Age Discrimination in Hiring Practices Against Older Adults in Western Australia: The Case of Accounting Assistants

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Eyal Gringart

A report submitted as a partial requirement of the degree of Bachelor of Science with Honours in Psychology at Edith Cowan University. October 1999.

Declaration

I declare that this written assignment is my own work and does not include:

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Eyal Gringart
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Age Discrimination in Hiring Practices

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Abstract

The percentage of older adults in the Australian population is predicted to increase from about 18 at the end of this century to about 33 per cent by the year 2050. One anticipated consequence of this significant ageing of the population is that increasing numbers of older adults may be required in the workforce. Still, age discrimination in hiring places older adults at a disadvantage. Local measures of actual discrimination are needed in order to formulate appropriate policies and interventions to combat such negative attitudes. Evidence suggest that, contrary to employers perceptions, older adults are willing and able to work. The Equal Opportunity Act and the waving of compulsory retirement protect older adults and enable them to file complaints in cases of unlawful discrimination. However, a rejected job applicant is unlikely to be told that he or she were rejected because they are too old thus leaving the person powerless to make a complaint. One method with which to measure actual discrimination is correspondence testing, which was used in the USA to measure actual age discrimination in hiring. It is suggested that the use of similar methodology in Western Australia would yield important information for both policy makers and researchers.
Age Discrimination in Hiring Practices

Issues related to population ageing are becoming increasingly prominent as we approach the 21st century. The combination of medical advances that contribute to longevity together with the advancing age of the baby boom generation, and lower fertility rates of subsequent generations suggest that significantly greater numbers of older adults may be required in the workforce. A valid and important question, therefore, is how willing employers are to hire older adults. Studies of actual age discrimination in hiring practices against older adults are typically absent from the literature. There are, however, some areas that require further exploration prior to conducting a study of this topic. Ten areas relating to the rationale for a study of actual age discrimination in hiring practices against older adults were identified and are the subject of this paper.

The first area in need of review is that of ageism and its roots in Australia. Understanding the origins of this negative attitude may facilitate better understanding of the current situation. The second area relates to the relationship between ageism and sexism, as age discrimination may not have the same effect across gender, a point that should be considered if more substantial studies are to be undertaken. Third, data on predictions of population ageing and their social, psychological, and economic ramifications would provide an indication of the importance of investigations in the area of age discrimination in hiring practices.

The willingness of older adults to work and the importance of work to them are the next issues. The next area to be explored relates to the health and performance abilities
of older adults. This is important because if it is found that older adults are less capable of working than younger people, then an investigation of age discrimination in hiring is less relevant.

The sixth area explores research and literature related to older adults in the workforce, and reviews issues such as employers' and employees' perceptions of the relationship between age and employment and other issues related to aging and work. This area is important because it provides knowledge of the field in which age discrimination in hiring against older adults would occur.

Governmental policies that were formulated to combat age discrimination in employment in Australia, and in some other countries, form the seventh area reviewed. The eighth subject of review relates to possible methods of investigation by which to assess actual discrimination. Previous research measuring actual age discrimination in hiring practices will be the ninth area reviewed. In conclusion, the feasibility of employing similar methodology for research in Western Australia, and the importance of the results of such research, for both policy makers and researchers, will be discussed.

**Ageism.**

Ageism is defined as discrimination against people simply because they belong to a particular age group (Cavanaugh, 1997). Hence, ageism can be targeted at the young as well as the old. The subject of this paper, however, is ageism in hiring practices targeted at older adults. Davison (1995) suggested that ageism in Australia has its roots in the colonial era when most migrants were younger than 30 years of age. Hence, there were hardly any older adults among the original settlers. During the gold rush, people over 50
were considered old as they were run down due to long periods of physical work in the mines (Davison, 1995). Further, Australia enjoyed the image of the young country as contrasted with the old country of Britain (Davison, 1995). Another precursor of ageism is the image of older adults depicted by Australian literature as physically impaired and feeble minded (Davison, 1995). Thus, ageism is embedded in Australian culture and ageist attitudes are formed through both socialisation and education.

The age at which one is considered old is linked to the time of leaving the work force (Ranford, 1987; Walker, 1997). The widely held notion of the age of 65 as the cut off point for exiting the work force finds its roots in the days of chancellor Otto Von Bismark, who proposed that every worker would be cared for by the state once they reached the age of 65 (Ranford, 1987). Whilst this may seem generous, very few people lived to the age of 65 in those days. It is, therefore, important to recognise that the convention of age 65 as the age of retirement is not related to loss of abilities or performance but is a tradition inherited from days past. The notion of a cut off point for exiting the workforce promotes stereotypes and facilitates for ageism. Whilst it is important to note that mandatory retirement was waived in Western Australia in 1995 (Age Discrimination Guidelines, 1998), the stereotype of ‘old’ as related to age 65 will probably linger in peoples’ minds for some time yet.

Butler (1980) suggested that ageism mostly results from an unconscious process that is deeply rooted in western societies. Perdue and Gurtman (1990) conducted two studies that investigated the automaticity of ageism. In the first, participants were asked to rate positive and negative adjectives as more typical of a ‘young’ or an ‘old’ hypothetical person. The results showed more negative descriptors were attributed to ‘old’ than to
'young' (Perdue & Gurtman, 1990). In the second study, participants were requested to categorise adjectives as positive or negative. The presentation of each adjective was preceded by either the word "old" or "young" being flashed so that no conscious awareness of it occurred. The results showed that response times for negative descriptors were faster when primed by the word "old" and positive adjectives yielded faster reaction times when primed by the word "young" (Perdue & Gurtman, 1990). Whilst cultural biases may limit generalisability of such findings, they nevertheless demonstrate the unconscious (automatic) negative connotations associated with older persons. Thus, regardless of whether an older person was compared to a younger one or presented in isolation, 'old' was shown to be associated with negative perceptions. This issue may be important in the investigation of ageism in hiring practices for it would suggest that, regardless of any job related merits, older applicants would be automatically disadvantaged.

**Ageism and sexism.**

As far as employability is concerned, women age sooner than men (Rife, 1992; Rodeheaver, 1992). That is, a middle aged woman is perceived as significantly less attractive than a younger woman and is thus less likely to be hired, whereas a middle aged man's appearance is not affected to such a degree (Rodeheaver, 1990). The perception of some jobs as 'masculine' and others as 'feminine' promotes employment segregation of men and women due to the perceived nature of jobs (Lambert and Petridis, 1994; Rodeheaver, 1992; Sargent, 1994). Onyx (1998) suggested that older women suffer from both sexism and ageism and may thus be discriminated against to a greater
extent than both younger women and older men. Thus, older women are disadvantaged when competing against either younger women, younger men, or men of a similar age to their own.

Poststructuralist theory suggests that although most companies and organisations try to maintain sex neutral attitudes and policies, this is not the case in practice (Zajdow, 1995). Poststructuralist theory proposes that the workforce is a male dominated area and that heterosexual preferences influence hiring practices and on the job relations (Sargent, 1994; Zajdow, 1995). Thus, an interaction between age and gender leading to older women being least favoured by potential employers is quite likely.

In a study conducted by Benokraitis (1987) regarding work prospects of older women, 52 per cent of older women respondents reported experiences of age discrimination in job interviews. Having their job applications rejected affected older women to a greater degree than it did men of similar age (Rife, 1992). Whilst men attributed rejections to market place circumstances, older females blamed themselves and believed they lacked the skills necessary to get the job (Rife, 1992). This reaction on the part of the older females reduced their job search self-efficacy and thus increased the likelihood that they would abandon their job seeking (Rife, 1992). Older women were also more prone to depression than were men, suffered from lower self-esteem and self-worth, all as a result of rejection of their job applications (Rife, 1992). Thus, not only were older women discriminated against, but they also suffered increased consequences as a result.

As the baby boom generation reaches older adulthood early next century there will be a significant increase in the number of older adults needing employment (Bishop, 1999; Clare & Tulpule; 1994; Kendig & McCallum, 1986). Further, increasing numbers of
women are joining the workforce, a trend that is predicted to continue (Clare & Tulpule', 1994). Thus, as the number of older women seeking employment is predicted to increase, it is important to investigate the actual willingness of employers to hire older women.

**Population ageing.**

In Australia, the period of greatest growth in the population of people over 65 is predicted to occur between 2011 and 2021, as the baby boom generation (born between mid 1940's to early 1960's) will reach this age (Bishop, 1999). Dependency ratios (number of persons aged 65 and over per 100 persons aged 15-65) are increasing rapidly (Clare & Tulpule', 1994; Kendig & McCallum, 1986). From 16.7 in 1991, the dependency ratio is predicted to increase to 18.1 by 2001, and to 33.0 by 2051 (Clare & Tulpule', 1994). The percentage of persons over 65 in the Australian population was 11.2% in 1991, and is predicted to increase to 13.3% by 2001, and to 20.4% by 2050 (Clare & Tulpule', 1994). This significant increase in the number of older adults in the population will inevitably influence both social structures and the economy. The significant growth in the population of older adults will require sufficient financial resources in order to support them (Bishop, 1999). The exclusion of older adults from the workforce would mean that the financial burden for their care would be carried by younger taxpayers. This may lead to increased feelings of uselessness among older adults, as well as feelings of frustration and resentment toward older adults by the younger taxpayers. Including older adults in the workforce longer would increase the tax base (Bishop, 1999), as well as alleviating the burden placed on younger taxpayers.
Thus, the predictions of population ageing and its implications make evident the increasing importance of, and the need for, older adults in the workforce.

Other developed countries, such as Canada and the USA, show a similar magnitude, to Australia, of the predicted percentage of older adults. European countries, such as Switzerland, show even more rapid growth, with a predicted 20% of their population being over 65 by 2010 (Clare & Tulpole', 1994). Sweden currently has the greatest percentage of its population accounted for by older adults, with 23% aged over 65 (Cavanaugh, 1997). Overall, the populations of all developed countries are ageing due to falling birth rates and increased life expectancy, and most of these countries will have more than 20% of their populations aged 65 and over by the middle of the 21st century. Thus, population ageing is not limited to Australia but is rather a global trend.

Less developed countries, such as Sri Lanka, currently have about four per cent of their populations over 65 (Cavanaugh, 1997). This number, however, is expected to quadruple by 2025, whilst in developed countries the number will only double (Cavanaugh, 1997). Planning for the future is of great importance in this issue and the success of industrialised countries in meeting this challenge can be followed by underdeveloped countries whose limited resources will, undoubtedly, be taxed by their ageing population.

The willingness of older adults to work and the meaning work has to them.

Research regarding the importance of work for older adults is typically missing from the literature (Mor-Barak, 1995). This may be because it has been the norm for older adults to retire (Mor-Barak, 1995). From what has been written thus far, however, it is
clear that there is a growing need for older adults to remain in the workforce and the question of their willingness to work, as well as the meaning of work to them, are both important and relevant questions.

Mor-Barak (1995) investigated the meaning of work in a sample of 146 older adults (50 years and over) and found four factors of importance. One was a social contact factor that related to issues such as status and socialisation. The second factor was a personal one relating to areas such as self-esteem and personal satisfaction. The third was a financial factor and the fourth was a generativity factor, which related to teaching and passing knowledge and skills to younger generations. No significant gender differences were observed in the assignment of importance of these factors to the meaning of work (Mor-Barak, 1995). The desire of older adults to pass on their knowledge to younger generations is of particular interest because it can facilitate communication and provide intergenerational benefits in the workforce.

Another issue related to the desire of older adults to teach and pass on their knowledge is that of mentoring. Mentors are typically more experienced persons who shepherd new employees in the first years of their careers (Winefield, 1998). Mentors provide advice, facilitate socialisation, and teach the less experienced worker (the protégé) ‘the ropes’ (Cavanaugh, 1997). Mentors were shown to make a significant contribution to the success of new employees (Winefield, 1998). Further, most new recruits prefer older mentors (Cavanaugh, 1997). Thus, both organisations and new employees benefit if older adults remain active in the workforce.

Rife (1992) reported that paid employment enhanced older women’s feelings of self-worth, empowerment, self-control, and life satisfaction. Lack of employment, on the
other hand, was pronounced in depression, loss of self-esteem, and increased family strain (Rife, 1992). Older adults who remain active in the workforce show higher levels of life satisfaction and morale compared with retired persons of the same cohort (Aquino, Russell, Cutrona, & Altmaier, 1996). Ranford (1987) found that many retired Australians claimed that they would rather work than be retired.

Aquino et al. (1996) studied a sample of 292 older adults (aged 65-97) and found paid work contributed directly to life satisfaction, whilst on the other hand, the contribution of volunteer work to life satisfaction was mediated by social support. This finding was consistent even after controlling for financial gain (Aquino et al., 1996). Thus, remaining active in paid jobs had a unique contribution to life satisfaction for older adults. Taken together, the above studies suggest that older adults want to work, that paid employment makes a significant contribution to their psychological well being, and that they want to pass on their knowledge to younger generations.

Health and performance abilities of older adults.

The growing necessity of older adults to remain in the workforce and their willingness to do so are evident, but how capable are older adults? Whilst biological and physical changes do occur with age, they do not usually pose any significant difficulty for older adults to be active and productive well into old age (Cavanaugh, 1997; Ranford, 1987). Physical changes with advancing age that may impair one's functioning abilities are more likely to be related to individual differences rather than to age itself (Seedsman, 1996; Sterns & Milkos, 1995). Although lay persons tend to think that systematic decline in
functioning inevitably occurs as people age and that dementia is the province of the aged, this is not the case (Ranford, 1987).

Age differences are found in speed of encoding, divided attention, and complex reaction time with older adults being slower than younger people (Kail & Salthouse, 1994; Sterns & Milkos, 1995). However, two points about these changes should be borne in mind. The first is that older adults may lack interest in test stimuli and thus demonstrate lower performance on tests than their younger counterparts. Indeed, Flynn (1998) suggested that differences between older and younger test takers were not necessarily consistent in real world situations. The second issue is that of experience. Older adults' performance is compensated for by their experience and job related practice (Salthouse, 1984; Sterns & Milkos, 1995). For example, Salthouse (1984) found that although reaction time increased for older typists, overall typing speed was maintained because the typist compensated with greater hand-eye span. Hence, with the exception of jobs such as racing car driver or jet fighter pilot, the above cognitive declines found in older adults have less significance for working abilities (Sterns & Milkos, 1995).

Memory performance shows differences across age with older adults showing smaller working memory capacity (Schaie & Willis, 1991). Still, the extent of these differences is doubtful and appears not to be universal (Cavanaugh, 1997). Age differences are also found for recall but not for recognition (Schaie, 1996). Older adults do not use memory strategies spontaneously as younger adults do. These differences are reduced, however, when older adults do use such strategies (Schaie & Willis, 1991). Thus, whilst age related differences are found in memory performance they are unlikely to have any significant interference with job performance.
Primary mental abilities of number, word fluency, verbal meaning, inductive reasoning, and spatial orientation usually show improvement until people reach their late 30's or early 40's. These abilities, for most people, remain stable until their late 60's after which normative declines are seen with advancing age (Schaie, 1996). This decline in intellectual performance, however, is not significant until people reach their mid 70's and even then individual differences are great (Schaie, 1996). That is, very few people in their mid 70's show significant decline in more than one primary mental ability and even by age 88 only a very small minority show significant decline in all five (Schaie, 1996). Fluid intelligence shows a decline with age, whilst chrystalised intelligence does not (Schaie & Willis, 1991). Two important points need to be mentioned. First, fluid intelligence performance can improve with training (Cavanaugh, 1997). Second, comparing fluid intelligence performance in real world situations failed to show consistent lower performance for older adults compared with younger persons (Flynn, 1998; Schaie & Willis, 1991). Older adults may have expected to perform worse than younger people on tests, and thus may have created a self-fulfilling prophecy (Sterns & Milkos, 1995). Therefore, as far as employment is concerned, age related declines in intellectual abilities should pose no barrier to hiring older adults.

As for the relationship between ageing and disease, Forbes and Hirdes (1993) surmised that no disease is universally prevalent in old age. Hence, individuals age differently and are affected by various diseases throughout life. Thus, the stereotype of older adulthood as inevitably related to ill health is unfounded. In Australia, 80% of persons over the age of 70 are not using any aged care services (Bishop, 1999). Hence, the majority of older adults in Australia are in good health. Thus, the data relating to
older adults' state of health and intellectual functioning show unequivocally that older adults can perform adequately at work.

Older adults in the workforce

Although it is evident that there is a growing need for older adults in the workforce and that older adults are generally willing and able to work, age discrimination seems to place them at a disadvantage. Whilst employers recognise a number of positive qualities in older adults they rarely consider hiring older adults (Encel, 1998). Older adults are recognised as responsible, punctual, reliable, and devoted to quality (Encel, 1998). Interestingly, many employers who claimed they were unlikely to hire older adults had a number of older adults already working for them (Encel, 1998). Thus, there may be a discrepancy between employers' intentions and actions regarding the hiring of older adults.

Steinberg, Donald, Najman, and Skerman (1996) surveyed 525 employees and 104 employers across industries in Queensland, and found that whilst employees considered workers aged between 56-60 as older workers, employers viewed those aged between 51-55 as older ones. In other words, workers aged earlier from the employers' point of view compared with that of employees. Further, although employers viewed older workers as loyal and reliable, they considered younger workers to possess more favorable qualities, such as hard working, healthy, and creative (Steinberg et al., 1996). Minimal interest was shown in hiring persons over 45 years of age and there was no interest in hiring persons over 56 (Steinberg et al., 1996). These authors concluded that ageism was well established in Australian society.
Another manifestation of ageism in employment is the trend of retrenchment as a result of downsizing of organisations (Walker, 1997). Older adults are the first to lose their jobs as a result of downsizing and are the least likely to find new positions (Walker, 1997). In the USA, for example, manufacturing jobs dropped from 30 per cent of all jobs, in the 1960's, to 17 per cent in the 1990's (Cavanaugh, 1997). Of those manufacturing workers over 55 years of age who were displaced only 40 per cent found other jobs compared with over 70 per cent of those in their 20's (Cavanaugh, 1997). Further, older manufacturing workers tended to be laid off first (Cavanaugh, 1997).

Employers typically view older adults as slow, inflexible, untrainable, and in ill health (Ranford, 1987). Buys and Buys (1996) asserted that the notion of older adults being untrainable is unfounded and that older adults are willing and able to be trained and educated for new employment demands. Whilst perceptions among the general public are of decline in job performance with advancing age, chronological age accounts for only a small percentage of the variance in actual job performance (Sparrow & Davies, 1988). Thus, age per se does not seem to be of significant importance in job performance.

Having assessed the performance of 1308 service engineers, Sparrow and Davies (1988) found that age differences in job performance were mediated by the time that elapsed from last training. Age differences in job performance were significantly reduced when the time from last training between the two comparison groups was similar (Sparrow & Davies, 1988). Thus, older workers who are not given refreshment and new job training may not perform as well as their younger counterparts but the difference is not due to the workers' age but rather to the lack of training opportunities.
Two meta-analyses (Waldman & Avolio, 1986; McEvoy & Cascio, 1989), together reviewed 136 independent studies conducted over 22 years. These studies found low correlations between age and job performance. Higher correlations, however, were found between supervisors’ ratings of employees and employees’ age, with older employees being rated lower regardless of actual performance. This suggests that age discrimination against older job applicants may be counter-productive.

Braithwaite, Lynd-Stevenson, and Pigram (1993) studied ageist attitudes in a sample of 195 undergraduates in Canberra and found that the majority of students thought an older (59) job applicant would be less successful than a younger (29) applicant. Hence, such attitudes may later be pronounced as age discrimination in hiring practices.

Ageism in hiring practices can be harmful to older adults, not only because of discriminatory attitudes and behaviours portrayed by society, but also because such attitudes, if held by older adults themselves, can act as self fulfilling prophecies (Braithwaite et al., 1993). The notion of such self-fulfilling prophecies finds support in Schwab & Heneman’s (1978) study of a sample of personnel specialists. Schwab and Heneman (1978) reported that older personnel specialists gave lower performance ratings to an older target than did younger personnel specialists. This would suggest that older adults, who view themselves as potentially less valuable than younger persons, would expect to be rejected as job applicants which, in turn, may lead them to refrain from trying to get a job in the first place.

Cases demonstrating older adults’ trainability and willingness to work are also found in the literature. For example, Simon, Morse, Speier, and Osofsky (1993) trained 14 older adults (average age 65) as case management aids for mentally ill patients. Thirteen
out of the 14 were then employed in that capacity and their performance was rated as excellent (Simon et al., 1993). Mayhew and Swindell (1996) employed retired older adults as research assistants in two projects and reported that they were enthusiastic, reliable, responsible, and generally good to work with. Thus, older adults have been shown empirically to be trainable and demonstrate high quality performance as a result of their training.

Cleveland, Festa, and Montgomery (1988) suggested that the greater the number of older persons in an applicant pool, the older the appropriate age for the job was perceived to be. This may suggest that as the number of older job applicants increases so will job perceptions change in favor of older adults. Cleveland et al., however, also reported that whilst job perceptions changed, hiring decisions were not influenced. Feldman (1981) proposed that the decision making process engaged in whilst making hiring considerations is mediated by stereotypes held by the employer about the target person. This means that although the anticipated growth in the number of older adults seeking employment may change the perceived appropriate age for jobs, it will not increase their chances of finding employment unless ways to change stereotypic views of older adults are addressed.

**Government policies to combat age discrimination.**

Attempts at combating age discrimination in hiring practices in Western Australia are the Equal Opportunity Act (EOA), which was enacted in 1984 (Equal Opportunity Guidelines, 1998), and the waiving of mandatory retirement in 1995. The principle
underlying the EOA is that everybody deserves a 'fair go' regardless of sex, race, or age.

The Equal Opportunity Guidelines (1998) state that:

Equal opportunity in employment means employing the best person for the job, so long as the choice is made fairly. People who are suitable for particular jobs should not be excluded because of their age. (p. 5)

The EOA enables people to make complaints if they suspect they were unlawfully discriminated against.

It is unlikely, especially with the EOA in force that potential employers would explain to rejected applicants that they were rejected because they are too old. This leaves applicants powerless to make a complaint in such cases. Thus, at least in the area of hiring practices, the EOA appears to fall short of adequately protecting job applicants from age discrimination.

Similar attempts at combating ageism in employment are found in the USA where the Age Discrimination in Employment Act was enacted in 1967 and amended in 1986 to further prohibit employers from segregating or classifying workers on the bases of age (Cavanaugh, 1997). In the UK, there appears to be no legislation against age discrimination and it is up to individual companies to employ equal opportunity policies (Lucas, 1993). In Germany, mandatory retirement at age 65 for men and 60 for women is still in force, which is direct discrimination (Frerichs & Naegel, 1997). People over 45 years of age in both the UK and Germany are faced with significant difficulties in finding employment (Frerichs & Naegel, 1997; Lucas, 1993). It may thus be suggested that although acts such as the EOA fall short in some aspects they are, nevertheless, steps in the right direction.

The objective evidence that points to age discrimination against older adults in hiring practices is mostly found through surveys, such as Steinberg et al. (1996) described
earlier, observation of hiring criteria, and unemployment demographics (Steinberg, Wally, Tyman, & Donald, 1998). Researchers who have investigated age discrimination in hiring practices have mostly gathered data of employers' intentions, rather than their actions. Hence, studies measuring actual discrimination are typically absent. Considering the inevitability of the ageing of the Australian population, and the feasibility of older adults' participation in the workforce, it is important to obtain actual measures of age discrimination in hiring practices.

**Methods of investigation of actual discrimination.**

As explained earlier, age discrimination in recruiting employees may not be openly observable. Further, asking employers whether they abide by acts such as the EOA would probably yield very predictable answers. Thus, other methods are required in order to elicit such information.

One method that shows promise is correspondence testing (also called employment testing), which was developed by Jowel and Prescott-Claire (1970) to test for racial discrimination in hiring practices in Britain. The method was designed to assess the inclination of various employers to consider different applicants for an interview (Jowel & Prescott-Claire, 1970). The technique involves sending carefully matched pairs of job applications in response to advertised vacant positions. One application depicted a white British applicant and the other depicted a ‘coloured’ immigrant (Jowel & Prescott-Claire, 1970). Using correspondence testing allowed the observation of differences in employers' responses according to the applicants' race.
Correspondence testing was used in Australia by Riach and Rich (1987, 1991) to test for sexual and racial discrimination. Correspondence testing is a systematic technique that enables the observation of employers' 'honest' responses to demographic characteristics of job applicants in a controlled experimental manner (Bendick, Jackson, & Romero, 1996). Two fictitious applications portraying job seekers are simultaneously mailed. The applications are identical in all job relevant qualifications, such as education and experience, but differ in some demographic dimension (Bendick et al., 1996; Jowel & Prescott-Clarke, 1970). Random factors that may influence decision making are eliminated by repeating the procedure dozens of times, thus allowing the researcher to infer that outcome differences can be attributed to the demographic characteristic that was varied (Bendick et al., 1996; Riach & Rich, 1991a).

Having considered the possibility of posting unsolicited pairs of applications, Jowel and Prescott-Clarke (1970) decided to mail pairs of applications as a response to advertised vacant positions. They reasoned that mailing unsolicited applications might have yielded a great number of useless negative responses (Jowel & Prescott-Clarke, 1970). Riach and Rich (1991) suggested that when used as a response to advertised vacant positions, the method of correspondence testing allowed for the observation of discrimination, but was limited in detecting the precise source of the observed discrimination. This is because market conditions and the number of other applications, factors that are out of the experimenter's control, may confound the results (Riach & Rich, 1991). Bendick et al. (1996) suggested that negative responses were valuable for analysis when the time it took from mailing applications to the time such responses were received was taken into consideration. Bendick et al. (1996) reasoned that shorter times
for negative responses could be interpreted as less favorable treatment toward applicants because it suggested that less consideration was given to those applications. Thus, correspondence testing could be employed with unsolicited application as well. Further, it may be suggested that using unsolicited applications would provide a purer measure of general trends in discrimination among employers than responding to vacant positions would.

The use of unsolicited applications would also allow random sampling of target employers, as well as provide the researcher with the freedom to choose which professions and which industries to study. Responding to vacant positions means that the experimental posted applications need to compete successfully with real applications. This may create two ethical problems. Firstly, some real applicants may be rejected in favor of the fictitious ones causing the former undue anxiety. Secondly, having favored a fictitious application, employers may become anxious as they meet with no response to their interest. In order to obtain sample sizes that would be adequate for powerful statistical analyses, responding to vacant positions may require a lengthy process as dictated by market requirements. Further, if a cross industrial study were to be conducted, various types of resumes would need to be produced in a relatively short time, which may be a costly process. Thus, the use of unsolicited applications could allow for greater generalisability of results, with minimal foreseeable harm to respondents.

Previous research of actual age discrimination in hiring

Bendick et al. (1996) conducted a study of actual age discrimination in hiring practices in the USA. These researchers used correspondence testing with pairs of
unsolicited applications (Bendick et al., 1996). A complete test was defined as one that resulted in at least one response to one of the two applicants (Bendick et al., 1996).

Potential employers could respond either by mail or by leaving a message on an answering machine. No further contact was made with potential employers (Bendick et al., 1996). The two ages varied were 32 and 57 and data was analysed to observe which age received more favorable responses by considering four criteria. (1) The number of positive versus negative responses. (2) The time from posting an application until receipt of positive and negative responses. (3) Whether positive responses, once made, were followed by additional communication attempts. (4) Whether a negative response included alternative suggestions for the applicant.

The results of Bendick et al.'s (1996) study indicated age discrimination against older applicants. A greater number of positive responses (e.g., “please call us to arrange an interview”) were received by younger applicants. Further, younger applicants received positive responses sooner than did older applicants (Bendick et al., 1996). Older applicants were faster to receive negative responses (e.g., “we are sorry to inform you that no suitable position currently exists”). Further, older applicants received a greater number of negative responses than did younger applicants (Bendick et al., 1996). Younger applicants received a greater number of positive responses over the phone, which was taken as an indication of greater urgency to contact them, as well as more additional contact attempts (Bendick et al., 1996). Finally, younger applicants received a greater number of alternative suggestions with negative responses, than did the older applicants (e.g., “we regret to inform you that we have no suitable vacancies at present. However, you may wish to contact X who may have a need for a person of your
Hiring Discrimination

Bendick et al. (1996) reported that no significant differences in discrimination across gender were observed. Overall, age discrimination against older applicants was pronounced in 25% of complete tests (Bendick et al., 1996). Thus, correspondence testing with unsolicited applications was successfully used to measure actual age discrimination in hiring practices against older adults.

Conclusion.

Ageism appears to be embedded in Australian culture and the age at which one is considered old is linked to the time of leaving the work force. Nevertheless, the predictions of population ageing and their implications makes evident the increasing importance of, and the need for, older adults in the workforce.

Older women seem to be disadvantaged due to an interaction between age and gender. Further, older women who were discriminated against suffered increased consequences as a result compared to men. Thus, as the number of older women seeking employment is predicted to increase, it is important to investigate the actual willingness of employers to recruit them.

Older adults want to work, paid employment makes a significant contribution to their psychological well being, and they want to pass on their knowledge to younger generations. Further, data relating to older adults’ state of health and intellectual functioning shows unequivocally that older adults can work.

Research relating to age discrimination in hiring practices is mostly based on employers’ intentions rather than actions. Hence, measures of actual discrimination are
needed, as there may be a discrepancy between employers' intentions and actions regarding the hiring of older adults.

Age discrimination in recruiting employees may not be openly observable. Further, direct inquiries to employers whether they abide by acts such as the EOA would probably yield very predictable answers. Thus, other methods are required in order to elicit such information. As correspondence testing with unsolicited applications was successfully used to measure actual age discrimination in hiring practices in the USA, it is suggested that similar methodology could be used in Western Australia. Further, if it proves effective, correspondence testing could be used by government bodies, such as the Equal Opportunity Commission, to monitor employers' responses to various types of applicants.

The ageing of the population is inevitable, and anticipatory planning is, therefore, important. Local data on actual discrimination are important for they will allow the formulation of appropriate policies as well as designing interventions, such as educational programs and awareness campaigns. For example Bendick et al.'s (1996) found no differences in discrimination across gender. This may not be the same in Western Australia. Thus, foreign data could be misleading for both policy making and future research avenues.

Finally, formulating ways by which to prepare for the inevitable ageing of the population is important for the young as well as the old. This is because better care and enhanced awareness of older adults' needs would facilitate for a positive outlook of the prospects of older adulthood for the young.
References


The following research report, "Age Discrimination in Hiring Practices Against Older Adults in Western Australia: The Case of Accounting Assistants" will be submitted to the Australasian Journal on Ageing. Instructions for authors are included in the next page.
INSTRUCTIONS FOR AUTHORS

1. SCOPE AND MISSION

The Australasian Journal on Ageing is a peer reviewed journal which publishes original work in any area of gerontology and geriatric medicine. It welcomes international submissions, particularly from authors in the Asia Pacific region. The journal publishes the following categories of articles (word limits include text and references, but not tables):

Research. These are reports of original research up to 4,000 words long. Priority will be given to brief research reports of up to 1,500 words, with no more than 1 table or figure, which can be printed in 2 journal pages.

Reviews. The journal publishes reviews of the literature of up to 4,000 words.

Opinion. Opinion pieces are invited contributions of up to 900 words designed to stimulate discussion and debate.

Professional Practice Updates. These are invited reviews of up to 4,000 words, by an expert in the field, which aim to update readers on some area of professional practice with the elderly.

Innovations in Aged Care. These are invited articles of up to 4,000 words which describe and evaluate an innovation. Innovations can include new treatments, community and residential care programs, professional training courses and social policies.

Case Reports. The journal accepts reports of up to 900 words.

Letters. Letters to the editor may be up to 400 words. They may be edited and are subject to reply.

Authors who wish to write an Opinion article or a Professional Practice Update, or describe an innovation in Aged Care, should first write to the Editor-in-Chief with a proposal for the article. Invited articles, like other contributions to the journal, are subject to refereeing.

2. SUBMISSION

Send all papers to: Dr Anthony Jorm, Editor-In-Chief, Australasian Journal on Ageing, c/o Council on the Ageing (Australia), Level 2, 3 Bowen Crescent, Melbourne, Vic. 3004. Telephone (03) 98202655, Fax (03) 98209866, E-mail costs@cota.org.au

Package submissions securely and include the following:

- A covering letter signed by all the authors with the title of the manuscript and contact details for the corresponding author. The covering letter should state that: 1. The paper is not submitted for publication nor published elsewhere. 2. Any research involving humans or animals has been approved by an institutional ethics committee. 3. All authors have made a major contribution to the paper (for reports of original research, all authors should have made a major contribution to at least 2 of the following: planning the study, collecting the data, analysing the data, writing the paper). 4. Any potential conflicts of Interest have been declared.
- Four copies of the manuscript with all pages numbered.
- A title page with authors’ names and affiliations and (to allow blind review) a second title page without author identification.
- One return, regular size self-addressed envelope for acknowledgment.

Final Submission. In the final submission, after the review process is completed, authors are asked to submit an electronic copy on a 3.5 inch IBM-formatted disk in Microsoft Word or some other common package that is clearly identified. At this stage, a passport-style photo of the first-named author is also required.

3. MANUSCRIPT PREPARATION

Word limits. In order to publish as many contributions as possible, word limits for articles have to be strictly enforced. The title page should state the number of words in the article (including References but excluding Tables).

Research articles. Articles should have sections for Abstract, Introduction, Method, Results, Discussion. Acknowledgment (if applicable), Key Points and References. Abstracts should be structured into sections preferably under the headings: Objective(s), Method, Results, Conclusion(s). Key Points (which must be included) are 3-4 dot points which give the essential take-home messages of the paper.

Other articles. Reviews, Professional Practice Updates, Innovations in Aged Care and Case Reports should be preceded by a short Abstract. Opinion articles do not need an Abstract.

Manuscript presentation. Print the manuscript on A4 paper, double-spaced. References. Personal communications and unpublished manuscripts are not acceptable. Use the Vancouver system of referencing. In the text, references should be identified by numbers in square brackets (not as superscripts). In the Reference list, number the references in the order in which they appear in the text. However, once a reference is cited, all subsequent citations should refer to the original number. All journal titles must be quoted in full (no abbreviations). List all authors when there are 6 or fewer; when there are more than 6, list only the first 3 and add ‘et al’. Prepare references as follows:


Tables. Type tables on separate sheets, double spaced, numbered separately with Arabic numerals and given a brief title. Type table footnotes immediately below each table using superscript letters. Use asterisks exclusively for probability levels of tests of significance, e.g. *P<0.05. Indicate in the text where tables should be placed.

Figures and Illustrations. Photographs must be black and white. Figures must be professionally lettered in a sans-serif type like Helvetica or Univers or produced on a laser printer. Typewritten or dot matrix lettering is not acceptable. Original copies should not be sent until the final revisions are completed.

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Age Discrimination in Hiring Practices
Against Older Adults in Western Australia:
The Case of Accounting Assistants.

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October 29, 1999
Length: 3995 words.
Abstract

Objectives: To investigate the willingness of employers to hire older adults.

Method: Measures of actual age discrimination were obtained through the use of correspondence testing. Unsolicited fictitious resumes were simultaneously mailed to 452 companies across industries in Western Australia. Resumes were similar in all job relevant information except applicant's age that was either 32 or 57 and gender. Measures of discrimination were obtained through comparisons of the time for receipt, and the number of positive and negative responses across age and gender.

Results: Responses for 202 resumes were received from 154 companies. A significant three-way interaction between age, gender, and mailing condition was found for time for receipt of negative responses. The interaction showed that both younger males and older females were significantly faster to receive negative responses compared with either older males or younger females. Overall, younger applicants received a greater number of positive and a smaller number of negative responses compared with the older applicants.

Conclusions: The current study found trends of actual age discrimination in hiring practices against older adults in Western Australia, with older women the most discriminated against. These trends of discrimination were different and of lower magnitude to those found in the USA. Correspondence testing with unsolicited applications was shown to be a valid and sensitive tool for measuring actual discrimination in Western Australia.
Age Discrimination in Hiring Practices Against Older Adults in Western Australia: The Case of Accounting Assistants.

Issues related to population ageing are becoming increasingly prominent as we approach the 21st century. Among these are the increased numbers of people approaching retirement, and the likelihood that significantly greater numbers of older adults may be required in the workforce [1, 2, 3]. Therefore an important question is how willing employers are to hire older adults.

Whilst a growing need for older adults in the workforce is anticipated, age discrimination places them at a disadvantage compared with younger persons [4, 5]. A survey of 104 employers across industries in Queensland revealed that whilst recognising several positive qualities in older adults, such as loyalty and reliability, employers said that they would be unlikely to hire older adults [6, 7]. Minimal interest was shown in hiring persons over 45 years of age and there was no interest in hiring persons over 56 [7], although many employers who claim they would be unlikely to hire older adults had a number of older adults already working for them [8]. Thus, whilst age discrimination is evident, there may be a discrepancy between employers' intentions and actions regarding the hiring of older adults.

As far as employability is concerned, women age sooner than men [9, 10]. That is, a middle aged woman is perceived as significantly less attractive than a younger woman and is thus less likely to be hired, whereas a middle aged man's appearance is not affected to such a degree [10]. This is in accord with Poststructuralist theory which suggests that although most companies and organisations try to maintain sex neutral
attitudes and policies, this is not the case in practice [11, 12]. Further, the perception of some jobs as 'masculine' and others as 'feminine' promotes employment segregation of men and women due to the perceived nature of jobs [10, 12, 14]. Thus, an interaction between ageism and sexism [13] leading to older women being least favoured by potential employers is feasible.

Butler [15] suggested that ageism mostly results from an unconscious process that is deeply rooted in western societies and Feldman proposed that the decision making process engaged in whilst making hiring considerations is mediated by stereotypes held by the employer about the target person [16]. This would suggest that, regardless of any job related merits, older applicants would be automatically discriminated against.

Attempts at combating age discrimination in hiring practices in Western Australia are the Equal Opportunity Act (EOA), which was enacted in 1984 [17], and the waiving of mandatory retirement in 1995. The principle underlying the EOA is that everybody deserves a 'fair go' regardless of sex, race, or age [17]. Hence hiring decisions should be made only on the bases of applicants' qualifications.

Objective evidence that points to age discrimination against older adults in hiring practices in Australia is mostly found through surveys, observation of hiring criteria, and unemployment demographics [6]. Hence, most data is on employers' intentions, whilst studies measuring actual discrimination are rare. As trends in age discrimination in hiring practices may not be universal, local studies of actual discrimination would be valuable for accuracy in policy formulation, appropriate interventions, and future research directions in the area.

One method with which actual discrimination can be measured is correspondence testing, which was developed by Jowel and Prescott-Clarke [18] to test for racial
discrimination in hiring practices in Britain and was used in Australia to test for sexual and racial discrimination [19, 20]. Two fictitious applications portraying job seekers are simultaneously mailed. The applications are carefully matched but differ in some demographic dimension, such as age [18, 21]. Random factors that may influence decision making are eliminated by repeating the procedure dozens of times, thus allowing the researcher to infer that outcome differences can be attributed to the demographic characteristic that was varied [21, 22].

Bendick et al. conducted a study of actual age discrimination in hiring practices across industries in the USA using correspondence testing with pairs of unsolicited applications [21]. The results study indicated that the younger applicants received more favorable treatment compared with the older applicants. Younger applicants received positive responses sooner than did older applicants whilst the latter were faster to receive negative responses. Further, younger applicants received a greater number of positive responses compared with older applicants who received a greater number of negative responses. Positive responses were cases in which potential employers attempted to contact the applicants in order to discuss their application or arrange for an interview. Negative responses were rejections in which the applicants met with a dead end. No differences in discrimination across gender were observed. Overall, age discrimination against older applicants was pronounced in 25% of tests. Thus, correspondence testing with unsolicited applications was successfully used to measure actual age discrimination in hiring practices.

The current study used correspondence testing with unsolicited applications to test for age discrimination in hiring practices against older adults in Western Australia. There were two methodological differences between the current study and that of Bendick et al.
Firstly, the fictitious applicants in Bendick et al.'s study all had tertiary level education. As this would not be representative of the West Australian population, the current study's applicants had secondary level education. Secondly, as correspondence testing with unsolicited applications was not used in Australia there was concern over demand characteristics that could confound the results. Thus, it was decided to mail half of the applications in pairs and the other half as singles. This procedure allowed for the observation of the effects of possible demand characteristics and hence the efficacy of the use of correspondence testing with unsolicited applications in Western Australia.

In order to allow for generalisability of results the current study's applications depicted accounting assistants, which are employed across industries. The 1996 census data suggested that whilst accounts clerks were predominantly female (75%) the 'accounting services' industry, excluding auditors and accountants, was more equally distributed, comprising 52% females and 48% males [23].

The research question was whether correspondence testing with unsolicited applications could be used effectively in Western Australia. The hypothesis was that younger applicants would receive more favorable responses compared with older applicants and that this would be consistent across gender.

Method

Design

The current study was a 2 x 2 x 2 between subjects design with age (32 and 57), gender, and resume mailing method (singles and pairs) as the independent variables. There were four dependent variables: the number of days from posting out resume until
receipt of positive response; the number of days from posting out resume until receipt of negative response; number of positive responses, and number of negative responses.

Two types of responses were considered as positive ones. The first type was cases in which applicants were asked to contact the company to arrange for an interview. The second was cases in which, although there was no vacant position, the company made it clear that if circumstances changed the applicant would be contacted or is asked to contact the company to arrange for an interview. The second type was taken as positive responses because the applicant had a 'foot in the door' in these cases had the company advertised that there was a vacant position.

Negative responses were rejection letters or telephone calls.

Respondents

Resumes were mailed to 452 randomly selected Western Australian companies across industries from the private sector. Companies were located through the Kompas electronic database. Only companies with at least 30 employees were used. Such companies would be more likely to employ accounting assistants than smaller companies, and they would be more likely than smaller companies to have an equal opportunity policy in place.

Materials

Twelve fictitious one-page resumes with covering letters, based on those developed by Bendick et al., were used. These depicted a 57-year old male, a 32-year old male, a 57-year old female, and a 32-year old female. To control for racial confounds, all
applicants' names were Anglo-Saxon, for example Karen M. James and Steve J. Saunders.

The covering letters presented applicants as job seekers, and the resumes specified age, marital status, employment history, job relevant skills, and education. All applicants were presented as married and currently employed. This was done in order to control for any confounds which might have been introduced due to stereotyping and prejudice toward the unemployed, which may be held differently across age and gender.

Considering the small size of the Western Australian business community, and hence the likelihood that employers would recognise bogus companies, all companies specified in applicants' employment histories were real. In order to minimize the possibility that potential employers might make inquiries with these companies, covering letters requested that confidentiality be maintained. All resumes concluded by stating that references were available upon request.

All resumes presented secondary education at TEE/matriculation level and 10 years experience in the area of accounting assistance. To control for job relevant experience, the time differences resulting from the age differences between applicants was accounted for by the older male applicant having worked in the building industry, and the older female having been a housewife and having had various domestic jobs.

Each resume had both a mailing address and a telephone number for response purposes. Each resume and covering letter was produced in two styles, Elegant and Professional, adapted from the Microsoft Word V7.0 Resume Wizard. This procedure ensured that no potential employer would receive two resumes of identical styles, which may have raised suspicions. The two styles were counterbalanced within and across all
conditions to control for a possible confounding effect resulting from potential employers favoring one style over another.

Procedure

One hundred and fifty-two pairs of resumes (young female/older female; young male/older male; young female/older male; and young male/older female) and 300 single resumes (young male; old male; young female; and old female) were simultaneously mailed to 452 companies in the Perth metropolitan area. Two addresses and two telephone numbers were available for responses. As the two addresses were from different suburbs, applications were mailed from their corresponding post offices to ensure authenticity. Complete tests (according to correspondence testing), in the pairs condition, were cases in which a response was received for at least one applicant.

Both telephone lines were connected to answering machines 24 hours per day throughout the seven week data collection period and were checked daily after business hours. To control for possible confounds resulting from a more favorable reaction to either recorded messages, both answering machines outgoing messages were recorded by two Australian born women, a younger one for the younger applicants' and an older one for the older applicants. Mailboxes were checked daily after close of business.

Data were collated and analyzed using the Statistical Package for Social Sciences (SPSS) version eight and manual calculations where appropriate.

Results

Responses for 202 applications were received from 154 companies, yielding a response rate of 34%. Prior to analyses, the number of days for positive responses and
the number of days for negative responses were examined through various SPSS programs for accuracy of data entry, missing values, and fit between their distributions and the assumptions of multivariate analyses. No missing values were detected. The number of days for positive responses had 47 cases and the number of days for negative responses had 155. To improve pairwise linearity and to reduce the extreme skewness and kurtosis, both variables were logarithmically transformed. No univariate outliers were detected after transformation. One multivariate outlier (with $p < .001$) was detected in time for negative responses and was deleted, leaving this variable with 154 cases for analysis.

Separate $2 \times 2$ (age x gender) $\times 2$ (mailing, pairs or single resumes) between-subjects ANOVA was performed on both dependent variables involving time to respond. The assumptions of ANOVA were met for the times for receipt of negative responses. With alpha set at $.05$ there was a significant age x gender x mailing interaction, $F(1,146) = 4.16, p = .043, \eta^2 = .028$. The ANOVA results are given in Appendix A and the interaction is illustrated in Appendix B.

Post hoc pairwise comparisons were conducted among the eight group means. Because the assumption of homogeneity of variance for the post hoc test was violated, (Levene's test, $p < .05$), the Games-Howell procedure was used. It was found that the mean time for negative responses was significantly shorter for the younger male and older female paired group compared with the groups of the other three pairs and the younger male and older male in the singles condition. No other pairwise comparisons achieved significance. Raw means and standard deviations are given in Table 1.

*INSERT TABLE 1.
The assumptions of ANOVA were met for the times for positive responses. With alpha set at .05, no main effects or interaction reached significance. For the ANOVA results see Appendix C.

Binomial tests of proportions were performed to compare the number of positive and the number of negative responses across age and gender and, in accord with Bendick et al., were also analysed by percentage points subtractions. As both mailing conditions yielded similar response rates (singles = 32%, pairs = 35%) and because the ANOVA showed no main effects for mailing condition, data from both conditions were collapsed.

Percentage points for females were subtracted from those of males and percentage points of older applicants from those of younger applicants. The proportion of negative responses was .77 for males and .76 for females, $z = .17$, $p > .05$. Thus, males received, on average, one percent more negative responses than did females. The proportion of negative responses was .74 for the younger applicants and .79 for the older ones, $z = -.85$, $p > .05$. Thus, older applicants received, on average, five percent more negative responses than did the younger applicants. The proportion of positive responses was .23 for males and .24 for females, $z = -.16$, $p > .05$. Thus, females received, on average, one percent more positive responses than did males. The proportion of positive responses was .26 for the younger applicants and .21 for the older ones, $z = .83$, $p > .05$. Thus, younger applicants received, on average, five percent more positive responses than did the older applicants.

Discussion

The first part of the hypothesis, that younger (32 years old) applicants would receive more favorable responses compared with older (57 years old) applicants, was supported
by the results. The second part of the hypothesis, that this trend would be consistent across gender, however, was not supported.

The results of the current study differed from those reported by Bendick et al. on the variable of time to negative responses. Whilst Bendick et al. found no discrimination across gender, the current study found a significant three-way interaction between age, gender, and mailing condition. This shows that trends in age discrimination in hiring practices are not universal and suggests that local research is relevant.

The results also showed that both the younger male and older female applicants were faster to receive negative responses compared with both younger female and older male applicants. This difference was more pronounced in the pairs, rather than the singles mailing condition. Further research would be required to explore reasons for such significant discrimination of the specific pair of younger male and older female.

If employers were suspicious due to receiving a pair of similar resumes at the same time, there are two possible outcomes. The first is that response rate for the pairs condition would be significantly lower compared with the singles mailing condition. The second is that less discrimination would be apparent in the pairs condition compared with the singles mailing condition due to uniformity of responses in the former. Neither the first nor the second outcomes eventuated. Further, the pairs mailing condition proved to be more sensitive in detecting discrimination compared with the singles. It is, therefore, suggested that correspondence testing with unsolicited applications can be effectively used in Australia.

The greater sensitivity of the pairs mailing condition compared with the singles may be especially pronounced when using unsolicited applications. Negative responses made to single applications may not represent more than specific companies’ policies in
responding whilst mailing pairs of applications, however, imposes the comparison of preference on employers and thus makes such responses more meaningful.

As for the observed discrimination against the younger male applicants, it could be suggested that, having no vacant position, employers did not pay careful attention to the skills presented in the resumes and did not distinguish between accounts clerks and accounting assistants. This could sway the responses of employers who might hold a feminine stereotype of accounts clerks. Considering the predominance of female account clerks (75%) compared with males (25%) in Western Australia [23], such stereotypes are feasible. This could explain the observed discrimination of the younger male applicants compared with the younger female. Further, such gender stereotype in jobs may not be held to the same degree for older men and hence more consideration was given to their applications.

The significant faster time for negative responses for older females compared with both younger females and older males supports the notion that older women experience both age and sex discrimination [5, 11]. This is an important issue because, as our population ages, increasing numbers of older women job seekers are anticipated [3]. Further, older women experienced greater negative psychological consequences compared with men as a result of job rejection, including depression, lowered self-esteem and self-worth, and were, in turn, more likely to refrain from further job seeking [8].

The results of the current study, although collected across industries, are limited in generalisability to accounting assistants. Further, the current study drew its sample from the Kompas data-base which also poses limitation on generalisability.

Based on Bendick et al., the current study anticipated an effect size of about 0.30. Had that been true for Western Australia the power of the current study would have been
However, after calculating the actual effect size in Western Australia was found to be 0.18, which is significantly smaller than that found in the USA. This can offer an explanation to the small variance accounted for by the significant interaction ($\eta^2 = .028$) as a greater number of responses would have increased its effect. This is important for two reasons. Firstly, it suggests that age discrimination in hiring practices is less pronounced in Western Australia compared with the USA. Secondly, if taken into consideration, local estimates of effect size would enhance the accuracy and robustness of future research.

There are a number of issues in need of future studies in the area of age discrimination in hiring practices. Investigators could assess the possible interaction of race and age in hiring. The gender of respondents as a factor in hiring discrimination could also be researched. Further, future research could employ a greater number of occupations and send solicited as well as unsolicited applications. Combining the information from such studies would facilitate more accurate policies and interventions according to specific industries, occupations, gender of decision makers, and the racial demographics of communities. In order to change negative stereotypes, educational efforts should be made to instill positive stereotypes of older workers with an emphasis on older females. Finally, policy makers and governmental bodies, such as the Equal Opportunity Commission, can use correspondence testing to monitor employers’ responses to various types of applicants.
Key points

- Trends of actual age discrimination against older adults in hiring practices are evident in Western Australia.

- Older women were discriminated against significantly more than either younger women or men of similar age as their own.

- Correspondence testing, with unsolicited applications can be effectively used in Western Australia.

- Effect size and trends of discrimination in Western Australia are different to those found in the USA. Effect size is smaller and trends of discrimination, in Western Australia unlike the USA, are different across gender.
References


Table 1

Raw means and standard deviations for days to negative responses as a Function of mailing condition

<table>
<thead>
<tr>
<th>Applicant</th>
<th>Pairs</th>
<th>Singles</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Female (32)</td>
<td>18.94</td>
<td>13.15</td>
<td>13.07</td>
</tr>
<tr>
<td>Female (57)</td>
<td>10.47</td>
<td>8.52</td>
<td>12.23</td>
</tr>
<tr>
<td>Male (32)</td>
<td>11.45</td>
<td>9.95</td>
<td>12.78</td>
</tr>
<tr>
<td>Male (57)</td>
<td>15.19</td>
<td>10.86</td>
<td>11.77</td>
</tr>
</tbody>
</table>
ANOVA results’ summary table for time for negative responses.

Table 2

ANOVA Summary Table

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<th>Source</th>
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<th>SS</th>
<th>MS</th>
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<th>$n^2$</th>
</tr>
</thead>
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<tr>
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<td>.30</td>
<td>.30</td>
<td>.74</td>
<td>.01</td>
</tr>
<tr>
<td>Gender</td>
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<td>1.288E-02</td>
<td>1.288E-02</td>
<td>.03</td>
<td>.00</td>
</tr>
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<td>6.392E-02</td>
<td>.16</td>
<td>.00</td>
</tr>
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</tr>
<tr>
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<td>Total</td>
<td>153</td>
<td>63.11</td>
<td></td>
<td>.41</td>
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</tr>
</tbody>
</table>

*p < .05
An illustration of the age x gender interaction in the pairs mailing condition.

Figure 1. Mean time for negative responses as a function of age and gender in the pairs mailing condition.
ANOVA results' summary table for time for positive responses.

Table 3

ANOVA Summary Table

<table>
<thead>
<tr>
<th>Source</th>
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<th>MS</th>
<th>F</th>
<th>$n^2$</th>
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<td>.82</td>
<td>1.45</td>
<td>.04</td>
</tr>
<tr>
<td>Mailing</td>
<td>1</td>
<td>1.29</td>
<td>1.29</td>
<td>2.29</td>
<td>.06</td>
</tr>
<tr>
<td>Age x Gender</td>
<td>1</td>
<td>.68</td>
<td>.68</td>
<td>1.20</td>
<td>.03</td>
</tr>
<tr>
<td>Age x Mailing</td>
<td>1</td>
<td>2.696E-03</td>
<td>2.696E-03</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>Gender x Mailing</td>
<td>1</td>
<td>1.95</td>
<td>1.95</td>
<td>3.46</td>
<td>.08</td>
</tr>
<tr>
<td>Age x Gender x Mailing</td>
<td>1</td>
<td>1.925E-02</td>
<td>1.925E-02</td>
<td>.03</td>
<td>.00</td>
</tr>
<tr>
<td>Within</td>
<td>39</td>
<td>21.97</td>
<td>.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>27.49</td>
<td>.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. No main effects or interaction reached significance.
Bendick et al. performed median subtractions and not ANOVA for response time analyses. Hence, in order to compare the current study's results with those reported by Bendick et al., the times for positive responses and the times for negative responses were compared across age and gender through median subtractions. The median response times for the older applicants were subtracted from those of the younger applicants and the median response times for the females were subtracted from those of the males. As both mailing conditions yielded similar response rates (singles = 32%, pairs = 35%) and because the ANOVA showed no main effects for mailing condition, data from both conditions were collapsed.

The median time for negative responses was 8.00 for both the younger and older applicants as well as for males and females. Thus, analysed in this manner, no differences in time for negative responses were observed. The median time for positive responses was 8.00 for the younger applicants and 7.50 for the older applicants. Thus, it took one half day longer for the younger applicants to receive positive responses. The median time for positive responses was 9.50 for males and 7.00 for females. Thus, males took 2.50 days longer to receive positive responses.

Bendick et al. [21] used median subtractions to observe for differences in response times whilst the current study employed factorial ANOVA's. Analysing the data of the current study using median subtractions showed no significant results, whereas the ANOVA detected a significant three-way interaction. ANOVA is a more powerful statistics than median subtractions. Further, ANOVA proved to be more sensitive in detecting discrimination in the current study.
Appendix E

Examples of Covering Letters and Resumes
28 May, 1999

91 Jackson Avenue
KARRINYUP WA 6018

Dear Sir/Madam,

Please consider my application for a position as Accounts Assistant with your company. Enclosed is a brief resume outlining my skills and experience.

Your confidentiality would be appreciated.

I look forward to hearing from you in the near future.

Thank you.

Yours faithfully,

SUSAN M. JENKINSON
Susan M. Jenkinson

Personal Information
Marital Status: Married
Date of Birth: 11 January 1942

Skills
Debtors, creditors, and payroll on computerised systems.
Computing skills including Windows, Word, Excel, MYOB.
Bank reconciliations, insurance, superannuation, & taxation.

Work experience
Aug. 1992 – Present
Atlas Pest Control
Accounting Assistant
- Computerised payroll, tax returns, and superannuation fund.
- Maintenance of personnel records & leave entitlement accruals.
- Banking, cost control, bank reconciliations, and petty cash.
- Maintain & reconcile computerised debtors & creditors system.

Nov. 1987 – July 1992
Ansett International Airfreight
Accounts Assistant
- Data entry of consignment notes.
- Reconciliation of accounts.
- Customer inquiries and general office duties.

Aug. 1984 – Nov. 1987
Courier Australia
Office Clerk
- Telephone and two way operation.
- General assistance including banking, photocopying, filing, petty cash.
- Input consignment notes to debtors system.

1960 – 1984
Home duties plus various part-time domestic positions.

Education
1955 – 1959 Kent Street Senior High School Matriculation

References
Available upon request.
Dear Sir/Madam,

Please consider my application for a position as Accounts Assistant with your company. Enclosed is a brief resume outlining my skills and experience.

Your confidentiality would be appreciated.

I look forward to hearing from you in the near future.

Thank you.

Yours faithfully,

CRAIG L. HARRIS
Craig L. Harris

Personal Information

Marital Status: Married
Date of Birth: 28 December 1967

Skills

Computer proficient, including Windows, Word, Excel, MYOB.
Computerised payroll, debtors and creditors.
Tax returns, bank reconciliations, insurance and superannuation.

Work experience

Sept 1992 – Present
Solamagic
Accounting Assistant
- Responsible for computerised debtors and creditors system.
- Arrange monthly payroll and submission of various tax returns.
- Maintain employee records and leave entitlements.
- Bank reconciliations, cost control, petty cash, and other day to day accounting and administrative functions.

Northern Suburbs Crane Hire
Accounts Clerk
- Daily banking, petty cash, filing and general office duties.
- Arrange freight and shipments of machinery and parts.
- Weekly payroll for approx. 30 employees.
- Assist with debtors and creditors.
- Telephone sales and enquiries.

West Australian Newspapers
Office Traineeship
- Mail, banking, petty cash, filing and general office duties.

Education

1980 – 1984
Scarborough High School
T.E.E.

References

Available upon request.
Dear Sir/Madam,

I am currently seeking a position as an Accounting Assistant and, therefore, enclose a brief resume for consideration.

I would appreciate your keeping this inquiry confidential at this stage.

Thank you for your time. I look forward to hearing from you in the near future.

Yours sincerely,

Deborah R. Milton
DEBORAH R. MILTON

PERSONAL INFORMATION

- Marital status: Married
- D.O.B.: 15-1-1967

SKILLS

Computer proficient, including Windows, Word, Excel, MYOB.
Computerised payroll, debtors and creditors.
Tax returns, bank reconciliations, insurance, and superannuation.

WORK EXPERIENCE

September 1992 – current
Solamagic
Accounting Assistant
- Responsible for computerised debtors and creditors system.
- Arrange monthly payroll and submission of various tax returns.
- Maintain employee records and leave entitlements.
- Bank reconciliations, cost control, petty cash, and other day to day accounting and administrative functions.

February 1987 – August 1992
Northern Suburbs Crane Hire
Accounts Clerk
- Daily banking, petty cash, filing and general office duties.
- Arrange freight and shipment of machinery and parts.
- Weekly payroll for approx. 30 employees.
- Assist with debtors and creditors.
- Telephone sales and enquiries.

January 1985 – December 1986
West Australian Newspapers
Office Traineeship
- Mail, banking, petty cash, filing and general office duties.

EDUCATION

1980 - 1984
Scarborough High School
TEE

REFERENCES

Available on request.

9 WAMPUM PLACE, • HEATHRIDGE WA 6027 • PHONE 9307 2373
91 Jackson Avenue  
KARRINYUP  WA  6018

28/5/99

Dear Sir/Madam,

I am currently seeking a position as an Accounting Assistant and, therefore, enclose a brief resume for consideration.

I would appreciate your keeping this inquiry confidential at this stage.

Thank you for your time. I look forward to hearing from you in the near future.

Yours sincerely,

Stewart B. Irving
STEWART B. IRVING

PERSONAL INFORMATION

- Marital status: Married
- D.O.B.: 10-1-1942

SKILLS

Debtors, creditors, and payroll on computerised systems.
Computing skills including Windows, Word, Excel, MYOB.
Bank reconciliations, insurance, superannuation, & taxation.

WORK EXPERIENCE

August 1992 - current
Tino & Co. Pty Ltd
Accounting Assistant
- Computerised payroll, tax returns, and superannuation fund.
- Maintenance of personnel records & leave entitlement accruals.
- Banking, cost control, bank reconciliations, and petty cash.
- Maintain & reconcile computerised debtors & creditors system.

November 1987 - July 1992
Ansett International Airfreight
Accounts Assistant
- Data entry of consignment notes.
- Reconciliation of accounts.
- Customer enquiries and general office duties.

August 1984 - November 1987
Skippers Couriers
Office Clerk
- Telephone and two way operation.
- General assistance including banking, photocopying, filing, petty cash.
- Input consignment notes to debtor's system.

March 1982 - July 1984
Skippers Couriers
Driver

1960 - 1981
Various jobs in the building industry.

EDUCATION

1955 - 1959
Kent Street Senior High School
Matriculation

REFERENCES

Available on request.