made up each step were:

- **Organisation Characteristics**
  - Workforce size
  - Workforce age distribution
  - Workforce gender balance
  - Workforce occupation composition
  - Industry sector
  - Labour market conditions

- **Respondent Characteristics**
  - Gender
  - Occupation
  - Age

Figure 15: Graphical representation of the two-step regression model and the independent variables within each 'block' used to test associations with attitudes towards older workers

5.3.1 Independent variables used in the regression model

Before describing the results it is useful to consider the independent variables used in this analysis. Some of these variables involved a number of computation
steps to arrive at a useful format for this analysis so it is necessary to explain their meaning. Other variables are simple dichotomous variables but are described here to facilitate understanding of the results offered below.

The independent variables in the organisation characteristics block were workforce size, workforce age distribution, workforce gender balance, workforce occupation composition, industry sector and labour market conditions. Workforce size was a dichotomous variable differentiating organisations with 50 to 199 employees and organisations with more than 200 employees. Workforce gender balance was a continuous variable measuring the percentage of male employees. Workforce occupation composition was measured using eight continuous variables reporting the percentage of the workforce that were in occupation categories derived from the Australian standard occupation classification (ABS, 2013a). These categories were managers, professionals, technicians and trades workers, community and personal service workers, clerical and administrative workers, sales workers, machinery operators and drivers and labourers. Labour market conditions were measured using 11 dummy coded variables indicating whether organisations were experiencing the following difficulties: a need to reduce staff levels, shortages of critical skills, maintaining skill levels among the workforce, competing on remuneration with other employers, retaining innovative capacity, poaching by other employers in their sector, poaching by employers in other sectors, time to fill vacancies, unfilled vacancies, quantity of candidates and quality of candidates. The configuration of the workforce age composition and industry sector variables was more complex and is described in detail below.

Organisations’ workforces were classified as either predominantly young, prime-age, older or diverse. Organisations with a young workforce age profile had more than 25 per cent of employees aged under 35 and less than 25 per cent aged over 50. An older workforce age profile was defined as having more than 25 per cent of employees aged over 50 and less than 25 per cent aged under 35. Prime-age workforces were defined as having more than 50 per cent of employees aged 35–50 and less than 25 per cent either aged under 35 or over 50. Organisations categorised as diverse had more than 25 per cent of employees aged under 35 and
more than 25 per cent aged over 50. Further analysis explored these categorisations.

A Gini coefficient was calculated to establish empirically that different workforce age profiles were appropriately distinct in terms of the relative proportion of the workforce in different age groups. This measure captures the relative equality of the proportion of organisations' workforces in each of the three age groups. This demonstrated that the predominantly prime-age group was more homogenous than the predominantly young and predominantly older workforce. These were comparatively heterogeneous in their age profile and, in turn, less heterogeneous than the organisations with diverse age profiles. A Gini coefficient of zero would indicate the entire workforce of a responding organisation was in one age category and a score of 1 indicates that the workforce was evenly distributed across the age groups. The mean difference in the Gini coefficient for the age profile categories were compared using analysis of variance with Bonferroni adjusted post hoc comparisons. This indicated a statistically significant difference. The differences in the equality of the proportions across the four categories varied significantly. Table 12 presents the frequency and percentage of responding organisations that were classified by their workforce age profile along with the average Gini coefficient score. Diverse organisations had the highest average Gini coefficient followed by 'young' and 'old' organisations and subsequently 'prime-age' organisations. The mean difference between 'young' and 'old' organisations was non-significant. This result indicated that: (1) the organisations with predominantly young and predominantly older workforces had comparable levels of age diversity; (2) organisations with predominantly prime-age workforces were the least diverse in terms of their workforce age profile; and (3) organisations in the diverse workforce age profile group had, on average, the most even proportions of workers in the different age groups.
Table 12: Frequency and proportion of the sample classified into each workforce age profile category and the mean and standard deviation of the Gini coefficient scores for each workforce age profile

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Per cent</th>
<th>Gini Coefficient (M)</th>
<th>Gini Coefficient (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime-age</td>
<td>139</td>
<td>23.4</td>
<td>.42</td>
<td>.14</td>
</tr>
<tr>
<td>Diverse</td>
<td>51</td>
<td>8.6</td>
<td>.65</td>
<td>.02</td>
</tr>
<tr>
<td>Younger</td>
<td>245</td>
<td>41.2</td>
<td>.55</td>
<td>.07</td>
</tr>
<tr>
<td>Older</td>
<td>160</td>
<td>26.9</td>
<td>.57</td>
<td>.07</td>
</tr>
</tbody>
</table>

For the purposes of this analysis, only the diverse age workforces and older age workforces were of interest in terms of their association with attitudes towards older workers. As such, two dummy coded variables were used in the regression model that captured whether organisations had a diverse age workforce or an older age workforce.

The primary industry of operation of the organisations was classified in terms of one of 19 categories that represent the standard classifications used by the Australian Bureau of Statistics (2006b). Due to concerns regarding small cell sizes in certain industries, a new categorisation isolated those industries with a high proportion of occupations with high physical demands and consolidated industries with low numbers of responding organisations to ensure robust comparisons of the average evaluation scores. The reclassified industry groups are presented graphically in Figure 16. Using the reclassified industry sectors, five dummy coded variables were used to represent each industry group in the regression model.
The respondent characteristics block of independent variables included gender, occupation and age. Gender was measured using a dichotomous variable. Age was measured using a continuous variable. Respondent occupation was reclassified from the original response options used in the survey to overcome issues of low responses in certain categories and to group respondents hypothesised to hold certain attitudes towards older workers. Respondent occupations were grouped into human resource based roles and the most senior management positions and compared to lower level management positions and other occupation groups. This reclassification was made for two reasons. First, the regression analysis was completed with the original occupation classifications (detailed in the right hand column of Table 13) and no statistically significant differences were detected. The second reason is that the hypothesis regarding the association between respondent occupation and attitudes towards older workers, driven by findings in previous studies, predicted more favourable evaluations from human resource based roles and the most senior management positions. In light of the initial non-significant results, these occupations were pooled to ultimately confirm or reject this hypothesis. The amalgamations that produced this dichotomised
categorisations are detailed in Table 13 below, along with the numbers of participants in each of the original and refined categories.

Table 13: Occupation categories that were amalgamated to produce the dichotomised employer occupation groups and the number of participants in these occupation groups

<table>
<thead>
<tr>
<th>Dichotomised group</th>
<th>Included occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resource and senior management (n = 403)</td>
<td>Human resource manager, human resource officer, recruitment function (n = 242)</td>
</tr>
<tr>
<td></td>
<td>Director, chief executive officer, chief financial officer, managing director (n = 103)</td>
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<tr>
<td></td>
<td>Head or director of a department (n = 58)</td>
</tr>
<tr>
<td>Middle management and other positions (n = 192)</td>
<td>General manager (n = 71)</td>
</tr>
<tr>
<td></td>
<td>Administrators (n = 7)</td>
</tr>
<tr>
<td></td>
<td>Region or department manager (n = 85)</td>
</tr>
<tr>
<td></td>
<td>Other position (n = 29)</td>
</tr>
</tbody>
</table>

5.3.2 Regression modelling results

The two blocks of independent variables were used to predict employer attitudes on the 12 older worker qualities. The results of these analyses are described below and presented in Table 14. As with the repeated measures analysis of variance comparing the evaluations of different worker age groups, the design of the analysis makes description of individual findings and parameter values repetitive without adding to the information gained in more general description of the results. To remain focused on the key outcomes of this analysis in this section, the following describes the important characteristics of the analysis, key findings and statements of the acceptance or rejection of relevant hypotheses.
### Table 1: Unstandardised Regression Weights for Organisational and Respondent Characteristic Variables Predicting Evaluations of Older Workers on 12 Qualities with Variable Label Key Table Below

<table>
<thead>
<tr>
<th>Flexibility</th>
<th>Social Skills</th>
<th>Loyalty</th>
<th>Reliability</th>
<th>Productivity</th>
<th>Creativity</th>
<th>Management</th>
<th>Willingness</th>
<th>Health and Technology</th>
<th>New Skills</th>
<th>Information Skills to Learn</th>
<th>Social Skills</th>
<th>Cooperate</th>
<th>Flexibility</th>
<th>Productivity</th>
<th>Reliability</th>
<th>Loyalty</th>
<th>Management</th>
<th>Willingness</th>
<th>Health and Technology</th>
<th>New Skills</th>
<th>Information Skills to Learn</th>
<th>Social Skills</th>
<th>Cooperate</th>
</tr>
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<tbody>
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</tr>
</tbody>
</table>

**Note:** Table 1: Unstandardised regression weights for organisational and respondent characteristic variables predicting evaluations of older workers on 12 qualities with variable label key table below.

Chapter Five: Results
Chapter Five: Results
## Chapter Five: Results

<table>
<thead>
<tr>
<th>Workforce Occupation Composition</th>
<th>Quantity of candidates</th>
<th>Quality of candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare Industry</td>
<td>8</td>
<td>77</td>
</tr>
<tr>
<td>Government and Education Industries</td>
<td>7</td>
<td>28</td>
</tr>
<tr>
<td>Retail and Wholesale Industries</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>Service Industries</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>Primary Industries</td>
<td>4</td>
<td>28</td>
</tr>
<tr>
<td>Diversified profile</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>Older age profile</td>
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<td>28</td>
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<tr>
<td>Workforce Age Distribution</td>
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<td></td>
</tr>
<tr>
<td>Workforce Gender Balance</td>
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</tr>
<tr>
<td>Workforce Size</td>
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</table>

<table>
<thead>
<tr>
<th>Respondent Characteristics</th>
<th>Labour Market Conditions</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Laboures</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Machine operators and drivers</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Sales Workers</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Clerical and administrative workers</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Community and personal service workers</td>
<td>13</td>
</tr>
</tbody>
</table>

|                          | Time to fill vacancies   |    |
|                          |                           |    |
|                          | Unfilled vacancies       | 26 |
|                          |                           |    |
|                          | Problem by employers in other sector | 25 |
|                          |                           |    |
|                          | Problem by other employers in your sector | 24 |
|                          |                           |    |
|                          | Replacing employees quickly | 22 |
|                          | Competing on remuneration with other employers | 21 |
|                          | Maintaining skill levels among the workforce | 20 |
|                          | Shortages of critical skills | 19 |
|                          | A need to reduce skill levels | 18 |

* p < 0.1  ** p < 0.05
Overall, the regression model was a poor predictor of employer attitudes. This model explained between four per cent and eight per cent of variance across evaluations of older workers. The inefficiency of this model is particularly noteworthy when compared to the variance explained in the within-subjects analysis of attitudes towards different age groups of workers that ranged from between three per cent and 54 per cent. Despite the inefficiency, a pattern of statistically significant independent variables was evident. The pattern included both consistent and inconsistent associations between organisation and respondent characteristics, and attitudes towards older workers. Consistency in this case refers to the number qualities with which independent variables were associated. The independent variables did not interact with each other when the second block of independent variables was added to the regression model. This indicated that no mediating, moderating or suppressing effects were present. As such, the results from the second step of the modelling analysis are presented.

Also, the absence of the interface between independent variables means that the interpretation of associations are made while the effect of all other included variables are held constant. Associations for independent variables with probability values below 0.1 but exceeding the standard 0.05 critical value have been included. Despite being above the standard critical value for statistical significance these results are still highly unlikely to be due to chance alone. These account for approximately 30 per cent of the associations discussed.

Organisation size, workforce occupation composition and respondent age emerged consistently as being associated with attitudes towards older workers. For eight qualities (social skills, loyalty, productivity, management skills, physical health and stamina, new technology skills, ability to cope with stress and ability to cope with work/life balance issues) respondents in larger organisations made more favourable evaluations of older workers. For nine qualities (flexibility, social skills, loyalty, reliability, productivity, creativity, management skills, ability to cope with stress and ability to cope with work/life balance issues) a greater proportion of technicians and trades workers in the workforce was associated with less favourable attitudes towards older workers. Similarly, for six qualities (flexibility, social skills, loyalty, productivity, creativity and new technology skills) a greater proportion of machinery operators and drivers in the workforce was associated
with less favourable attitudes towards older workers. For eight qualities (social skills, reliability, productivity, management skills, willingness to learn, physical health and stamina, new technology skills and coping with work/life balance issues) favourability towards older workers increased with respondent age.

Variables that demonstrated inconsistent associations with employer attitudes towards older workers were more numerous. A total of five factors, including organisation and respondent characteristics were associated with attitudes towards older workers. These were: workforce age distribution, industry sector, workforce occupation composition, labour market conditions and respondent gender. The results relating to these factors are described below. Only two characteristics demonstrated no association with attitudes towards older workers. These included: workforce gender balance and respondent occupation.

Similarities were uncovered in the results across statistically significant independent variables that were predictors of attitudes towards older workers. A description of the results of the regression modelling sets out these commonalities and provides examples.

The direction of association with different attitudes was uniform within each significant independent variable. For example, on the one hand respondents in larger organisations evaluated older workers more favourably on eight qualities compared to those in medium-sized organisations. On the other hand, increased proportions of machinery operators and drivers in a workforce predicted less favourable evaluations on six qualities. In some instances, for example in the cases of organisation size and respondent age, the uniform direction of associations across evaluations of different qualities may indicate that respondents in these groups have a generalised favourability towards older workers, regardless of the content of attitude topic. There does not appear to be a systematic grouping of attitude content that was significantly different across these groups of respondents.

Contrary to this proposed generalised favourability, attitudes towards older workers associated with workforce occupation composition may reasonably be
assumed to reflect the practicalities of the occupations in question. For example, a greater proportion of machinery operators and drivers in a workforce was associated with less favourable evaluations of older workers on characteristics not central to the execution of this occupation. Arguably, creativity, social skills and flexibility for example do not fit the fundamental skill set required for this occupation category. This may explain, at least in part, the less favourable evaluation of older workers on these qualities from respondents with greater contact with workers in this occupation. For similar reasons the associations between the proportion of other occupation groups (technicians and trades workers, community and personal service workers, clerical and administrative workers, managers, and professionals) and attitudes toward older workers may be explained. A single exception to this direction uniformity occurred in the case of the association between greater proportions of professionals in the workforce and attitudes towards older workers. This workforce composition was associated with evaluations of lower loyalty, greater new technology skills and physical health and stamina. It is suggested this pattern reflects an authentic variation in respondent attitudes based on experience with workers in this occupation group.

Another commonality among the significant independent variables was the strength of the associations. The statistically significant associations uncovered predicted very small changes in respondent evaluations of older workers. For example, all the dichotomised categorical variables, which make up two-thirds of the significant independent variables, predicted changes between 0.1 and 0.32 in respondent evaluations of older workers. Respondent age and workforce occupation composition, statistically significant independent variables measured on interval scales, predicted change in evaluation scores for older worker qualities of less than 0.01 for every year increase in respondent age or percentage increase in a specific occupation group. In both cases these are small changes in evaluation scores. To contextualise this using the sample of this study, the regression model predicts that the oldest respondent, aged 69 years, would evaluate older workers 0.47 higher (approximately half the distance between two response options on these items) than the youngest respondent, aged 22 years. These results suggest the differences in respondent experiences stemming from various organisational and individual contexts have, at most, minimal practical relevance for attitudes
towards older workers. Nevertheless, these results inform the understanding of employer attitudes in the Australian setting in reference to previous research. This is discussed further in the following chapter.

The final similarity among statistically significant independent variables was the equivalent relative importance these variables held for predicting attitudes towards older workers. The range of standardised beta values, which indicate the importance of a variable for the regression model, was between 0.07 and 0.19. This small range was spread comparably across organisation and respondent characteristic variables. This indicates that neither block of independent variables were consistently more influential for attitudes towards older workers. Both blocks of independent variables had variables associated with numerous attitude items (between six and nine) and other variables associated with one to four attitude items. These results suggest that organisation and respondent characteristics are more or less equally influential on attitudes towards older workers, taking into account the wider range of organisation characteristics included in the model.

The results of the regression analysis facilitate acceptance or rejection of nine hypotheses. The outcomes for hypotheses related to organisation characteristics are described first, followed by those relating to respondent characteristics. The hypotheses regarding organisation characteristics compared workforce age profiles, industry sector, workforce gender balance, organisations size, workforce occupation composition and labour market conditions.

Hypothesis H14a stated that respondents in organisations with a larger proportion of older workers would hold more favourable attitudes towards older workers. This hypothesis was rejected. A statistically significant negative association between organisations with larger proportions of older workers and evaluations of older worker flexibility was contrary to the expected relationship. Hypothesis H14b stated that respondents in organisations with a workforce that had a diverse age distribution would hold more favourable attitudes towards older workers. This hypothesis was also rejected. A statistically significant negative association
between organisations with diverse workforce age profiles and evaluations of older worker flexibility was contrary to the expected relationship.

Hypothesis H15 stated that respondents from different industries would have different configurations of attitudes towards older workers. This hypothesis was supported. Respondents employed in the Agriculture, Forestry and Fishing; Mining; Manufacturing; Construction and Transport, Postal and Warehousing industries offered significantly less favourable evaluations of older workers’ physical health and stamina. Respondents employed in the Public Administration and Safety and the Education and training industries made significantly less favourable evaluations of older workers’ physical health and stamina.

Hypothesis H16 stated that respondents from organisations with larger proportions of female employees would hold more negative attitudes towards older workers. This hypothesis was rejected. No significant association between organisational gender balance and attitudes towards older workers was detected.

Hypothesis H17 stated that respondents from large organisations would hold more favourable attitudes towards older workers. This hypothesis was supported. Respondents from large organisations held more favourable attitudes towards older workers on a majority of the qualities evaluated, demonstrating this to be one of the most consistently influential factors on attitudes towards older workers.

Hypothesis H18 stated that respondents from organisations with larger proportions of lower skilled workers in their workforces would hold less favourable attitudes towards older workers. This hypothesis was supported. The interpretation of this result as supporting the hypothesis is offered with a caveat. Larger proportions of lower skill occupation groups: technicians and trades workers, clerical and administrative workers, community and personal service workers and machinery operator and drivers were associated with less favourable attitudes towards older workers on all qualities except willingness to learn and physical health and stamina. This supported the acceptance of the hypothesis. However, results for the two higher skill occupation groups did not provide unequivocal support for the hypothesis. Increasing proportions of managers was
associated with less favourable attitudes towards older workers’ new technology skills and loyalty. The proportion of professional workers was associated with more favourable evaluations of physical health and stamina and new technology skills but also with less favourable evaluations of loyalty. Nevertheless, the weight of negative associations in evaluations with increased proportions of lower skilled workers is interpreted to support partial acceptance of this hypothesis.

Hypothesis $H_{19}$ stated that equivalent evaluations of older workers would be made by respondents irrespective of the labour market conditions their organisation was experiencing. This hypothesis was rejected. Problems with shortages of critical skills and time to fill vacancies were associated with less favourable evaluations of older workers on new technology skills and flexibility respectively. The problem of poaching by employers in other sectors was associated with favourable evaluations of older workers on creativity and willingness to learn. The results suggest that it is only very specific problems with a workforce and the labour market (here only three of 11 workforce and labour market problems were statistically significant independent variables) that influence attitudes towards older workers. The connections these results of associations between organisation characteristics and attitudes towards older workers have with previous studies and theoretically driven expectations are described in the following chapter.

In the following section the outcomes of hypotheses relating to respondent characteristics and attitudes towards older workers are described. The respondent characteristics compared were age, gender and occupation.

Hypothesis $H_{20}$ stated that older respondents would hold more favourable attitudes towards older workers. This hypothesis was accepted. Respondent age was positively associated with a majority of qualities evaluated, emerging as one of the most consistently influential factors on attitudes towards older workers.

Hypothesis $H_{21}$ stated that male and female respondents would report equivalent attitudes towards older workers. This hypothesis was rejected. Male respondents held significantly less favourable attitudes towards older workers’ physical health and stamina and new technology skills.
Hypothesis H\textsubscript{22} stated that respondents in human resource and senior management roles would report more favourable attitudes towards older workers than line managers and respondents in other less senior management roles. This hypothesis was rejected. Respondent occupation demonstrated no significant association with attitudes towards older workers. The implication of these results and their position among the existing literature is discussed in the following chapter.

5.4 Attitudes towards older workers and organisational behaviour

Binary logistic regression was used to test whether attitudes towards older workers were associated with the probability of adoption of certain organisational behaviour related to recruiting or retaining older workers. This regression modelling also tested whether attitudes or organisation characteristics were stronger predictors of these probabilities. Four organisational behaviours were considered: whether organisations had offered employees approaching retirement ‘flexible withdrawal strategies’ as a response to workforce ageing, whether organisations had recruited older workers in response to labour shortages, whether organisations had encouraged employees to retire later in response to labour shortages and, whether organisations had recruited workers who had already retired in response to labour shortages. The three ‘responses to labour shortages’ variables were captured using three dichotomous variables indicating whether these strategies had been used. The ‘flexible withdrawal strategies’ variable captured a range of practices that data reduction analysis suggested were a typology of strategies organisations used to respond to workforce ageing. The construction of the ‘flexible withdrawal strategies’ variable involved data reduction techniques. This analysis is described first to clarify the meaning of this variable before relating the results of the binary logistic regression.

The independent variables used in this analysis were the 12 attitude items regarding older workers and the organisation characteristic variables used in the linear regression analysis. It is noted that the workforce age profile and the industry sector variables used in this case were single categorical variables rather than several dummy coded variables. This change was made to simplify
interpretations. A two-step regression model was used in order to assess the relative explanatory power of the attitude variables compared to organisation characteristic variables. The details of the two blocks of independent variables are presented graphically in Figure 17. A complete tabulation of results is presented in Table 16.

![Graphical representation of the two-step regression model and the independent variables within each ‘block’ used to test associations with organisational behaviour](image)

**5.4.1 Dependent variable construction: flexible withdrawal strategies**

Participants were asked whether their organisation had implemented any of 16 human resource management responses in an attempt to offset effects of workforce ageing. These responses were employed with varying frequency. Employers tended to have a multifaceted approach, adopting several of these responses to workforce ageing. These responses were:

1. Part-time retirement
2. Reduction of working hours before retirement
3. Retraining for older workers
4. Early retirement schemes
5. Possibilities for extra leave for older workers
6. Decreasing the workload for older workers  
7. Reduction in salary (demotion)  
8. Ergonomic measures  
9. Adjustment to irregular work/shift work to accommodate older workers  
10. Continuous career development supported by training  
11. Health and well-being programs  
12. Support for older carers  
13. Retirement planning  
14. Knowledge transfer  
15. Coaching and mentoring  
16. Adjustment of recruitment practices to attract older workers.

A factor analysis was performed using principle axis factoring extraction with a direct oblimin rotation to assess the presence of typologies of employer responses to workforce ageing. Items were removed based on low communalities and low factor loadings. Scree plots consistently suggested a two-factor solution. Each item was removed individually in order of the lowest loading and, in total, seven items were removed. The final structure revealed two conceptually meaningful factors that were labelled 'Older worker flexible withdrawal strategies' and 'General human resource strategies'. The former consisted of items that had the common element of a gradual withdrawal in the lead up to retirement. The latter consisted of more general approaches to human resource management, with items concerning knowledge sharing and acquisition having the largest loadings. See Table 15 for the final model.

Table 15: Latent structure of the two-factor solution of organisations responses to workforce ageing

<table>
<thead>
<tr>
<th>Factor</th>
<th>Flexible withdrawal</th>
<th>General strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part-time retirement</td>
<td>.719</td>
<td></td>
</tr>
<tr>
<td>Reduction of working hours before retirement</td>
<td>.739</td>
<td></td>
</tr>
<tr>
<td>Early retirement schemes</td>
<td>.495</td>
<td></td>
</tr>
<tr>
<td>Possibilities of extra leave for older workers</td>
<td>.765</td>
<td></td>
</tr>
<tr>
<td>Decreasing the workload for older workers</td>
<td>.672</td>
<td></td>
</tr>
<tr>
<td>Continuous career development supported by training</td>
<td></td>
<td>-.675</td>
</tr>
<tr>
<td>Health and well-being programs</td>
<td></td>
<td>-.597</td>
</tr>
<tr>
<td>Knowledge transfer</td>
<td></td>
<td>-.813</td>
</tr>
<tr>
<td>Coaching and mentoring</td>
<td></td>
<td>-.84</td>
</tr>
</tbody>
</table>
Regarding assumptions, tests for sphericity, sampling adequacy and communalities were acceptable (KMO = 0.766, Bartlett’s $= 1296.3$, $p<0.001$). The two-factor model explained 51.2 per cent of the variation in the variables. The residuals of the reproduced correlations revealed 18 (50%) non-redundant values greater than 0.05. While this does not necessitate a rejection of this solution, it does reduce the confidence in this two-factor model. As this factor analysis was based upon dichotomous variables, such model misfit can be expected. This is a basis for some facets of the debate regarding the use of dichotomous variables in factor analysis (for discussion of these debates see Collins, Cliff, McKormick and Zatkin, 1986; Green, 1983; Parry and McArdle, 1991). In the present analysis, dichotomisation of variables was applied for conceptual purposes and the analyses were conducted with awareness of the potential limitations of the use of such data with methods underpinned by correlation matrices.

5.4.2 Logistic regression modelling results

The four logistic regression analyses indicated that attitudes towards older workers were associated with the probability that organisations had adopted practices that encouraged labour market activity among older workers. However, organisation characteristics were more important predictors than attitudes. The regression models based on attitude items explained between two and four per cent of variance in the adoption of these practices. This increased to between seven and 18 per cent when organisation characteristics were included. The exponential beta values arrived at though these analyses are presented in Table 16.
### Table 16: Exponential Beta Coefficients for Binary Logistic Regression Predicting the Implementation of Four Organisational Behaviours

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Flexibility</th>
<th>Social Skills</th>
<th>Loyalty</th>
<th>Productivity</th>
<th>Creativity</th>
<th>Reliability</th>
<th>Willingness to Learn</th>
<th>Physical Health and Stamina</th>
<th>Ability to Cope with Stress</th>
<th>Management Skills</th>
<th>Flexibility</th>
<th>Constant</th>
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<tbody>
<tr>
<td></td>
<td>1.27*</td>
<td>1.17</td>
<td>1.26</td>
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<td>0.92</td>
<td>0.83</td>
<td>1.19</td>
<td>0.81</td>
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<td>1.70</td>
<td>1.27</td>
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<td>1.35**</td>
<td>1.13</td>
<td>1.50</td>
<td>0.95</td>
<td>0.70*</td>
<td>0.93</td>
<td>1.46</td>
<td>0.84</td>
<td>0.69</td>
</tr>
<tr>
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<td>1.13</td>
<td>1.22</td>
<td>1.29</td>
<td>1.29</td>
<td>0.89</td>
<td>1.80</td>
<td>1.01</td>
<td>0.70*</td>
<td>1.27</td>
<td>1.46</td>
<td>0.84</td>
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<td>1.08</td>
<td>1.06</td>
<td>1.01</td>
<td>1.14</td>
<td>1.77**</td>
<td>0.99</td>
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<td>0.91</td>
<td>1.74</td>
<td>0.80</td>
<td>0.66</td>
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**Note:** The table above shows the exponential beta coefficients for binary logistic regression predicting the implementation of four organisational behaviours with variable key label below.
### Chapter Five: Results

<table>
<thead>
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<th>Workforce Gender Balance</th>
<th>Older age Profile</th>
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<tbody>
<tr>
<td>1.74**</td>
<td>1.72**</td>
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<td>Health Industry</td>
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<td>1.02*</td>
<td>Government and Education Industries</td>
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<tr>
<td>Professionals</td>
<td>Retail and Wholesale Industries</td>
</tr>
<tr>
<td>1.01</td>
<td>Service Industries</td>
</tr>
<tr>
<td>Technicians and trade workers</td>
<td>Primary Industries</td>
</tr>
<tr>
<td>Professionals</td>
<td></td>
</tr>
<tr>
<td>Managers</td>
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<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Labour Market Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary industries</td>
<td>Health Industry</td>
</tr>
<tr>
<td>Service industries</td>
<td>Government and Education Industries</td>
</tr>
<tr>
<td>Retail and Wholesale industries</td>
<td>Retail and Wholesale Industries</td>
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<td>Education and Training</td>
<td>Primary Industries</td>
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<td>Health Industry</td>
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<table>
<thead>
<tr>
<th>Labour Market Conditions</th>
<th>Industry Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>A need to reduce staff levels</td>
<td>Primary Industries</td>
</tr>
<tr>
<td>Maintaining skills among the workforce</td>
<td>Service Industries</td>
</tr>
<tr>
<td>Shortages of critical skills</td>
<td>Retail and Wholesale Industries</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Workforce Occupation Composition</th>
</tr>
</thead>
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<td>Primary industries</td>
<td>Workforce Gender Balance</td>
</tr>
<tr>
<td>Service Industries</td>
<td>Older age Profile</td>
</tr>
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<td>Retail and Wholesale Industries</td>
<td></td>
</tr>
</tbody>
</table>
### Chapter Five: Results

<table>
<thead>
<tr>
<th>Poaching by employers in other sector</th>
<th>Time to fill vacancies</th>
<th>Unfilled vacancies</th>
<th>Quantity of candidates</th>
<th>Quality of candidates</th>
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<td>1.09</td>
<td>1.09</td>
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<td>1.61*</td>
<td>1.61*</td>
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</table>

**Nagelkerke $R^2$**

<table>
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<tr>
<th>Block 1</th>
<th>Block 2</th>
</tr>
</thead>
<tbody>
<tr>
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* $p < 0.1$  ** $p < 0.05$  

- Quantity of candidates
- Unfilled vacancies
- Time to fill vacancies
- Poaching by employers in other sector
For each of the organisational behaviours, an organisation characteristic made the largest contribution to the model as indicated by the Wald-statistic. For the models predicting use of flexible withdrawal strategies and recruiting workers who had already retired, workforce size was the most important predictor. Larger organisations were approximately 75 per cent more likely to have adopted both of these practices. Experiencing difficulties with time to fill vacancies was the most important predictor of organisations recruiting older workers in response to labour shortages. Encountering this type of labour market condition predicted a 62 per cent increase in the probability that organisations had recruited older workers. The probability of organisations encouraging employees to retire later was only associated with two factors of approximately equal importance: whether the workforce had an older age profile (predicting a 71 per cent increase in the probability of this practice compared to prime age workforce profiles) and attitudes towards the new technology skills of older workers. For each unit increase, on the four-point response scale, in evaluations of new technology skills, the probability that organisations had encouraged employees to retire later increased by 35 per cent.

Several indicators of labour market conditions had associations with an organisation's probability of offering flexible withdrawal strategies. Labour market conditions were largely unrelated to the adoption of the other organisation behaviours. The need to reduce staff levels and experiencing competition on remuneration with other employers reduced the probability of offering flexible withdrawal strategies by approximately 35 per cent. Organisations experiencing difficulties with poaching by employers in other sectors and the quality of candidates for recruitment were 61 per cent and 43 per cent respectively more likely to offer flexible withdrawal strategies. Difficulties with time to fill vacancies predicted a 62 per cent increase in the probability that organisations would recruit older workers in response to labour shortages.

Labour market conditions may be particularly influential in the adoption of flexible withdrawal strategies because of the range of organisational behaviour captured in this dependent variable. The need to reduce staff levels may be addressed by resisting implementing a number of responses to workforce ageing captured by the flexible withdrawal measure. For example, enforcing a 'cliff-edge' retirement
(Vickerstaff, 2004) may induce older workers, who are approaching retirement but preferring to continue working under changed conditions, such as with a reduced workload or hours, to choose to exit. A similar argument could be made on the grounds of seniority wage system in the context of fierce remuneration competition. An organisation may induce older workers to exit in order to compete on remuneration for other workers. In the case of issues of poaching and quality of candidates, associated with a greater probability of offering flexible withdrawal strategies, the retention of valuable older workers on a part-time or in a reduced responsibility role, rather than lose them to retirement, may offset the productivity losses related to these labour market conditions.

Workforce occupation composition was associated with the use of flexible withdrawal strategies, the recruiting of older workers and recruiting already retired workers. Specific occupation groups were associated with organisational behaviours, suggesting organisations with different types of workforces take specific approaches to respond to workforce ageing and labour shortages. A one per cent increase in the proportions of managers, professionals and clerical and administrative workers in an organisation was associated with an approximate one per cent increase in the probability of the organisation offering flexible withdrawal strategies. Organisations wishing to retain highly skilled older workers and clerical and administrative workers with institutional knowledge perhaps explain these associations. Organisations found alternative working arrangements to encourage continued participation. Organisations with larger proportion of technicians and trades workers and sales workers had higher probabilities of recruiting older workers in response to labour shortages. Similarly, organisations with larger proportions of technicians and trades workers, and clerical and administrative workers had higher probabilities of recruiting already retired workers in response to labour shortages. Both of these results suggest workforces with large proportions of these occupations, considered to be moderate skill level occupations, had a stronger orientation towards older workers as a resource when facing labour shortages than other workforce occupation compositions.

Workforce age distribution and industry sector demonstrated little association with the probability that organisations adopted practices encouraging older
worker participation. An older workforce age profile was associated with a greater probability of offering flexible withdrawal strategies and encouraging employees to retire later compared to prime-age workforce profiles, at 74 per cent and 70 per cent respectively. Organisations with older workforce age profiles appear more inclined to make greater use of the older workers they already employed rather than recruit new or already retired older workers. No other associations between organisation behaviour and workforce age profiles, whether younger, prime-age or diverse, were detected.

Industry sector had a significant association with organisation behaviour in only one case. Organisations in the Retail and Wholesale trade industry were approximately 60 per cent less likely to recruit workers who had already retired compared to organisations in Agriculture, Forestry and Fishing; Mining; Manufacturing; Construction and Transport, Postal and Warehousing industries. The Retail trade industry, as one of the ‘youngest’ industry sectors in Australia (See: Figure 2) may be particularly disinclined to make use of older workers in the face of labour shortages.

Attitudes towards older workers were associated with the probability that organisations had adopted practices concerning the recruitment and retention of older workers. The results suggested that respondent attitudes towards older workers were not, however, particularly important for organisations’ decision to implement the recruitment and retention practices considered in this analysis. This is evident in the very low explained variance (two to four per cent) in the use of the four organisation behaviours accounted for by the attitude items. Similarly, few statistically significant associations were found. Across the four organisational behaviours analysed, only five significant associations with attitudes towards older workers were discovered. The limited importance of respondent attitudes may be explained by the weight of economic imperatives in determining organisational behaviour, the fact that numerous decision makers influence policies and practices in medium and large organisations, and potentially, explanations related to the approach to measuring attitudes used in this study. These potential explanations are discussed in the next chapter.
Despite limited importance, the associations between attitudes towards older workers and organisational behaviour suggested a pattern where counter-normative attitudes were most important. Attitudes that were contrary to commonly reported perceptions of older workers held the largest associations with probabilities of organisation behaviour encouraging older worker participation. More favourable assessments of older workers’ new technology skills, willingness to learn and flexibility were associated with greater probabilities of organisations encouraging employees to retire later, recruiting already retired workers and offering flexible withdrawal strategies respectively. It was evident from the within-subjects analysis of variance that respondents evaluated older workers least favourably on these characteristics. The logistic regression analyses revealed that for each increase of one response option on these items, the probability of organisations adopting the relevant practice increased by 35 per cent for new technology skills, 61 per cent for willingness to learn and 27 per cent for flexibility. These results suggest that, at least in terms of encouraging organisations to make use of older workers in the face of labour shortages and to adjust practices to manage an ageing workforce, attitudes that are contrary to the stereotypical view of older workers are the most important.

Other results regarding attitudes towards older workers and the probability of certain organisational behaviours are relevant to this conclusion. Favourable evaluations of older worker reliability were associated with a lower probability of organisations offering flexible withdrawal strategies. For each increase of one response option on evaluations of reliability, the probability of organisations offering flexible withdrawal strategies fell by 35 per cent. In this case, a favourable attitude towards older workers that conforms to the normative view was associated with lower probability of organisations deploying practices encouraging older worker participation.

The final results regarding attitudes towards older workers and the probability of certain organisational behaviour appears to contradict the pattern described above. Favourable evaluations of older workers’ physical health and stamina predicted a 30 per cent reduction in the probability of organisations recruiting already retired workers. An explanation for this finding is not readily apparent and
it is suggested that perhaps the question of physical health and stamina in the context of an already retired worker is moot for those job types for which this quality is important. When making recruitment decisions for a physically demanding job, recruiting an already retired worker may be dismissed out of hand in spite of a favourable perception of older workers’ physical health and stamina.

Hypothesis $H_{23}$ stated that respondents in organisations that had adopted human resource practices around the recruitment and retention of older workers would hold more favourable attitudes towards older workers. This hypothesis was partially supported. Favourable attitudes towards older workers were associated with both higher and lower probabilities of organisational behaviour encouraging the participation of older workers, depending on the attitude content and the organisational behaviour. A small majority of the significant associations detected, specifically three of five, were as hypothesised and were interpreted as sufficient to accept this hypothesis. Further discussion of these results and the influence the nuances hold for future research and policy are described in the next chapter.

5.5 Conclusion

This chapter presented results of analyses that addressed each of the hypotheses tested in this study. Each of the 23 hypotheses tested were discussed and a statement of their acceptance or rejection was made. A general summation of the outcomes of this chapter is perhaps best described as a mix of results. A number of hypotheses were supported, either completely or partially, and others were rejected. The following chapter discusses these results. This discussion positions the results in the relevant literature, highlighting findings that are congruent to previous studies and also those findings that are distinct from what others have found. This discussion will include alternative explanations for counter-hypothesised findings and how these findings may relate to confounding or extraneous factors contaminating the associations of interest.
Chapter Six: Discussion

This study set out to consider four research questions. Some facets of the questions had not previously been investigated in Australia and some have been neglected in the international literature. Other facets of the research questions have not been assessed since macroeconomic phenomena changed labour market conditions. This chapter discusses the results of the study. The discussion is structured around the four research questions and considers the extent to which the findings complement and contradict those of previous Australian and international studies.

The discussion first covers the comparisons of employer attitudes towards workers in different age groups, particularly noting the support for social role theory as an explanatory principle for these attitudes. A discussion of the data reduction analysis focuses on comparisons to the findings of previous research. These findings appear to support the results of another Australian study, contrary to the hypothesis and have implications for the conceptualisation of typologies of worker qualities. Analysis facilitated by the novel approach to measuring employer attitudes in this study provided the opportunity to consider perceived age-dependence of the qualities evaluated by respondents. Discussion of the respondent and organisation characteristics that were associated with attitudes towards older workers considers explanations for the range of associated factors. One facet of this discussion relates to the finding that some factors demonstrated a consistent association with attitudes and others were inconsistently associated with only small selection of attitudes. Finally, this chapter considers the finding of a limited association between attitudes and organisational behaviours that encourage continued participation of older workers.

6.1 Interpretation of results

6.1.1 Evaluations of workers qualities

The first research question asked: what are Australian employer attitudes towards older workers in terms of 12 salient work-related individual qualities, and how do
these compare to workers of other ages? A number of analyses were used to develop a broad perspective on attitudes towards workers of different ages. Which of these qualities respondents considered most dependent on worker age was assessed. An aggregated score of responses to each of the 12 qualities was compared across age groups. The 12 individual qualities were assessed for the presence of latent variables. It was anticipated that the latent structure of the attitude items would broadly reflect the dimensions uncovered in a previous study (Henkens, 2005).

The hypothesised direction of the relationship between employer attitudes and worker age was predominantly based on the mechanisms described by social role theory. The direct comparison of employer evaluations of older workers with other age groups was an approach almost completely absent from the literature. This resulted in a need to derive the directional hypotheses from theoretical arguments. The hypotheses for each of the 12 qualities were divided into three sub-hypotheses, addressing the comparative position of the three age groups. Of these 36 sub-hypotheses, 14 of the hypothesised directions were supported by the analysis, 19 received partial support and three were rejected. These findings have implications for the endorsement of the social role theory to explain attitudes towards different age groups of workers.

For two qualities, the hypothesised position of each age group was supported. These were management skills and physical health and stamina. The hypothesised favourability of evaluations of management skills with increasing age was based on the observed proportions of different age groups employed in management positions. Greater proportions of older workers are employed in management positions than prime-age or younger workers. Considering this observation's influence on employer attitudes led to expectations that older workers would be evaluated more favourably on management skills. The direction of the relationship between worker age and evaluations of physical health and stamina was based on normative expectations about physical health. The expectation that as people age they experience deterioration in physical health is a stereotype confounded by biologically determined changes associated with age. These changes position older people into social roles typified by dependency and ill health. Observation of older
people in these roles produces the attitude equating ageing with physical decline that ignores individual variation in the biologically determined changes that cause deterioration in physical health and stamina. It was expected that respondents would generalise this stereotype of older people to older workers.

The arguments for the direction of these two hypotheses were derived based on the mechanisms described in social role theory as they potentially related to observable social roles of older workers. Observations about this age group, one relating to the predominance of older workers in management roles and the other to the positioning of older people into social roles typified by dependency and ill health, were expected to be attributed as enduring traits rather than role based characteristics. This was expected to occur based on the theoretical mechanism of correspondence bias. More so than other hypotheses described below, these two hypotheses were based on the operation of the mechanisms described in social role theory in relation to observations about older workers. The finding of unequivocal support for these hypotheses perhaps suggests these theoretical arguments are more robust than the others used in this study.

The hypotheses concerning the remaining ten individual qualities received partial support. The contended directions of seven hypotheses were based on assertions of employers’ generalised preferences for prime-age and younger workers. Qualities with associated hypotheses based on this preference were: flexibility, loyalty, reliability, productivity, creativity, new technology skills and ability to cope with stress. The effect of employer preferences for younger and prime-age workers on ratings of these qualities was over-estimated in the development of these hypotheses. Alternative explanations are offered below.

Respondent evaluations of loyalty and reliability were predicted to favour older workers. Support for this was found in the data analysis. Older workers were evaluated more favourably than other age groups. Based on application of social role theory’s mechanisms, no difference between prime-age workers and younger workers was expected. In both cases, prime-age workers were evaluated more favourably than younger workers. The argument for equivalency of evaluations of prime-age and younger workers' loyalty and reliability was grounded in these age
groups’ contemporaneity to modern labour markets. The results do not support this prediction. Alternative explanations may account for the unexpectedly favourable evaluations of prime-age workers on loyalty and reliability. For example, a prime-age worker who has had a long organisational tenure could be perceived as more loyal than a younger worker who simply has not had a long career. This argument could equally explain evaluations of reliability. Absences or failures to deliver on expectations are evaluated relative to organisational tenure. For example, an employee who consistently demonstrates a lack of reliability early in their organisational tenure is unlikely to be retained and promoted. This may co-vary with age, as new entrants may not have had sufficient time to demonstrate their reliability. Theoretically driven hypotheses are less certain than replications of previous studies. As a result, alternative explanations for counter hypothesised findings are more acceptable. Equally, the novelty of these comparisons dictates that interpretations must proceed cautiously until future studies can replicate these findings. Uncovering evidence that contradicts hypotheses did not invalidate the use of social role theory to explain employer attitudes towards workers of different ages in these circumstances.

The hypotheses addressing the remaining five qualities developed using the arguments based on the assumption of employers’ generalised preference for younger and prime-age workers were: flexibility, productivity, creativity, new technology skills and ability to cope with stress. Hypotheses predicted that evaluations would favour prime-age workers on these qualities. This was supported for flexibility, productivity and ability to cope with stress. Evaluations of creativity and new technology skills, however, were most favourable for younger workers. Hypothesised pejorative views about older workers on these qualities were not found, with evaluations of older workers being more favourable than expected. They were considered equally as flexible as younger workers and more productive than younger workers. A potential explanation can be found in social role theory.

Evaluations of flexibility may reflect perceptions of prime-age workers’ predominance and commitment to the employee role. Normative life course events
such as the financial commitments of home ownership and raising children, along with cultural social norms, solidify prime-age workers’ labour market attachment. The process of correspondence bias, resulting from prime-age workers’ predominance in the employee role, potentially explains the evaluation of younger and older workers being less flexible. Employers may have evaluated prime-age workers’ flexibility most favourably because of observations of younger and older workers’ engagement in other roles. Engagement in multiple roles may reduce younger and older workers’ commitment to the labour market. Such roles may include familial caring roles or engagement in learning and training.

Respondents’ positive assessments of prime-age workers’ productivity conformed to the hypothesis. Contrary to the hypothesis, older workers were evaluated to be more productive than younger workers. A potential explanation for this is related to seniority pay and promotion tendencies. Longer tenures are associated with greater probability of increased pay and promotions through seniority preferences. Through the correspondence bias mechanism, employers ascribe increased pay and promotions to the superior qualities of this group of workers. Productivity is a quality important for career advancement potentially confounded by a seniority preference system. Employer attitudes may reflect observations that older workers, through longer tenures, receive higher pay and greater promotions. Younger workers are therefore perceived to have lower productivity.

Prime-age workers’ ability to cope with stress was evaluated most favourably, conforming to expectations. Older workers’ ability to cope with stress was evaluated more favourably than expected, equivalent to prime-age workers. Perceptions of a deficit among younger workers on this quality may be explained by social role theory. This explanation relates to younger workers’ tendency to occupy jobs at the lower end of the occupation continuum. This can result from the seniority preference system or from the fact some senior positions require experience or demonstrated ability. Employers observe prime-age and older workers holding more senior occupations, encumbered with greater responsibilities and stresses compensated with greater benefits and higher wages. Through the process of correspondence bias, employer attitudes may assign the
role-based behaviour of managing high-stress occupations to the enduring traits of older and prime-age workers.

The two remaining hypotheses, regarding the qualities of creativity and new technology skills, predicted that respondents would favour prime-age workers. However, evaluations favoured younger workers, contradicting the hypotheses. Evaluations were also less favourable towards older workers. Prime-age workers were perceived more favourably than older workers. Attitudes regarding new technology skills may be accounted for by a stereotype resulting from younger persons' developmental contemporaneity to an era of rapid technological change and the ensuing entrenchment of technology into many aspects of daily life. The observation of younger people deploying technology in their social and working lives could potentially result in a stereotype of this group holding greater skills with technology through correspondence bias. Attitudes based on this stereotype may more accurately explain respondents' evaluations of new technology skills than a generalised preference for certain age groups as employees. Behavioural intentions have been shown to play a more important role in determining new technology orientation than age (Morris, Venkatesh and Ackerman, 2005) suggesting that individual variation in new technology skills within age groups is likely to be high. The strong favourability towards younger workers demonstrated in respondent evaluations of this quality may indicate that attitudes in relation to new technology skills are based on a robust stereotype, resilient to conflicting observations of older and prime-age workers with high new technology skills.

Evaluations of creativity were less favourable for older workers. Younger workers were evaluated more favourably than the other two age groups. Prime-age workers were perceived more favourably than older workers. This contradicted the hypothesised favouring of prime-age workers. Creativity has been defined as a coalescence of expertise and knowledge. This would seem to contradict employer perceptions of declining creativity with age (Gringart, Helmes and Speelman, 2005). The observed characteristics of extremely creative people provide a plausible alternative explanation for favourable attitudes towards younger workers' creativity. Policastro and Gardner (1999) demonstrated that exceptionally creative people develop an interest in their field at a young age, have
Chapter Six: Discussion

a creative breakthrough in the first decade of their work in a field and are often famed for the breakthrough. Respondent attitudes are perhaps influenced by examples of exceptionally creative individuals. Through correspondence bias, it is possible that respondents stereotype creativity to the enduring traits of younger people. Declining evaluations of creativity with increasing age fits this explanation.

Those hypotheses based on the presumption of a generalised preference for prime-age and younger workers were less supported by survey responses. The expected pejorative views about older workers were not ubiquitously endorsed. Alternative explanations accounted for the counter-hypothesised findings that maintained the applicability of social role theory. Employer attitudes towards older workers were unexpectedly positive. These were, to a degree, more favourable than those held about younger workers. Employers evaluated both older workers and younger workers less favourably than prime-age workers. Evaluations favouring prime-age workers conformed to the mechanisms of social role theory. The somewhat more favourable evaluations of older workers compared to younger workers contradicted notions of an attitudinal negativity towards older workers. This contradiction raises questions concerning the utility of the present approach to tackling age discrimination in Australia, one that appears to favour actions targeting age discrimination faced by older workers. Arguably there is a need for greater balance in terms of advocacy against age discrimination, with greater acknowledgement of that experienced by younger workers.

The unexpectedly favourable evaluations of older compared to younger workers were evidenced in the aggregated scores and a number of the individual qualities. This comparison assumes that the qualities are equally important. Evidence indicates this may not the case. Van Dalen, Henkens and Schippers (2010) demonstrated that, similarly to the results reported in this thesis, employer evaluations of younger and older workers were polarised. Qualities on which older workers received favourable evaluations were ones on which younger workers received poor evaluations and vice versa. Van Dalen and colleagues suggested these groups of qualities reflected distinct latent variables labelled 'soft qualities' (favouring older workers) and 'hard qualities' (favouring younger workers).
Employers considered hard qualities to be more important than soft qualities. Those qualities that favoured older workers were considered less important than those that favoured younger workers. The qualities assessed in this study were very similar to those in Van Dalen and colleagues’ study. This suggests that although employers evaluated older workers more favourably on the aggregate score, this was perhaps based on evaluations of less important qualities. The individual qualities that contributed to the aggregate evaluation and align with the soft qualities described by Van Dalen and colleagues were: reliability, loyalty, social skills, ability to cope with work/life balance issues and ability to cope with stress. The aggregate scores should be interpreted with care and may not have indicated that respondents were as favourably disposed towards older workers as initial inspection suggested.

Three hypotheses received partial support and were not based on notions of a generalised preference for younger and prime-age workers. These concerned: social skills, willingness to learn and ability to cope with work/life balance issues. Hypotheses regarding social skills were based on research into other forms of discrimination. Moss and Tilly (2006) argued that employer evaluations unchallenged by objective indicators would manifest discriminatory attitudes. As such, it was expected that older workers would be evaluated least favourably on social skills. This expectation was not supported. Older workers and prime-age workers were evaluated more favourably on this quality than younger workers. An alternative explanation relates to a co-variance between age and occupation groups, and the skills required in these occupations. Strong interpersonal skills are required for senior and middle managers in modern organisations (Schaufeli and Taris, 2014). These occupations tend to be populated by prime-age and older workers. Respondents perhaps attributed this set of occupation-based skills to the age groups that primarily populate these roles through correspondence bias.

Hypotheses regarding workers’ willingness to learn were based on normative life course trajectories. The notion that education is the domain of the young person is a ubiquitously shared stereotype. It was expected that employer attitudes would reflect this. A perceived trend of decline in workers’ willingness to learn with increasing age was also expected. Evaluations were most favourable towards
younger workers on this quality. Older and prime-age workers were, however, evaluated homogenously. This finding can be explained through social role theory. A strong orientation towards learning was more confined to younger workers than was hypothesised. As such, the degree of prime-age workers’ orientation towards learning was considered to be equivalent to that of older workers. The favourable evaluations of younger workers are an expression of correspondence bias. Respondents fail to acknowledge the normative life course roles that put younger people into educational institutions. Affirming the basis of this stereotype in correspondence bias is the considerable evidence indicating that, although older workers learn differently, they do not perform worse than younger workers in workplace education (Charness, Kelley, Bosman and Mottram, 2001).

Hypotheses regarding the ability to cope with work/life balance issues were partially supported. Expectations that prime-age workers would be evaluated most favourably were not supported. Employers perceived deficits in the ability to cope with work/life balance issues among younger workers. Older workers were evaluated more favourably than prime-age workers. Older and prime-age workers were evaluated more favourably than younger workers. An explanation for these evaluations relates to changing caring roles. Older workers increasingly face combined demands of longer working lives, later parenting responsibilities and caring responsibilities for elderly parents (Gordon, Whelan-Berry and Hamilton, 2007). Respondents were potentially aware of this from experiences in their own lives and with employees requesting flexibility to manage these demands. Observation of increasing familial demands and labour market attachment at older ages perhaps lead employers to conclude that older workers have a superior ability to cope with work/life balance issues. This relies on the correspondence bias process. The more favourable evaluations of prime-age workers compared to younger workers could also be explained in this way.

6.1.2 Consistent and transitory attitudes towards older workers

A number of the attitudes towards older expressed by respondents were similar to those found in previous research. The extent to which the results are in agreement with previous research is described in order to present a picture of those attitudes
towards older workers that are seemingly consistent across notional contexts and enduring over extended time periods. A reference table listing the previous studies according to the favourability or otherwise of evaluations reported is presented in Appendix 3. Consistent findings concerning attitudes towards older workers evident in the literature and also uncovered in the present study were:

- Favourable assessments of
  - Loyalty
  - Reliability
  - Productivity
- Unfavourable assessments of
  - Physical health and stamina
  - New technology skills

In eight of the nine previous studies that included evaluations of older worker loyalty, assessments were favourable. This was also the case in the present study. The single exception in the literature was Henkens’ (2005) study where respondents were in disagreement about whether this quality was present among older workers. In the case of reliability, eight of the thirteen studies that included this quality reported favourable evaluations of older workers, as did the present study. Although the five remaining studies reported ambivalent evaluations or disagreement among respondents of this quality, the majority of these were based on student samples (Loretto, Duncan and White, 2000; Lyon and Pollard, 1997; Chiu, Chan, Snape and Redman, 2001) or smaller, non-representative samples (Schmidt, 2000). Evaluations of older worker productivity were similarly consistent, with seven of the nine studies including this quality finding favourable evaluations of older workers. Although prime-age workers were evaluated significantly more favourably than older workers on this quality in the present study, the average evaluation of older workers was still favourable, as can be seen in Figure 14 (section: 5.1). The two other studies that included evaluations of productivity reported unfavourable evaluations of older workers (Van Dalen, Henkens and Schippers, 2010) and disagreement among respondents on evaluations of this quality (Gringart, Helmes & Speelman, 2005).
In four of the seven studies that included evaluations of older workers’ physical health and stamina, evaluations were unfavourable. This was also the case in the present study. Only one study reported favourable assessments of older workers’ physical health and stamina (Marshall, 1996) and two others reported disagreement among employers (Berger, Marshall and Ashbury, 2005) and ambivalent attitudes on this quality (Gringart, Helmes and Speelman, 2005). In seven of the 12 studies that included assessments of older workers’ new technology skills, unfavourable evaluations were reported. The present study replicated this finding. In two studies, favourable attitudes towards this quality were reported (Hassell & Perrewe, 1995; Marshall, 1996) and in three others ambivalence or disagreement on this quality were reported (Schmidt, 2000; Henkens, 2005; Berger, Marshall and Ashbury, 2005). There are no issues of sample generalisability or out-datedness of these studies to justify dismissing these counter current findings. However, the weight of replicated assessments of older workers on this quality and the fact that this unfavourable attitude was found in the oldest of the studies considered (Rosen and Jerdee, 1976b), the most recent study (Van Dalen, Henkens and Schippers, 2010) along with several studies in between, suggests it would be reasonable to conclude this is a robust and consistent attitude towards older workers.

The remaining eight attitudes were inconsistently evaluated by respondents in previous studies or the results of the present study were incongruous to consistent previous findings or were qualities not measured in previous studies. Surprisingly, three qualities that are unquestionably important for executing many occupations were all but omitted in previous studies of attitudes towards older workers. These overlooked qualities were the ability to cope with stress (the single exception being Gray and McGregor (2003) who, as with the present study, found favourable evaluations of older workers), the ability to manage work/life balance issues and management skills. These qualities are therefore excluded from this exploration of enduring attitudes towards older workers. In five of the eight studies assessing older worker creativity, evaluations were favourable. This finding was not replicated in the present study. In two other studies, as with the present study, evaluations were unfavourable (Rosen and Jerdee, 1976b; Van Dalen, Henkens and Schippers, 2010) and one study reported ambivalent attitudes on this quality.
(Gringart, Helmes and Speelman, 2005). Despite failing to replicate the favourable evaluation of older worker creativity in this study, it is suggested that the persistent favourable evaluations reported in five of eight previous studies (Rhine, 1984; Taylor and Walker, 1994; Steinberg, Donald, Najman and Skerman, 1996; Gray and McGregor, 2003; Henkens, 2005), each with robust methodological characteristics and generalisable employer samples, justified its inclusion as an enduring attitude towards older workers.

The three remaining qualities: flexibility, social skills and willingness to learn were all evaluated inconsistently in previous studies. Social skills was the only one of the three to be evaluated favourably in the present study. The pattern of studies that reported favourable, unfavourable or ambivalent attitudes on these qualities did not indicate a pattern of specific national context, sample characteristics, item wording or other measurement approach characteristics to explain variations in evaluations. It is suggested these qualities would be most usefully conceptualised as variable attitudes towards older workers. These potentially indicate the attitudes influenced by respondent experiences and therefore difficult to account for in developing both a priori hypotheses and intervention exercises.

The designation of certain attitudes as consistent and transient, based on the result of this study and the 18 preceding studies achieved two purposes. The first was to position the results of the present study among those that came before. From this exercise it is evident that this study has largely replicated the consistent attitudes found across the stock of previous studies (with the exception of the creativity quality). This replication supported the assertion of the validity of this study’s measurement of attitudes towards older workers and demonstrated that these attitudes endure and are valid in the Australian national context. The second purpose for designating certain attitudes as consistent or transient based on cumulative evidence from several decades of research is to inform recommendations for intervention exercises promoting attitude change among employers. The results of this study, in combination with previous studies, potentially indicate that strategies and expectations about attitude change should be modulated based on the consistency or transience of the specific attitude.
Challenging a consistently reported attitude could reasonably be expected to be a more difficult process. For example, older workers have been evaluated less favourably on new technology skills in numerous studies of employer attitudes. In accounting for findings regarding this quality in this study, it was suggested that attitudes towards new technology skills appear resilient to observation of counter-stereotypical evidence. It was contended that large individual variation in new technology skills within age groups might be expected based on findings that behavioural intentions were more important predictors of orientation towards new technologies than age (Morris, Venkatesh and Ackerman, 2005). Changing this attitude may require prolonged and creative social marketing if it is resilient to counter-stereotypical evidence of older workers with high new technology skills. Changing transient attitudes may be a more easily achieved. For example, older workers were evaluated less favourably on flexibility in this study and previous research found inconsistent evaluations of this quality. Transience between negative and positive evaluations in different studies perhaps suggest that attitudes towards older worker flexibility may be more pliable, susceptible to change based on observations of older workers being flexible and promotion of best practice example of organisations deploying flexible work arrangement to encourage the continued participation of older workers and older workers demonstrating flexibility to meet their organisations needs.

6.1.3 Attitude items’ latent structure

The latent structure underlying the 12 qualities was assessed. This uncovered similar latent variables across the three age groups. A two-factor solution was judged as optimal. Flexibility did not fit the two-factor solution. The ability to cope with stress also cross-loaded for older workers. The first factor consisted of qualities on which older workers were evaluated more favourably than younger workers. The second factor consisted of qualities on which younger workers were evaluated more favourably than older workers. The factors were labelled ‘qualities favouring older workers’ and ‘qualities favouring younger workers’ respectively. The first factor included the qualities: reliability, loyalty, social skills, management skills, productivity and coping with work/life balance issues. The second factor included the qualities: new technology skills, physical health and stamina,
willingness to learn and creativity. This latent structure was different to that uncovered in previous research, for example Henkens’ (2005) three-factor structure.

Similarities to the latent structure reported by Van Dalen, Henkens and Schippers (2010) were evident. Both the present study and Van Dalen and colleagues’ work uncovered latent factors that grouped qualities that favoured either younger or older workers. In the present study, however, item content did not reflect the ‘hard’ and ‘soft’ qualities dichotomy reported by Van Dalen and colleagues. The first factor in the present study included ‘soft qualities’, such as social skills, and ‘hard qualities’, such as productivity. The second factor contained items similar to the ‘hard qualities’ latent variable in Van Dalen and colleagues’ study. Consistent latent structures across age groups were present in both studies. The comingling of hard and soft qualities can be explained by considering the nature of these qualities. Productivity was the hard quality that loaded in the first factor. Productivity was not included in the analysis reported by Van Dalen and colleagues. This quality does not fit conceptually with the notion of soft qualities. The presence of this item in this factor is perhaps the result of the favourability of respondent evaluations of older workers’ productivity. The findings of a recent Australian study of employer attitudes towards older workers may provide an explanation for the failure to replicate a latent structure reported in previous studies.

Gringart, Helmes and Speelman (2013) assessed the latent structure among employer evaluations of older workers on a range of qualities. The two-component structure reported Gringart and colleagues resembled the latent factors uncovered in the present study. The two-component structure delineated items that favoured older workers from those that did not favour older workers. The authors concluded that the two factors represented ‘difficulty factors’ (p.113). Difficulty factors are groups of items extracted as result of the statistical analyses rather than identification of underlying themes. The average raw scores of employer responses produced the groupings of items rather than substantive meanings of the items. The statistically driven explanation for the latent factors uncovered in the present study appears applicable. This explanation accounts for the
incongruent substantive meanings of the qualities delineated into the two factors more parsimoniously than the three-factor model proposed by Henkens (2005) or the soft and hard quality dichotomy described by Van Dalen, Henkens and Schippers (2010). It is noted that two previous studies may have uncovered difficulty factors in the analysis of attitude item latent structure (Warr and Pennington, 1993; Chiu, Chan, Snape and Redman, 2001). The pattern of items underpinning the factors in these studies were interpreted by the respective authors as having conceptually significant meanings and did not consider the possibility that the results were driven by the favourability of evaluations captured by the items. This may indicate the need to reconceptualise the predominant perspective in studies of employer attitudes towards older workers that data reduction techniques reveal meaningful typologies of qualities. It is suggested that interpretations of latent factors extracted from attitudinal items should eliminate the possibility of these factors representing difficulty factors before concluding that they signify meaningful typologies of qualities. This offers assurance that conclusions based on the analysis of latent factors, for example Van Dalen, Henkens and Schippers’ (2010) conclusion that ‘hard qualities’ are more important to employer perceptions of productivity, are not confounded by misinterpretation of the meaning of latent factors.

The ‘difficulty factor’ interpretation does not invalidate the contention of multidimensionality of employer attitudes based on age. This explanation is interpreted as supporting social role theory’s understanding of stereotypes. Factors do not reflect typologies of qualities such as hard and soft qualities or productivity, reliability and adaptability. Instead, they represent perceptions about age groups. This is evident in the polarisations of evaluations. This is also evident in the homogeneity of the latent structure across age groups observed in this study and that carried out by Van Dalen, Henkens and Schippers (2010). Respondents have observed different social roles and occupations typically occupied by younger and older workers. Through correspondence bias, role-based characteristics have been assigned as representing enduring traits of individuals in these age groups. The different social roles and occupations that tend to be occupied by younger and older people explain the latent structure if the ‘difficulty factor’ explanation is accepted.
6.1.4 Age dependence of evaluations

Respondent perceptions of the extent of age dependence of the 12 qualities were assessed. This has not been reported in the literature before. The amount of variance in employer evaluations that was explained by effect of age group ranged from small to large. This suggests that from the respondent perspective, some of these qualities were more dependent on age than others. New technology skills and loyalty were most dependent on age. More than half of the variation in evaluation scores was explained by the effect of age group (\(\eta^2 = 0.53\) for both).

Age group explained moderate proportions of variation in evaluation scores of reliability, physical health and stamina, management skills and creativity. These qualities had \(\eta^2\) scores ranging from 0.44, 0.36 and 0.35 to 0.24 respectively. Smaller proportions of variation in evaluation scores of willingness to learn, social skills, productivity, ability to cope with stress, coping with work/life balance issues and flexibility were explained by age group. These qualities had \(\eta^2\) scores ranging from 0.17, 0.12, 0.11, 0.09 and 0.06 to 0.03 respectively. This new information can inform approaches to modifying attitudes. The extent of age dependence could be a proxy for the robustness of the attitudes, an assertion supported by the overlap between qualities perceived as highly age dependent in this study and those evaluated in consistently in previous studies. Examples of this include new technology skills, loyalty, reliability, physical health and stamina, and creativity.

Greater efforts at persuasion are likely to be required for attitudes perceived to be more dependent on age. It is suggested that a nuanced approach reflecting the expected difficulty in persuasion may provide optimal results in terms of attitude change. Developing this approach to include a more exhaustive list of individual qualities would also facilitate the design of interventions that aim to optimise employer attitudes to older or younger workers.

6.1.5 Individual and organisational characteristics

Relationships between attitudes and respondent and organisational characteristics were assessed. The first hypothesis related to the extent of contact with older workers. The hypothesis that greater contact with older workers would positively influence attitudes was not supported. Respondents in organisations with older
and diverse workforce age profiles reported less favourable attitudes towards older workers' flexibility. The present study's results suggest that contact with older workers may not improve employer attitudes towards older workers. Contact with marginalised groups, or Zajonc's (1968) 'mere exposure' effect, has been effective in modifying racial prejudices. Less empirical evidence exists regarding its utility in changing workplace age stereotypes. The counter-hypothesised results may reflect respondents' confidence to depart from socially desirable response bias driven by perceived expertise of respondents with experience interacting with older workers. Moss and Tilly (2006) argued such evaluations are to be expected from employers with experience in interacting with marginalised groups. Under this explanation, respondents with limited experience make more favourable evaluations based on a desire to conform to egalitarian ideals. Respondents with more experience interacting with older workers however feel their experience justifies departure from such a position. The specificity of this association to only evaluations of flexibility, in the context of a regression model, which consisted of weak associations and limited explanatory power, suggests that these results be viewed cautiously until replicated in future analyses.

The industry of the organisation was hypothesised to influence attitudes towards older workers. This was the case and the associations indicated that respondents from industries with large proportions of physically demanding jobs held less favourable attitudes about older workers' physical health and stamina. It appears reasonable to conclude, based on the specific industries and that only evaluations of physical health and stamina varied, that observation of few older workers, in physically demanding jobs, played a role in influencing respondent attitudes. Respondents from the following industries made these less favourable evaluations of older workers: Agriculture, Forestry and Fishing; Mining; Manufacturing; Construction; Transport, Postal and Warehousing; Public administration and Safety, and Education and Training industries. The mechanisms explaining this evaluation may be multifaceted. For example, older workers in physically demanding roles may have withdrawn earlier than normative retirement ages. They may have been out-performed by younger workers or the biologically determined changes in physical capacity with age may have been accentuated by extended periods working in physically demanding roles. The respondents in these
industries generalised their observations about older workers in a specific type of occupation to enduring traits of older workers as a group, suggesting the mechanisms described by correspondence bias. The observed normative decline in physical capacity with age is not challenged. One may ask, however, whether an employer in these industries would be influenced negative attitudes about older workers' physical health and stamina if presented with a personnel decision regarding an older worker with exceptional physical health and stamina.

Among the industries mentioned above, two did not appear to fit in a typology of industries with a high proportion of physically demanding occupations. These were the Public Administration and Safety, and the Education and Training industries. These two industries were merged into an aggregate classification when it was found that the industry variable based on the standard classification of industry used by the Australian Bureau of Statistics (2006b) was not associated with attitudes towards older workers. These two industry sectors were merged because of small sample sizes and a judgement that there was significant overlap in the types of occupations included in both industries. The Public Administration and Safety industry classification includes large proportions of physically demanding occupations such as police and emergency services, including fire fighters and military organisations. The average evaluations of older workers' physical health and stamina made by respondents in the Public Administration and Safety industry were lower than those in the Education and Training industry and comparable to those of other industries with large proportions of physically demanding jobs. In light of the explanation offered above, it is suggested that it was respondents from the Public Administration and Safety industry who made less favourable evaluations of older workers' physical health and stamina.

The relationship between gender and attitudes towards older workers was also assessed. The results of this analysis were contrary to the hypothesised relationship and contradicted previous research. No differences in evaluation scores were observed across organisations with varying workforce gender balances. This may indicate that respondent attitudes towards older workers were equivalent for male and female dominated workforces. This finding supports the results of Gringart, Helmes and Speelman (2013). The authors found no differences
in evaluations when employers were asked separately about male and female older workers. The absence of gender differences is an important addition to previous analyses, demonstrating homogeneity in attitudes towards older workers. Gender is one of the most fundamental characteristics on which people are categorised. A potential explanation for the absence of a relationship is that employer beliefs about gender are displaced by their beliefs about age. This suggests that age may be a more important organising category than gender in employer attitudes. Studies have demonstrated the differences in experiences of discrimination, career trajectories and retirement transitions for men and women, and so it was counter-intuitive to find evidence of homogeneity of attitudes towards older workers in the context of organisations with predominantly male or female workforces. This is particularly so when other findings regarding workforce characteristics, for example industry sector and age profile, appear to play a role in determining attitudes towards older workers. These findings support the notion of respondents’ age-based attitudes as robust cognitive constructs but will require replication for some semblance of certainty because of the methodological caveats described below.

The absence of support for the gendered ageism hypothesis may be the result of a limitation of the approach. Organisations were categorised according to the relative proportion of men and women in their workforce and compared on age-based evaluations. Increased contact with a gender is not guaranteed by the presence of a larger proportion of that gender in the workforce. Employers in organisations with highly gendered workforces do not necessarily have a more gendered view of different age groups. It was hypothesised that employers from organisations with larger proportions of women would have more pejorative views towards older workers because of a number of factors. These include observations that female older workers tend to have greater difficulties in transitions common in that stage of the life course and that women tend to be thought of as old at younger ages than men. It was presumed that female workers would be burdened with the pejorative views ascribed to older workers at younger ages. To test this more effectively, the extent of survey participants’ interactions with workers of both genders could have been measured. Van Dalen, Henkens and Schippers (2010) used this approach to assess employer contact with older
workers, finding a significant association between contact and employer attitudes. Future research could benefit from applying this approach in the exploration of gendered ageism.

The association between organisation size and attitudes towards older workers was assessed. The results of this hypothesis were as expected. Respondents from large organisations held more favourable attitudes towards older workers on a majority of the qualities evaluated, demonstrating this to be one of the most consistently influential factors on attitudes towards older workers. Respondents from larger organisations evaluated older workers more favourably on: social skills, loyalty, productivity, management skills, physical health and stamina, new technology skills, ability to cope with stress and ability to cope with work/life balance issues. The range of qualities on which older workers were evaluated favourably suggested respondents in large organisations held general favourability towards older workers. There did not appear to be a meaningful pattern in the qualities that were evaluated favourably. Older workers employed in large organisations may offer counter-stereotype evidence, leading to evaluations reflecting employer experiences with these older workers. This favourability may result from the activity of human resource departments promoting equal opportunity policies or greater effectiveness in recruitment and retention. As a result, these evaluations of older workers may be based on respondent experiences with a highly selected sub-population of older workers. If the favourable evaluations are the result of internal equal opportunity policies, an assertion supported by the findings of a previous study (Chiu, Chan, Snape and Redman, 2001) this may represent an important point for organisational intervention against workplace ageism. If the promotion of an organisation level equal opportunity policy encourages employers to adopt more favourable attitudes towards older workers, government and advocacy groups should facilitate the implementation of such policies among medium-sized organisations.

Respondents from organisations with higher proportions of lower skill workers tended to hold less favourable attitudes towards older workers, as hypothesised. In four of the six lower skill level occupation categories less favourable evaluations were made on between one to nine qualities.
Some of these evaluations may have been related to the types of occupations in question. This, however, did not appear to explain completely the range of less favourable evaluations observed. For example, machinery operators and drivers were evaluated less favourably on creativity, social skills and flexibility. It seems reasonable to conclude that these skills are not fundamental to the execution of this type of occupation. Workers in this occupation category may not have opportunities to demonstrate or develop these qualities.

In contrast, the absence of a pattern in the less favourable evaluations of technicians and trades workers on nine qualities perhaps indicated a general disfavour towards older workers. Respondents from organisations with larger proportions of workers in the technicians and trades occupation category evaluated older workers less favourably on every quality except physical health and stamina, new technology skills and willingness to learn. It is noted that, on average, all respondents evaluated older workers least favourably on these three qualities. One may expect that if evaluations of these three qualities had been marginally more favourable among respondents in general, statistically significant associations between the proportion of technicians and trades workers and less favourable evaluations of older workers would have included these qualities as well. This suggests a more general disfavour for older workers in these occupations alongside the less favourable evaluations for other lower skill occupations. This may warrant tailored organisational responses seeking attitude change, nuanced according to the predominant occupations in the workforce.

The relationship between organisations having larger proportions of highly skilled workers and attitudes towards older workers was more complicated. The expectation of more favourable attitudes with more highly skilled workers was not found. A mix of less favourable and more favourable attitudes towards older workers was found with larger proportions of managers and professionals. Both occupation categories were associated with less favourable evaluations of loyalty, perhaps indicating greater labour market mobility afforded to higher skilled workers for transitions later in careers. Managers were also evaluated less favourably on the ability to cope with stress, whereas higher proportions of
professional workers were associated with more favourable evaluations of physical health and new technology skills. These results suggest that the relationship between workforce skill level and attitudes towards older workers is irregular, depending on the type of highly skilled occupation and the quality in question. Developing further insights into this question for highly skilled workers may require a different conceptualisation of worker skill level than that used in this study.

Difficulties relating to personnel and labour market conditions were found to have both positive and negative associations with attitudes towards older workers, contrary to expectations of no association. These relationships were limited in number. Respondents from organisations experiencing difficulties with the time to fill vacancies and shortages of critical skills, evaluated older workers less favourably on flexibility and new technology skills respectively. In the case of difficulties with poaching by employers from other sectors, respondents evaluated older workers more favourably on creativity and willingness to learn. Arguably, these evaluations of older workers may relate directly to the labour market conditions. For example, perceiving deficiencies in older workers’ new technology skills may be a manifestation of a more general lack of critical skills in the workforce. Similarly, encountering unexpectedly long times to fill vacancies may induce employers to turn to their existing personnel to help meet requirements through various means, for example, extended working hours or delaying retirement transitions. Older workers reluctant to agree to such requests may be perceived as lacking flexibility. In the case of problems with poaching by employers from other sectors, favourable evaluations of older workers on creativity and willingness to learn were potentially the result of newly found appreciation for older workers who were enticed to another organisation. These results suggest a limited and very specific role of labour market conditions influencing attitudes towards older workers. The analysis considered eight other types of labour market difficulties that were not associated with attitudes towards older workers. This perhaps suggests that shifts in orientation towards or away from older workers in response to labour market turbulence (for example, Remery, Henkens, Schippers and Ekmapper, 2003) may change labour market outcomes for older workers but do not seem likely to result in widespread
attitudinal shifts.

The extent to which the results described above, regarding associations between respondent and organisation characteristics with attitudes towards older workers, replicated the findings of previous studies was assessed. This process was hindered by inconsistencies in the results of previous research. Commentary is provided in order to position the results of this study among the literature. A tabulation of the studies that tested these associations and a simplified, descriptive statement of their findings are presented in Appendix 3.

In nine of the 12 studies that assessed the association between respondent age and attitudes towards older workers, a positive association was found. This was also the case in this study, perhaps indicating a positive prospect for the future of attitudes towards older workers; if older workers continue to participate and participation increases, attitudes may be expected to become generally more favourable. This may be expected through the normalisation of prolonged working lives and increasing proportion of older workers in the workforce, particularly in roles responsible for personnel decisions.

None of the five previous studies that tested the association between the proportion of older workers in a workforce or the extent of contact with older worker, found a negative association with attitudes, as was the case in the present study. This may indicate that the approach to classifying organisations' workforce age profiles in this study did not capture the extent of respondents' contact with older workers as was proposed. Half of the eight studies that tested the association between respondent gender and attitudes towards older workers found no significant association. The findings of three studies (Rosen and Jerdee, 1976a; Chiu, Chan, Snape and Redman, 2001; Berger, Marshall and Ashbury, 2005) were in agreement with the results reported in this study, that male participants reported less favourable attitudes towards older workers. In two of the three previous studies that assessed the association between workforce occupation composition and attitudes towards older workers (Rhine, 1984; Henkens, 2005), higher skill occupations were associated with more favourable attitudes towards older workers. An equivalent association was found in the present study. Slater and Kingsley (1976) found no significant association between this factor and
attitudes, a result that is perhaps less relevant as a counter current finding considering the intervening four decades since its publication.

The majority of previous findings regarding respondent and organisation characteristics and attitudes towards older workers were in rather less agreement. No clear pattern in these results implies that particular national context, methodological approach or sample type played a role in confounding the testing of these associations. It is suggested that little further can be achieved by distinguishing which of the previous studies concurred with the findings of the present study and which did not. Visual inspection of the summary of findings in previous studies, presented in Appendix 3, demonstrates that despite repeated assessments of industry sector, workforce size, workforce gender balance, labour market conditions and respondent occupation, uncovering an understanding of any systematic role for these factors has not been achieved. It is suggested that until a standardised methodology and a meaningful stock of international comparison studies can be completed there is little chance of developing a reasoned argument explaining the variations in the associations between individual and organisation characteristics and attitudes towards older workers. Nevertheless, the consistently reported results provide some guidance for development of interventions designed to modify employer attitudes towards older workers. These may, for example, focus disproportionately on younger men, particularly in organisations with lower skill workforces. The extent of previous experience working with older workers could also be considered.

6.1.6 Attitudes towards older workers and organisation practices

The association between attitudes towards older workers and organisational practices were assessed. This analysis was constructed to assess the relative influence of attitudes and organisation characteristics. The hypothesis that respondents in organisations that had adopted human resource practices around the recruitment and retention of older workers would hold more favourable attitudes towards older workers was partially supported. Favourable attitudes towards older workers were associated with both higher and lower probabilities of organisational behaviour encouraging the participation of older workers. This
depended on the specific attitude content and the organisational behaviour under consideration. A small majority of the significant associations detected, specifically three of five, were as hypothesised.

Notable from the analysis was the apparently minimal role attitudes towards older workers play and the specific attitudes that made up this minor influence on organisational behaviour. The limited role of attitudes was evident in low explained variances and the very small number of statistically significant associations. The important implication is that a continued emphasis on efforts to change employer attitudes towards older workers (for example see: Australian Government Department of Employment, 2014) may not have the desired consequences of improving their labour market prospects. Contextualising this finding with the comparison of attitudes towards different age groups of workers that revealed rather favourable attitudes towards older workers, in absolute and relative terms, raises further questions about the value of an extensive policy focus on problematising employer attitudes towards older workers.

The evidence suggesting that attitudes towards older workers had minimal influence on organisation behaviours should be contrasted with the pattern of specific attitudes that accounted for the association with organisational behaviour. In addition, understanding that optimising organisation practices is not the only relevant outcome of changing attitudes is worthy of consideration. The results of these analyses indicated that counter-stereotypic favourable attitudes underpinned an increased probability of organisational behaviour that potentially benefited older workers. Favourable evaluations of new technology skills, willingness to learn and flexibility were associated with greater probabilities of organisations encouraging workers to retire later, recruiting workers who had already retired and offering flexible withdrawal strategies. A favourable attitude that would be expected from a normative view, specifically the reliability of older workers, was associated with a lower probability of organisations offering flexible withdrawal strategies. These results may indicate the need to discontinue an approach currently employed by advocacy groups of championing positive stereotypes about older workers. An alternative, if more demanding approach, may be to challenge pervasive negative attitudes about willingness to learn,
competence with new technology and the ability accommodate the flexibility increasingly needed in the modern labour market.

Changing employer attitudes towards older workers is important because optimising organisation practices may be only one component of encouraging the continued labour market participation of older workers. Arguably, the attitudes of the specific respondent may have little influence on organisation practices because of the structure of organisation policy and personnel decision-making. This is particularly the case in multi-level large organisations but could reasonably be expected in the medium-sized organisations surveyed in this study. Multiple stakeholders play a role in personnel decision-making. However, the endorsement of the principles of equal opportunity and rejection of ageism within organisations may have consequences beyond organisation practices. Such consequences could include reducing perceptions of discriminatory attitudes and behaviours towards older workers in organisations. Such perceptions have been shown to have significant influence on a range of individual and work-related outcomes, for example psychological well-being and job satisfaction (Taylor, McLoughlin, Meyer, and Brooke, 2012). It is important to recall such outcomes in the context of the evidence of the minimal influence of employer attitudes on organisation practices.

In this study, the pattern of associations between attitudes towards older workers and organisation behaviour was different from the findings of previous research. This finding suggested respondents held distinct perceptions of recruiting older workers compared with retaining older workers. Respondents from organisations that had recruited older workers as a means of dealing with labour shortages did not report more favourable attitudes. This is incongruent with previous studies (Taylor and Walker, 1998b). Taylor and Walker found that employer attitudes were related to perceptions of the importance of age when evaluating jobseekers, whether an organisation sought to recruit older workers, whether training was provided to managers and workers over the age of 50 and whether older workers were considered promotable. Loretto and White (2006) concluded that stereotype based attitudes influenced recruitment decisions. An explanation for the incongruence between these studies and the present study may have been the focus on hypothetical or prospective actions used in the earlier work. Asking about
prospective decisions or hypothetical recruitment has been criticised (Adams and Nuemark, 2006). Asking about hypothetical personnel decisions may reveal persistent bias but it provides less concrete evidence of the role of attitudes in determining older workers’ labour market experiences. Demonstrating associations with actual practices is of greater significance. The absence of associations between employer attitudes towards older workers and recruitment decisions may be the result of economic imperatives driving decision-making, as discussed below.

Employers did not report more favourable attitudes towards older workers, even if their organisations had recruited older workers as a means of dealing with labour shortages. This may be explained, along with findings relating to the association between attitudes in retention decisions, by different perceptions of older workers as prospective employees compared with continuing employees. A pattern in these findings emerged that suggested employers distinguish between older workers currently or previously employed and older workers as prospective employees. Employers that have recruited older workers in response to labour shortages could be expected to have more favourable attitudes than those who have not implemented this strategy. This expectation could be dismissed if the selection decision was made because economic imperatives required immediate filling of the vacancy and an older worker was recruited because of an absence of alternative candidates. This aligns with Loretto and White’s (2006) contention that employers would recruit older workers, but not as the preferred choice. This explanation is congruent to the finding that older workers were more successful in less competitive labour markets (Patrickson and Ranzijn, 2003). This success in the less competitive labour markets suggests that older workers would be recruited but not when alternative candidates were available. If employers were motivated by a strong need to fill vacancies and were presented with few applicants, attitudes towards older workers would be of little importance to their recruitment decisions. This is supported by the finding that labour market conditions related to the time taken to fill vacancies, was associated with a greater probability of recruiting older workers.
Decisions about retaining older workers were associated with employer attitudes. The results suggested that employers who retained older workers held more positive, and counter-stereotypical, attitudes towards older workers. Either favourable attitudes played a role in decisions about the implementation of policies aimed at retaining older workers or implementation of these policies led to favourable organisational outcomes, fostering more positive attitudes. Employer attitudes were more important for decisions about retention than recruitment. Such decisions were about older workers who employers knew and who were part of their organisations. This result conforms to other findings about social role theory's explanation of ageism. Kite, Stockdale, Whitley and Johnson (2005) found that older people's employment status was one of the strongest individuating factors, discouraging the endorsement of age based stereotypes in judgements of older people. Knowledge that an older worker was a member of their organisation potentially reduced the endorsement of stereotype based attitudes in decision making about retention of older workers. Employers in organisations that retained older workers held more favourable attitudes perhaps because these older workers had been recognised as valuable assets. This knowledge may have dissuaded employers from endorsing and acting on stereotypic based attitudes.

Employers from organisations that were retaining older workers in response to labour shortages made favourable evaluations of older workers' new technology skills. Respondents typically identified this quality as being more prevalent among younger workers. Older workers who were retained were perceived to have specific counter-stereotypical skills. The distinction employers made between older workers as prospective employees or as targets for retention resonates with concerns about the prospects of older workers if separated from employment. Inducing employers to make recruitment decisions without reference to attitudes based on age stereotypes would provide beneficial outcomes for older jobseekers. Removing the influence of attitudes from such decisions would produce a greater likelihood of the recruitment of the objectively ideal applicant. Employers making recruitment decisions, informed by cognitively inefficient effortful processing of available information rather than relying on age stereotypes, are more likely to choose the most suitable applicant. The costs of short-term inefficiency in this decision-making are likely to be much smaller than the benefits of recruiting the
most suitable applicant. This outcome would benefit both the employer and older workers.

Indicative evidence suggests generalised attitude change may not be an effective approach to achieve improved labour market outcomes for older workers. Other aspects of this analysis perhaps provide alternative paths to achieving this goal. Organisation characteristics associated with the probability of implementation of strategies relating to the recruitment and retention of older workers can perhaps guide the development of nuanced policy interventions. For example, large organisations and organisations with older workforce age profiles were more likely to implement strategies that encouraged the participation of older workers. This suggests that medium-sized organisations are perhaps in a position to benefit from making greater use of older workers and may be encouraged to do so with tailored information materials or policy inducements.

Similarly, organisations with workforce age profiles where older workers were in the minority had lower probabilities of encouraging employees to retire later or offering flexible withdrawal strategies. This perhaps suggests that such organisations currently prioritise other human resource strategies but may still be in a position to make prolonged use of the older workers they do employ. Results regarding workforce occupation composition indicated that flexible withdrawal strategies were more frequently deployed in the case of manager and professional categories. In contrast to this, recruiting older workers and recruiting already retired workers was deployed more frequently for technicians and trades workers, and sales workers. In the case of larger proportions of clerical and administrative workers, organisations were more likely to offer flexible withdrawal strategies and recruiting already retired workers in response to labour shortages. Taken together, this suggests that whatever the workforce occupation composition, opportunities to implement additional strategies exist. Use of more of these strategies in response to labour shortages may be beneficial for organisations and older workers, giving both greater options. In addition, these results suggest that promoting responses to labour shortages and workforce ageing, customised to organisation characteristics, may benefit both organisations and older workers.
6.2 Summary of findings

A summary of the findings of this study is offered below, addressing the four research questions investigated. The first research question asked: What are Australian employer attitudes towards older workers and how do these attitudes compare to those towards workers of other ages? Employer attitudes were found to be more favourable towards older workers than was initially hypothesised. Some evaluations were at odds with previous research. Employers evaluated older workers favourably on organisational citizenship behaviours, confirming findings of previous research (Gray and McGregor, 2003; Taylor and Walker 1994; Warr and Pennington, 1993). Older workers’ productivity and management skills were evaluated more favourably than expected. This contradicts Chiu, Chan, Snape and Redman’s (2001) findings but supports others (Henkens, 2005; Loretto, Duncan and White, 2000; Taylor and Walker, 1994). Older workers were also evaluated as having superior social skills. Previous studies reported mixed evaluative positions on this quality. Employers indicated a mix of positive and negative attitudes towards older workers that were plausibly explained by social role theory.

Evaluations of older workers were contextualised using evaluations of younger workers. This approach has only been used once before (Van Dalen, Henkens and Schippers 2010). The evaluations of younger workers were diametrically opposed to those of older workers. Evaluations of younger workers as having optimal new technology skills, being willing to learn, having better physical health and stamina, and being more creative supported the results of Van Dalen and colleagues. Younger workers were evaluated less favourably on reliability, loyalty and social skills. These findings also replicate the above-mentioned preceding study. These evaluations were contextualised in evaluations of prime-age workers. Such a comparison has not been made before. Prime-age workers were evaluated more favourably on flexibility, productivity and their ability to cope with stress. Across the 12 qualities, there was less variation in evaluation scores of prime-age workers. When these scores were aggregated, prime-age workers were favoured, followed by older workers with younger workers being least favoured. These results were explained by the mechanisms described in social role theory. Other explanations of directional hypotheses, particularly notions of a generalised...
favourability towards younger and prime-age workers, were rejected. This motivated the conclusion that such preferences are not as pervasive as was initially hypothesised.

The second research question asked: Is there a latent variable structure among attitude items that reflects a meaningful typology of qualities comparable to those uncovered in previous studies? The latent structure uncovered was different to the three-factor configuration proposed by Henkens (2005). Similarities to the latent structure reported by Van Dalen, Henkens and Schippers (2010) were evident. The first factor consisted of qualities on which older workers were evaluated more favourably than younger workers. The second factor consists of qualities on which younger workers were evaluated more favourably than older workers. The factors were labelled ‘qualities favouring older workers’ and ‘qualities favouring younger workers’ respectively. Consistent latent structures across age groups were present in this and Van Dalen and colleagues’ study. The latent structure uncovered in the present study was not accurately described by the ‘hard quality’ and ‘soft quality’ dichotomy proposed by Van Dalen, Henkens and Schippers but appeared to be better explained by what Gringart, Helmes and Speelman (2013) described as ‘difficulty factors’. Difficulty factors are a result of the statistical analyses rather than identification of underlying themes. The average raw scores of employer responses produced the groupings of items rather than substantive meanings of the items.

This explanation was interpreted as supporting social role theory's understanding of stereotypes. Factors do not reflect typologies of qualities such as hard and soft qualities or productivity, reliability and adaptability. Instead, they represent perceptions about age groups. This is evident in the polarisation of evaluations. This is also evident in the homogeneity of the latent structure across age groups observed in this study and that carried out by Van Dalen, Henkens and Schippers (2010). The different social roles and occupations that tend to be occupied by younger and older people explain the latent structure if the ‘difficulty factor’ structure is accepted.

The third research question asked: How do Australian employers vary in their
attitudes to older workers according to individual characteristics and the characteristics of their organisation, including workforce demographics, occupation composition and labour market situations faced? Respondents from large organisations consistently reported more favourable evaluations of older workers. This was interpreted as stemming from respondents’ experiences with a highly select group of older workers employed in large organisations. Employers from organisations with older or diverse workforce age profiles held less favourable attitudes towards older workers. It was suggested that this might have resulted from the failure to use an optimal measure of employers’ contact with older workers. The type of industry sector played a limited role in influencing attitudes towards older workers, interpreted to be centred on issues of physically demanding occupations and biologically determined normative declines in physical capacity. The associations between workforce occupation composition and attitudes towards older workers indicated that employers made more favourable evaluations of older workers when higher skill occupations predominated.

The labour market conditions experienced by organisations appeared to play a very limited and specific role in influencing attitudes towards older workers. Shortages of critical skills and time to fill vacancies were associated with less favourable attitudes towards older workers on new technology skills and flexibility respectively. Difficulties with poaching by employers from other sectors were associated with more favourable attitudes towards older workers’ creativity and willingness to learn. These results were interpreted as indicating that, while shifts in orientation towards or away from older workers in response to labour market turbulence (for example, Remery, Henkens, Schippers and Ekamper, 2003) may change labour market outcomes for older workers, they do not seem likely to result in widespread attitudinal shifts.

Respondent characteristics were also associated with attitudes towards older workers. Respondent age was among the most important factors in terms of associations with attitudes. Older respondents made more favourable evaluations of older workers on a majority of the qualities assessed. This finding was in clear agreement with previous research, further replicating an association that has now been consistently demonstrated over several decades of research. In addition to
the finding regarding respondent age, the gender of the respondents was
associated with attitudes towards two qualities of older workers. Male
respondents evaluated older workers less favourably on physical health and new
technology skills, perhaps explained by the predominance of men in physically
demanding industries and information technology industries.

The fourth research question asked: Do employer attitudes towards older workers
play a role in influencing organisational behaviour concerning the recruitment and
retention of older workers, and what is the relative importance of these attitudes
compared to organisational characteristics? Associations between attitudes
towards older workers and certain organisational practices were found but
organisation characteristics were more important for the probability of
implementation. Employer attitudes were of little importance for the probability of
implementation of the organisation practices and only counter-stereotypical
attitudes appeared to play a role. Employers from organisations that had put in
place practices to retain older workers held more favourable attitudes towards
older workers. Employers from organisations that had recruited older workers to
overcome labour shortages reported attitudes equivalent to other employers. This
result indicated an important facet of employers’ attitudinal orientation towards
older workers, that older jobseekers are perceived differently to older workers
within organisations.

Respondents appeared to hold more favourable attitudes towards older workers
who had been employed in their organisations. This perhaps reflects the effect of
knowledge of an older person’s employment status, described by Kite and
colleagues (2005) in their discussion of social role theory and ageism. Recruitment
and retention decisions are distinct in their relation to employer attitudes. This
aligns with research demonstrating the various difficulties older workers face
while unemployed (Patrickson and Ranzijn, 2003). The consistency in employer
attitudes across organisations that had recruited older workers in response to
labour shortages and those that had not, suggests such recruitment decisions may
be independent of attitudes towards older workers. If older workers were
recruited but employers do not perceive them more favourably, it may be
reasonable to conclude that it was a lack of suitable alternatives that encouraged
the recruitment decision. Any steps taken to improve labour market conditions for older workers through the modification of employer attitudes would need to consider whether changes in retention or recruitment are sought and the organisational context for this change.

6.3 Conclusions

In this chapter the results of analysis used to investigate the four research questions proposed in this study were interpreted. The interpretation considered a number of findings that have not been assessed in prior Australian research and others that have not been studied in any international research. The simultaneous measurement of attitudes towards different age groups of workers provided new basis for comparison of attitudes towards older workers. Attitudes towards older workers appear more favourable than may have been expected. In addition, findings regarding attitudes towards younger workers highlight the potential need to question whether the focus on challenging age discrimination against older workers should be balanced with similar advocacy for younger workers. The novel approach to measuring employer attitudes used in this study facilitated estimation of perceived age-dependence of the qualities evaluated. Assessment of the latent structure among the attitude items replicated the findings of previous research, raising questions about the conclusions of other previous studies that may have misinterpreted the results of data reduction analyses. The organisational and respondent characteristics associated with attitudes towards older workers were discussed, noting that factors originating from both sources had consistent and inconsistent associations with attitudes. The relationship between employer attitudes and organisational behaviour revealed a pattern suggesting that counter-stereotypical attitudes were more important than others for the probability of certain organisational practices. Generally, attitudes towards older workers appeared to play a very minor role in influencing the probability of implementation of strategies around their recruitment and retention.

While noting the limitations of the exercise, findings were positioned among those of previous research. Findings provided support for a social role theory explanation of attitudes towards workers of different ages. These were noted in
this chapter and are explored further in the following chapter. In interpreting the findings of this study, the implications for future research and organisation and public policy have been briefly mentioned to signal the significance of the findings and their interpretation. The following chapter concludes this study with a more detailed discussion of these and other implications, the limitations of study and suggestions for future research into attitudes towards older workers.
Chapter Seven: Conclusions

In this chapter the implications of the findings of the study are presented. It begins by briefly identifying the substantive new knowledge obtained during the study. Next, the implications for policy and practice are enumerated, making particular note of where findings are consistent with those of previous research. The limitations of this study are discussed and their consequences acknowledged. Approaches to overcome these limitations and directions for future research are suggested.

7.1 Substantive contributions of new knowledge

This study has increased understanding of employer attitudes towards older workers in the following ways:

- The absolute and relative position of employer evaluations of older workers compared to workers in other age groups was demonstrated. Respondent attitudes towards older workers were unexpectedly favourable. Evaluations of the youngest worker age group were approximately as favourable as those made of older workers (section: 5.1);
- Assessed the 'perceived age-dependence' of the 12 qualities. Indicative evidence suggested that highly age dependent qualities may be more robust and therefore represent a greater challenge to attempts to change attitude (section: 6.1.4);
- Questions were raised about typologies of work-related qualities proposed in previous studies based on data reduction techniques. Results of this study suggested that latent structures underpinning attitudinal items reflect perceptions of age groups rather than meaningful clusters of qualities (section: 6.1.3);
- The study demonstrated the suitability of social role theory for explaining attitudes held by employers towards workers of different ages (section: 6.1.1);
- The consistency of the findings of this study with those of previous studies was examined. The evaluations of worker qualities made by respondents in
the present study were largely comparable with those consistently
demonstrated in previous research (section: 6.1.2);

- Associations not previously demonstrated in Australian research were
  established between respondent and organisational characteristics and
  attitudes towards older workers. Few respondent and organisational
  characteristics were consistently associated with attitudes towards older
  workers but many others had inconsistent associations. Findings regarding
  respondent age and gender conformed to stable findings reported in
  previous studies. The inconsistency of findings in previous research limited
  the usefulness of comparing other associations between respondent and
  organisational characteristics and attitudes towards older workers found in
  this study (sections: 5.3.2 and 6.1.5);

- Also not previously demonstrated in Australian research, associations were
  established between attitudes towards older workers and organisational
  practices encouraging the recruitment and retention of older workers.
  Counter-stereotypical attitudes demonstrated the strongest relationships
  with organisational practices. Overall, attitudes towards older workers had
  a minor role in influencing organisation practices (sections: 5.4.2 and 6.16).

7.2 Implications for Policy and Practice

The discussion now turns to the implications that follow from the findings of this
study.

Demonstrating the absolute and relative position of employer evaluations of older
workers compared to workers in other age groups is perhaps the foremost
contribution of this study. This study found that prime-age workers were
perceived to have more desirable qualities than both younger and older workers.
Employers held less favourable attitudes towards older and younger workers, with
the least favourable evaluations made of the latter. Younger workers received the
lowest aggregate evaluation scores and the largest variation in evaluation scores
across qualities. This presents a picture of older workers as being in a more
favourable position than has sometimes been argued. Congruence between the
attitudes held by employers in this study and those in Van Dalen, Henkens and
Schippers' (2010) study, the only other one to make direct comparisons between evaluations of multiple age groups of workers, and the consistently identified attitudes reported in other studies, suggest that such attitudes may be consistent across modern economies.

The confidence that can be held in this conclusion is limited by deficiencies in current knowledge of the role of factors related to the national context in influencing attitudes towards older workers. However, the cumulative evidence provided by studies covering approximately four decades suggest certain attitudes could reasonably be assumed to be ubiquitous. It is argued that this is the case in terms of perceptions of reliability, loyalty, productivity, physical health and stamina, creativity and new technology skills. These attitudes are likely to influence decisions about recruitment, retention and the provision of training based on assumptions derived from understanding models of information processing. Employers are likely to use decision heuristics (attitudes) in the making personnel decisions because they are based on incomplete information and are made in the context of time pressure and other stressors. It is difficult, however, to determine the extent of their importance in these decisions (Adams and Nuemark, 2006).

An implication of the finding that respondents held comparatively less favourable attitudes towards younger workers is that while older workers may face attitudinal barriers in terms of personnel decisions, younger workers potentially face similar barriers. The extent of these attitudinal barriers for workers of different ages depends, at least in part, on the value employers place on different qualities. Drawing conclusions must, at this stage, proceed on limited evidence. On the one hand, it may be contended that the qualities evaluated in this study hold equal weight once normalised across the range of occupations, industries and organisations present in the labour market. On the other hand, evidence provided by Van Dalen, Henkens and Schippers (2010) suggests that the qualities favouring younger workers, 'hard qualities', are perceived as of greater value than the qualities favouring older workers, 'soft qualities'. In the case of qualities being of equal importance, it would seem reasonable to conclude that both younger and older workers are likely to face attitudinal barriers in personnel decisions. This
situation would necessitate questioning the current public policy focus on challenging attitudes towards older workers without equivalent activity regarding attitudes held about younger workers. It is suggested that despite the limitations of existing evidence, it seems more likely that employers perceive the qualities favouring younger workers to be of greater value.

Considering each quality as equally important from the employer perspective ignores the work of Van Dalen, Henkens and Schippers (2010). These authors found that qualities perceived to favour younger workers were more important predictors of perceived productivity. The qualities that favoured younger workers and older workers in this study largely mirrored those found in Van Dalen and colleagues’ study. This being the case, continued policy focus on challenging attitudes towards older workers is justified and, as discussed below, similar efforts with respect to younger workers may also be of value in more specific circumstances. Following the line of differential valuing of certain qualities, findings regarding the role of counter-stereotypical attitudes towards older workers in influencing organisational behaviour are relevant. Attitudes toward older workers for qualities that were typically favoured among younger or prime-age workers were the most influential in terms of organisational behaviours. This suggests that efforts to challenge attitudes towards older workers would be most successful if targeted at attitudes to contest negative stereotypes about older workers. This can be contrasted with an alternative approach that highlights the value of positive stereotypes about older workers, for example for reliability and loyalty. Based on the findings of this study it is argued that championing positive stereotypes about older workers will not improve attitudes towards them.

Younger workers may be equally likely to face attitudinal barriers when jobs require counter-stereotypical skill sets, for example, for management positions. While valuable societal benefits are expected from increasing the labour market participation of older workers, younger workers’ experiences of workplace discrimination need not be neglected. Notions of social justice are not the only motivation to challenge attitudes towards both younger and older workers. Employer attitudes are sources of error in personnel decisions despite offering advantages in cognitive efficiency and bridging gaps in decisions based on
incomplete information. Attitudes can displace cognitive processing that is high-effort but also high-accuracy. Defaulting to attitudes sacrifices accuracy for efficiency, which is understandably enticing for employers, who face constant time and resource pressures. It is, however, discriminatory and potentially deprives organisations of the counter-stereotypical skills of a younger or older worker. Reducing employer reliance on attitudes towards workers in specific demographic groups would lead to efficiency gains in the long-term resulting from optimal personnel decisions at the cost of short-term inefficiency in decision-making resulting from the requirement of more effortful cognitive processing of available information.

Reducing the reliance on attitudes in personnel decision-making is a problematic task. Categorisation of stimuli is a fundamental facet of information processing; so fundamental that categorisation can occur and endure at subconscious levels. Encouraging relevant decision-makers to critically evaluate the influence of attitudes and to choose to actively process the relevant, available information can only be achieved through acceptance that age based stereotypes and attitudes are not representative of individuals. It is suggested that striving to raise the unacceptability of age discrimination to the pervasive level of the rejection of racial and gender discrimination will ultimately achieve this in egalitarian societies. This can perhaps be achieved through sustained education via the dissemination of best-practice guidelines and promotion of best-practice examples, and the anecdotal experiences of individuals as older workers become increasingly important in the workforce. One may expect to find a situation where an individual recognises attitudes beginning to influence decision-making and is then able to self-regulate the information processing and so minimise the role of biases in decision-making. This situation represents a long-term change considering the widespread and institutionalised ageism considered by many commentators to be evident.

The probability of older jobseekers facing attitudinal barriers in recruitment situations is likely. The analysis of organisational practices and employer attitudes suggested favourable attitudes have little influence on organisation behaviour and no influence in the case of recruitment decisions. These recruitment decisions
appear to be based on limited choice and economic imperatives. Older workers with counter-stereotypical skill sets, and who are employed or were recently retired from an organisation, have stronger labour market positions. Such counter-stereotypical qualities were associated with positive retention outcomes in the context of labour shortages. These findings echo concerns commentators raise regarding the fate of older jobseekers. These workers face greater barriers to re-employment, potentially influenced by negative attitudes. Workers who do not hold counter-stereotypical skill sets, for example, demonstrating a strong willingness to learn or developing new technology skills, will fare worse in employer decisions about retention.

Despite efforts at employer education and the introduction of legislation proscribing labour market age discrimination, older workers continue to be the subject of attitudes that form barriers to employment, retention and professional development. This is not equally true for all older workers. This study found that employer orientations towards sub-populations of older workers were more favourable. The notion of more favourably viewed sub-populations of older workers was offered to account for more favourable evaluations made of older workers by respondents in large organisations. From a practical perspective, these older workers are likely to have highly marketable human capital and stand to benefit less from interventions aimed at reducing attitudinal barriers to labour market participation. The unemployed, underemployed and older workers with less marketable skills would benefit more from the removal of attitudinal barriers. Older workers who are not part of the sub-population that command stronger labour market position are more likely to have other vulnerabilities. For example, those who are outside the highly select sub-population could be expected to have fewer retirement assets, through the effect of long-term lower incomes in a pay-as-you-go retirement saving system. Those workers who choose or are forced into retirement with fewer resources will place a larger burden on the Age Pension (Angela and Hamil-Luker, 2009). This may be expected to occur due to recently implemented restrictions to the Age Pension, such that only those with limited superannuation and private assets will have access to the maximum Age Pension payments. Among this group are lower skill workers who are also more likely to have experienced physically arduous employment during their working life (Arber
and Ginn, 1993). These workers are resultantly likely to place greater demands on the healthcare system in their retirement. The characteristics of older workers that co-vary with weaker labour market positions make extending their working lives particularly important. These workers have a greater propensity to also experience other problems, such as greater ill-health at later ages, that lead to greater burdens on social welfare systems. These challenges can be eased through prolonging the labour market participation of these workers in particular by reducing the time spent accessing the Age Pension and relying on publicly funded health care and increasing their superannuation savings.

This study has advanced knowledge by providing support for a social role theory explanation of workplace ageism. This is evident in the interpretations of employer evaluations across age groups. Where hypotheses received partial support, alternative explanations were compatible with social role theory. Evaluations across the range of working ages, as made in this study, have not been studied previously. This presented the need for theoretically driven hypotheses. Explanations were chosen based on social role theory and other perspectives, for example, the assumption of a generalised preference for younger workers. Hypothesised associations were not unequivocally supported but it was the additional perspectives, specifically the generalised preference for younger workers that were erroneously applied. The inaccuracy of this perspective did not rebut social role theory. As such, this study adds evidence to support the proposition that attitudes towards workers of different ages may be understood in terms of social role theory.

Some researchers have explained their findings using social identity theory. Others have suggested job contingency theory can account for employer attitudes towards older workers. These theoretical perspectives are limited in their suitability for explaining attitudes towards older workers. This study has shown that social role theory can explain favourable and unfavourable attitudes towards workers of different ages. It was argued that social role theory can account for attitude formation. This indicates that a social role theory perspective would be useful for future research. Agreement on a theoretical perspective to explain attitudes towards workers of different ages could be usefully paired with adoption of a
standard pool of evaluated qualities, for example, the exhaustive pool proposed by Gringart, Helmes and Speelman (2013). This standardised approach would provide the opportunity for direct international comparisons and establish benchmarks for cross-sectional studies that are currently difficult to position among existing studies using variations of similar approaches.

The association between respondent and organisational characteristics and attitudes towards older workers highlights issues facing advocates wishing to challenge barriers to older workers’ labour market participation. These were assessed for the first time in Australia in this study. Attitudes towards older workers appear unsusceptible to the mere exposure effect (Zajonc, 1968). More contact with older workers was associated with less favourable attitudes. Respondents from large organisations demonstrated one of the most consistently favourable attitude sets towards older workers. Variations in attitudes across industries were largely related to issues around physically demanding work and biologically determined physiological changes with age. Low skill occupations were associated with less favourable attitudes towards older workers. Labour market conditions demonstrated very limited and specific associations with attitudes towards older workers. Respondent characteristics, including gender but more consistently age, demonstrated strong associations with attitudes towards older workers. The implication is that interventions will be most effective if tailored to the organisation context and the characteristics of the employer are considered. The results of this study suggest that such interventions should, while focussing on promoting particularly the counter-stereotypical skills of older workers, be directed to medium-sized organisations and industries with physically demanding and low skill level occupations. In developing these targeted messages additional focus should be directed towards men and younger and prime age employers.

It is also important to consider the issue of labour market conditions and the effects on outcomes versus attitudes towards older workers. If the recruitment of older workers was driven by economic imperatives, unrelated to attitudes towards these workers, then increased demand for labour would be expected to improve recruitment outcomes for older workers. This study did not find evidence to
suggest this favourable outcome would also change attitudes towards older workers. The distinction between the effects of labour market conditions in improving outcomes but not necessarily attitudes is noted to highlight the importance of attitudinal barriers to the recruitment of older workers. In times of weaker economic circumstances older workers face more difficult conditions, conditions that may be eased through changing attitudes towards these workers. For example, market turbulence may displace older workers as they tend to be over-represented in redundancy programs (Remery, Henkens, Schippers and Ekamper, 2003). Pairing this finding with indicative evidence from this and other studies (Taylor, McLoughlin, Brooke, Di Biase and Steinberg, 2013; Loretto and White, 2006) that even when older workers are recruited they are considered a less preferred option suggests that, in the case of weaker demand for labour, older workers face considerable challenges as jobseekers. Such situations confine older workers to the peripheral workforce and in some ways cement perceptions of older workers as disposable. Changing attitudes and reducing personnel decision-makers reliance on stereotype-based attitudes in recruitment decisions is perhaps the only avenue to improve outcomes for older workers in time of economic turbulence.

Employer attitudes were associated with an organisation’s configuration of human resource strategies. This is the first study in Australia to establish this association and one of a small number to do so anywhere (Taylor and Walker, 1998b; Loretto and White, 2006). However, attitudes towards older workers appeared to play a minor role in influencing organisational behaviours that encouraged the participation of older workers. This minor role was also confined to decisions regarding the retention and recruitment of retired workers. This indicated that employers held substantively different attitudes towards older workers who were currently employed in their organisation or had recently retired from their organisation compared to older jobseekers. If this finding is coupled with the observation that employers hold favourable orientations towards older workers who hold counter-stereotypical skill sets, the prospects for older jobseekers appear bleak. Older workers who are unable to demonstrate such counter-stereotypical skill sets are likely to be subjected to attitudinal barriers to
recruitment. Older workers may be subjected to these views because of the lack of opportunity to demonstrate these skills as jobseekers.

If changing organisational behaviour was the only outcome sought as a results of attitude change, the results of this study would suggest this to perhaps be a futile exercise. However, along with small changes in organisational behaviour, changing attitudes towards older workers may be expected to have other benefits. For example, reducing the perception among older workers that uncritical acceptance of age stereotypes is normal in their organisation may improve outcomes such as job satisfaction and psychological well-being (Taylor, McLoughlin, Meyer, and Brooke, 2012). More generally, changing attitudes may reduce the extent that older workers internalise negative age stereotypes. This internalisation has been shown to increase enactment of stereotypical behaviour, for example, reticence in seeking workplace training (Levy, 2009). In addition, Priming with pertinent positive age stereotypes has been shown to improve performance on cognitive and physical tasks (Levy and Leifheit-Limson, 2009) suggesting organisations with overt positive perceptions of the participation of older workers may foster improved performance from these workers. With these potential outcomes in mind, an effort towards changing attitudes towards older workers may be of value.

7.3 Limitations of this study

A number of criticisms can be made of this research. In this section, it is acknowledged that no study is without design and execution faults. Every effort was made to address or compensate for design faults and care was taken to optimise the execution of this research. This discussion will identify methodological limitations followed by limitations regarding the theories driving the hypotheses of this study.

Aspects of the study place important limitations on the extent to which the reliability, validity and generalisability of the findings can be asserted. These were discussed thoroughly in the methodology chapter and so will be given less attention here. The stratified random sample was confined to a specific location – Queensland. The over-representation of employers from some industries was
suggested to be a by-product of the regional specificity. This regional specificity makes it impossible to conclude definitively that the study's findings were indicative of the opinions of employers in all Australian medium and large organisations. The survey response rate was relatively high but it is impossible to conclude there was no systematic bias in terms of those employers who agreed to participate in this study. As there was no way to assess the characteristics of those organisations that declined to participate, it must be conceded that the existence of an unknown systematic pattern of characteristics among participating employers may have existed. This may have influenced the relationships assessed. Biases in employer responses based on the desire to present a positive image of their organisation and to appear to adhere to egalitarian ideals could not be controlled. Assessment of respondents' proclivity towards socially desirable responses was considered a burdensome addition to a questionnaire that was already lengthy. Time constraints when surveying employers are well known (Moss and Tilly, 2006). It is impossible to determine the extent to which social desirability may have influenced the responses of participants.

Simultaneous assessment of employer attitudes towards three age groups represented one of the unique features of this study, but this methodological approach placed limitations on the number of worker qualities that could be listed in the survey. A comprehensive set of work-related individual qualities, for example, Gringart, Helmes and Speelman's (2013) Attitudes Towards Older Workers Scale, would have provided a more complete picture of attitudes towards older workers. However, Gringart and colleagues' study had not been published when the present study was undertaken. Another potential methodological weakness was that the Likert-type response scale used in this study differed from standardised response scales. This may have invalidated the use of these responses as interval level measurements. The implication of choosing a four-point response scale in place of a five- or seven-point scale was that some analysis, particularly the factor analyses, may have underestimated the extent of associations (Cunningham, 2008). The survey administration also coincided with the tail end of the GFC. This temporary state of economic uncertainty may have influenced employer responses in indeterminable ways.
The decision to measure explicit rather than implicit attitudes was a further weakness of the study. Explicit attitudes are subject to manipulation by conscious and subconscious biases. Implicit attitudes are free from such biases because they operate outside conscious awareness. Measurement of explicit attitudes was potentially confounded by sources of bias that would have been eliminated if this study had instead measured implicit attitudes. Implicit attitudes are more difficult to measure; one cannot simply ask a participant what these attitudes are. They have been completely absent from other studies of employer attitudes towards older workers and this study was no exception. Practical difficulties, such as time constraints and the need to employ experimental conditions to measure implicit attitudes, mean it would be difficult to apply these approaches to an employer sample. Such participants are difficult to access even for the least time-consuming surveys.

Another issue concerned the definition of ‘older worker’. This study considered older workers as those aged over 50. While commonly done in the research and policy literature, such an approach creates difficulties when developing policy responses to accommodate such a diverse group of people. In this study, asking about workers aged over of 50 may have provided a signal to employers that such workers had commonalities. This, however, ignores the heterogeneity among those labelled ‘older workers’ (Sterns and Milkos, 1995). The study’s definition of older workers as being aged over 50 was based on the well-documented decline in labour market participation that occurs around that age (Taylor, 2006). Had the employers in this study been asked to consider workers in narrower age ranges, for instance, early 50s, late 50s, early 60s and late 60s, differences in attitudes might have emerged.

This study considered the relationship between attitudes and selected organisational practices relating to the recruitment and retention of older workers. This study did not consider the relationship between attitudes and dismissal, promotion and the provision of training. Understanding decisions regarding dismissals influenced by attitudes is important because this situation has been less frequently studied than that of recruitment decisions. More discrimination claims have been brought because of decisions to dismiss (Adams and Neumark, 2006).
Demonstrating an association between attitudes and older worker dismissal would highlight the risk of costly non-compliance with anti-discrimination legislation. This would provide a clear business case for devising approaches to addressing these attitudes. The association between promotion of older workers and attitudes has also been underexplored in the literature. The provision of training is an important factor for prolonging older workers’ labour market participation (Patrickson and Ranzijn, 2003). This is particularly true of those most at risk of long-term labour market separation. If older workers can be equipped with counter-stereotypical skill sets, this will increase their competitiveness. Some evidence presented in this study suggests that demonstrating counter-stereotypical skills encourages employers to reject stereotypical attitudes. The failure to include assessment of these relationships was a further limitation of this study.

This study did not make attempts to control for common method variance. This is problematic when assessing the attitude-behaviour relationship. Asking participants to report on their internal states and, at the same time, their past behaviours may lead to artificially inflated correlations (Lindell and Whitney, 2001). Different procedures of varying complexity have been developed to estimate, correct or eliminate common method variance from cross-sectional studies (Chang, Van Witteloostuijn, and Eden, 2010). The relationship between organisational practices and the attitudes of employers in these organisations were assessed. These could have been susceptible to common method variance. The ideal approach would have been to ask one participant from an organisation to report their attitudes and another participant from the same organisation to report on practices. In this way, the artificial inflation of these relationships could have been unequivocally eliminated. This approach was not employed because of the additional expense and difficulty in inducing employer participation. Even if these analyses suffered from common method variance the research was still of value as these associations had not previously been assessed in Australia. Having established the existence of associations, the additional expense of a more detailed study using approaches to overcome common method variance would be justified.
Many of the study’s hypotheses were rejected. Nonetheless, it was still possible to suggest alternative explanations based on social role theory. Social role theory, therefore, could be criticised for failing to match strong explanatory power with robust predictive power. However, characteristics of this study warrant noting in considering this limitation. Uncertainty about the direction of associations resulted from the absence of previous studies assessing employer attitudes that utilised the methodology employed in this study. A Dutch study (Van Dalen, Henkens and Schippers, 2010) assessed the comparative and absolute evaluations of younger and older workers. However, as no previous study had considered attitudes to prime-age workers, there was little precedent on which to base hypotheses. It fell to this author to develop arguments concerning directions of these previously untested relationships. The lack of support for these hypotheses does not, therefore, necessarily reflect the inappropriateness of social role theory. Some previous studies of employer attitudes have not adopted a theoretical position and others have endorsed one of a group of theories. These were deficient for various reasons. This field of research is far from achieving consensus on theoretical explanations for the nature and direction of employer attitudes towards workers of different ages. It has only been recently, beginning with Kite, Stockdale, Whitley and Johnson (2005), that social role theory has been utilised in studies of ageism. Therefore, future research attempting to apply this theory should proceed with caution.

The cross-sectional design of this study also raises questions of causality, placing limits on the usefulness of the findings. Evaluating changes over time under conditions of an experimental design is the only approach that can demonstrate the direction of causality. Any research endeavour holds the ultimate goal of understanding cause and effect. Cross-sectional designs can never unequivocally determine that one variable is the causal factor for a change in another. Nonetheless, cross-sectional studies serve an important exploratory role. They are cost-efficient and not as time-intensive as longitudinal experimental studies. This study can only point to associations between the concepts of interest and make assumptions about causality. Responsibility for determining causality falls to future work that builds on this and earlier studies.
7.4 Ideas for future research

It is suggested that a key element for the advancement of knowledge in this area of research is the methodology applied. There are three specific factors that are critical to the utility of the findings of future research for both academia and practitioners. The first element is the adoption of a standard measure. As with many of the preceding studies in this area, future research will seek to explore specific issues related to attitudes towards older workers and will conclude this justifies the development of a unique measure. However, for the author of this thesis, the need to assess a specific aspect of this area of research must be balanced against the ability to position a study among the previous literature with greater certainty than is currently possible in a context of extensive methodological diversity. Future research should therefore endeavour to adopt a common core of items measured on a standard response scale to be complimented by those aspects that are of particular interest to the individual research team. If future work proceeds in this manner, with the same frequency of published results that has occurred over the last two decades, many questions relating to issues of national context and transient economic conditions could be answered more effectively.

The development and administration of a standardised self-report measure of attitudes towards older workers should be complimented with measurement of implicit attitudes. This is the second of the recommended methodological advancements. As discussed above, implicit attitudes more accurately represent the cognitions that influence decision-making and cannot be confounded by socially desirability response bias. The study of implicit attitudes is absent from the literature regarding attitudes towards older workers. This represents the next step the field needs to take to inform public policy action and to motivate relevant decision-makers to reassess how their stored cognitions can influence decisions in unintended ways. Advancements in the sophistication and accessibility of online implicit attitude tests, the prototypical example being 'Project Implicit' (2015), have made this type of testing possible for difficult to access populations such as employers. The resources offered by this research group enable the assessment of employers’ implicit attitudes about ageing and researchers in this field should now begin to study these attitudes.
The third recommendation relating to optimising methodological characteristics of future studies concerns the way ‘older worker’ is defined. The majority of preceding studies have simply used the term ‘older worker’ in survey items and others have used variously defined age ranges. Neither of these strategies is ideal in the context of the range of problems with defining who is an older worker, as discussed in section 1.6. From the perspective of developing comparative research, one may argue that the best option is to use the term ‘older worker’. Using this term would lead respondents to evaluate the same notions of a type of worker, effectively sidestepping issues of individual, industry sector and occupational variation in perceptions of at what age someone is an older worker. It is suggested that an alternative approach retains the advantages of using the arguably too general ‘older worker’ label and provides additional information regarding perceptions of this group of workers. This approach replicates that used by Steinberg and colleagues (1996), by asking respondents at what age someone is an older worker. By piloting a survey with this item, it is possible to tailor the older worker label to the sample to be studied and allows comparative research through accounting for variations in perceived age of older workers. This approach adds significant complexity and expense to studies of attitudes towards older workers. However knowledge has progressed sufficiently to justify rejection of excessively broad age categories and amorphous labels such as ‘older worker’ in future research.

Explanation of the implications of this study included general recommendations for activities seeking to improve labour market outcomes for older workers by reducing or removing attitudinal barriers. These recommendations are considered largely for the Australian context and rely specifically on the results of this study. In some cases, these recommendations are also informed by findings consistently reported by international studies, justified by the uniformity of the findings, despite emerging in different national contexts and time-periods. This would have been the appropriate point to refer to previous studies that demonstrated the efficacy or otherwise of specific intervention programs designed to improve attitudes towards older workers. Unfortunately, to the knowledge of the author, no
such studies exist at the time of writing this thesis. This leads to the following proposal for future research. The use of deliberately timed repeated measurements of attitudes towards older workers could also advance knowledge in this field. A longitudinal study that sought to assess the impact of the implementation of programs that challenge attitudes towards older workers or that follow significant macroeconomic phenomena would be useful. Such a longitudinal study could inform future policy actions by demonstrating the effectiveness of specific intervention exercises or develop the current understanding of the effect of economic turbulence on attitudes towards older workers. For example, at the time of writing, the Australian Federal Government was conducting an inquiry titled ‘Willing to Work’ which is considering ‘practices, attitudes and commonwealth law that deny or diminish the equal participation of older Australian’ (Australian Human Rights Commission, 2015). The inquiry seeks to recommend actions to address employment discrimination. Repeated phases of attitude measurement could extend existing knowledge regarding the role of public policy action on influencing attitudes towards older workers. This measurement timing could be expected to test if, and to what extent, attitudes towards older workers are influenced by: the government demonstrating interest in changing the climate of workplace discrimination, the strength of recommended remedial action and the actions that are implemented. Empirical evidence indicating the effectiveness or otherwise of these various policy interventions could drive further action, refine current approaches and inform the development and deployment of policy in different national contexts.

7.5 Conclusion

This chapter has outlined the implications and limitations of this study and directions for future research. It began by summarising the substantive new knowledge offered by this study. Building on this knowledge, a range of public policy implications and recommendations were offered as potential guiding insights for future policy and action. A reflection on the limitations of this study was undertaken. To conclude this chapter, ideas and recommendations for future research were offered. The author acknowledges the limitations of this study but
contends that the new knowledge resulting from this research will, nonetheless, benefit the field.
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References


References


References


Appendix 1: Questionnaire
A. SOME FACTS ABOUT YOUR ESTABLISHMENT

We would like to begin by asking some general questions about this establishment (or site). By establishment (or site) we mean this single location.

(Screening item)

1. What is your position in the establishment and how many workers are employed?

- Director/CEO/CFO
- Head of a department
- General manager
- Human resource manager/ HRO
- Administrator
- other position, namely ……………………………………………………………

- 50-199 employees
- 200 or more employees

2. Within which of the following sectors of industry is your establishment mainly active?

- Mining, quarrying
- Manufacturing
- Electricity, gas supply
- Water supply, waste management
- Construction
- Wholesale and retail trade
- Transportation and storage
- Accommodation and food service
- Information and communication
- Finance and insurance
- Real estate
- Professional, scientific and technical activities
- Administrative and support services
- Public administration and defence
- Education
- Health care and social work
- Arts, entertainment and recreation
- Other, Including multiple industry sectors…………………………

3. In which sector does your establishment operate?

- Government (Please continue to Item 5)
- Not-for-profit
- Publically listed in Australia
- Publically listed overseas
- Privately owned
4. How would you describe your establishment?

- A single independent organisation? [ ] Yes [ ] No
- Part of a larger national organisation? [ ] Yes [ ] No
- Part of a larger international organisation? [ ] Yes [ ] No
- Foreign owned national organisation? [ ] Yes [ ] No
- Australian owned international organisation? [ ] Yes [ ] No
- Operates mainly in domestic marketplace? [ ] Yes [ ] No
- Operates mainly in international marketplace? [ ] Yes [ ] No
- Other? (Please specify ) [ ] Yes [ ] No

5. To what extent does your establishment experience competition for market share from:

- Local businesses (from your city, region, state) [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Australia-wide businesses [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Eastern Europe [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Western Europe [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- China [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- South East Asia [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Indian Sub Continent [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- North America [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Africa [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- South America [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Other (Please specify ) [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition

6. To what extent does your establishment experience competition for labour from:

- Local organisations (from your city, region, state) [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Australia-wide organisations [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Eastern Europe [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Western Europe [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- China [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- South East Asia [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Indian Sub Continent [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- North America [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Africa [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- South America [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
- Other (Please specify ) [ ] No competition [ ] Weak competition [ ] Modest competition [ ] Strong competition [ ] Fierce competition
B. EMPLOYMENT IN YOUR ESTABLISHMENT

Now we are going to ask some general questions about employment in your establishment.

7. Approximately what percentage of people who are currently employed at this establishment are?

............ Men
............ Women

8. What percentage of your establishment’s employees fall into the following age categories?
   (A rough estimate is okay)

<table>
<thead>
<tr>
<th>Age group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 to 19</td>
<td>%</td>
</tr>
<tr>
<td>20 to 29</td>
<td>%</td>
</tr>
<tr>
<td>30 to 39</td>
<td>%</td>
</tr>
<tr>
<td>40 to 49</td>
<td>%</td>
</tr>
<tr>
<td>50 to 59</td>
<td>%</td>
</tr>
<tr>
<td>60 and older</td>
<td>%</td>
</tr>
</tbody>
</table>

9. Approximately what percentage of your employees are…
   (A rough estimate is okay)

<table>
<thead>
<tr>
<th>Percentage of workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Working permanent part-time                                                         %</td>
</tr>
<tr>
<td>b. Working part-time temporarily                                                        %</td>
</tr>
<tr>
<td>c. Working permanent full time                                                         %</td>
</tr>
<tr>
<td>d. Holding a fixed-term temporary contract                                             %</td>
</tr>
<tr>
<td>e. Casual (i.e. no annual or sick leave)                                               %</td>
</tr>
<tr>
<td>f. Employed through labour hire or employment agency                                    %</td>
</tr>
<tr>
<td>g. An apprentice or trainee                                                            %</td>
</tr>
<tr>
<td>h. A sub-contractor                                                                    %</td>
</tr>
<tr>
<td>i. Other (please specify: )                                                            %</td>
</tr>
</tbody>
</table>

10. Approximately what percentage of your employees are….

<table>
<thead>
<tr>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Australian citizens or permanent residents</td>
</tr>
<tr>
<td>b. Migrant workers on temporary employment contracts</td>
</tr>
<tr>
<td>c. Overseas born trainees on temporary student visas</td>
</tr>
</tbody>
</table>
11. Approximately what proportion of your workforce are in the following job categories:

<table>
<thead>
<tr>
<th>Job categories</th>
<th>Percentage of workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Managers</td>
<td></td>
</tr>
<tr>
<td>b. Professionals</td>
<td></td>
</tr>
<tr>
<td>c. Technicians and trades workers</td>
<td></td>
</tr>
<tr>
<td>d. Community and personal service workers</td>
<td></td>
</tr>
<tr>
<td>e. Clerical and administrative workers</td>
<td></td>
</tr>
<tr>
<td>f. Sales workers</td>
<td></td>
</tr>
<tr>
<td>g. Machinery operators and drivers</td>
<td></td>
</tr>
<tr>
<td>h. Labourers</td>
<td></td>
</tr>
</tbody>
</table>

12. Over the last twelve months, has your establishment increased employment in the following categories?

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes, increased</th>
<th>No, stayed the same</th>
<th>No, reduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Working permanent part-time</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. Working part-time temporarily</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c. Working permanent full time</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d. Holding a fixed-term temporary contract</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e. Casual (i.e. no annual or sick leave)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f. Employed through labour hire or employment agency</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g. An apprentice or trainee</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h. A sub-contractor</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i. Migrant workers on temporary employment contracts</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j. Overseas workers with temporary student visas</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>k. Other (please specify: )</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Do you anticipate a change in the composition of your workforce in the next two years?

<table>
<thead>
<tr>
<th>Category</th>
<th>Stay the same</th>
<th>I expect growth</th>
<th>I expect contraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Working permanent part-time</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. Working part-time temporarily</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c. Working permanent full time</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d. Holding a fixed-term temporary contract</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e. Casual (i.e. no annual or sick leave)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f. Employed through labour hire or employment agency</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g. An apprentice or trainee</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h. A sub-contractor</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i. Migrant workers on temporary employment contracts</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j. Overseas workers with temporary student visas</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>k. Other (please specify: )</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
C. HUMAN RESOURCE MANAGEMENT

Now we would like to ask some general questions about recruitment and personnel policies in your establishment (or site)

14. Is your establishment currently experiencing difficulty in recruiting or retaining workers in the following occupational areas?

<table>
<thead>
<tr>
<th>Job categories</th>
<th>Recruiting Difficulties</th>
<th>Retaining Difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Managers</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. Professionals</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. Technicians and trades workers</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. Community and personal service workers</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. Clerical and administrative workers</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f. Sales workers</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>g. Machinery operators and drivers</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>h. Labourers</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

15. To what extent is your establishment currently encountering any of the following problems related to personnel?

<table>
<thead>
<tr>
<th>Problems</th>
<th>No / Low extent</th>
<th>Some extent</th>
<th>High extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Absenteeism due to illness</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b. A need to reduce staff levels</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c. Shortages of critical skills</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d. Maintaining skill levels among the workforce</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e. Competing on remuneration with other employers</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f. Retaining innovative capacity</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>g. Poaching by other employers in your sector</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>h. Poaching by other employers in other sector</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>i. Time to fill vacancies</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>j. Unfilled vacancies</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>k. Quantity of candidates</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>l. Quality of candidates</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
16. In the case your establishment faces a shortage of personnel - now or in the near future - what measures will you consider taking?

<table>
<thead>
<tr>
<th>Currents</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Already applied</td>
<td>Will be considered</td>
</tr>
<tr>
<td>a. Increased remuneration</td>
<td>☐1</td>
</tr>
<tr>
<td>b. Recruiting more women</td>
<td>☐1</td>
</tr>
<tr>
<td>c. Lowering job entry qualifications</td>
<td>☐1</td>
</tr>
<tr>
<td>d. Recruiting migrant labour</td>
<td>☐1</td>
</tr>
<tr>
<td>e. Relocation of operations abroad (all or partly)</td>
<td>☐1</td>
</tr>
<tr>
<td>f. Extending the working week/ work more hours</td>
<td>☐1</td>
</tr>
<tr>
<td>g. Recruiting more older employees</td>
<td>☐1</td>
</tr>
<tr>
<td>h. Encouraging employees to retire later</td>
<td>☐1</td>
</tr>
<tr>
<td>i. Investing in labour-saving technology</td>
<td>☐1</td>
</tr>
<tr>
<td>j. Recruiting employees who already retired</td>
<td>☐1</td>
</tr>
<tr>
<td>k. Outsourcing functions</td>
<td>☐1</td>
</tr>
<tr>
<td>l. Make use of unpaid volunteers</td>
<td>☐1</td>
</tr>
<tr>
<td>m. Recruit more younger workers</td>
<td>☐1</td>
</tr>
<tr>
<td>n. Offer greater flexibility</td>
<td>☐1</td>
</tr>
<tr>
<td>o. Downscale your establishments activities</td>
<td>☐1</td>
</tr>
</tbody>
</table>

17. Which of the following benefits and services are offered to members of your workforce?

<table>
<thead>
<tr>
<th>Benefit or service</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Career management programs</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>b. Mentoring and formal coaching</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>c. Flexible work options, e.g. job sharing, working from home, flexible leave and benefit options, compressed working week</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>d. Management development programs</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>e. Child care</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>f. Elder care</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>g. Health, well-being and stress reduction programs.</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>h. Ongoing training in management skills</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>i. Trade union representation</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>j. Study leave</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>k. Carer’s leave</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>l. Leave for volunteering</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>m. Paternity and maternity leave which goes beyond statutory provisions</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>n. Superannuation which goes beyond statutory provisions</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>o. Individual/family private health plans</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>p. Disability/accident/life insurance cover</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>q. Managing work/life balance programs</td>
<td>☐1</td>
<td>☐2</td>
</tr>
<tr>
<td>r. Women returners program</td>
<td>☐1</td>
<td>☐2</td>
</tr>
</tbody>
</table>
18. Does your establishment undertake the following types of learning and training?  

<table>
<thead>
<tr>
<th>Type of Learning</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Mentoring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Internal education and (formal) courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Off the job education or training paid for mostly by the organisation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Off the job education or training paid for by the worker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. On the job training (e.g. from other workers or supervisors)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Informal learning undertaken by a worker outside of standard working hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Training tailored to individual’s career stage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Management development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. None of the above</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19. If your establishment needed to reduce staffing levels by 20 per cent. How would you rate each of the following options?

Tick only one box per line

<table>
<thead>
<tr>
<th>Option</th>
<th>Strongly against</th>
<th>Against</th>
<th>No opinion</th>
<th>In favour</th>
<th>Strongly in favour</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Last-in-first-out</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>b. Out sourcing aspects of the business</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>c. Early retirement of older workers</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>d. Laying off workers reflecting the organisational age distribution</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>e. Financial incentives for voluntary redundancy</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>f. Unpaid leave for staff</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>g. Short time working</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>h. Reducing wage levels for all employees</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>i. Laying off workers only on performance grounds</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>j. Restructuring work</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>k. Offshoring aspects of the business</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>l. Laying off temporary or contract workers</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>m. Sourcing cheaper labour from elsewhere</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
</tbody>
</table>

20. How would you rate your establishment’s ability in terms of…?

<table>
<thead>
<tr>
<th>Ability</th>
<th>Poor</th>
<th>Fair</th>
<th>Moderate</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Effective people strategy</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>b. Workforce planning</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>c. Attracting quality staff</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>d. Retaining staff</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>e. Being easily able to change the composition of your workforce in response to changing needs</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
<tr>
<td>f. Maintaining the capacity of employees to respond to changing demands</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
<td>□ 5</td>
</tr>
</tbody>
</table>
21. Over the last 5 years, have key roles in your establishment shown

<table>
<thead>
<tr>
<th></th>
<th>A large decrease</th>
<th>A decrease</th>
<th>No change</th>
<th>An increase</th>
<th>A large increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. An increase in job demands</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>b. Greater role complexity</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>c. Increase in the pace of work</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>d. More frequent reports of job stress</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
<tr>
<td>e. Increase in skill set or qualifications demands</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
<td>☐ 5</td>
</tr>
</tbody>
</table>

22. Over the last 5 years, has your establishment’s ability to offer lighter duties to staff that might want them increased or diminished?

- Increased ☐ 1
- Stayed the same ☐ 2
- Decreased ☐ 3

23. Over the last 12 months, has your establishment increased or decreased the size of its workforce?

- Increased ☐ 1
- Stayed the same ☐ 2
- Decreased ☐ 3

24. Do you expect the number of employees in your establishment to increase or decrease in the coming two years?

- Increased ☐ 1
- Stayed the same ☐ 2
- Decreased ☐ 3

25. Over the last 12 months, has your establishment changed levels of production or services?

- Increased ☐ 1
- Stayed the same ☐ 2
- Decreased ☐ 3
D. OLDER WORKERS AND AGEING

Now we would like to ask some questions about ageing and older workers in your organisation.

26. Will the percentage of employees in your establishment, aged 50 years and older change in the next five years?

- Increase ☐1
- Stay the same ☐2
- Decrease ☐3
- Don’t know ☐4

27. Is the ageing of the Australian population an issue that your establishment feels it needs to respond to?

- Immediately ☐1
- 1 year time horizon ☐2
- 5 year time horizon ☐3
- 10 year time horizon ☐4

28. Which of the following measures regarding workforce ageing are currently applied in your establishment? If not, do you expect it to be considered in the near future?

<table>
<thead>
<tr>
<th>Current</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is already applied</td>
<td>Will be considered</td>
</tr>
<tr>
<td>a. Part-time retirement</td>
<td>☐1</td>
</tr>
<tr>
<td>b. Reduction of working hours before retirement</td>
<td>☐1</td>
</tr>
<tr>
<td>c. Retraining for older workers</td>
<td>☐1</td>
</tr>
<tr>
<td>d. Early retirement schemes</td>
<td>☐1</td>
</tr>
<tr>
<td>e. Possibilities of extra leave for older workers</td>
<td>☐1</td>
</tr>
<tr>
<td>f. Decreasing the workload for older workers</td>
<td>☐1</td>
</tr>
<tr>
<td>g. Reduction in salary (demotion)</td>
<td>☐1</td>
</tr>
<tr>
<td>h. Ergonomic measures</td>
<td>☐1</td>
</tr>
<tr>
<td>i. Adjustment to irregular work/shift work to accommodate older workers</td>
<td>☐1</td>
</tr>
<tr>
<td>j. Continuous career development</td>
<td>☐1</td>
</tr>
<tr>
<td>k. Health and wellbeing programs</td>
<td>☐1</td>
</tr>
<tr>
<td>l. Support for employed carers</td>
<td>☐1</td>
</tr>
<tr>
<td>m. Retirement planning</td>
<td>☐1</td>
</tr>
<tr>
<td>n. Knowledge transfer</td>
<td>☐1</td>
</tr>
<tr>
<td>o. Coaching and mentoring</td>
<td>☐1</td>
</tr>
<tr>
<td>p. Adjustment recruitment practices to attract older workers</td>
<td>☐1</td>
</tr>
</tbody>
</table>
29. If the average age of your workforce increases by 5 years, what will be the effect on…?

<table>
<thead>
<tr>
<th>a. Substantial loss of staff due to retirement</th>
<th>Strong decline</th>
<th>Decline</th>
<th>Stays the same</th>
<th>Increase</th>
<th>Strong increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Labour costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Conflicts in the organisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Knowledge base</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Labour productivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Overall profitability or financial sustainability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Enthusiasm for new technologies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Resistance to organisational changes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Image of the organisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Sick leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Work injuries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Training/schooling costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. Remuneration costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. Ability to attract younger workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30. To what extent do you think the following characteristics apply to workers aged 50 years and older:

<table>
<thead>
<tr>
<th>a. Flexibility</th>
<th>Not/ Low extent</th>
<th>Some extent</th>
<th>High extent</th>
<th>Very high extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Social skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Loyalty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Productivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Creativity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Management skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Reliability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Willingness to learn</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Physical health and stamina</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Ability to cope with stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. New technology skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Coping with work/life balance issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
31. To what extent do you think the following characteristics apply to workers aged roughly between 35 and 50 years:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Not/ Low extent</th>
<th>Some extent</th>
<th>High extent</th>
<th>Very high extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Flexibility</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>b. Social skills</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>c. Loyalty</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>d. Productivity</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>e. Creativity</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>f. Management skills</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>g. Reliability</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>h. Willingness to learn</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>i. Physical health and stamina</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>j. Ability to cope with stress</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>k. New technology skills</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>l. Coping with work/life balance issues</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
</tbody>
</table>

32. To what extent do you think the following characteristics apply to workers aged less than 35 years:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Not/ Low extent</th>
<th>Some extent</th>
<th>High extent</th>
<th>Very high extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Flexibility</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>b. Social skills</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>c. Loyalty</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>d. Productivity</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>e. Creativity</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>f. Management skills</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>g. Reliability</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>h. Willingness to learn</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>i. Physical health and stamina</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>j. Ability to cope with stress</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>k. New technology skills</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
<tr>
<td>l. Coping with work/life balance issues</td>
<td>☐ 1</td>
<td>☐ 2</td>
<td>☐ 3</td>
<td>☐ 4</td>
</tr>
</tbody>
</table>
E. TO CONCLUDE

33. How old are you?

........ years

34. Are you?

☐: Male
☐: Female

35. If you are interested in receiving a summary of the results of this research, please fill in the following details.

<table>
<thead>
<tr>
<th>Name:</th>
<th>..........................................................</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email:</td>
<td>..........................................................</td>
</tr>
</tbody>
</table>

36. If we have any further questions on age related management issues may we contact you?
(Please provide contact information below)

☐: No
☐: Yes, maybe

This is the end of the survey, would you like to make any further comments?

Many thanks for your help in completing this survey.
Appendix 2: Participant e-letter
SUBJECT

Email Text

<TITLE><FIRSTNAME>< LASTNAME>

Thank you for agreeing to take part in the study we are conducting on behalf of the Business Work and Ageing Centre for Research at Swinburne University of Technology.

We are administering a survey that is a component of an Australian Research Council funded project concerned with the management of Australian labour supply.

This project is considering the issues of labour supply against the backdrop of demographic change and the restructuring of industry.

Our focus is on Queensland employers because of intense policy interest in the State. Participation in this survey facilitates the development of policies and procedures aimed at optimising labour force usage that benefits both employers and workers. All participants in the telephone survey will have available to them a report on the aggregated findings of this survey which will provide unique insights into labour usage in Queensland.

We strongly encourage participation in this survey to ensure a broad range of perspectives are represented. The survey will be conducted by telephone, taking approx. 15 minutes to complete.

All information provided will be kept completely confidential and will only be used for research purposes in agreement with the AMSRS Code of Professional Behaviour.

During the survey we will ask you some background demographic questions on type of employment/employees working at your site.

To assist the survey are included in the attached document for you to read through prior to the interview. It would be helpful if you were able to have these answers ready at the time of the call.

Kind Regards

Professor Philip Taylor | Faculty of Business and Enterprise | Swinburne University of Technology | PO Box 218 Hawthorn Victoria Australia 3122

Swinburne University of Technology

Business, Work and Ageing Centre for Research
Appendix 3: Additional reference tables
<table>
<thead>
<tr>
<th>Quality</th>
<th>Favourable evaluations</th>
<th>Unfavourable evaluations</th>
<th>Ambivalent/Disagreements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 17: Reference table listing the previous studies according to the favourability or otherwise of evaluations reported for the qualities measured in this study. 

Appendices
<table>
<thead>
<tr>
<th>Previous Studies</th>
<th>Stress Coped with</th>
<th>Creativity</th>
<th>Ability to Learn</th>
<th>Physical Health and Stamina</th>
<th>New Technology Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van Dalen, Henkens &amp; Schippers (2010)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Henkens (2005)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schmidt (2000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Henkens (2005)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Dalen, Henkens &amp; Schippers (2010)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lyon &amp; Pollard (1977)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schenberge et al. (1996)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taylor &amp; Walker (1994)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>War &amp; Pennington (1993)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rosen &amp; Jerdee (1976)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hassell &amp; Perrewe (1996)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Management skills and ability to cope with work/life balance issues were excluded from the table because they have not been measured in...
### Table 18

<table>
<thead>
<tr>
<th>Variable</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of older workers</td>
<td>Slater &amp; Kingsley (1976)</td>
</tr>
<tr>
<td></td>
<td>Larger proportions of older workers associated with</td>
</tr>
<tr>
<td></td>
<td>more favourable evaluations of older workers</td>
</tr>
<tr>
<td></td>
<td>Hassell &amp; Perrew (1995)</td>
</tr>
<tr>
<td></td>
<td>Larger proportions of older workers in the workforce</td>
</tr>
<tr>
<td></td>
<td>Slater &amp; Kingsley (1976)</td>
</tr>
<tr>
<td></td>
<td>Proportion of older workers</td>
</tr>
<tr>
<td>Industry sector</td>
<td>Taylor &amp; Walker (1994)</td>
</tr>
<tr>
<td></td>
<td>More contacts with older workers associated with</td>
</tr>
<tr>
<td></td>
<td>more favourable evaluations of older workers</td>
</tr>
<tr>
<td></td>
<td>Henkens (2005)</td>
</tr>
<tr>
<td></td>
<td>No significant association detected</td>
</tr>
<tr>
<td></td>
<td>More contacts with older workers associated with</td>
</tr>
<tr>
<td></td>
<td>more favourable evaluations of older workers</td>
</tr>
<tr>
<td></td>
<td>Henkens (2005)</td>
</tr>
<tr>
<td></td>
<td>No significant association detected</td>
</tr>
<tr>
<td></td>
<td>More contacts with older workers associated with</td>
</tr>
<tr>
<td></td>
<td>more favourable evaluations of older workers</td>
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<td>War &amp; Parnickson (1993)</td>
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Table 18: Tabulation of the studies that tested associations between organisational and respondent characteristics with simple descriptive statements of relevant findings.
composition (skill level)

Labour market conditions
Respondent age

Rhine (1984)
Henkens (2005)
Slater & Kingsley (1976)
Rosen & Jerdee (1976)a:
Slater & Kingsley (1976)
Rhine (1984):
Warr & Pennington (1993):

Hassell & Perrewe (1995)
Loretto, Duncan & White (2000)
Chiu, Chan, Snape & Redman (2001):
Henkens (2005):
Gringart, Helmes & Speelman (2005)
Van Dalen, Henkens & Schippers (2010)

Appendices

significantly associated with attitudes towards older
workers.
Blue-collar older workers evaluated less favourably
particularly by younger respondents.
Higher skill workforces associated with more
favourable attitudes towards older workers.
No significant association detected.
Older respondents more favourable towards older
workers on performance capacity.
Older respondents more favourable towards older
workers on several undefined latent variable.
Respondents under 45 years less favourable towards
older workers.
Respondents under 40 years less favourable about
older workers on some qualities and respondents
over 40 years less favourable towards older workers
on ability to learn quickly.
Older respondents less favourable toward older
workers.
Older respondents more favourable toward older
workers.
No significant association detected.
Older respondents more favourable toward older
workers on majority of qualities.
Older respondents more favourable toward older
workers.
No significant association detected.
Older respondents more favourable toward older
workers.

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