Managers’ stereotypes and their relation to employment decision-making in the workplace

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MANAGERS’ STEREOTYPES AND THEIR RELATION TO EMPLOYMENT DECISION-MAKING IN THE WORKPLACE

A thesis submitted in fulfilment of the requirements for the degree

DOCTOR of PHILOSOPHY

From

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By

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Thesis Certification

CERTIFICATION

I, Barry Reginald Partridge, declare that this thesis, submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the Department of Psychology, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Barry R Partridge

30th October 2007
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ABSTRACT

This study set out to establish the type and nature of decision-making that managers displayed at work, and ways in which those decisions may be related to managers’ stereotyping of their colleagues. Ninety nine managers, drawn from six age-gender categories, made 594 employment decisions on six different age-gender categories of workplace colleagues. Managers’ employment decisions were found to vary according to differences in the managers’ own age-gender category with younger female managers more negative in their decision-making and younger male, older male and older female managers more positive in their decisions.

The study made innovative use of a Personal Construct Theory-based (PCT) methodology (Kelly, 1955), to gain insights into managers’ decision-making. A process of measuring manager-colleague social proximity determined managers’ perceived differences from colleagues, and provided a means of comparing social distance measures with managers’ employment decisions. Research aimed to establish whether managers’ perceived social proximity with colleagues could vary according to differences in managers’ or colleagues’ age-gender categories, and if colleagues perceived more socially proximate would be assigned positive decisions by managers and those colleagues more distant, negative decisions. Study results confirmed managers’ perceived social proximity with colleagues varied according to differences in managers’ and colleagues’ age-gender categories and managers were positive in their decisions on socially proximate, younger colleagues and negative in their decision-making, on more socially distant older ones.

Stereotype research in the study sought to determine levels of abstraction with which managers held information in their stereotypes, and uses to which managers put that information in making employment choices between colleagues. A PCT-based methodology helped identify managers’ workplace stereotypes and established relations between managers’ stereotypes and their employment decisions. The managers’ more meaningful interpretation of colleagues, expressed through superordinacy of constructs and commonality of usage of salient constructs, helped describe managers’ stereotyping
processes and identified those stereotypes managers were most likely to act on in their decision-making. The managers’ stereotypes were found to hold both positive and negative prejudicial perceptions of the same person and to vary according to colleagues’ age-gender category. Stereotype research results showed positive superordinate constructs associated with managers’ stereotypes on younger age-gender categories as significantly related to managers’ positive decisions on younger male and female colleagues. On the other hand, negative superordinate constructs associated with stereotypes on older female colleagues were significantly related to managers’ negative decisions on the older female category. Positive stereotypes on younger colleagues, describing them as helpful and hardworking, were related to more positive employment decisions on younger males and females while negative stereotypes describing older females as traditional in approach and not being a good training investment were related to more negative decisions made on their category.

Stereotype and decision research carried out in the study established the nature of managers’ discriminatory decision-making and relation to managers’ stereotyping of colleagues. Research results proved particularly useful in describing the nexus between managers’ decision-making and stereotyping processes. Such results make an important contribution to current stereotype and decision research and practice. The methodology employed in this study is capable of being readily applied and can provide improved transparency of stereotypes thus facilitating changes to stereotyping and discriminatory employment practices operating in managers’ workplaces.
While working as a newly-appointed manager in a US multinational operating in Australia, I came to understand, during the course of my work that the company cared greatly about staff, was an equal-opportunity employer and people were our greatest resource. After all, the company’s most senior management had talked about these issues on many occasions. Yet I also became aware that people aged over 50, particularly women, were unlikely to be successful in our business. There was no point in putting their names forward for promotion, or in training them. Young blood was required to give the organisation a strong future. I could not remember, however, being told or being given directions about this underlying philosophy. Indeed, there was nothing written, nor was any manager that I can remember, willing to speak on the matter. Differences between job applicants were not openly discussed. More particularly, questions were rarely asked about who was to be selected, promoted, or trained. It was supposed to just happen. People management was therefore rarely straightforward. As the business was experiencing modest short-term growth and needed new staff, senior management wanted people with drive and “fire in their belly”. This seemed to rule out older people, females and those from many social groups who it was suggested did not have the potential to grow in the company, and who might not “fit in”.

Not surprisingly, uncertainty surrounded who was made of the “right stuff”, or who might be the “best fit” for a job with the company. We were expected, through our experience, to “know what to do”, and to act in the best interests of the company. This resulted in all but younger males, of “good company appearance” and unquestioned morality, being excluded. However, the company had little to offer younger job applicants, and continually faced problems recruiting staff. Furthermore, company staff demographics, particularly among the most senior management ranks, were dominated by a majority of older males and females. Yet other, older, managerial and supervisory-level employees
who earlier had been successful in developing the company, had come to be regarded as “good people, but behind in the technology”.

The company did not train existing staff to replace missing skill-sets and further careers, preferring to “pinch the skills from outside”, a common practice in the industry. Shortages of staff eventually caused senior management to consider offering incentives to attract skilled younger aged applicants from overseas countries. This did not meet with a great deal of success, and the business ultimately lost much of its share of the market, being overtaken by well-run, energetic, and creative organisations, generally run by older, more skilled managers, many of them female.

This experience caused me to look beyond my role as a manager involved in short-run decision-making, acting with little regard for the impact on people, and encouraged me to explore in some depth the many issues surrounding managers’ age-based discrimination and its impact on people at work. I accordingly address managers’ stereotypes and their discrimination in decision-making in the Australian context in this study, but give consideration to overseas developments as well. The focus of interest is on managers working in medium to large-scale private and public-sector organisations.
CHAPTER 1

INTRODUCTION
INTRODUCTION

Changes, during the late twentieth century and the new millennium, to ways of working in the community, industry, and government led to new and different views on age and ageing, with many people, as young as 40 years of age, becoming deemed too old to work. Stereotypes formerly associated with people 60 years plus became attached to the newly aged, resulting in the loss of many perceived as newly old workers from the workforce. This study sets out to explain relationships between managers’ stereotypes and their discriminatory decision-making on others in the workplace, by identifying the processes practising managers use in discriminating between themselves and colleagues. Answers will be sought to questions such as: “do managers discriminate between colleagues on the basis of their age, or gender, or a combination of both of these?”, and, “do managers hold age, or gender, or age-gender related stereotypes which can lead them to decide not to select, promote, or train people at work?”

1.1 Background to the Study

Australia’s drive to become more internationally-competitive during the 1990s created an environment of cost-cutting and structural change in organisations of all types and sizes (Littler, 1996). Indeed, Australia’s efforts at cutting operating costs and reducing numbers through forced staff redundancy and retirement became legendary (Raab, 1995). By the end of the twentieth century, Australia had become established as an industrialised nation having one of the highest rates of workforce casualisation in the developed world (Hall, Bretherton & Buchanan, 2000). Moreover, some suggested that the Australian industrial landscape had, by the end of the century, established early retirement, and age-based discrimination in job selection, promotion, training, and career planning, as widely accepted work practices (Equal Opportunity Commission of South Australia, 2001).
These changes had an enormous impact on the less mobile sector of the workforce - mature-age workers. In a country with a median population age of 36 years, some people had become too old to work at 40! Moreover, mature-age workers (those 50 years of age and older) who, through workplace changes in the 1990’s had been made redundant or encouraged to take early retirement, came to experience long periods of unemployment in their search to return to work (ABS, 2005). It was subsequently argued that older workers had become ensnared by age-based stereotypes which branded them as being unfit to work by their fourth decade of life (Muir, & Slack-Smith, 2004). Stigmata associated with being an older worker most often included stereotypes such as: being unable to change; having poor health; not getting along with others; and not keeping up with the latest technology. Moreover, these stigmata helped justify the non-retention of mature-age workers, and gave rise to a general unwillingness to hire older applicants. Such twentieth-century workplace attitudes are considered to be still evident among managers in the Australian workplace (Horin, 2002; Wilcox, 2006).

Nevertheless, anticipated demographic shifts in the world population’s age distribution, between 2010 and 2030, mean that fewer entry age-level staff will become available to fill jobs in organisations (Ball, 1999). Australia, in particular, faces high levels of ageing, with one-fourth of the population projected to be aged 65 and over by 2044 (Productivity Commission, 2004). The United Nations has meanwhile reported that Australia’s early twenty-first century population is an aged one, given the country has in excess of 13% of people over the age of 65 (Encel, 2003). For Australia to continue to discard skilled mature-aged workers in an environment of emerging skill shortages, or to deny older people access to organisations on the basis of negative misperceptions of their work performance, is misguided. Meanwhile, a growing shortage of skilled staff internationally is creating pressure within Australia, and among its trading partners, for changes to be made to work practices. In turn, organisations are being forced to reconsider their discriminatory approaches towards the employment of older workers (Bittman, Flick, & Rice, 2001). It is considered that failure to make use of older workers’ skills in a world of falling numbers of entry-age workers could become extremely costly for both business and government (Smith, 2003; Shacklock, Fulop & Hort, 2007). Gaining the widespread
engagement of mature-age workers may, however, be extremely difficult, given a succession of failed international attempts at re-engaging aged workers (Bittman, et al., 2001). There is clearly an urgent need for widespread reform to workplace practices to create workplaces free from discrimination to help alleviate skill shortages (Wilcox, 2006).

Future world-wide shortages of younger skilled people will most likely deny many countries a quick fix to their problems associated with having too few skilled workers. Developed countries, such as Australia, have been finding it increasingly difficult to import young workers through job migration programs. Most importantly, large scale reductions in Australia’s workforce numbers will lead, in the longer term, to an erosion of the country’s taxation base (Shacklock et al., 2007). In turn, the financial costs of supporting expanded numbers of unemployed, through increased taxation, will fall most heavily on a decreasing number of people in the workforce (Access Economics, in Smith, 2003). Projections of Australia’s dependency ratio (the number of people in work, relative to those outside the workforce) point to the need for major changes to be made to prevailing organisational recruitment and employment retention practices to ensure Australia’s on-going international competitiveness (Economic Planning, Advisory Committee, 1994; Wilcox, 2006).

In the absence of major improvements to the rates of recruitment and retention of older workers, governments may be forced to legislate for increased levels of workforce participation by those outside the workforce. This could result in older workers being retained for longer periods and those retired from the workplace encouraged to re-join the workforce. To this end, governments in Australia, both State and Federal, have begun to exhort business to re-consider older workers as a valuable resource that can actively contribute to the workplace (Donaldson, 2004 a). Meanwhile, human resource managers and recruiters are being encouraged to overcome their prejudices against older workers and to employ staff on the basis of workers’ skills (Shacklock et al., 2007). In turn, the Australian Government has suggested that organisations that fail to recognise older workers’ skills and employ mature-age Australians will not survive (Donaldson, 2004b). Importantly, organisations have been asked to alter a culture of early retirement, which
discards workers on the basis of their birth-date rather than work performance, and to change work environments where age discrimination is rife (Donaldson, 2004a). Government agencies have not, however, escaped criticism, with their age-discriminatory job search support services favouring the young over mature-age job seekers (Equal Opportunity Commission of South Australia, 2001). Personnel management practices operating in Australia have been described as ill-equipped to deal with the country’s shifting demographics (Murray & Syed, 2005), with few organisations found to be willing to recruit mature-age workers. More recently, identification of worker age-related categories have given rise to discussions on how to best manage generations X (born 1965-1979) and Y (born 1980-1994) over mature-age workers (born 1946-1962) (McCrindle, 2006).

1.2 Focus of the Study

This study seeks to establish the type and nature of stereotypes and related discriminatory decisions managers have applied to colleagues and those seeking jobs. The focus is on identifying and describing those processes associated with managers’ stereotyping and discriminatory decision practices in public and private sector organisations. The study will follow a research methodology which engages managers in describing their perceptions of others, and explaining discriminatory decisions on them. Managers’ stereotypes, discrimination and prejudice will be identified according to both managers’ and their colleagues’ age and gender categories. Relations will then be established between managers’ stereotypes, according to both beliefs and emotion contained within those stereotypes and decisions, as a means of explaining the processes underpinning managers’ stereotyping, prejudice and discriminatory decision-making. The study brings innovative approaches to the investigation of stereotypes, prejudice, discrimination and managerial decision-making by borrowing from research in the field of psychology. Use is made of Personal Construct Theory (Kelly, 1955) and associated research tools as a means of identifying managers’ stereotypes and their judgment-making, and hence decisions, on colleagues from differing age and gender categories in industrial and commercial enterprises throughout Australia.
Given the enormity of the subject area, the many macro and micro-economic issues associated with planning for, and administering an ageing workforce, will not be dealt with in this study. Similarly, the many public policy, public financing and community development issues will not be addressed. These include funding of the ageing, job-search financing, ageing workers’ public education, training and health-care issues, and different types of social and workplace support systems required for mature-age workers. Workforce planning and organisational change strategies will similarly be placed outside the consideration of this study. This work sets out to identify and describe managers’ stereotypes and related decision-making processes which limit workforce participation on the basis of people’s age and gender; information which, if readily available, could be used by policy-makers to reduce workplace discriminatory practices.

1.3 Likely Benefits Flowing from the Study

The study seeks to establish the ways in which managers make decisions, both positive and negative, impacting on those with whom they work and those being considered for employment. While considerable agreement exists on the extent of managers’ discriminatory work practices, little is known of the processes under-pinning their workplace discrimination. Improving management practices by reducing discriminatory decision-making can therefore be difficult to achieve, as little theory is associated with discriminatory decision-making. Stereotyping is more often given as a major contributor to discrimination (Fiske, 1998; Stangor, 2000). Indeed, stereotypes are often used as a means of explaining discriminatory actions, despite the fact that little agreement exists on what constitutes stereotypes or how they might operate in practice (Finkelstein, Burke & Raju, 1995).

Recent changes to public policy have witnessed efforts to have retired mature-aged Australians re-enter the workforce, policy direction which has tended to ignore evidence of negative imagery and discriminatory decisions surrounding employment of older workers. Older people invited to re-enter the workforce will need to be assured they are entering age
discrimination-free workplaces if they are to become fully engaged in that workforce. Managers will therefore need considerable understanding of the nature of both the positive, and negative stereotypes they hold of workers from different age and gender categories, and the implications of those stereotypes on their decision-making, if widespread discriminatory work practices are be changed. This study seeks to establish a ready means of managers gaining greater understanding of their own stereotypes and related discriminatory decisions so that they can assume greater responsibility for reducing discriminatory decisions in their workplaces. Without change interventions of this type to reduce workplace discrimination, it will be difficult for Australia to achieve the workplace integration of older workers currently sought by governments trying to talk up increased levels of workforce participation.

1.4 Outline of the Study

To gain some understanding of the focus, limitations, and associated issues, the study firstly addresses the issue of discrimination. Chapter 2 provides evidence of workplace discrimination in areas of failure to hire, discriminatory promotion and training decisions. The considerable literature on gender-based discrimination is drawn on to provide evidence of gender-based discrimination, while age-based discrimination research, which is much smaller in quantity, lends support for the high incidence of workplace discrimination. Age and gender-related discrimination research is, however, largely descriptive, with a focus on the outcomes of discriminatory behaviour. Moreover, most discrimination research is largely of an applied type with limited research directed to establishing those factors contributing to discrimination in decision-making. This is left to the following chapter to explain.

Chapter 3 explores managers’ decision-making and describes a number of established decision models available to managers. The concept of the rational decision-maker, fundamental to traditional decision models, is outlined, along with more contemporary decision models. This chapter addresses some of the limitations surrounding
traditional and contemporary decision model design and many of the problems associated with decision research.

Chapter 4 makes use of the diverse literature on stereotype research, and describes the way stereotypes, prejudice and discrimination can interact. Personal Construct Theory (Kelly, 1955) is introduced as a methodology to establish managers’ stereotypes and identifying the stereotyping process. Explanations are given of information biases as potential contributors to inequity in managers’ workplace decision-making.

Chapter 5 describes the current study and outlines the rationale supporting selection of the Personal Construct Theory-based research methodology used. The research aims, together with research questions pursued in the study, are provided and discussed.

Chapter 6 further describes the research method and process utilised in the study, participant recruitment and composition, along with the structure of participant interviews, and procedures undertaken in analysing the research data.

Chapter 7 describes the results of managers’ employment decisions made according to managers’ own, and their colleagues’ age-gender categories. Using a personal construct-based methodology, managers’ construing forms a basis for inferring managers’ decisions. Relationships between inferred and reported decisions are identified and reported.

Chapter 8 describes the results of research devoted to identifying managers’ stereotypes on their colleagues. Stereotype-related data are compared with managers’ decisions on colleagues, and relationships between stereotypes and decisions reported.

Chapter 9 discusses the major findings of the study, including some of the limitations surrounding the methodology employed, together with implications for industry, government, and the community, arising from the study. Potential areas for future research are noted, as are the needs for new studies to further explore research gaps.
CHAPTER 2

DISCRIMINATION
In this chapter it will be argued that there is a considerable research literature supporting the view that over the past two decades, managers have discriminated against workers on the basis of their gender, in Australian and overseas workplaces. Some research suggests that job-irrelevant variables such as age and gender are used frequently in selection decisions, with serious social implications (Plous, 2003). Little research has been conducted into the effects of age on managers’ discriminatory employment decision-making. To address the paucity of information on age discrimination, evidence will be provided on managers’ discriminatory decisions which force older workers into early retirement on the basis of age rather than work performance. Further, evidence is given on organisations’ reticence to hire mature-age job applicants, and on work practices that include management’s failure to promote people, due largely to age-related factors. Consideration is also given to the more insidious discrimination associated with enterprises’ reluctance to train older members of staff, contributing to their loss of jobs. Attention is later given to the development of a research methodology to identify workplace discrimination.

2.1 What is Discrimination?

For some, discrimination is seen to be a naturally occurring human process, a process starting with people being categorised according to “the pictures in someone’s head” (Carlsen, 1991, p.97). Others take the view that discrimination is primarily a phenomenon originating in group processes. Still others believe that discrimination has been created, amplified and perpetuated by political messages, media imagery, and service industries casting certain groups in negative roles. Blackwell, Smith and Sorenson (2003, p. 338) define discrimination as “behaviours and practices of a dominant group over a subordinate group”. It is generally accepted, however, that discriminatory beliefs once annealed onto a nation’s cultural beliefs and value systems can give rise to people drawing negative inferences about others in society (Plous, 2003).
Discrimination against individuals would not be an issue if it were not for the possibility of negative outcomes for others. Central to the discrimination process are assumptions that humans inevitably place objects and people in their world into categories carrying specific meanings, often negative, on the basis of their perceived group membership (Stangor, 2000). An individual’s gender, for example, can be considered obvious to the perceiver and used so frequently that categorising another person can become automatic (Perry, 1997). Social categorisation, while providing an important sense-making activity for humans, entails more than the mere cognitive classification of events, objects, or people. It is a process said to be impregnated by values, and cultural and social representations. Moreover, it has been argued that the perceptual distinctiveness of certain people can act as category triggers, with some categories holding precedence over others in the discrimination formation process (Leyens, Yzerbyt, & Schadron, 1994). People categorise others more readily, for example, when they can use an age, or race category (Blackwell et al., 2003). Overall, gender and age have been found to be among the broadest and most inclusive categories used by people when judging others (McCann, 1985).

The discrimination literature emphasises the use of category-based processes (stereotypes) as a means of explaining what discrimination is, and the social implications of the phenomenon (Plous, 2003). Perry (1997) described discrimination in terms of a process starting with an individual’s social categorisation followed by activation of stereotypical beliefs, or feelings of prejudice. Fiske (1998), in striving to explain this categorising-discrimination process, identifies category-based processing (stereotypes) as the more cognitive or beliefs-related component of the process, prejudice as the more affective or emotional, and discrimination as the more behavioural component of a person’s category-based reactions. However, stereotype and discrimination research has failed to identify the type and nature of stereotypes affecting employment decisions (Finkelstein et al., 1995). Little agreement has been reached between researchers, for example, on the meanings associated with terms such as stereotyping, discrimination, and prejudice. Moreover, relationships between these three components and their roles in discriminatory decision-making, currently lack adequate agreement among researchers.
Researchers have attempted to differentiate between the terms affect, cognition and discrimination in their research work by the use of terms *hot discrimination* and *cold discrimination* to describe different types of discriminatory behaviour (Fiske, 1998). The term *hot discrimination* seeks to explain the more affect–laden prejudices based on disgust, resentment or anger, perhaps characteristic of an authoritarian personality type. On the other hand, *cold discrimination* is held to operate largely automatically, based on stereotypes of *out groups*. This form of discrimination is said to be more descriptive of workplace discriminatory behaviour, such as managers failing to hire, or promote others (Fiske, Bersoff, Borgida, Deaux & Heilman, 1991).

While the outcomes of the discrimination process have been well documented, there is little agreement between researchers on a theoretical basis for discrimination. Fiske (1998) is particularly critical of the state of research into discrimination internationally, and criticises the parlous state of discrimination literature brought about by social psychology’s failure to adequately investigate, and report on the processes underlying discrimination. While Chapter 3 will describe the considerable research effort directed towards stereotype research, similar efforts are missing from discrimination research. Indeed, discrimination research lacks an agreed framework and is described by Fiske (1998, p.374) as having an “abysmal lack of reliable evidence documenting discriminatory behaviour”.

This study sets out to identify and document discriminatory behaviour in Australian workplaces. Discrimination in the current study is considered to be of both the *cold* and *hot* varieties, with the processes of discrimination related to managers’ perceptions as they impact on their decision-making on colleagues. Importantly, the study will make use of a research framework capable of identifying and reporting on managers’ discriminatory decisions and the processes underpinning discrimination. It will be argued in subsequent chapters that the use of a Personal Construct Theory-based methodology can provide a research framework capable of identifying managers’ discriminatory decision-making, and explaining that discrimination by way of the perceptions they hold of themselves and their workplace colleagues.
2.2 Research into Gender-Related Discrimination

In Employment

There has been a considerable growth in the body of information during the 1990s, documenting the extent and origins of gender-based discrimination evident in workplaces (Reskin, 1993; Date-Bah, 1997; Perry, 1997). Indeed, some hold to the view that research into workplace-related gender discrimination has made a significant contribution to the wider understanding of gender gaps in wages, and gender differential in benefits and retirement incomes (Perry, Davis-Blake & Kulik, 1994). Others, meanwhile, suggest that research into gender-based discrimination supports the argument that female-dominated jobs provide fewer opportunities for skills training, and hence job mobility, than male-dominated jobs; and also that the concentration of women in lower-paid jobs renders them more vulnerable to job-loss and leads to their long-term unemployment (Bielby & Baron, 1986; Reskin & Hartman, 1986; Bernard, Itzin, Phillipson, & Skucha, 1995; Wilcox, 2006).

2.2.1 Focus on Gender Related Discrimination

Discrimination research has emphasised gender discrimination in the workplace, and largely outpaced research into age discrimination. Indeed, literature dealing with research into gender–based discrimination has been described as voluminous (Perry, 1997). Age discrimination research literature has, in comparison, been much less prevalent and largely taken a back seat to gender-related research (Finkelstein et al., 1995). Considerable research has, for example, been devoted to raters’ gender-based characteristics (Katz, 1987), while limited age access discrimination research has explored raters’ age-based characteristics (Perry, Kulik & Bourhis, 1996). Gender discrimination research has reported on the role of attractiveness in personnel decisions, and gender-biased communication in interviews to the exclusion of age-based discrimination. Gender discrimination research has additionally studied factors such as the amount and type of applicant information available to selectors, to a far greater degree than age discrimination
research. Further, research into gender-based discrimination has considered contextual factors such as the gender composition of subordinates and the nature of discrimination in the environment, to a greater extent than age discrimination (Perry, Davis-Blake & Kulik, 1994).

While Freedman and Philips (1988) concluded that there is little difference between male and female performance in jobs, recruitment staff have often perceived women to be more likely than men to have frequent absences from work and to lack many of the skills commonly held by their male equivalents (Britten & Thomas, 1973). Research has, however, revealed inconsistent and contrary evidence on applicant gender effects with male candidates evaluated more positively than female candidates, while other studies found female applicants were rated more positively than males (Terborg, 1977). Perry (1997, has posited that gender effects can be inconsistent due to different applicant gender characteristics moderating selection decisions. Research confirmed a number of factors can interact with applicant gender in influencing selection decision processes. Some of the moderating effects of applicant characteristics included: attractiveness (Ambromowitz & O’Grady, 1991); qualifications and experience (Cash & Kilcullen, 1985); marital status (Biggs & Beutell, 1986); and presentation style (Gallois, Callen, & Palmer, 1992). Perry, Davis-Blake and Kulik (1994), meanwhile explored decision-makers’ propensity to use applicant gender as a basis for hiring and promotion decisions by using contextual and cognitive explanations of bias. They posited that gender-related bias can vary across organisational contexts due to the interaction between context and cognition, and give rise to persistent gender-based discrimination in the workplace.

Diversity training is typically tasked to achieve greater workplace equity by removing biased decision-making processes stemming from age, gender, or race-related discrimination. Diversity education and training activities conducted internationally have, however, been found to have pursued gender and race-related biases at work, and failed to address age-related discrimination (Finkelstein et al., 1995).
2.3 Range of Research into Age Discrimination: 
An Issue Warranting Further Research

Little research is available in Australia exploring age as a social, as opposed to a chronological, phenomenon. Limited agreement exists on what constitutes a useful categorisation of workforce members’ ages, and how to establish behaviour associated with specific age categories. Meanwhile, some research has set out to establish behaviours characterising chronological age. The 25-year old worker category, for example, has been identified according to their energetic and idealistic behaviour, while 45-year old workers are more likely to exhibit job loyalty and commitment-type behaviour at work (McCrindle, 2006, p.13). Meanwhile, other researchers have focused on explaining age-related behaviour using institutionally-determined age markers as a means of differentiating between the young and old. Individuals can be described as entry-age level, or as being close to retirement age, or, according to age-based markers, in between. Age and vocation, when taken together, can also provide important markers in the social categorisation process by giving meaning to another’s age and related behaviour in the Australian workplace. The 65-year old District Court Justice, for example, elicits little comment and is considered ageless, while the 65-year old surgeon gives rise to concern among fellow workers for being too old to perform the job. Managers might pay greater attention to their employees’ chronological ages and how they are ageing, than the work they carry out. When staffing changes are to be made in organisations updating technology, the once reliable worker can be considered too old at 40 and lacking the requisite skills (Muir, & Slack-Smith, 2004). Clearly, research needs to establish agreement on what constitutes age (chronological, social, institutional or some other device) and social implications of the ageing process.

The twenty-first century marketplace has actively sought to identify societal members according to their different patterns of consumption of products. One method of achieving this has been by segmenting people into age-group categories according to their different tastes. Similarly, recruitment agencies seeking a ready means of explaining workforce members’ behaviour have developed a scientific means of better managing human capital
by assigning individuals to age-gender categories entailing particular behaviours. McCrindle (2006) has created such a workforce typology using a demographic research approach which categorises an individual’s behaviour according to their age group membership.

This typology includes the categories of very young, (generation Z, those under 12), the young (generation Y, 12-29 years of age), the mid-aged (generation X, 30-40 years old), and the old (baby boomer generation, 41-60 years old) and the old-old (the builder demographic group, 61 years of age plus). Use of this typology is claimed to facilitate employment decisions by alerting managers to different age categories’ learning styles, work patterns, and employment attitudes. Users of the typology are advised that “…. only generation Y can bring youthful idealism and energy and a fresh view to the industry” (McCrindle, 2006, pp. 13).

Clearly, this form of commercial research can lead to increased age-based discrimination by associating positive and negative imagery with particular age-related categories of workers. The author’s focus on narrow sets of chronological age-related social behaviour can lead to narrow expectations of behaviour from different age-category members. Importantly, the typology could be flawed in not having researched respondent differences according to the nature of the job, or organisational variables such as work experience, qualifications, or individuals’ age and gender-related characteristics. A commercially available intervention capable of establishing an ageless workplace would seem better suited to increasing worker engagement, thereby overcoming current workforce skill shortages. Moreover, the research needs to take account of individual, job and organisational characteristics in establishing workplace behaviour.

Authors concerned with redressing gender discrimination in the late twentieth century (Date-Bah, 1997; Thomas & Taylor, 1997), explored what constituted gender and the ways in which gender-related factors contributed to gender-related discrimination. In a similar fashion, research needs to explore what constitutes age, so that age-related discrimination can be explored, and action taken to reduce the phenomenon in the twenty-first century.
Importantly, use of a common age-gender research framework might be able to build on the very useful research carried out by gender-based discrimination researchers, and extend on the methodologies they have employed, to create a greater understanding of both age and gender discrimination.

While the outcomes of gender-based discriminatory selection decisions have been well documented, the theoretical underpinnings of discrimination have not been well explored. Further, processes underlying both age and gender discriminatory employment decisions have not been well documented, and are little understood (Finklestein et al., 1995). Progress in much discrimination research continues to show inconsistent results due to uncontrolled and moderating variables (Perry, 1997). Age discrimination research has confirmed, for example, that a number of factors can interact with applicant age to influence selection decisions. Lee and Clemmons (1985) found, for example, that age discrimination in management development decisions was a function of the amount of job-relevant information available to those evaluating trainees, and the degree of concurrent comparisons of young and old trainees making age salient. Few research studies have, however, explored the effects of moderating factors, such as applicant competence, on employment decisions.

While some research has found evidence of the moderating effect of competence on selection decisions on older applicants (Haefner, 1977), others have failed to find such evidence (Fusilier and Hitt, 1983). Some research studies experienced mixed results in attempting to link age effects and selection decisions (Singer & Sewell, 1989). Researchers, for example, have found no evidence of age discrimination in the selection of public school teachers (Young, Rinehart & Bates, 1997). While some managers in industry have made more favourable evaluations on older job applicants over younger ones, there is a substantial body of knowledge supporting the existence of age-based discrimination among younger managers in their selection and promotion decisions of older workers (Elliott, 1995). Finklestein et al. (1995) noted that discrimination against older workers was more likely when raters were younger, limited job relevant information was available, and raters concurrently evaluated older and younger workers, thereby making age salient.
2.4 Age Effect on Discrimination

Ageing has been described as essentially biological. Ageing can, however, be both socially and culturally determined, with social age, for example, a relative concept which can vary according to the cultural context (Hareven, 1976). Fischer (1977) posited that an individual’s age is established according to the dictates of society’s institutions, with their position on the work-life continuum largely determined through institutional definition. Do individuals, for example, meet the statistician’s standard of being of working age, or are they outside working age? For older people, significant life changes can occur as a direct result of the retirement marker, an administrative intervention separating the useful from the useless (Fischer, 1977). Institutionally defined life markers, such as retirement, can contribute to considerable discrimination between the old and the young in the workplace (Plous, 2003). Examples can be found among the age-related categories of labelling, by way of the “young-old” (those in their early 40s); the “old” (those 55 years of age and older); or the “old-old” (those 70 year of age plus) (Neugarten & Daton, 1973). Use of an age-related typology currently used for human resource management selection purposes is outlined in Section 1.1. The challenge in correctly picking an individual’s stage in the ageing process, and hence their place in society, could devolve to gaining understanding of their relevant age markers and labels - a practice, one would speculate, is more representative of age-based discrimination than equity and fairness in social decision-making.

2.4.1 Ageism and Discrimination

Butler (1975) coined the term ageism to describe the process of systematic stereotyping and discrimination directed against people because they were old. Ageism has a long history in Western societies, and is a long-standing cultural phenomenon which cuts across many levels of race, religion and social class (Levin, 1980). Duncan and Loretto (2004) cite the results of a study into discrimination among 1000 finance sector staff members which gave evidence of age-related discrimination directed against older and
younger members of staff, but talk of the complexities surrounding research into ageism in workplaces. Some, however, question whether ageism has become a real problem, by refuting the notion that age-based discrimination is practised on older Australians (Schonfeld, 1978). Discrimination against older people only becomes evident when individuals exhibit socially-unattractive behaviour (Braithwaite, 1986). Studies of ageism among children and adolescent populations have reported a mixture of positive and negative attributions among their spontaneous descriptions of older people (Ivester & King 1977). Little, however, is known about ageism, and even less about age-based discriminatory decision-making processes.

Capowski (1994) suggested that greater familiarity exists on gender over age-related discrimination in the workplace, and describes age discrimination as the new diversity issue needing to be addressed by management. Further, age-based discriminatory behaviour faces greater difficulty in bringing about longer-term change than gender-based discrimination at work (Finkelstein et al., 1995). Perry, (1997), confirms the greater emphasis organisations place on overcoming gender, over age related discrimination in diversity training, with limited diversity training effort being directed towards changing age-related discriminatory practices in US workplaces. Meanwhile, diversity management activities in Australia have been criticised for being rudimentary and barely meeting minimal legal requirements (De Cieri & Kramar, 2003), and lacking an integrated organisation-wide approach to reducing discriminatory decisions (Kramar, 2004). The potentially high costs of continued age-based discriminatory practices call for increased applied research into age-related discrimination. Research efforts clearly need to be refocused to take account of age-based discrimination (Shacklock et al., 2007). In turn, the results of this research should be made available to organisations by way of structured diversity management policies and training, to ensure increased understanding among managers of the implications of age-based discrimination at work.

This study is based on the premise that age-based discrimination is an important issue, has been under-researched, can be changed, and, therefore, warrants research interest. Providing managers with a better understanding of their age-based discriminatory practices
with a view to changing those practices could bring considerable benefits to organisations. Moreover, improvements could be made to training curricula offered by diversity managers in their work of reducing workplace discrimination, by overcoming age, as well as gender-related discrimination. The gender discrimination learning platform established by many diversity managers could benefit from the introduction of age-related discrimination change practices. It has been posited that greater effort directed to managers learning the implications of their discrimination in organisations could contribute to better management of people, and lead to more productive workplaces (De Cieri & Kramar, 2003).

2.4.2 Age as an Economic Factor

Economic rationalism, changes to workplace psychological contracts, the exodus of older workers from full-time jobs, and an emerging international shortage of entry-age workers, have all contributed to new definitions of the older worker in the late twentieth-century’s world of work. The early twentieth century view of 50 years of work, followed by retirement at 65 years of age does not fit well with the emergent view of old age arriving for people at 45 years of age, after only 25 years of work (Handy, 1994). Finklestein et al. (1995) argue that the social and cultural basis of perceptions of people moving along the age continuum have not been well recorded, and are areas which need to be investigated and added to the broader age discrimination debate. Further, determination of the social costs attached to twentieth-century society’s changing perceptions of an individual’s place in the ageing process, and their associated value as a worker, have only just started to emerge as issues of interest in the first decade of the new millennium. During the late twentieth century, authors pursuing greater equity in workplace decision-making, on the basis of gender, (Date-Bah, 1997; Thomas &Taylor, 1997), argued for the creation of a genderless society through the reduction of gender-based discrimination. This argument could rightfully be resurrected during the twenty-first century to help create an ageless work society. Again, the benefits of established research into gender-based discrimination could be brought together with age-based discrimination research, to provide parsimony in research effort.
2.5 Evidence of Discrimination Against Older Workers

The large-scale loss of jobs in the last decade of the twentieth century displaced many workers, with dislocation in work and jobs overall falling most heavily on older workers (Equal Opportunity Commission of South Australia, 2001). By the early twenty-first century, casualised workers constituted a significant part of the country’s workforce (Hall, Bretherton & Buchanan, 2000), and with the large-scale reduction in the number of full-time older workers, there has been an attendant increased devolution of management to younger people - a process which has called for younger managers to evaluate older workers’ performance and, in turn, led to poor management outcomes due to the lack of understanding of differences in behaviour operating between age categories (Murray & Syed, 2005). Workplace venues carrying limited performance information on older workers can increase younger managers’ age discriminatory decisions of those older workers (Shacklock et al., 2007).

Research has confirmed that age-based discrimination against older workers is more likely when raters are younger, and workers’ job histories are less well-known to their younger raters (Hassel & Perewe, 1995). Changes to the contemporary work environment have contributed to distorted perceptions of older workers among many managers. These perceptions have, in turn, been related to marked increases in age related discrimination of mature-age workers in contract employment, and among those filling temporary positions (Wilcox, 2006).

Considerable evidence, from Australia and internationally, supports the assertion that managers have been discriminatory in their treatment of older workers (Bittman, Flick, & Rice, 2001; Horin, 2002; Encel, 2003; Murray & Syed, 2005). Early retirement of older workers, for example, has been widely reported, with employers said to take a quick-fix approach to implementing structural change in organisations (Coltrin, 1988). Some employers have discriminated against older workers on the basis of applicants’ age with younger cohorts deemed more suitable for particular jobs driving employment decisions.
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(Perry & Finkelstein, 1999). Evidence abounds of mature-age workers being discriminated against in staff selection, and overlooked in promotion and career development activities (Yearta & Warr, 1992; Murray & Syed, 2005). Further, many older members of organisations have been denied opportunities to attend enterprise-sponsored training, a failure later leading to their redundancy (Patrickson & Hartmann, 1995; Wilcox, 2006).

2.5.1 Evidence of Enforced Early Retirement.

Wide-ranging reports from international sources document the large-scale retrenchment and early retirement of older workers, with cases reported during the late twentieth century of enforced retirement of workers over 50 years of age (Drury, 1993; Yearta & Warr, 1995; Bennington & Tharenou, 1996; Bittman, Flick & Rice, 2001). Indeed, it is posited that early retirement has become a fixture in the Western world’s industrial landscape, with international researchers confirming the degree of age-related discrimination faced by older workers through inappropriate retirement (ILO, 1995; Shacklock et al., 2007).

Workplace discrimination has come to be regarded as a particular problem in the United Kingdom (UK), with researchers describing workers being forced into early retirement. Research during the period 1990-1994, witnessed the acceleration of early retirement, voluntary severance, and retirement at 50, and an attendant loss of the ideal of one having a job for life (Bernard, Itzin, Phillipson, & Skucha, 1995). The early 1990s has been described as a period in the UK when workers, 45 years of age and older, came to be described as too old to work and likely to lose their jobs (Yearta & Warr, 1995). A major British union, in describing enforced worker retirement throughout the UK over two decades, pointed to the retirement load falling most heavily on older workers (BIFU, 1995). Moreover, older males, through enforced early retirement and consequent full-time job loss, were said to have created an under-class of males in UK society (Hearn, 1995).

Researchers across the developed world have identified age-related discrimination directed at skilled personnel which has led to those workers’ retirement. In Brazil, it was
suggested that workers over 40 years of age could expect, in the normal course of events, to be discriminated against at work by being confronted with early retirement (Mahar, 1979). It was subsequently noted that there was a firm trend towards early retirement in the Canadian workforce (List, 1988). Later still, other researchers in Israel came to question the wisdom of compelling the elderly to retire from employment at a fixed age, and the frequent use of economic incentives to facilitate this process (Eisenbach & Sabatello, 1991). A similar trend was said to have developed throughout the European Union during the last decade of the twentieth century, with a large number of people reported as exiting the labour market earlier, through age requirements, than might have been mandated (Drury, 1993). In the US, despite a plethora of anti-discrimination laws, older workers were said to have been pressured to take early retirement (Hodges, 1994). One of the worst offenders found discriminating against older workers was the US Government’s Merit Protection Board (MPB), (Capowski, 1994). The MPB, entrusted with the oversight of employment equity of that country’s public servants, introduced a process of retiring people from their jobs earlier than their mandated retirement date (Elliott, 1995).

It has been posited that in Australia, “where older workers have often been the last hired and the first fired” (Sax, 1993, p.3), compulsory retirement has long been outlawed. Despite this caveat, The National Centre for Population and Health found that 33% of employees described how they had felt obliged to retire because they were near retirement age (Bittman, Flick & Rice, 2001). Another study found that 31% of those who had been invited to resign from their jobs would have preferred to stay in full-time employment (Bennington & Tharenou, 1996). Research has, meanwhile, suggested that people taking early retirement often try to re-enter the workforce, only to become discouraged long-term job seekers (Bacon, 1996). Efforts at restructuring, and downsizing, organisations over the past decade have contributed to a disproportionate number of older workers being forced out of the workforce through the mechanisms of retrenchment and early retirement (Taylor & Walker, 1998; Murray & Syed, 2005; Shacklock et al., 2007). Perry and Finkelstein, (1999) describe the structural and organisation-level stereotypes associated with older workers which have contributed to a marked decline in workforce participation rates among older workers in the late twentieth century. The twenty-first century has shaped up
to be little different to the preceding one, with older workers continuing to face the
ilikelihood of retrenchment (Encel & Studenecki, 2004), as targeted early retirement
activities extend well beyond the business sector. The New South Wales Government’s
Public Employment Office’s Policy on Management of Displaced Persons, stands out as an
eexample of public sector discrimination through encouragement of early retirement of staff
from the Service (Public Employment Office, 1996).

2.5.2 Evidence of Failure to Hire

Overseas research into discrimination practices in hiring included a survey of
US employment specialists, confirming age discriminatory bias operating among
respondents based on beliefs that older workers were unable to cope with emerging
technology (AARP, 1994 in Encel, 1999). International research has confirmed managers’
preferences to hire younger staff over older ones despite mature-age staff members’
consistently high performance levels (Craft, Doctors, Shkop & Benecki, 1979).
Perry (1993) subsequently reported on the many barriers operating against older workers in
the recruitment-selection process, while it has been reported that older workers, having left
their jobs, have little chance of being re-hired into their former organisation (Hodges,
1994). Research further suggests that job-irrelevant variables, such as gender or age,
continue to play an important part in selection decision-making, and to contribute to
discriminatory decisions (Zebrowitz, Tannenbaum & Goldstein, 1991).

US-based research points to people’s perceptions about an applicant’s age being
a key determinant driving their employment decisions (Lawrence, 1988), with job
applicants’ age or gender said to contribute significantly to decisions not to hire older
workers (Cleveland & Hollman, 1991). Age effect can have a significant influence on
decisions not to hire older job applicants, while younger-age cohorts are deemed more
suitable choices for jobs (Perry & Finkelstein, 1999).
A 1999 study of 1000 managers in Australia found widespread evidence of age discrimination among managers in their employment decisions (Bittman et al., 2001). More than 51% of successful candidates taken on by the organisations contacted were less than thirty years of age, with 31% aged between 30 and 40. Nearly 50% of the organisations questioned were found to employ no workers over 55 years of age. Further, the study revealed that managers filled only one job in ten with workers over 45, yet 243 applicants aged over 45 were reported by managers as being unsuccessful in their job applications due to their lack of current skills, or technical experience. Major differences were found between employers’ requirements for workers to hold certain qualities and managers’ hiring practices. It was concluded that filling positions for many employers largely came down to a matter of the candidate’s age (Bittman, et al., 2001). Murray and Syed (2005) talk of the persistence of young-age profiling associated with recruitment practices well into the twenty-first century when filling banking, marketing, and sales jobs - work practices which continue to discriminate against older job applicants.

An Australia-wide study of employers conducted by the Reark Group, described the many negative perceptions held of older workers by human resource managers, perceptions which led to the non-recruitment of job applicants over forty years of age. The study concluded that human resources managers: “Were among the older workers’ worst enemies” (Ferguson, 1995, p.75). Another research study outlined the depth and pervasiveness of age discrimination experienced by older workers at all stages of the employment cycle, and described how recruitment agencies screened applicants according to their age, with primary selection judgments largely based on applicant appearance at interview (Equal Opportunity Commission of South Australia, 2001). The study further confirmed the severe disadvantages confronting older job searchers when confronted with employment agency-based recruiters. Yet another study of recruitment practices in Australia found that many employment agencies had been set up by governments, essentially to support younger people in their search for work, at the expense of mature-age job searchers (Horin, 2002).
Age discrimination in the recruitment and selection of people can be covert, and the language evasive, by virtue of widespread use of code words which make it difficult to challenge the offenders’ discriminatory decisions. Examples of widespread and debilitating age discriminatory practices include applicants being described, or coded, as “too over-qualified”, “not a good fit”, and forced to respond to indirect age-based questions such as “how old are your children” (Equal Opportunity Commission of South Australia, 2001, p.3). Some mature-age job searchers have commented on the many negative statements that recruitment staff use when interviewing older people for jobs. Outcomes of discriminatory interviewing of older job applicants, made redundant through age discriminatory practices, can be feelings of powerless and lack of self worth, negative emotions which can stem from consistent failure to meet obscure job requirements in selection interviews. Older job searchers may, over time, internalise the negative perceptions assigned to them and give up searching for jobs altogether. Mature-aged persons, once made redundant, have been reported as becoming less successful in securing work than younger job searchers, and ultimately, can become discouraged job seekers, or long-term unemployed (Murray & Syed, 2005; Shacklock et al., 2007).

2.5.3 Lack of Training Opportunities While Still Employed

Vocational skills and professional knowledge are considered important contributors to sustained workplace productivity, with ongoing learning essential for individuals to achieve positive career growth, and in some cases, to merely retain employment (Wilcox, 2006). Holding up-to-date, relevant skill-sets is a pre-requisite for the unemployed individuals to be effective in securing a job, (OECD, 2001). Older workers, particularly, have been warned to guard against job obsolescence by undertaking ongoing learning to help them continue to be productive at work (Hirsch, Macpherson & Hardy, 2000). Sparrow and Davies, (1988) concluded that on-job training can obviate performance declines among older workers. The OECD (2001) points to work practices in an increasingly more casualised workforce environment leading to older workers occupying casual or part-time jobs, and being denied training opportunities.
The Congressional Research Service (1992) described beliefs among senior managers that older workers were less receptive to changes in technology, and organisations as justifying their efforts to restricting their organisations’ training to younger employees as they ‘constituted the future of the industry’. Discriminatory personnel decisions in the area of training and skill development typically result in younger workers receiving greater amounts of employer-funded training than their older colleagues (Smith, 2003). The rationale for decisions of this type can be found in managers’ perceptions of older workers as being “slow, subject to poor health, and hard to train” (Greller & Simpson, 1999, p. 321). A CPA Australia report found barriers to retraining of mature-age professionals were due largely to employers’ negative perceptions of older workers. There was a lack of training ‘in soft and technical skills’ said to be provided to older workers by employers (Donaldson, 2006a, p.6). Gray and McGregor (2003) confirm the many negative perceptions held of older workers’ limited their learning and development opportunities.

Perry (1993) points to the considerable lack of industry training provided for older workers in the US, with decisions not to train mature-age workers often based on age-related criteria. International research confirms this view, by concluding that training is rarely extended to older workers due to perceptions of their inability to transfer competencies from enterprise-based training to the workplace (OECD, 2001). However, a Finnish study found, contrary to popular age-based perceptions, older workers were keen to be trained and were able to improve work productivity following training at least as well as their younger counterparts (Lahteemahki & Paalumaki, 1993). Despite a general reluctance on the part of enterprises to train older workers there is some evidence to support mature-age workers’ successful acquisition and application of skills derived through training (OECD, 2001; Smith, 2003). Courses targeting over 40-year olds showed few age-related decrements among participants (Pennington & Downs, 1993).

Davies, Mathews and Wong, (1988) contend that older workers may require special information and personal support to aid their learning, but few face problems in learning up till age 70, or later. However, older workers in Australia are less likely than their
younger counterparts to have access to the training and skills development necessary to keep them employed (Hirsch, Macpherson & Hardy, 2000), because of negative age-discriminatory factors employers attribute to older workers’ capacities to learn in organisations (Gray & McGregor, 2003). Hall (2000) confirms the limited employer-funded training being extended to marginalised workers in Australia, such as older job holders.

Despite numerous studies having documented mature-aged workers’ commitment, loyalty, and job dedication, older workers have continued to be made redundant due to perceptions that they lack up-to-date skills (Elliott, 1995). Perry (1995) supports this assertion by citing the case of a US-based organisation which selected only younger members of staff for training, with later decisions to make staff redundant due to technological change falling hardest on older workers.

The American Association of Retired Persons (AARP), an internationally-respected social research and policy making organisation, in an attempt to counter these trends, has recommended decision-makers be trained, so as to reduce age-based discrimination against older workers. The AARP contends that managers’ age-based discrimination of people in the workplace will only be overcome through systematic and ongoing education of management (AARP 1994, in Encel, 1999). In a similar fashion, ongoing learning has been advocated as a means of overcoming managers’ entrenched negative treatment of older workers (Rosen & Jerdee, 1985). There is an argument for large-scale retraining of human resource managers in policy making, given their potential to negatively impact on employment of older people (Gibson, 1988). In some organisations, it has been found necessary to provide managers and staff members with extended training to minimise their negative stereotyping, and hence discriminatory decision-making on others in the workplace (Towler, 1987).

Enterprise-supported training can provide a ready source of discrimination in the workplace. Decisions to provide training to one group over another, while more subtle than denying someone a job or delaying promotion, on the basis of their gender or age, are
nonetheless discriminatory, and can lead to extremely debilitating outcomes. The widespread denial of opportunities for training, or retraining of older workers can, through a lack of up-to-date work-related skills, lead to those workers’ eventual loss of employment (The Equal Opportunity Commission of South Australia, 2001). Workplace discrimination through biased training decision-making, while indirect in nature, can give rise to barriers which impede older workers’ access to enterprise training resources; deny those workers opportunities for career progression; and in many cases deny opportunities to retain their jobs in the workforce (Department of Family and Community Services, 2001, in Horan, 2002).

Enterprise-based training in Australia prefers to provide training for full-time members of staff (generally younger workers), over part-timers and casualised staff (generally older ones) (Wilcox, 2006). Workplace practices are relatively common which place substantial investment on development of younger, full-time workers during their earlier years, and little investment in training of workers during their later stages of employment, practices which may be viewed as operating in apparent ignorance of the social and economic costs attached to enterprise-level discrimination training decisions (Smith, 2003; Wilcox, 2006). It is also worth noting that many older workers do not volunteer to attend training activities at the same rate as their younger colleagues, with suggestions that Australian employers pressure older workers not to apply for positions on training programs (Mc Fee, 1992). Unskilled older workers constitute the highest proportion of unemployed in Australia and New Zealand because of their part in the vicious circle of skill gaps, exclusion from training opportunities, and workplace redundancy decisions (Gray & McGregor, 2003, p.348)

2.5.4 Age and Gender-Based Discrimination in Managers’ Performance Evaluations

Managers in carrying out performance appraisals on subordinates, have demonstrated considerable discrimination against workers (Cook, 1995), with biases in performance evaluations found to operate on the basis of both age and gender. Considerable negative
bias has been found, for example, in managers’ evaluation of older subordinates’
performance relative to their younger colleagues (Rosen & Jerdee, 1985; Waldman &
Avolio, 1986). A study of 100 nursing staff in the US showed that supervisors carrying out
performance appraisals rated older nurses lower than they did younger ones doing a similar
job (Rosen & Jerdee, 1976). This discrimination in performance evaluation has led some to
conclude that a manager’s judgments of an individual’s work performance is driven more
by the effect of that worker’s chronological age on the manager’s belief system, than their
actual work performance level (Rosen & Jerdee, 1985; Lawrence, 1988). Further,
managers’ evaluations of others at work have been found to better reflect their own
knowledge structure’s limited parameters over demonstrated work performance. It has
been found that managers, who have rated colleagues highly in the past, are likely to retain
that set of perceptions, and apply elevated ratings in subsequent evaluations (Sternberg,
1985). It has similarly been argued that human resources managers can act as imperfect
raters in the way they assign negative social judgments, and hence evaluations on older job
applicants (Ferguson, 1995).

UK research reported several organisations’ preferences for hiring women into low-
level clerical, cleaning, and catering jobs, while filling management positions with males
(Bernard et al., 1995). It was concluded that older females were limited in their career
progression by a glass ceiling of age built into performance appraisal and related
promotion processes. An examination of performance management systems in Australia
similarly found age and gender discriminatory determinants associated with evaluations,
and to reflect prevailing social values which organisations needed to make more equitable
and socially responsible (Wilcox, 2006). Processes of performance evaluation used by
managers have been found to conform to the social and institutional systems underpinning
performance appraisal processes, and therefore to reflect broader societal perceptions of
older workers and minority groups (Murray & Syed, 2005). Importantly, both age and
gender can play an important role in managers’ performance evaluations of subordinate
staff at work (Perry, 1997). It has been posited that given the biased way in which work is
designed, and job performance is assessed by Australian managers, performance
management systems in use can lead to discriminatory decisions, (Murray & Syed, 2005).
Discrimination research conducted in the USA during the last two decades of the twentieth century provided evidence of age discrimination in workplace performance rating processes (Hess, 1986; Herz & Rones, 1989; Kaeter, 1995). Research into performance ratings of older workers (Waldman and Avolio, 1986) indicated supervisors’ evaluations were biased down, resulting in mature-aged workers receiving lower ratings than younger colleagues. However, in another study, little correlation was found between workers’ chronological age and ratings of various aspects of their performance (Warr, 1994). Meanwhile, Campbell (1983) posited that managers’ ratings of others’ workplace performance better reflected how well employees fitted with managers’ perceptions of subordinates. Others have meanwhile suggested that raters’ perceptions can be based on the social categories to which people belong, and biased positively or negatively “according to whether the person being rated is female, coloured, handicapped, or old” (O’Leary & Hansen, 1983, p.210). Researchers have concluded that managers’ biased evaluations of subordinates should be removed from the judgment-making process if discriminatory decisions associated with performance appraisals are to be reduced (Borman, 1983).

2.5.5 Age and Gender-Based Discrimination in Work Processes

Widespread discrimination has been reported internationally, and to some extent, within the Australian workplace. This discrimination has taken many forms, but has been found concentrated in areas such as: early retirement of workers considered to be too old to hold a job; people being denied access to full time work due to their age; not being hired because they were the wrong gender or age; those in work not being promoted because of their gender, or not allowed to train because of low training potential due to their age.

Discrimination on the basis of age and gender can be perpetuated by the work processes managers use to attract, train and promote staff. Evidence of discrimination on the basis of age and gender surround work processes such as performance appraisal, which largely underpin training or promotion decisions. Many of the processes involving
selection, promotion and training decision-making have been found to be contaminated by managers’ often negative perceptions, seemingly on the basis of colleagues’ age and gender (Gray & McGregor, 2003). The limited enterprise-training opportunities extended to mature-age and minority workers, suggest extensive age-based discriminatory training and development decisions on the part of managers (Wilcox, 2006). Meanwhile, Fiske (1998) roundly criticises the field of social psychology for failing to adequately research workplace discrimination.

There is clearly an urgent need to better identify and document the nature of discrimination processes, and examine ways of reducing managers’ discriminatory decisions directed against job applicants, not only in selection, but also in promotion and training. The current study sets out to document evidence of manager’s positive and negative discrimination of colleagues in different employment decision-areas, and build on social psychology’s paucity of research into managers’ discriminatory behaviour in workplaces. While research indicates that both managers’ and colleagues’ age and gender-related characteristics could have an effect on managers’ discriminatory decision-making processes, a research methodology is needed which can adequately explain those processes.

2.6 Relations Between Social Group Membership and Managers’ Discriminatory Decision-making

Liden & Graen (1980) suggest that managers discriminate between subordinates in matters such as promotion, according to who management believes occupies in-group or out-group status. In-group membership can extend special privilege over out-group members through managers providing to them: personal attention, increased learning and development opportunities and hence promotion at work. Out-groupers, in contrast, are typically offered little work training, receive limited personal attention from managers, are not allowed to participate in decisions that affect them, and do not enjoy the promotional opportunities offered to in group members. Graen & Schiemann (1978) argue that managers prefer to promote staff members who share similar qualities and interests with
them, and in judgment-making and work behaviour managers are more likely to make positive judgements on those displaying similarity in behaviour to them. Managers, in turn, are more likely to help in-groupers most like themselves to improve their workplace position by making decisions that favour in-groupers over out-group members.

It may be that success at work can be more about individuals meeting managers’ social expectations of them than being technically skilled skilful at their job. Many managers have been found to place greater value on impressions formed on staff members, and how individuals might meet managers’ expectations of them, rather than individual job-related performance (Aktouf, 1996). Patrickson (1994, p.31) suggested that a history of achievement at work should be preferred over an individual’s “rich but as yet developed potential” in managers’ selection decision-making.

Goffman (1963) describes the many factors contributing to acceptance into, or exclusion from, social group membership according to commonly-held perceptions of what constitutes an appropriate identity. Some people are said to have been stigmatised by society, and to have been excluded from particular social group membership by virtue of their physical disability, racial grouping, gender or age. Goffman (1963) has assigned the term spoiled identity to some, to differentiate between them, as outsiders, and the rest of society. Among those with the spoiled identity in the US, are many older workers who are perceived to be less productive by their supervisors and managers than their younger colleagues, and have therefore lesser economic and social value (Goffman, 1963). Age discriminatory barriers can form around stigmatised older workers as they face increasingly more limited promotional opportunities. Stigmatised workers, considered to be non-productive, can be accused of contributing to lower levels of morale, and promptly moved outside the promotional cycle (Meyer, 1992; Solomon, 1995). In a similar manner, gender membership can contribute to workplace stigmatisation and exclusion from promotional opportunities.

Wilcox (2006), in describing the social exclusion of females and older workers from jobs with promotional opportunities, attributes their marginalisation to the perceived
negative attributes attached to their social categories. Perceived out-group membership can exclude older people from positions in the full job market, and deny females career promotion. Substantial workplace barriers have been found to stand in the way of the promotion and development of females and older workers, who through employer bias and management prejudice find few career-type job opportunities open to them, a process associated with their stigmatisation as low promotion-potential people (Ginn & Arber, 1995).

It has been held that older women suffer similar problems to older males, but do so to a much greater extent (Rodehaver, 1990). Type-casting of women in subordinate workplace roles has long been held to be age and gender related, with line managers in organisations in one study found to categorise female employees aged 30 years of age as older workers (Tyler & Abbott, 1994). Respondents in the study generally described women in the 35-40 age range as being too old, and therefore beyond promotion at work. Age-related discrimination was found to be most pronounced, however, in promotional decisions affecting females aged in their fifties. Increasingly, there has been found to be a negative relationship operating in the workplace between a female worker’s age and promotional opportunities (Bernard et al., 1995). Workplace succession schemes involving planned promotional opportunities at work can rely on value-laden attributes which carry age or gender biases, and preclude older workers, females and minority group members from inclusion (Wilcox, 2006).

This study, in developing a methodology to research discrimination, needs to take account of managers’ judgments as they relate to their perceptions. It would seem that in an environment of acceptance into a given group, or exclusion from that group’s membership, managers’ intentions towards others can vary according to how alike individuals are perceived to be relative to those managers’ self-perceptions. Identification of managers’ differential perceptions between themselves and their colleagues would seem to be a useful means of indicating their decisional intentionality, and potential for discrimination in decisions on colleagues.
2.7 Importance of Developing an Age-Gender Research Framework to Identify Managers’ Discriminatory Decisions

Perry (1997) adopts a cognitive research approach to identifying stereotyping and using those stereotypes as a means of explaining discrimination processes. She posits that the cognitive underpinnings of stereotypes might provide valuable information on stereotype content and, in turn, lead to an understanding of the biases influencing managers’ employment decisions. Discrimination research has traditionally used age-related biases to establish age-based discrimination, and gender-related biases to research gender-based discrimination (Finkelstein et al., 1995). Macan, Detjen and Dickey (1994), on the other hand, suggest that traditional methods of treating gender and age independently provide fragmented pictures of raters’ perceptions on current job holders. Age and gender-based discrimination have for some time been considered to be separate phenomena, with researchers addressing them in different ways (Cleveland & Hollman, 1991).

Researchers, carrying out an extensive review of discrimination research in organisations, have noted that age as a control variable has been consistently neglected, or treated as being of little interest (Lawrence, 1996). Meanwhile, research suggests that gender-based discrimination can be more predictable, on balance, than age discrimination, due to contextual factors having a greater influence on an applicant’s age than gender (Perry, 1997). It could be important, therefore, to treat gender and age in workplace selection decision situations in fundamentally different ways. However, it may well be that there is some commonality in age and gender discrimination processes due to an overlap in raters’ perceptions. This overlap could justify use of a joint age-gender research framework in researching discrimination.

Chapter 4 will introduce a methodology based on Personal Construct Theory (Kelly, 1955) and ways in which managers’ stereotypes can be identified and related to their discriminatory employment decisions. Consideration will be given, in formulating this methodology, to using a suitable framework to establish age and gender-based
discrimination, as distinct from current research, which takes separate age and gender approaches to researching discrimination. Stereotype and discrimination research which attempts to explain discrimination in terms of stereotypes, and addresses individuals according to their age, or their gender-related characteristics, and related age, or gender group membership, will take on a very different emphasis and set of research approaches.

It could be useful for researchers into managers’ employment decision-making to take account of managers’ own, and their colleagues’, age and gender-related characteristics to explain biased decision-making. This level of understanding is currently not available in the discrimination research literature. Further, given the exclusive attention paid to selection decision-making in research, interest could be extended to promotion and training decisions. Exploration of factors contributing to discriminatory decision-making might also make use of a research framework which considers age and gender as main effects, and takes account of the moderating effects of rater and colleague characteristics. The advantages in use of a single age and gender-based research framework may overcome some of the research difficulties associated with pursuing the two variables independently. This combined approach could offer a more parsimonious use of research resources, while advancing understanding of workplace discriminatory processes.

Chapter 3, meanwhile, introduces decision-making as a process. The chapter provides insights into a number of decision models as a means of explaining how decision processes operate in workplace contexts. Some of the limitations associated with decision model design are discussed, as are the challenges associated with contemporary decision research. Limitations in design of decision models and application of decision theory to the workplace, and to decision research generally, will be explored.
CHAPTER 3

DECISION-MAKING
Decision-making is ever held to be central to the management function, with managers generally expected to act decisively. Indeed, the management function is deemed by many to be essentially about making decisions. In turn, the act of choice-making is fundamental to decision-making, with research determining that people, when making decisions, typically consider a range of actions over which they can exercise choice (Ajzen, 1996). Establishing the point at which an individual makes a decision can, however, be difficult, as can describing the discrete steps involved in the decision-making process (Miller, Hickson & Wilson, 1996). Despite these limitations, decision-making can be defined as a process whereby managers respond to situations requiring choice-making, and actions have to be taken, or changes made as a result of those choices.

This chapter deals with the language of beliefs, preferences, and rational judgments associated with decisions, decision models and the decision-making process. As such, the treatment of decision-making is selective in nature rather than providing an exhaustive overview of the area. The discussions on decision-making are tailored to fit the more limited focus that is of specific relevance to this thesis. Matters of rationality and non-rationality are discussed, as is the importance of accuracy in decision-making. Four decision models and a pre-decisional model are presented, with some discussion on the relative benefits and disadvantages of each. Theories underpinning manager’s judgment-making, automatic processing of data and heuristic decision-making occupy central parts of this chapter.

3.1 Managers’ Decision-making

Decision-making has traditionally been viewed as a rational, purposeful, and intentional process, one in which the decision-maker has good knowledge of the decision process, and will strive to provide optimum outcomes (Moorehead & Griffin, 1992). These assumptions do not accord well, however, with recent accounts of challenges facing decision-makers in the world of work. Increasingly more complex decision choices confronting managers are not being matched by individuals’ human capacities. Managers’ decisions continue to be criticised as being irrational (Sparrow, 2000). The argument is
advanced that managers’ decisions will not improve while ever organisations continue to implement what has been described as third generation strategies, using second generation business planning/decision-making processes, operated by first generation managers (Ghoshal & Bartlett, 1998).

It is argued that a new generation of decision-makers is required to deal effectively with non-programmed decisions, unique, intractable, difficult to resolve decision situations, which call for new and often very different ways of making choices, by determining likely future outcomes, and implementing decisions (Bortel, Martin, Tein & Mathews, 1998). Decisions, despite their generally consensual decision-making nature, can immobilise managers, a decision paralysis brought on by the perceived riskiness of exercising decision choices which may be associated with extremely risky outcomes. Managers, regardless of position, can be forced to look up and look around for answers, when questions are unique in nature and have no history of solution (Fulop, Linstead & Clarke, 1999). At an extreme, these managers may even enter into avoidance behaviour by becoming overly busy and avoid making decisions at all.

Managers in transparent work situations, holding no history of successful decision-making, when confronted by risky non-programmed decision choices, could enter into avoidance, or non decision-making modes. After all, the sovereign rules of managers’ decision-making have long been: avoid making decisions if possible; if a decision has to be made, involve as many people as one can; then, if things go astray, point as quickly as possible in as many directions as one can. Programmed decisions on the other hand, have typically taken the form of specific procedures set down to deal with problems; are typically well structured and straightforward; can be readily addressed through policy and procedural frameworks; and are of the type typically addressed through currently available decision models (Fulop, Linstead & Clarke, 1999). Programmed decision models have been set in place to address structured, manageable decision situations.
The changing nature of a manager’s work calls for decisions to be made, increasingly in unstructured situations, and to require unique and innovative non-programmed approaches. Non-programmed decision situations are not well served however, by established decision models or structured and traditional management practices. Programmed decision models are, meanwhile, better suited to more straightforward and predictable types of decision situations. There is clearly a need for more research into decision models, processes, and practices which can address this shortfall in decision knowledge. Decision models need to address practicing managers’ needs for both programmed and non-programmed decision theories and practices which are better matched to the needs of twenty-first century workplaces. The new century manager needs to be able to operate and make decisions under extremes of time, risk, and uncertainty in the making of decisions. Constantly changing workplace situations call for new and better problem-solving/decision-making skills. The next Section will deal with some of the challenges associated with gaining an understanding of these processes.

3.2 Decision-making

3.2.1 Some Problems in Definition

One of the many problems associated with studying decision-making lies in the considerable ambiguity surrounding the use of terms, with the decision field drawing heavily on research into economics, statistics, and psychology. Decision theory, as a science, has failed, generally, to create a uniform, widely-understood and recognised language to facilitate widespread use of the emerging theory. Decision-making terms can be found to have different meanings in similar situations, or hold similar meanings when in different hands, or stay the same, or change, when contexts vary. These can be illustrated by the rough equivalence between decision theorists’ use of terms such as judgment, preference, belief, and choice. Another problem surrounds the attempts made at describing the decision-making process, with debate surrounding whether preferences between alternatives, judgments, or belief in judgments, are central to the process.
3.2.2 Judgments, Beliefs, Preferences and Decision-making

There is considerable debate within decision theory, and decision-making circles generally, as to how the decision process actually operates. Some agreement has been reached between decision theorists, that decision alternatives are selected over one another on the basis of judgments, or beliefs about them (Bell, Raiffa & Tversky, 1988; Busemeyer & Naylor, 1990). Dispute continues to exist, however, among decision researchers as to whether preferences between alternatives are based on individuals’ judgments or their beliefs about those judgments (Ajzen, 1996). Some of those commenting on the role of judgment-making in decision formation have maintained that judgment is neither a necessary nor sufficient condition for choice (Abelson & Levi, 1985). To further muddy the waters, some theorists make no distinction between judgments and decisions, and use the terms interchangeably (Slovic & Lichtenstein, 1971). Others, mainly social psychologists, have, meanwhile, expressed considerable interest in being able to readily distinguish between judgments, beliefs, preferences, attitudes, decision intentions, and actions (Fishbein & Ajzen, 1975; Eagly & Chaiken, 1993).

On the issue of whether the decision-making process is a rational one, dictated by an individual’s conscious ability to search between alternatives, some decision theorists hold to the view that people’s judgments may be influenced by motivational factors outside of their conscious, and are often irrational. While it has been accepted that human judgment-making can be distorted by personal preferences, needs, and desires, a major assumption held by decision theorists is that people are generally motivated to make correct judgments, preferring accurate information about their abilities over information that enhances them (Ajzen, 1996; Trope & Ben-Yair, 1982). Simultaneous and competing needs have, however, been found to work against the individual’s search for accurate information.
An individual’s personal preferences, it has been posited, can have a greater effect on their rationality than cognitive biases, and decisions surrounding events which are perceived as more desirable are therefore deemed as more likely to occur (Kruglanski, 1989). Meanwhile, research has reported that preferences do not necessarily come from a master list in memory, and it has been suggested that decision-makers have a variety of means of developing preferences and beliefs, which can be drawn from their experiences, and training (Tversky, Sattath & Slovic 1988). Moreover, the ways individuals construct their preferences have been attributed to human limitations in information processing capacity. Further, there has been a suggestion that people’s imprecise goals are due to their lack of preference orderliness (March 1978).

Theories of belief formation suggest that human judgments receive differing degrees of scrutiny. At one extreme, a controlled, reasoned, central processing mode systematically reviews and analyses available information before judgment; at the other extreme, an automatic, intuitive mode operates, which relies on relatively superficial cues, and category membership such as that found in stereotypes, or simple cognitive heuristics which facilitate judgments. One mode will likely predominate, depending on the person’s motivation and abilities (Fiske & Taylor, 1991).

It has been suggested that individuals placed under considerable pressure at work are more likely to process data automatically. Moreover, time-efficient, or expeditious ways of handling large amounts of data, while under cognitive load, are likely to lead to errors of judgment. The automatic mode of processing can cause individuals to be assigned to categories with stereotypes functioning as judgmental heuristics. Heuristic processing has been found to be more likely to occur when the situation is cognitively demanding, with the heuristic or peripheral mode tending to be the default mode (Fiske & Neuberg, 1990).

From another perspective, Ajzen (1996), in contrasting decision-making approaches, posits that information embodied in salient beliefs about behavioural alternatives is basic to an understanding of human decision-making. Further, salient beliefs together with their evaluations are responsible for peoples’ preferences, and in turn, their
behavioural decisions. Accessibility, has been given as the cause of heuristics, where the individual rater’s opinion is more accessible and therefore used automatically as the basis for judgments (Higgins, 1996), which can often be biased. The current study makes use of salient, chronically-accessible constructs, as a means of accessing managers’ more important meanings, and determining managers’ impressions of their own qualities, relative to those of their colleagues’, in establishing managers’ decision intentionality.

The theoretical framework underpinning much decision theory and related decision models has been said not to be well formed, and to be under-researched. Moreover, the assumptions on which much decision modelling is based, include strict adherence to statistical probability, or Baye’s Theorem, and to utility theory. The making of choices between alternatives in decision-making situations is underpinned by a theoretical basis concerned with rationality and individual maximisation of utility. Human decision-makers, in their decision-making efforts, have, however, been found to regularly transgress these assumptions.

The effective choice maker, selecting between decision alternatives based on judgments guided by salient beliefs, is expected to consider the probabilities associated with alternatives, and to seek optimum value in outcomes. The question which often arises is just how well people operate as statisticians, given their propensity to often fail to honour Baye’s theory. Moreover, people constantly fail to recognise the potential value of future outcomes, by failing to follow utility theory. There is clearly a need for decision theory to develop an integrated research framework, shared language, and more widely-understood research methodologies. Decision theory similarly needs to carry out more rigorous applied research into decision-making, which takes greater account of the underlying emotional aspects associated with decision-makers’ workplace-centred decision processes.

The more recent adoption of cognitive psychology by decision theorists has confirmed the use of rational thought and cognitive processes as essential underpinnings to decision-making. Meanwhile, theory-driven information models, based on these
underpinnings and put forward by the social cognition school, have been described as largely inadequate explanations of human knowledge structures. Clearly, different approaches to decision model design are required if the decision field is to take sufficient account of the emotional world of personal preferences held by the manager/decision-maker, with research pointing to people not knowing what they want, and having great difficulty understanding their preferences (March, 1994). Managers could benefit from an improved understanding of their decision-making processes if based on workplace-relevant decision research, as it relates to their decision-making. Importantly, research is needed that moves beyond current limited cognitive explanations of human information processing to accommodate not only the cognitive, but the individual’s more tacit, intuitive, subjective, and emotional involvement in decision-making. A range of decision models will be outlined in Section 3.4, which strives to describe managers’ decision-making behaviour.

### 3.3 Decision-making Assumptions

The decision field is characterised by ongoing research into comparisons between actual and rational decision-making. Behavioural decision studies have been particularly concerned with people who muddle through in their decision-making, and make decisions which can lead to predictable biases as they depart from rationality in their decision processes. Two major assumptions underpinning decision-making behaviour are 1) adults’ processes of problem-solving can be considered similar, and 2) there is some good reason behind most things that people do. Violations of these assumptions are considered deviations from the path of rational decision-making, and can cause the decision-maker to fall into the area of biased decision-making (Dawes, 1998).

### 3.4 Decision Models

There are many different types of decision models ostensibly seeking to describe decision-makers’ actions. It is the intention of this study to introduce five models: four models based on the decision-maker as a maximiser of utility, while, in the main, operating
rationally, and a fifth model that covers the pre-decisional activities associated with decision-making. The first model introduced is The Rational Model (March & Simon, 1958; March & Olsen, 1979), the second, The Administrative Model (Simon, 1971; Harrison, 1981; Cyert & March, 1992), the third, The Garbage Can Model (Cohen, March & Olsen, 1972; Westerland & Sjorstrand, 1979; Jackall, 1988), the fourth, The Expectancy Value Model (Feather, 1982; Ajzen, 1996) and the fifth, The Information Processing Model (McCall & Kaplan, 1985; Slovic et al., 1988; Walsh, 1995). The fields from which the models are drawn are large, and generally not well integrated; they tend to emphasise the more cognitive and rational sides of decision-making over the tacit, or more emotional aspects of decisions.

3.4.1 The Rational Model

The Rational or Traditional Model (March & Simon, 1958; March & Olsen, 1979) of decision-making operates under the assumptions that:

- People hold widespread understanding of decision-making terminology.
- There is one best way to make decisions.
- The process is rational and logical.
- The process is carried out exclusively by objective problem-solvers.
- It is assumed that, for the most part, managers are confronted by routine decision situations.
- Managers can readily estimate the likely probability of outcomes associated with different alternatives.
- The decision-maker is routinely required to cast about for alternatives and take a preferred course of action.

Most importantly, the model assumes a unitary frame of reference, and a stable or predictable environment, conditions which are rarely available to the early twenty-first century manager (Ajzen, 1996). The Traditional or Rational model of decision-making was based on the commonly held view of the day, that humans were blessed with exceptional
intellectual powers. Miller (1956) subsequently demonstrated a contrary view, by illustrating the individuals’ intellectual and information-handling shortfalls in their having limited ability to attend to, and process sensory signals. Moreover, the Rational decision-making approach is not only limited by the decision-makers’ mental processing capabilities, but also by the demands of large-scale information gathering (Schmerherhorn, 1984). This level of information processing has been found to be expensive, time-consuming, and often denied to the practicing decision-maker (Moorehead & Griffin, 1992).

This Traditional/Rational model assumes that the managerial decision-maker has ready access to relevant information, is able to formulate alternatives, and to select between multiple, often-complex alternatives. Further, the model assumes that decision-makers will optimally search for, reach, and implement the one best solution (March & Simon, 1958; March & Olsen, 1979; Taylor, 1984). March (1994) has meanwhile taken a contrary view, by suggesting that decision-makers suffer from limitations to attention, shortfalls in memory, restricted comprehension, imperfect communication, and limited cognition. Shortcomings in human information processing, according to March, could include problems of attention, memory, comprehension, editing, decomposition, and cognitive constraints.

In summary, decision-making has been found, in practice, to rarely be a wholly rational process. To carry out, in the required sequence, all the steps set down by the Traditional/Rational model, is considered generally to be beyond the processing capacity of an ordinary individual (Moorehead & Griffin, 1992).

3.4.2 The Administrative Model

The Administrative Model of decision-making (Simon, 1971; Harrison, 1981; Cyert & March, 1992) was said to have been based on the shortcomings, or actual behaviour, of decision-makers, captured in behavioural decision theory. The model was introduced to address many of the unrealistic assumptions of the rational model, and strove
to take account of the human limitations in decision-making, for example, people’s poor work habits, limited skills, group pressure, or the pressures of time. In recognition of the limited opportunities open to managers to optimise problem situations, the notion of *satisficing* was introduced to describe managers who made the best decisions they could, under the circumstances. Most importantly, the Administrative Model introduced the differing needs held by unique or non-programmed decision situations, together with the more mundane or programmed decision types. The model has been affirmed as well suited to the solution of programmed decisions. Non-programmed decision-making, on the other hand, requires more predictive models, or heuristic approaches using the individual’s tacit knowledge.

Lindblom (1990) provided some support for the Administrative Model by arguing that managers search for alternatives based on their current knowledge, and undertake incremental changes, in a similar way to managers’ *satisficing* in their decision-making. This argument is based on the assumption that the manager/decision-maker operates within a limited information framework, or *bounded rationality*, seeking out and accepting less than optimum solutions to problems (Harrison, 1981, pp.53-57). Simon (1971) and later Cyert and March (1992) held that the Administrative Model’s approach to decision-making described well the decision-makers’ application of short-cuts, in not searching for the one best solution. Further, decision-makers, in *satisficing* their decisions, take up the first reasonable option available to them, thereby simplifying the utility maximisation goals fundamental to the Traditional Model.

The Administrative Model requires the individual to have only limited computational ability, and provides short-cuts around having to evaluate each outcome’s overall utility. Further, the model’s behavioural theory approach to decision-making takes into account the manager’s limited information processing capabilities (Moorehead & Griffin, 1992). The model, complete with its in-built errors, has been described by some as probably better reflecting the manager’s place in the real world of work than its classical alternative (Taylor, 1984). While many consider the Administrative Model to be an improvement on the overly-structured Rational model, there have been criticisms of its
neglect of the power, or political dimensions in decision-making, for example, the impact made by powerful groups in organisations on decision processes. Moreover, the Administrative Model posits that the decision-maker cuts corners by applying rules of thumb, is willing to accept the first reasonable solution that comes along, and uses a biased view of the world (March, 1994). There is evidence of considerable bias in behavioural decision theory associated with the model (Einhorn & Hogarth, 1981; Pitz & Sachs, 1984), with Hogarth (1980) citing at least 27 sources of error in human judgment and decision-making. Unlike its classical predecessor’s more normative framework, the Administrative Model is accused of having an overly-descriptive nature, and of tending to focus on the decision-makers’ cognitive limitations.

3.4.3 The Garbage Can Model

The Garbage Can Model (Cohen, March & Olsen, 1972; Westerland & Sjorstrand, 1979; Jackall, 1988), unlike earlier decision models, argues against clear linkage between goals, people and problem solutions, and proposes that the organisations in which managers make decisions are anarchic. Meanwhile, Cohen, March, and Olsen (1972) posited that anarchy operates in organisations based on problematic goals, unclear technology, and managers’ fluid participation in decision-making. The Garbage Can model holds that managers make decisions randomly in organisations. Wherever clear choice criteria are found to be absent, non-related matters can be lumped into the decision-making process, thereby leading to solutions which have little relationship to problems. Problems can, however, become easily confused with solutions when using this model. In jumbled-up decision-making processes, solutions in one area can, in reality, become problems in other areas, and vice versa. This model, when compared to earlier-mentioned decision models, has been found to have circumstantial rationality (Fulop & Linstead, 1999).

One criticism of the Garbage Can Model has been its failure to account for the effects of those contributing to anarchy in the organisation. The model does, however, give insights into the non-rational nature of decisions in organisations, and serves to expose the myth of the rational organisation (Westerland & Sjostrand, 1979). The Garbage Can Model
illustrates well that managers’ choice of problems, and selection of decision-making approaches, are often influenced by the personal preferences, values and expectations of key members of the organisation. It is held that it is not so much a question of the manager being rational in decision-making in organisations, but of appearing to be so, of making sense of work situations and being able to justify likely future outcomes (Jackall, 1988).

3.4.4 The Expectancy Value Model

The Expectancy Value Model (Feather, 1982) has been found useful in dealing with applied problems in areas as diverse as consumer behaviour (Brinberg & Durand, 1983), exercising (Godin, Shephard, & Colantonio, 1986) and occupational choice (Greenstein, Miller & Weldon, 1979). The model holds that salient beliefs, together with measures of subjective probability and value, can help determine positive or negative attitudes towards a given activity (Ajzen, 1996). The model, based on utility maximisation, and attitude formation theory, makes no assumptions about rationality, but relies on attitudes drawn from beliefs about the attitude object. Whether true or false, biased or unbiased, the more positive the beliefs, and the more strongly they are held, the more favourable the attitude (Ajzen, 1996). The model is predicated on people holding beliefs that are not necessarily derived through logical reasoning, but on beliefs that are biased by their emotions to meet a variety of personal needs, such as those in stereotypes (Allport, 1954).

While the Expectancy Value Model is less sophisticated, psychometrically, than many other decision-making models, it is claimed to offer a means of obtaining underlying evaluative judgments about real life situations. Real-life decisions have, however, been found to fall far short of the model’s ideal, due to the decision-maker’s cognitive limitations (Simon, 1956; March, 1994). Moreover, much decision-making has been found to follow rules that are incompatible with the utility maximisation assumptions which underpin the model (Kahneman & Tversky, 1979).
3.4.5 The Information Processing Model

The Information Processing Model (McCall & Kaplan, 1985; Slovic et al., 1988; Fiske & Neuberg, 1990; Walsh, 1995) assumes that managers are information workers making decisions in a complex world (McCall & Kaplan, 1985, p.14), where social cognition has bought to decision-making practice an emphasis on internal processes, human mental limitations, and information processing (Slovic, et al., 1988). Managers are said to be able to find their way through a decision-making minefield by employing knowledge structures to facilitate information processing and decision-making (Walsh, 1995, p. 280). Key to this manager/information processing perspective is the individuals’ use of a top down (Reiser, Black & Abelson, 1986), or theory driven (Nisbett & Ross, 1980) approach, or a bottom up, or data driven approach (Fiske & Neuberg, 1990). In the top down or theory driven process, past cognitive structures generated from experience guide individuals’ abilities to attend to, encode, and make inferences about new information. With the bottom up approach, the information itself shapes individuals’ responses. The top down, or theory driven approach, makes use of the individuals’ schemata, or theories about data, in categorising people or events. The bottom up process of impression formation is data driven, largely individuated, and more attribute-oriented in application (Fiske & Neuberg, 1990; Brewer, 1988).

The Information Processing Model posits that managers are able to apply their knowledge structure, or mental template, to an information environment and give it form and meaning (Walsh, 1995 pp. 280-281). Managers, it is proposed, form impressions somewhere between the extremes of simple heuristics, or cognitive short-cuts, using categorical information, through to the more effortful consideration of individuating information (Leyens, Yzerbyt, & Schadron, 1994). Fiske (1988) indicates that the cognitively quicker, category-oriented processes, dominate the more attribute-oriented processes, with theory driven, categorical information processing both more efficient and effective. The process is said to be fast, carried out effortlessly (Bargh & Thein, 1985), and to provide a basis for dealing with pieces of evidence before evaluating and processing more important information (Thorngate, 1980). It has been posited that knowledge

Category-based representations can, however, be driven by the “pictures in our head”, with decision-makers taking cognitive short-cuts in their judgment making (Fiske, 1998, p.363). Gioia (1986) reviewed managers’ use of knowledge structures, or top down processing, and found a host of potential liabilities associated with the model, including: subversion of controlled information processing; the filling of data gaps with inaccurate information; and encouragement of stereotypic thinking. It has been suggested that decision-makers relying on top down knowledge structures that are less than optimal, can be limited in their understanding. The consequences of flawed, top-down information processing by managers knowledge structures have been described as creating a blind spot, exercising selective perception, or having tunnel vision (Walsh, 1995). All of these problems have been described as cases of cognitive inertia, the inability of individuals to revise their mental models, or interpretive schemes quickly enough (Sparrow, 2000, p.19). Managers, unable to quickly revise their mental models, will likely face constraints by having to revert to yesterday’s old cognitive maps or mental frameworks (Axlerod, 1976) to navigate today’s rapidly-changing business environments (Reger & Palmer, 1996).

Much decision theory has concentrated on the shortcomings of individual decision-makers, and it has only been through the design of more contemporary decision models that manager’s more tacit decision-making behaviour is coming to be explained. More traditional approaches to decision modelling are largely predicated on adherence to utility theory, and application of statistical probability in decisions. More recently, some decision model design has taken on a more descriptive form, with decision models assuming a more behavioural emphasis. Models which stress decision-makers’ preferences, values, beliefs and decision limitations continue, however, to assume rational decision-making, maximising of utility, and operation within situations of known probabilities. Indeed, many of the assumptions underpinning decision models continue to be based on an individual’s rational decision processes and preference-seeking leading to maximising of personal
returns. Such processes have been found extremely difficult to replicate in real world situations.

It has been found that managers, in seeking out personal preferences, are more likely, under social and time pressures, to take up the nearest best option. Most importantly, however, it has been found that people do not know what they want, and are not able to readily determine probabilistic outcomes. Further, the decision-makers’ information handling shortfalls are not well addressed through contemporary decision models. A great deal of attention has, for example, been afforded the information model which deals with the decisions-makers’ pre-decisional information handling activities rather than the overall decision-making process.

Theory-driven information processing, as a social cognitive explanation for automaticity and human biases on the part of the person handling information, has been found to be largely inadequate (Crocker, Fiske & Taylor, 1984). Further, attempts at overcoming the many psychological shortcomings, said to be held by the average decision-maker, have largely overtaken decision theory, with research work concentrating on minimising users’ errors and biases in decision model design, said to lack an applied emphasis (Edwards & Von Winterfeldt, 1986).

The following Table 3.1 serves to summarise the five decision models outlined in this chapter, by outlining the relative features and limitations associated with each model. No one model can be found to meet the dynamic problem-solving, decision-making needs of twenty-first century managers operating in complex decision environments - an outcome that demands a review of how individuals make decisions on people, as the more difficult subject area of decision-making in their workplaces.
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3.5 Decision Model and Decision Makers’ Limitations

3.5.1 Decision Models’ Limitations

Decision models are attempts at explaining managers’ decision processes, and, one would imagine, making their real world workplace decision-making more effective. To these ends, model design has witnessed the use of cognitive psychology in experimental studies into decision-making. Meanwhile, what has been described as the overly-contrived and structured nature of experiments, has led to criticisms of many experimental studies used in developing applied decision models (Winkler & Murphy, 1973: Navon, 1978). Further, the continued use of cognitive psychology in model design has led to accusations of models holding exaggerated views of human intellectual limitations, with Edwards (1975) arguing that experimenters conducting decision research have placed exaggerated human intellectual limitations on research subjects. Moreover, the assumptions underpinning the functioning of human beings at work in many decision models have been found to be unrealistic. Social cognition models of information processing and memory functioning have been found to house many inadequacies. Further, decision model attempts at describing human behaviour have been found to lead to very narrow, stilted approaches towards explaining human decision-making.

The exclusive use of cognitive models to describe managers’ information processing has failed to take account of the more subjective values, or emotions employed in decision-making (Fischoff, Slovic & Lichtenstein, 1988). Moreover, decision models based on cognitive explanations of the decision process have been geared to address structured decisions that can be easily replicated, situations which have increasingly become less relevant in the workplace. Most importantly, the results of many decision research studies have been described as lacking real-world applicability (Edwards & Von Winterfeldt, 1986). Trends in twenty-first century workplaces are more likely to lead managers to face greater complexity in decision settings at work, conditions that will most likely impact on individual manager’s values. Finally, contemporary development of decision models has drawn largely on cognitive research into the processing of
information, memory use, and judgment-making, and has generally failed to take account of the more emotional, or values-oriented aspects of human decision behaviour in the twenty-first century world of work.

3.5.2 Decision Makers’ Limitations

Unstructured problems found in the workplace can demand information handling and decision-making of an extremely complex type. Traditional decision models were predicated on the many assumptions surrounding the rational man making decisions, assumptions which have been found to be largely unworkable (Simon, 1978). In turn, behavioural decision theory, and the models based on use of the theory, such as the Administrative Model, have been criticised as being overly-descriptive, and based on questionable assumptions which don’t always hold up in the workplace. Behavioural decision-making has been criticised as placing too great an emphasis on human decision-makers’ malfunctioning, and too great a focus on information handlers’ problems, rather than providing effective solutions (Taylor, 1984; Moorehead & Griffin, 1992). Meanwhile, it has been suggested that decision-makers’ limitations and the complexity of the decision environment together may give rise to behaviours which are not even close to the decision behaviour approximated by many decision models (Simon, 1978).

Decision-makers’ behaviour has come to be viewed by researchers as a problem of social cognition, and to demand, therefore, cognitive models capable of explaining managers’ failures at decision-making. Little consideration has, however, been extended to alternative approaches which could take account of the more value-oriented, emotional aspects of human behaviour. Moreover, greater concern could be directed to the inadequacy of social cognition’s knowledge template, and related use of schema and automaticity, as possible explanations of biased decision behaviour. Few knowledge structure theorists seem to understand how such structures are formed, nor can they explain how they operate (Brewer & Treyers, 1981), nor indeed, how they may be changed.
3.5.3 Decision Models’ Excessive Reliance on Statistical Probabilities and Utility Theory

Decision theories underpinning many decision models presume that individuals will strive to maximise their utility (desirability), and decision outcomes can be determined through statistical probabilities (Ajzen, 1996). Behavioural decisions, like choices between alternatives, are considered probabilistic, with utility maximisation held to be an essential predictor of likely decision behaviour. Meanwhile, Slovic et al. (1988) in describing the decision-makers’ actions, suggest that people should take close account of their worlds when considering the probabilities associated with different states of those worlds, and the subjective values associated with their potential outcomes. This view clearly has decision-makers operating as statisticians, and is at odds with research reporting decision-makers’ poor on-line computational abilities (Dawes, 1998).

Statistical models of probability have been found to provide only limited information about the processes underlying individuals’ judgments and decision-making (Ajzen 1996). Meanwhile, some of the many assumptions underpinning utility theory include those of people holding well-defined preferences between decisions’ potential outcomes (Slovic, et al., 1988). For example, Shafir (1993), in researching the decision-making field, failed to find support for many decision models’ assumptions, and expressed disappointment in finding that people’s choice or rejection of alternatives is often merely coincidental. Another assumption fundamental to much decision theory, and hence model design, is that individuals can determine the likely future outcomes of decision alternatives. Research suggests to the contrary, with individual decision-makers having limited cognitive capabilities and therefore facing considerable difficulty in making systematic use of information (March, 1978). Despite the descriptive limitations associated with utility maximisation and statistical determination of likely future decision outcomes, it has been claimed that they will likely continue to form the basis of much applied decision-making theory and model development (Slovic et al., 1988).
3.5.4 Decision Makers’ Limited Information Processing Capabilities

Human information processing, it has been posited, is guided not so much by statistical calculus but rather heuristics, or rules of thumb (Tversky & Kahneman, 1974). Individuals are said to make use of mental short-cuts which often lead one along the decision-making path to systematic biases and decision errors (Kahneman & Tversky, 1973). Given the consequences of alternatives generally being future-centred, and residing outside the individuals’ limited information-handling capabilities, decision-making processes have come to be considered by many as non-rational. People, it has been posited, can have great difficulty assessing their own likes and dislikes, and hence have difficulty formulating future preferences (Fischoff, Slovic & Lichenstein, 1980; Kahnemann & Snell, 1990). Meanwhile, March (1994) describes the many human information processing problems as including: difficulties of attention, memory, comprehension, editing, and composition. Decision-makers, it has been posited, “will see what that want to see”…. “by using stereotypes to infer non-observables from observables” (March, 1994, pp. 8-12)

Slovic and Lichenstein (1977), meanwhile, concluded that people have difficulty making systematic use of information, and, in attempting to reduce cognitive effort, resort to simplified strategies that cause them to neglect or misuse relevant information. Meanwhile, heuristics have been found to easily lead to biased judgments (Lichenstein, Slovic, Fischoff, Layman, & Combs, 1978), with research describing the ease with which people form preferences around simple decisions, and the difficulties they face in more complex situations (Slovic et al., 1988). Further, it has been found that the more unique and complex the decision-making situation, the more likely the individual’s values will be impacted by the process (Fischoff et al., 1980). There has, however, been a general reluctance on the part of researchers to consider the more emotional aspects of human behaviour in decision-making in decision theory and design. Moreover, assumptions about objective rational decision-makers’ abilities to foretell future events, maximise outcomes, and operate within bounded rationality, have failed to take account of the more pragmatic, time-constrained, value-oriented aspects associated with decision-making. Indeed, these
requirements on human behaviour are typical of those confronting practicing managers in their twenty-first century Australian workplaces.

Many limitations have come to be associated with decision-makers’ information processing abilities. Criticism has been particularly levelled at the decision-maker’s inability to conduct, online, the complex statistical analysis necessary for anticipating likely future outcomes, and overall failure to maximise utility in their judgment-making. These criticisms, when taken together, call for more relevant, and reasonable, user-friendly decision models to enable human information processing problems to be resolved. Further, the assumptions on which many decision models have been based are said to be unrealistic, with the widespread use of utility theory and statistics underpinning model design deemed not to fit well with the real world of management practice. Meanwhile, social cognition has sought to explain the many limitations associated with managers’ information processing in decision-making. Indeed, the use of knowledge structures, with their flawed information processing capabilities, underpins much research into an individual’s use of cognitive schemas - a line of research which has failed to take into account managers’ more tacit preferences, and provide an explanation of their more value-oriented approaches to work.

3.5.5 Heuristics in Decision Behaviour

Slovic and Lichenstein (1971) conclude that many people have difficulty making systematic use of information, and have a tendency to use simplifying strategies which cause them to neglect, or misuse, relevant information. Indeed, a great deal of empirical research has led to the conclusion that humans are limited in their judgment–making, and that biases and errors flow naturally from these limitations (Ajzen, 1996). Moreover, it has been generally agreed that decision theorists’ use of utility theory, and statistics in models, have largely failed to describe the processes underlying individuals’ judgments and decision-making processes. Tversky and Kahneman (1974) support this assertion through their studies into judgment and decision-making, by concluding that people don’t use statistical methods in their decision formation, but rather a variety of simple intuitive
heuristics, or rules of thumb. Heuristics can be considered useful ways for the individual to deal with information and make decisions while providing mental short-cuts, decision-making processes which unfortunately can carry systematic biases and errors.

Social cognition researchers investigating human information processing have provided managers with descriptions of heuristic-based processes, ranging between simple heuristics and more effortful consideration of individuating information (Fiske & Neuberg, 1990). Researchers consider heuristic processing of information to be of particular interest in the biasing of information arising from an individual’s use of stored data (Chaiken et al., 1989). Indeed, a multitude of cognitive biases have come to be associated with human information processing, which suggests that a great deal of human judgment-making is intuitive rather than thoroughly reasoned.

Importantly, authoritative decision researchers maintain that people making intuitive predictions tend to violate normative decision principles, in ways attributable to heuristics, or biases, and have gone on to explain that many biases committed by individual decision-makers are made through their use of judgmental heuristics (Tversky and Kahneman, 1974). Examples of two of these heuristics, or cognitive shortcuts, have been identified as anchoring, and availability. The anchoring heuristic serves to explain how individuals can misjudge the probability of conjunctive and disjunctive events (Bar-Hillel, 1973), while the availability heuristic is characterised by events being judged more likely to happen if easy for the individual to imagine or recall (Tversky & Kahneman, 1973).

Bruner, Goodnow and Austin (1956) earlier concluded that people undertaking tasks can become so cognitively strained that they try to reduce their load by constructing simplification strategies. It has further been posited that cognitive limitations in decision-making can force a person to construct simplified models of problems. An example of problem situation simplification can be found in individuals biasing their decisions by considering themselves less vulnerable than others to negative outcomes. In self-sealing
form, the individual, on following these simplifications, has been found to finally behave rationally towards the simplified model (Slovic, Lichtenstein & Fischoff, 1988).

Much social cognition research holds that cognitive biases, or heuristics, are central to stereotype usage, biased decision-making, and ineffective information processing. Heuristics appear, however, to be under-researched, and treated in research literature as cognitive glitches in human decision-making processes - imperfections which are said to stem from the individual’s idiosyncratic, and often sloppy, information processing. Research into biased decisions, it would seem, needs to be less concerned with the decision-makers’ imperfect cognitive functioning, and perhaps better applied to identifying the nature of biases, and their causes, in different decision-making processes, and decision contexts. Research, it is suggested, could be better devoted to identifying the processes underpinning managers’ judgment-making and on-line processing activities while taking account of the context, or environment, within which they make their decisions. There is clearly a need to expand on existing research by identifying, and clarifying, the plethora of often competing explanations describing the biases associated with heuristic information processing. Exploration of the effect of individual differences in information processing on individual judgments, and evaluation of colleagues, would seem to be a useful way of identifying managers’ biases by way of a method other than rational decision behaviour.

3.6 Biased Judgments in Decision-making

Social cognition contends that people make systematic use of information in forming impressions, and in their rational judgment-making about people. It has been established, however, that people can have a difficult time making systematic use of information, and will reduce their cognitive effort by resorting to simplifying strategies (Kahneman & Tversky, 1973). Ajzen (1996) contends that factors which are unconscious and irrational, while under extremes of cognitive load, will more likely lead to automatic processing of information. Human judgments can, however, be influenced by motivational factors which don’t seem relevant to the logical analyst.
It has been established, for example, that individuals in their information processing, invariably use a variety of intuitive heuristics, or rules of thumb, which produce biases and errors (Tversky & Kahneman, 1981). Researchers have directed their efforts to better understanding psychological processes producing these errors and biases, with individuals found, on balance, to be prone to making systematic errors rather than well-reasoned and rational judgments (Ajzen, 1996). Even more damaging to the concept of human rationality in decision-making, however, have been the distortions of judgment found to be created by an individual’s preferences and desires. Social cognition, through the use of information processing models, has not been able to adequately explain differences due to the idiosyncratic nature of individual’s judgments, nor able to contain the emotional genie that continues to escape from the stereotype, discrimination, decision-making research bottle.

A host of default biases have been found to influence judgment-making, with individuals, for example, found to assume what others say is true (Gilbert, 1991). This example of leniency bias similarly suggests that unfamiliar people found within an environment will be considered positively (Peeters & Czapinski, 1990). Motivational biases point to people preferring, under certain circumstances, to adopt the position of a liked source, while distancing themselves from a disliked source (Heider, 1958). People have been found, in the main, to use rules of thumb to protect themselves from appearing stupid, rules that mightn’t seem rational to expert researchers (Fischoff, 1983). Most importantly, negative information will be given more weight by individual problem-solvers over equivalent positive information (Baker & Petty, 1994). Examples of violations of behavioural decision rules committed by non-expert problem solvers include: violations of regularity; independence from irrelevant alternatives; transitivity; dominance; independence; and, anomalies due to framing (Dawes, 1998).

3.6.1 Biased Research into Biased Judgments

A great deal of research effort has been directed to explaining decision-making behaviour in terms of human failure to adhere to models. Biases in human decision
behaviour are given as possible explanations for the failure of decision models to adequately explain human judgments and decisions. Along the way, researchers have identified a multitude of cognitive biases associated with human judgment-making, biases which appear to support an intuitive, rather than a reasoned, approach on the individual’s part, and are prone to systematic error. It has been suggested, however, that these cognitive biases may be more apparent than real (Swann, 1984). Some of the difficulties in confirming these biases could include the lack of external validity of the psychological laboratory environments in which the decision errors and biases have been documented, and the paucity of real world judgment-making situations which formal models of decision-making are able to describe. Further, available information is said to be often biased or incomplete, with cognitive biases found to disappear when situations are structured to make their relevance apparent (Kruglanski & Ajzen, 1983).

It has been posited that human judgment in the real world is confined less by cognitive limitations than by time, motivation, or completeness of information. One decision theorist suggests that accepted models of inference should be considered irrational, unrealistic, intuitive, and largely inappropriate for decision-making in the contemporary world of work (Ajzen, 1996). Further, the current practice of building decision models exclusively around decision-maker’s cognitive constructs could be considered flawed, as the cognitive frameworks associated with formal contemporary decision models have been found to constitute poor criteria for evaluating intuitive inferences (Nisbett, Krantz, Jepson, & Kunda, 1983). Clearly, decision models are required which take greater account of the complex decision-making challenges faced by contemporary managers in increasingly more emotional workplaces.

The considerable body of research associated with biases and errors in managers’ heuristic processing of information has been largely carried out in the laboratory or classroom, with a great deal of research into biased decision-making limited to student-based research. Further, considerable empirical research emphasises students’ rationality in making extremely risky gambling-related decisions which are only loosely connected with decision-making in the world of work they strive to explain. A great deal of research into
heuristics in decision-making seems limited to the realm of the theoretical. Schwarz (2000) holds that decision-makers’ apparently irrational, intuitive judgment-making have stronger connections to human emotions than to decision-maker’s assumed rationality.

Much stereotype, discrimination and decision theory has been developed around an individual’s biased decision-making. Research outcomes, largely based on laboratory work, have devoted little research to understanding biases in decision processes among practising managers as a means of removing biased workplace decisions. Given social psychology’s emphasis on laboratory-based research, much decision research has failed to be accepted by practising managers. Contemporary research into stereotyping, discrimination, and decision-making has largely remained the preserve of the research community.

3.7 Changes to Workplace Decision-making

The twentieth century world of work has brought with it new ways of working and increased responsibilities for those managing people in the workplace, as outlined in Chapters one and two. Changes to the work environments within which managers’ decision-making operate, clearly require a better-integrated, more broadly-based approach in the design of decision models. Indeed, the grafting of cognitive theories onto traditional decision models, predicated on rational maximising of utility, and choice behaviour based on statistical theories, has been found cumbersome and increasingly irrelevant to the needs of twenty-first century practising managers. Decision model construction clearly needs to migrate from an essentially statistical framework, on which many unrealistic behavioural assumptions are currently based, towards individual decision-making behaviour which better reflects an understanding of both cognition and affect in decision situations. Further, there is a requirement for research to provide an improved explanation of managers’ judgment-making beyond the currently uncertain environment which uses schema-based, knowledge structure models as a means of explaining individual’s information processing and associated decision-making.
Chapter Four will introduce the concept of stereotypes and stereotyping, along with describing the nature of stereotypes and prejudice as they might apply to managers’ workplace discriminatory decisions. The formation and use of stereotypes and prejudice in individual’s stereotyping of those in their work communities will be outlined, together with the ways in which stereotypes may interact with managers’ personnel decision-making. The subsequent chapter will introduce the theory and method of choice for this thesis, Personal Construct theory (PCT) (Kelly, 1955) with its rich research-based tradition in business and industry, and outline the application of PCT to stereotype and discrimination research. Particular reference will be paid to how such an approach counterbalances many of the current limitations found in research into stereotyping and decision-making.
CHAPTER 4

STEREOTYPES, PREJUDICE, AND DISCRIMINATION

IN DECISION-MAKING
This chapter sets out to describe the stereotyping process, the nature and function of stereotypes, prejudices, and their relationship with decision-making. The importance of managers’ beliefs and emotion to their stereotyping will be explored, as will the role of prejudice in decision-making. Evidence will also be provided on the ways in which stereotyping and prejudice contribute to managers’ discriminatory decisions. The intractable nature of stereotyping and prejudice associated with decision-making will be outlined, as will the many challenges associated with established research into stereotyping and prejudice. An alternative research approach to that traditionally applied to stereotype and prejudice research will be introduced.

4.1 Stereotypes, Some Introductory Definitions

A stereotype has been described as an inference drawn from assigning an individual to a particular category, with the stereotyping process based on the use of images of people or events held in one’s mind (Brown, 1995). Stereotyping is held to be essentially a cognitive activity using picto-literal prototypes, like pictures in a person’s head, with stereotypes of a given group said to be a mixture of favourable and unfavourable components and generalisations, or over-generalisations (Bierhoff, 1989). Stereotypes have been described by some as the categories people use to differentiate between others, according to their membership of social groups (Borgida, Locksley & Brekke, 1981). Social cognition researchers, meanwhile, define stereotypes as “individual beliefs about person attributes, usually personality traits, but also often behaviours of a group of people” (Leyens 1994, p. 10). Social cognition’s continuing attempts to identify stereotype formation and utility have, however, tended to emphasise the cognitive processing of information, and individual use of information processing and memory (Fiske & Neuberg, 1990).

Many definitions have come to be associated with the phenomenon of stereotyping, with cognitive researchers’ efforts leading to a plethora of definitions, and a vast research literature on stereotypes and stereotyping. Miller (1982) notes that the definitions of stereotypes are about as numerous and diverse as the authors who have given life to them,
and that there are both central similarities, and essential differences shared by the many definitions of stereotypes. Fiske and Neuberg (1990), in describing stereotype research over the past 25 years, posit that the role of cognitive mechanisms in biased judgment-making has been well documented. This assertion does not, however, remove the general lack of agreement operating between researchers on how stereotypes operate, and how they may relate to an individual’s judgments. Stereotypes are identified in this study according to the dictionary definition, “An image or idea that has become fixed through being widely held” (The Australian Concise Oxford Dictionary, 2004, p.1400), and the stereotyping research work of Fransella (1977). The definition adopted for this study views stereotypes as: Those commonly held, extremely rated constructs, derived through managers’ construing of Self and their colleagues’ age-gender related characteristics, which managers have assigned to themselves and different categories of their colleagues.

A more extensive description of this definition of stereotypes and the stereotyping process will be provided in Chapter five together with the methodology used to identify managers’ stereotypes and their relation to employment decision-making.

4.1.1 Stereotypes and Emotion

The role of emotion, or affect, in the stereotyping, judgment-making processes, has not been as well researched as the cognitive, with affect, or the feeling state associated with cognition, less well-established in stereotype formation and application. Brown (1992) proposes that emotions can play an important role in stereotype formation. while Jussim, Nelson, Manis & Soffin (1995) hold that biased perceptions don’t result from cognitive factors alone, with people holding strong affective predispositions towards certain social groups found to be prejudiced in their judgments of others. The more extreme of emotions associated with prejudice hold a particularly ambiguous place in stereotype research. Stereotypes, according to some authors, are the cognitive components of prejudice (Bierhoff, 1989; Brown, 1995), with Fiske (1998) differentiating between the roles of stereotyping and prejudice in information processing by describing stereotypes as
the more cognitive component of the process, and prejudice as the more affective component of category-based reactions.

Early researchers into social psychology described individuals’ negative category-based reactions, or stereotyping, in terms of prejudice “according to preconceived feelings, opinions or attitudes held about a group or an individual according to their age, gender, or social class” (Holmes, 1972, p.735). For some, there is little doubt that prejudice can play an important part in stereotyping processes (Brown, 1995; Pickering, 2001). Further, research has determined that affective states, or moods, can influence an individual’s information processing and, in turn, their judgment-making (Schwarz, 2000). Limited research attention has, however, been directed to the role of prejudice in stereotype research, with social psychology largely taking a cognitive approach to explaining stereotypes and excluding emotion from their research efforts. It has been suggested that despite the close interplay between feeling, thinking and judgment-making, little collaboration exists between empirical researchers investigating the different fields (Schwarz, 2000).

4.2 Stereotypes and Stereotyping, Some Different Perspectives

Research has traditionally viewed stereotypes as cognitive shortcomings, by considering them to be derived from exaggerated and oversimplified beliefs, equivalent to prejudice (Allport, 1954). Others have posited that stereotypes can have a negative effect, and even lead to distorted and hostile judgments of people, or groups of people (Campbell, 1967), with Blackwell et al. (2003), for example, regarding stereotypes as being abhorrent or pathological in nature. From another standpoint, research has considered stereotypes as essentially positive, while the prejudice term is used sparingly to explain an individual’s negative or derogatory judgments (Aboud, 1988). For some, stereotyping is considered to be necessary (Hamilton, 1981), while for others, stereotypes represent an individual’s striving to reduce complexity, although stereotyping can be regarded as costly and inefficient (Miller, 1982). Stereotypes, while sometimes containing a grain of truth, are held, in the main, to be inaccurate and have the potential to bias information (Plous, 2003).
Devine (1989), on the other hand, holds the view that stereotypes are spontaneous and are processed automatically as matter of course, largely outside the individual’s control while prejudice, on the other hand, is held to be more a function of personal beliefs operating under cognitive control. Some writers from the social cognition field have come to the view that stereotypes are naturally-occurring, although frequently undesirable phenomena (Stangor, 1995; Fiske, 1998).

There have been considerable differences of opinion exhibited in stereotype research over the past 25 years. For example, some areas of stereotype research have been accused of de-emphasising the more negative aspects of stereotypes by parcelling out prejudice from their research (Augoustinos & Walker, 1998). There is an extremely critical view held by Pickering (2001) that researchers have attempted to sanitise the stereotype concept by removing the importance of prejudice from their research into stereotyping. The cognitive or individualist school stands accused of having Cleansed the stereotype construct by re-labelling them and placing greater emphasis on their more positive aspects, actions which have been described as dissociative, and said to have led to a distancing in research between the stereotype and prejudice constructs.

Other issues of difference in stereotype research emerging in the late twentieth century have surrounded the emphasis placed on the individual over the collective, in stressing the transmission and reproduction of stereotypes between individuals (Fiske & Neuberg, 1990). Stereotype researchers from the collective school have stressed the need for greater concern to be paid to content at a collective, rather than individual level, with stereotypes based on inter-individual consensus (Tajfel, 1981). Collectivist stereotype researchers, meanwhile, continue to maintain that consensual, and not individual, stereotypes stem from biased interpretation of events (Augoustinos & Walker, 1998). It has been further suggested that stereotypes serve groups by offering culturally-accepted explanations of events, justifying group actions, and providing groups with a means of positively differentiating between themselves and others (Augoustinos & Walker, 1998). To support this view, Tajfel, (1981) suggests that stereotypes developed at the collective level usefully provide information on people and social events. Some stereotype
researchers argue that stereotypes can affect an individual’s social judgments, while others maintain that, in the real world, people hold information in their social stereotypes on others, which may not influence their individual judgments (Locksley, Borgida, Brekke & Hepburn 1980). There seems to be general agreement, however, surrounding the views that stereotypes are essentially a product of cognitive processes (Fiske, 1998; Stangor, 2000), and that stereotypes may be acquired through data-driven attention and recall of information, or gained through inter-group contact (Langor & Imber, 1980).

The cognitive research paradigm, extending over the past 25 years, has been widely applied to the investigation of stereotype formation, and follows on from nearly 50 years of earlier research in the field. A great deal of this considerable amount of stereotype research has been devoted to identifying the irrational aspects of stereotyping. Division has started to develop, however, around researchers’ treatment of emotion, or affect, in stereotype research. Further, socio-cultural proponents have taken issue with many of social cognition’s research-based assertions on how stereotypes are formed. It is important, therefore, to take account of the fundamental differences dividing various fields of stereotype research. The current study strives to take account of affect, or emotions, together with cognition in managers’ perceptions and judgment-making on colleagues. Moreover, the study’s research emphasis will be directed to using managers’ own terms in establishing their meaning-making in reporting stereotype formation and application. The intention, overall, is to move discussion on stereotyping and biased decision-making away from the essentially cognitive process-driven view, towards a more combined cognitive and emotional one in identifying managers’ stereotypes and related discriminatory decisions.

4.2.1 How Do Stereotypes Operate?

Stereotypes can provide people with useful information on others and assist in the process of understanding and in predicting the behaviours of others. An individual can make use of their knowledge of social category memberships to draw inferences about those they meet (Oakes & Turner, 1990). It becomes possible for a person to use their
beliefs about social groups and human features such as age, race, or gender, to sort one another into categories and explain others’ behaviour a great deal more rapidly than otherwise might be the case (McCann, 1985). Importantly, people have been found able to process stereotypic information faster than non-stereotypic information. The process of stereotyping has been found to be carried out more readily when use is made of a social category such as age, or gender, or race (Fiske, 1991).

Stereotypes, it is claimed, can colour peoples’ perceptions and judgments of one another (Sagar & Schofield, 1980). Leyens et al. (1994, p. 205) posit that: “stereotypes are peoples’ naïve theories about groups, which facilitate social perception and interaction”. It has been suggested that people cannot get by without their stereotypes. It has been hypothesised that stereotypes typically reflect the social roles in which people are reported, with gender stereotypes operating as explanatory fictions which assume differences between men and women in different roles (Augoustinos & Walker, 1998). People may hold both positive and negative stereotypes of group members which describe them differentially. The same person may be simultaneously perceived as both an energetic worker and a lazy one. An individual worker can be viewed as reliable, skilled and valuable, while also being perceived as holding an array of negative characteristics (Muir & Slack-Smith, 2004).

Stereotypes, according to their stereotypic content, can operate to advantage or disadvantage particular social groups. Men can be perceived, for example, as more influential, while females are viewed as more easily influenced (Taylor, Fiske, Etcoff, & Ruderman, 1978). Individuals, to stereotype others, will require commonly held beliefs about category membership, with members of that category expected to share the attributes embedded in the given stereotype (Leyen et al., 1994). Most importantly, for those in the stereotyped category, the stereotyping process is reductionist. The process can lead, for example, to older females’ behaviour being perceived as readily interchangeable with others from that age-gender category (Plous, 2003). Enteman (2003) considers stereotyping as capable of converting real people into artificial ones by treating them as
proxies of pre-judged group members, with individuals being denied humanity through tenuous generalisation.

Given that no stereotype can be entirely true of all category members, stereotyping can be most unfair to some, and lead to exaggerated expectation of behaviour (Stangor, 1995). Hilton and von Hippel (1996) maintain that stereotypes based on relatively enduring characteristics of the person, such as age, gender, ethnicity, or religion, have enormous potential for error. People, it has been posited, readily form stereotypes based on others’ age-gender, race, ethnicity, or their jobs of work (Stangor, 2000), with a great deal of stereotyping based on distinctive stimuli such as language and status. Research has confirmed the part that emotion and motivation play in stereotyping (Yzerbyt, Schadron, Leyens & Rocher, 1994; Schwarz, 2000).

4.2.2 Social Stereotypes: How Deep Rooted Can Managers’ Biased Perceptions Become?

Five decades of research have revealed the deep-rooted nature of stereotypes and prejudice in Western society, with stereotype research associating an individual’s readiness to automatically categorise others as strongly related to their cognitive orientations (Fiske, 1998). This readiness of use of the stereotyping process has been attributed to the propensity for individuals to categorise one another. Social categorisation, as a naturally-occurring attempt at sense making, can cause people, in their subjective use of information, to stereotype one another. This social categorisation process is said to be fast, automatic, and, when mixed with stereotyping or prejudicial judgment, capable of creating long-lasting discriminatory action (Plous, 2003). Stereotypes, while easy to set in place through the process of social categorisation, can, however, become intractable and hard to change. Beilby and Baron (1986) argue that the stereotypes driving an individual’s decision choices are resistant to change. Further, Crocker, Fiske and Taylor (1984) posit that gender-based stereotypes may continue to operate while ever managers’ knowledge structures remain resistant to change. On the other hand, some maintain that stereotype-driven decisions can be changed (Weber & Crocker, 1983: Morrison, 1993); with research
showing that altering an information environment can change decision structures (Holyoak & Gordon, 1984).

Meanwhile, other researchers have suggested that managers’ information processing biases can be reduced through intensive training, or through changes to formal job descriptions and decision reward systems (Lord, Pepper & Thompson, 1980). Still others posit that job applicant stereotyping and related discriminatory decision-making can be reduced through provision of more relevant applicant information (Perry, 1997). Some contend that one way of reducing stereotyping could be by way of people using a greater degree of individuation in their judgment-making (Tetlock, 1992; Brown, 1995).

4.3 Dual Standards Associated with the Stereotypes That People Hold

Researchers have found the imagery surrounding age and aging holds powerful myths, and, through influence on discriminatory decisions, to impact negatively on middle-aged and older people’s lives (Smythe, 2003). It has been suggested, that at the core of age discrimination, there is a dread of becoming powerless, of fear set in place in Western society during the late nineteenth century (Williamson, 1984). As a consequence, positive terms can be found attached to younger people, while a negative terminology has grown up around older people in Western society (Gray & McGregor, 2003). An example of the duality of meaning associated with the age and gender processes can be found in society’s lowered perceptions of mature-aged females’ attractiveness, while assigning more positive views to older males by way of their increased desirability. There is clearly a double standard surrounding age and aging constructs in Western society, with old connoting incompetence or lack of attraction, while young can suggest competence, vitality, or good health (Pratt & Norris, 1984). It is important, therefore, to establish the relationships between the images managers hold in their heads on mature-age workers, and the discriminatory actions that might follow on from their use of those images.
4.3.1 Stereotyping in the Workplace

Research into workplace stereotyping has found that managers holding power over subordinates in the workplace are more likely to stereotype those subordinates (Fiske, 1993), actions which point to the importance of understanding workplace structure and context in stereotype research. Further, managers who know the views of people to whom they are accountable have been found to process their decisions heuristically and stereotype others more frequently (Fiske & Neuberg, 1990). Researchers have found, for example, that managers involved in selection processes are more likely to stereotype applicants in situations when limited information is available on those applying for jobs (Finkelstein et al., 1995). These findings could carry particular implications for stereotype and discrimination research into managers making promotion or training decisions on colleagues.

Managers’ propensity to stereotype colleagues could perhaps be reduced in selection decision-making situations by making available more relevant job-related information to recruiters and those involved in hiring decisions. Kunda and Thagard (1996), meanwhile, confirm that stereotypes can have considerable effect on managers’ behavioural predictions on applicants in selection decision situations. On the other hand, performance appraisals or training evaluations are more likely to involve causal attribution, and hence less stereotyping effect. There are clearly differences in stereotyping effect on judgment-making across the employment cycle between selection, training, and promotion decisions.

In summary then, stereotypes can provide useful information on others through the categorising of people, or events. This process can save individuals considerable cognitive effort, and allow beliefs on category membership to explain others’ behaviour by virtue of stereotypes being capable of organising and simplifying an individual’s environment. Stereotypes can, however, colour peoples’ perceptions and judgments of one another, particularly in their judgment-making of characteristics associated with different categories. The stereotyping process, while potentially efficient of time and cognitive
resources, is generally reductionist in nature, and one which can render the behaviours expected of group members from a particular social category readily interchangeable. Limited availability of information on job applicants can, for example, lead to stereotyping of the applicant and, in turn, result in discriminatory decisions with the evaluator “filling in” missing information on applicants through the use of stereotypes of their age category. Older people who have been out of the workforce for a period, for example, are less likely to have up-to-date information on their work history, and more likely, therefore, to be stereotyped in selection decision situations. Stereotypes may be efficient of time and operate to help people make sense of their complex worlds, but, importantly, can lead to negative outcomes for some social categories.

Researchers have described age and gender-based stereotypes surrounding particular categories of people according to assumed differences operating between men and women (Augustinos & Walker, 1998; Gray & McGregor, 2003). Age-related stereotypes can operate in a similar way to other stereotypes, with the highly-valued older worker, for example, held to be loyal and hardworking, while also being slow to learn and unwilling to change. Highly valued older female workers, for example, can continue to be assigned negative attributes typically associated with poorly performing workers (Date-Bah, 1997). Moreover, in line with research, stereotypes may not necessarily be confined to a person’s beliefs in isolation, but stem from strong affective predispositions held towards a given category’s membership. On the other hand, stereotypes in the real world might not operate in the ways proposed by researchers. They may not influence individual judgment-making in quite the way proposed by different individual, or collective, schools of research. There is little agreement between researchers on how a stereotype should be defined, and in turn, how stereotyping might operate in industry and commercial contexts. There is, similarly, limited understanding among stereotype researchers on the processes underpinning stereotyping.
4.3.2 Age-Based Stereotyping in the Australian Workplace

Davis (1994) suggests that an individual’s age can lead to negative images being formed around them, with age constituting a major division in Australian society. Stereotypes of the old have come to describe them as being incompetent, or worse (Falconer & Rothman, 1994). Others describe older workers as being: slow, subject to prolonged illness-based absences, hard to train, and unwilling to change (Greller & Simpson, 1999, p.321). Little value is said to be attached to older, more experienced, workers in Australia, who are deemed to be generally less productive than their younger counterparts (Lansbury, 1981). Steinberg, Najman, McChesney-Clark and Mahon (1994) have, meanwhile, posited that older workers in Australia, while on the one hand prized for their workplace loyalty and attendance rates, on the other are considered less hardworking, ambitious, healthy, mentally alert, and overall not as creative as their younger counterparts. Young age profiling of jobs continues to persist in the banking, call-centre and marketing occupations in Australia, and to contribute to age-based discrimination (Murray & Syed, 2005). Indeed, an industry has grown up in Australia which markets information to staff recruiters based on stereotypical differences in behaviour associated with different age groups (McCrindle, 2006).

Curiously, much research into older workers’ on-job performance disproves much of the negative mythology surrounding their age-related category membership. Older workers have been found to demonstrate better attendance records, lower accident rates, and greater work reliability than other age groups of workers (Murray and Syed, 2005). Moreover, this group faces no serious decline in cognitive abilities until advanced age, (85 years or more), (Davies, Mathews & Wong, 1988). Despite having access to this information, some professions in Australia have been accused of holding codes of silence about the negative perceptions management holds of older workers, and the related career limitations facing mature-aged workers in organisations (Equal Opportunity Commission of South Australia, 2001). There are clearly gaps existing between research into the imagery associated with older workers’ performance levels and their treatment at work. Murray and Syed (2005) assign blame in this matter to the social imagery embedded in
commonly-held myths of older workers, which underpin the personnel processes operating in Australian workplaces. Complaints of discrimination of this type are well-supported by evidence of workplace discrimination earlier outlined in Chapter 2.

Clearly, considerable stereotype and discrimination research has yet to be carried out in the Australian workplace to address the paucity of work carried out in this area. Australia, in creating more equitable, and hence more productive, workplaces for the future, will have to ensure that managers become aware of the social and economic costs associated with age-based stereotyping operating in their workplaces. Given greater stereotype-discrimination research, the results could be translated into policies and procedures which help educate managers to cleanse their work environments of much age, and gender-related inequity embedded in accepted ways of relating to colleagues - a set of actions that should not be limited to private sector organisations alone, but also take account of the wider age and gender-based discriminatory activities apparently practiced in government, the armed forces, police services, the legal fraternity, media and the Australian community at large.

4.3.3 Interaction between Age and Gender Effect in Stereotypes Held On Jobs and Job Applicants

While stereotype research supports the role age and gender-based stereotypes play in individual workplace selection decisions (Finklestein et al., 1995), emphasis has moved from concentration on the individual being stereotyped to the interaction between stereotypes held on that person, and the job being applied for. Interest in the job has come to revolve around the age-gender type of the job with, for example, jobs being gender typed, or age typed, or carrying both gender and age effects according to perceptions held on the current, or previous, incumbent. Cognitive researchers have suggested that the job as well as the applicant may be stereotyped and together play a role in age or gender-based judgments, with job stereotypes strongly associated with particular age or gender categories of applicants (Cleveland & Hollman, 1990). Meanwhile, Perry et al., (1996) found that age-congruence effects (the applicant’s chronological age relative to the age
related characteristics associated with the job) were stronger when those evaluating applicants’ job suitability were biased against older workers.

Other researchers have, meanwhile, suggested that job stereotypes could include both gender and age-associated information in applicant matching (Georgeff & Morris, 1996). This line of research points to gender and age being central features of job stereotypes, to the extent that applicant age information might be processed independently and then matched to managers’ job stereotypes. Perry et al., (1996) claim that applicant age-gender, together with other applicant trait information, can be matched to job incumbent age-gender related behaviours, and job stereotypes. Further, it has been held that where gender and age stereotypes are jointly stored in applicant and job stereotypes, a single age-gender cognitive framework might be required to better understand negative discrimination in the workplace (Perry, 1997). It has been concluded however that more research is required in this area.

Perry and Bourhis (1997) posited that age and gender might interact in jointly contributing to the stereotyping process and giving rise to age-gender stereotypes. They further held that a job applicant’s age may have a greater effect on employment decision-making than gender. Stangor, Lynch, Duan and Glass (1992), have meanwhile posited that there is some overlap between the age and gender-related stereotyping processes involved in gender and age discrimination. They hold that individuals may represent gender and age information independently, or jointly (older female, younger male), in their stereotypes. The joint storage of age and gender in the stereotype content held on applicants, they maintain, could have important implications for decision-making in matching the individual applicant and the job (Perry, 1994). However, these areas have not been well researched, with only limited research having been directed towards understanding the cognitive processes underlying similarities between age and gender and discrimination (Perry, 1997).

Chapter 2 outlined the paucity of research carried out into age over gender-based discrimination in the workplace, with much research effort carried out using cognitive
approaches. Perry (1994), in researching access (job selection) discrimination claimed that job-irrelevant information such as age or gender, may significantly contribute to discrimination in hiring decisions on women and older applicants. Cleveland and Hollman, (1991) had, meanwhile, contended that gender and age discrimination may occur as the result of similar cognitive processes. Perry (1997) went on to suggest that age and gender, discrimination research has relied on two conceptually different mechanisms (gender and age stereotypes), with independent treatment of age-gender biases claimed to provide only a fragmented appreciation of perceptions held of current job incumbents. Importantly, use of a methodology using an age-gender research framework, as introduced in Chapter 2, could go some way to rectifying this shortfall.

Some concern should, however, be attached to the limited amount of discrimination research which has, to date, relied largely on the concept of stereotyping to explain the discrimination process. Given the considerable lack of agreement in stereotype research circles on the nature of processes underpinning stereotype foundation and use, attempts at explaining discrimination in terms of stereotypes have been largely unsuccessful (Finklestein et al., 1995). Clearly, greater research effort has to be directed into gaining research agreement on how the stereotyping process operates, and identifying possible relations between stereotypes and discrimination processes as a means of better explaining their functioning. Moreover, research needs to be able to establish the processes underpinning both stereotyping and discriminatory decision-making, and their implications for different workplace settings.

4.4 Challenges Associated with Stereotyping and Discrimination Research

There has been criticism of the limited age and gender-based discrimination research carried out into job selection in the actual context of employment decision-making (Lin, Dobbins & Farh, 1992). A noticeable trend found in contemporary stereotype research studies has been the use of student raters, with very limited professional rater involvement (Singer & Sewell, 1989). Significant differences were found between student
and practicing managers’ ratings in discrimination research, results which brought into question those studies based on exclusive use of student raters. The use of methodologies based essentially on student samples have, however, been largely excused on the basis of the necessity to isolate causal factors and prevent possible confounding of variables. Questions continue, however, to surround research methodologies used to investigate stereotyping and discrimination (Finklestein et al., 1995). Considerable stereotype and discrimination research has been carried out using attitude questionnaires, bogus resumes, job application materials, videotapes, or transcripts of simulated interviews, and exercises and activities which do not reflect actual working environments.

Considerable gender discrimination research has been found to employ documentation unrelated to workplace selection practice while using simulated job interviews and naïve raters to assess hypothetical applicants in simulated employment contexts (Finklestein et al., 1995), with some field research results into discrimination criticised on the basis of questionable external validity (Dobbins & Farh, 1992). The outcome of much empirical discrimination research work has been a body of information which may not even be close to the practising managers’ decision-making environment. Clearly, research into discriminatory decision-making should have a more applied orientation and make better use of agreed-on, well-administered research methodologies. Stereotype and discrimination research could clearly benefit from the use of data from practising managers, operating in workplace contexts, as a means of developing more relevant and valid methodologies and models.

Given increases in reported age and gender-based discriminatory practices in staff selection and recruitment, there has grown a need for greater awareness of the effects stereotypes can have on discriminatory promotion, and training decision-making. It can be argued that stereotype and discrimination research into selection activities has largely been carried out to the exclusion of promotion and training decision processes. There is clearly an urgent need for increased research into biased age-based promotion and training decision-making. Meanwhile, Perry (1997) complains of an overall lack of understanding of work-related discriminatory beliefs and actions among managers, and calls for greater
understanding of the demand characteristics associated with discrimination at work. Researchers agree on the need to expand on the gender-based stereotype and discrimination research carried out to date, by building on age-related discrimination research, but also to broaden the employment areas investigated beyond selection, to include the wider employment cycle.

4.5 Trends in Stereotype, Discrimination, And Decision Research

Early research into gender discrimination explored negative attitudes and stereotypes associated with women relative to men (Kirchner & Dunnette, 1954). Later research into age and gender-based stereotyping has, meanwhile, concentrated on perceptions of women relative to men, and older workers relative to younger ones (Broverman, Broverman, Clarkson, Rosenkratz & Vogel, 1970). Among the first to examine the effects of managers’ age-based stereotyping on workers, Rosen and Jerdee, (1976) found that stereotyping of older workers led to negative employment outcomes for those employees. Later research in this tradition explored employment contexts in which applicant age stereotypes were more likely to operate, and while not explicitly measuring job-age type, researchers reported a significant main effect of applicant age, with older applicants evaluated less favourably than younger ones (Avolio & Barrett, 1987; Singer & Sewell, 1989).

Research into managers’ beliefs about older workers relative to younger ones has traditionally focused on chronological factors to the exclusion of organisational-level variables. Importantly, complex decision-making environments have been found to cause individuals to discriminate more on the basis of age than gender (Perry, 1997). Meanwhile, considerable research has concentrated on raters’ and job applicants’ gender-related characteristics, particularly with regards access, or selection related discrimination (Cleveland & Hollman, 1991). Meanwhile, Perry (1997) has attributed increased levels of discrimination to both age and gender effects in employment decisions.
Research into discrimination in the workplace clearly needs to take account of both age and gender related biases in workplace discrimination at different stages of the employment cycle, along with the contexts within which they operate. There is little doubt that considerable additional research will be required, if both the age variable and the employment decision areas of promotion and training are to catch up with gender discrimination research into biased selection processes. The line of research pursued in this study is based on the view that joint age-gender discrimination research is needed to replace the greater emphasis placed on the dichotomous gender variable (Male or Female), over the more continuous age variable (20 to 50 years of age). Further, increased age-based stereotype and discrimination research might overcome the current paucity of age-related research carried out.

Research has, however, not well-identified the interaction between age and gender-related characteristics of managers’ discrimination against older workers, nor the age/gender of those being discriminated against. While research results suggest that younger people are more discriminatory in their decision-making than their older colleagues, substantial differences are likely to exist within and between age and gender classes (Perry, 1997). Further, managers’ stereotyping, and the relations between those stereotypes and processes underpinning their judgment-making, are not well understood, and need further investigation. Chapter 2 introduced the suggested use of a joint age-gender research framework to build on established gender related research. The use of such a research framework has been outlined again in Section 4.4, above, as a means of gaining a wider understanding of managers’ stereotypes and judgment-making processes - understanding which could better establish, and explain, managers’ stereotype, judgment-making and decision processes over the use of existing cognitive models of stereotyping and discriminatory decision-making.

There is clearly a need to provide greater insights into the stereotyping, discrimination, and decision-making processes associated with managing people at work. Moreover, it needs to be established whether managers’ stereotypes are related to their discriminatory decisions. It is clear that methodology is required which will enable these
processes to be identified among managers and their colleagues operating in workplaces. Chapter five will outline how these outcomes can be achieved.

4.6 Emotion, Cognition in Stereotyping and Decision-making

Societal culture is said to have long been divided by the view of man separated into thinking and feeling dimensions. In turn, psychology has been interpreted as developing not into a unified science but rather two psychologies: one, cognitive psychology, the other a psychology of emotion (Bannister, 2003). This dichotomy has become epitomised by a duality in contrasting feeling and thinking, brain versus heart, or rationality and emotion. There has developed what Bannister (2003, p.63) terms “an elaborate language of feeling and an elaborate language of thinking, with adherence to this bi-polarity ultimately standing in the way of understanding the whole person”.

The study of emotion in stereotype and decision-making has been overtaken by cognitive research, and become of less interest to researchers who are more interested in the cognitive aspects of stereotyping and decision models. While there is a large body of research confirming the profound influence that emotion, or moods, can have on cognitive processes (Forgas, 1995; Schwarz & Clore, 1996), the relationships between cognition, emotion, stereotyping and discrimination remain not well understood. Moreover, opportunities for research to overcome this situation seem remote, given limited collaboration between those researching in the cognitive and emotional fields. Schwarz (2000, p.438), for example, in addressing the role of emotion in stereotype and discrimination research, complained of having to publish in specialised journals separate from researchers in outside, but related fields, thereby preventing him from being “exposed to work from the respective other field”.

Stangor, Sullivan & Ford, (1991) have suggested that an individual’s mood can influence their information processing such that those in a happy mood would most likely use a top down, or stereotype processing strategy, while those in a less happy mood would apply a systematic, bottom up approach. A great deal more research needs however to be
carried out into individual use of affect in stereotyping (Schwarz & Clore, 1996). Brown (1995) has, meanwhile, described the effects of emotional arousal on stereotype usage with people in anxiety-provoking social situations falling back on familiar, readily available stereotypes. Schwarz (1990) posited that differences in the ways individuals make use of stereotypes reflect individual’s thought processes being tuned to meet the requirements of the situation, signalled in part by their emotional states.

Mackie, Queller, Stressner, & Hamilton (1996), meanwhile, found that mood states, both positive and negative, affected people’s use of stereotypes, with heightened emotionality increasing the likelihood of stereotypical judgments. In the decision-making arena, an individual’s emotions have been found to influence their decisions while, in turn, the outcomes of their decision-making can influence the emotions they experience (Schwarz, 2000). Anticipated affect clearly plays a role in an individual’s decision-making with March (1978), earlier noting that all decisions involve predictions of future feelings. However, research suggests that an individual’s attempts to predict future feelings will be often unsuccessful and result in sub-optimal decisions (Lowenstein & Schkade, 1999).

Research on the retrospective assessment of past affective episodes, suggests that individuals, by tending to neglect the duration of the event, fail to take full account of their actual affective experiences, neglect of which has been found to result in sub-optimal decision-making (Fredrickson & Kahnemann, 1993). The area of anticipated affect and relation to decision-making remains under-researched, with retrospective affect not faring much better in the research stakes. Recent research findings in this area, however, have claimed to hold the promise of future improvements in understanding decision-making processes (Schwarz, 2000). Clearly, future stereotype research needs to place greater importance on managers’ use of emotions in their forming of judgments on colleagues, and relevance of emotion and cognition to the stereotyping and discrimination processes.

Individual judgment can be influenced by motivational factors remote from the reach of logical analysis. Cognitive models can, therefore, find it difficult to measure the effects of emotion on stereotyping and associated discrimination, as judgment-making is
largely intuitive. In this regard, identification of an individual’s use of emotion and cognition in their judgment-making and stereotype formation could benefit from adoption of a research methodology which considers both cognitive and affective dimensions of human information processing. It is of interest that Bannister (2003) advocates the use of Personal Construct Theory (Kelly, 1955), as a meta-theory in taking the total experience of the person into consideration. Use of this theory can allow individuals’ emotions and thoughts to be treated as integral parts of a dynamic process of change in overcoming distinctions between cognition and affect. Kelly (1955), in formulating his theory, adopted an alternative approach to interpreting experience over the more classical psychological treatments of cognition and emotion (Crittenden, 1991). Personal Construct Theory (Kelly, 1955) would appear to provide a research methodology capable of addressing well the role of emotion, cognition in stereotyping, and discrimination, while many alternative theories of psychology continue to treat emotion and cognition as separate and different entities. This will be discussed further in Chapter 5.

4.7 The Role of Prejudice in Stereotyping and Decision-making

Section 4.6, above, describes the under-researched nature of emotion in stereotyping and decision-making. Prejudice, as a social phenomenon, has similarly been overtaken over the past 25 years by the cognitive revolution’s all-consuming research interest in stereotypes, and has remained, therefore, largely under-researched (Fiske, 1998). Research, essentially cognitive in nature, has tended to explain biased judgments in terms of accepted cognitive processes involved in stereotyping, rather than by way of more irrational or emotionally-based sources (Fiske & Neuberg, 1990). Some researchers have emphasised social psychology’s greater focus on levels of affect leading to an individuals’ prejudices (Mackie et al., 1996). Researchers have found, for example, that measures of emotion are better predictors of evaluation and discrimination than cognitive measures, and concluded, therefore, that stereotypes consistently under-perform emotions in predicting evaluations of, and behaviour towards, out group members (Dovidio, Brigham, Johnson & Gaertner, 1996). Following the finding that prejudice is a better predictor of discrimination
than stereotypes, there has been some increased interest in the phenomenon of prejudice in stereotype research.

Bannister and Fransella, (1986, p.97) describe prejudice as: “An unfavourable attitude towards an object which tends to be highly stereotyped, emotionally charged and not easily changed”. Prejudice can, however, stem from a number of sources, including those perceived as threats to group members. Jussim et al. (1995) have researched differences in how much people like, or dislike, different groups (in contrast to differences in their beliefs), as a more complete means of understanding how group labels influence person perception. Prejudice has been found, for example, to result from threats to a given group’s jobs or welfare (Pettigrew & Meertens, 1995). Blackwell et al. (2003, p.19) describe prejudice as “the unreasonable, injurious, and hateful attitudes and actions directed against specific groups of outsiders and based on ill-informed judgments”. Close inter-group personal contact, as a source, has also been found capable of evoking feelings of prejudice. An individual’s chronic intolerance may lead, for example, to hostility based not on personal stereotypes, but on major value differences between them and group members (Plous, 2003). Social psychology has started to examine specific emotions directed towards out group members (Jussim et al., 1995), but considerable research has, however, yet to be carried out, as extreme evaluations can carry uncertainty as to their source, and questions as to whether they are a function of cognitive mechanisms or derived from emotional prejudices.

Prejudice is considered by some to be an attitude, or attitudes, largely resistant to change with an individual finding it very difficult to change from holding prejudiced views. Experience of continued exposure to members of the prejudiced group, for example, may not be sufficient for individuals to change their views. It has been found that many people experience difficulty abandoning the nature of their personal construing by constantly finding exceptions to the rule (Fransella & Bannister, 1986). Changes to individual prejudiced judgments and related behaviour may, however, be made possible by giving individuals new insights into the Self by way of creating new ways of modifying self-perception. The methodology, used by Fransella and Bannister (1986), has proved an
extremely useful way of identifying extreme emotion in prejudice, and bringing changes in 
behaviour to the prejudiced individual and will be outlined in greater detail in the 
stereotype research methodology outlined in Chapter five.

4.8 Taking a Wider View of Decision Research

Cognitive research into decision processes has derided decision-makers for their 
irrational, intuitive information handling, and widespread use of rules of thumb, or 
cognitive heuristics, in their judgment-making. Decision-makers have been widely 
criticised for consistently failing to adhere to Bayesian or Utility Theories, and for being 
reckless in not operating within the confines of normative models based on rational 
decision behaviour. Indeed, decision models calling on the rational individual to process 
vast amounts of complex data in reaching an optimal problem solution demand super-
normal performance, and invite failure of the manager–decision-maker. The practising 
manager probably exists somewhere on a continuum between the pathologically biased, 
and excessively error-prone decision-maker, and the excessively obsessive who adhere to 
the central tenets underlying much decision theory.

As will be discussed in Chapter five, (PCT) (Kelly, 1955) offers particular 
advantages to the decision researcher in being able to explain the processes underpinning 
an individuals’ stereotyping and decision-making. Personal construing, a central feature of 
PCT, can identify an individual’s meanings and help identify their stereotypes, as outlined 
earlier, in Section 4.7. Further, judgments associated with each manager’s personal 
construing, in differentiating between their colleagues’ qualities, can identify decision 
intentionality and relate differential decisions to meanings managers have attached to 
different categories of their colleagues. Biases in decisions would be functions not so much 
of human faults in decision-making, as suggested by cognitive researchers, but rather 
individual actions resulting from anticipated outcomes stemming from perceived 
differences between their own and their colleagues’ perceived qualities.
4.9 Research into Stereotyping and Decision-making Processes

The aims of the current study are to identify managers’ stereotyping processes and the relations between those stereotypes and managers’ discriminatory employment decision-making on colleagues. There is considerable uncertainty and lack of agreement among researchers surrounding the stereotyping, discrimination and decision-making processes. Researchers have failed to agree on what constitutes a stereotype and on the stereotyping process generally. This occurs at a time when little research has been conducted into discrimination, and, as outlined in Chapter 2, there is a noted lack of theory associated with the field. Moreover, explanations of stereotypes and decision processes currently in use have largely failed to take account of the often emotional issues underpinning managers’ workplace judgments. Clearly, there is need for a research methodology capable of improving understanding of managers’ stereotypes and judgment-making which takes account of the moods associated with individual decision-making at work. A research methodology, based on PCT, would be capable of identifying managers’ stereotypes and determining their relation to decisions made on colleagues in workplace settings. Importantly, increased stereotype research could provide improved understanding of the processes underpinning managers’ stereotyping, and establish their relations to managers’ discriminatory decisions on colleagues.

Chapter 5 will introduce the key concepts of Kelly’s (1955) Personal Construct Theory (PCT), give insights into PCT as a theory and methodology, and explain the basis for selecting a PCT-based methodology. The chapter will outline the many advantages associated with use of Repgrid technique, and describe Repgrid application to decision and stereotype research. Research questions associated with the study will be provided at the end of the chapter.
CHAPTER 5

THEORETICAL BASIS FOR THE METHODOLOGY
This Chapter introduces key concepts of Personal Construct Theory (PCT), and gives insights into PCT as a theory and methodology. The Chapter goes on to explain the basis for selecting a PCT-based methodology, introduces the many advantages associated with the use of repertory grid technique, and describes grid application to decision and stereotype research. Research questions associated with the study form the last part of the Chapter.

5.1 PCT as Theory and Method

5.1.1 Introduction

Kelly’s (1955) personal construct theory casts a person as a dynamic investigator of social opportunities capable of individual thought and action, and elevates individuals to the status of personal scientists. PCT recognises the individual’s intrinsic ability to understand their social world through construction of meaning of objects and events drawn from personal experience throughout his/her life.

5.1.2 Personal Construct Theory

Personal Construct Theory describes the psychology of being human and relates to one’s whole sense of being. The theory does not provide exhaustive lists of human needs and motives, but instead addresses the processes people use in making sense of their world, and in finding their way around their universes. PCT attempts to address the nature of the whole person by dealing with all aspects of human experience and the ways people use experience in formulating meaning. Life experiences give the basis for people to form systems of hypotheses from birth onwards, and to continuously test and shape relations with their world. These systems of hypotheses continuously evolve to provide individuals with means of communicating, and, in turn, influencing what they see and how they see things.
Central to PCT is a philosophical assumption which proposes that one’s ideas are open to revision or replacement. One’s systems of construction need therefore to remain open to revision as individual perceptions are continuously being challenged. The most accepted of occurrences in life may be transformed and take on another meaning when construed differently. This assumption suggests that all facts are open to alternative construction and, while not denying the notion of truth, argues for individuals to constantly strive to search for a truth which can incorporate alternative constructions.

Kelly’s (1955) philosophical assumption of constructive alternativism asserts that all of one’s personal interpretations of the universe are subject to revision or replacement. This dynamic notion of change and update relates to an individual’s need to continuously investigate their construction of meanings to make way for more satisfactory alternative interpretations. There can be many viable alternative constructions of reality in the world, and rather than holding entrenched convictions about an issue, one should remain open to alternate constructions. Constructive alternativism brings into question the currency of well-regarded facts in a social world which may need constant testing, and therefore revision. Strongly held sets of understanding about work and working could be illusory given the potential for shifts in construction of meaning and need for adoption of alternative constructions of what is appropriate workplace behaviour.

5.1.2.1 Construing as a process

Construing is an active, ongoing process in which one can operate like a naïve scientist in testing out one’s hypotheses and revising them where necessary, according to the outcomes of one’s construing. The construing process is central to our meaning-making and giving rise to the search for repeated themes from among our experiences of the world, while providing us opportunities to interpret and predict future events. Constructions that have proved useful for us in the past can be replicated based on one’s expectations that they will work as well again. The construing process requires individual recognition of similarities between events in their world which can sufficiently distinguish
between those events; recognition which can allow development of an individual’s construction system consisting of a finite number of dichotomous constructs.

5.1.2.2 What are constructs and elements?

A construct represents the actual discriminations a person makes between events, people, or things based on their life experience. Constructs differentiate between elements according to an individual’s ability to recognise their similarities and differences. Relationships between a person’s constructs and elements can determine if the person’s world predictions are likely to be validated by subsequent events, and their constructions strengthened. Persons can vary, however, in their ability to apply constructs to the making of predictions by virtue of their constructs having a finite number of elements to which they can be applied.

5.1.2.3 Constructs used in construal of cognition and affect

There has long been an entrenched divide in Western culture surrounding the dichotomy between thought and feeling, with its foundation appearing to reside in two discretely different systems. One author has, however, suggested that they might be part of the same process, with one’s thoughts having their beginnings in one’s emotions (Bannister, 1977). Some authors describe ways in which managers’ personal construct systems transcend distinctions between cognition and affect by taking on an emotional dimension through their processes of construing, (Stevens & Walker, 2002, p.73). Moreover, PCT has been found to be capable of accessing decision-makers’ cognitions, together with their values and behaviours (Crittendon, 1992). Managers’ construing of colleagues in the workplace could provide a means of gaining an integrated view of managers’ thinking and feeling by determining their interpretations of people and events at work.
5.1.2.4 Types of constructs (Pre-emptive, Constellatory, Propositional)

Some different classifications of constructs made by Kelly (1955) include them taking pre-emptive, constellatory, or propositional forms. A pre-emptive construct is one which pre-empts its elements from membership in its own realm exclusively. An example could be found in: “this older worker is nothing but an older worker”. Constellatory constructs can be considered characteristic of stereotyped thinking with constellatory construing giving rise to a constellation of constructs used to describe a particular category of person, such as an older person. This form of construing can invoke a cluster of constructs once one feature of an element becomes known, and is exemplified by constellatory thinking, whereby older persons, as a category, are construed as unhealthy, fixed in their ways, unwilling to change, and having low energy. Fransella (2003, p. 456) describes propositional constructs as ones which ‘carry no implications regarding the other realm memberships of their elements’, and constitute, ‘uncontaminated personal construction’. The individual, in their propositional construing can be flexible in problem solving by taking on new approaches, accommodating new resources, and considering different contexts.

5.1.2.5 Construct systems and subsystems

Kelly (1955) suggests that forming an understanding of someone’s construct system can allow insights into their history, and, in turn, prediction on how they might behave in given situations. A person’s construct system, while ordered, arranged, and interlinked, may change to accommodate new information. People can, however, vary in the amount of change they tolerate to their construct systems. An individual’s construct system, while in the process of integration, can never be finally or completely integrated with the individual continually attempting to relate their many subsystems to one another (Bannister, cited in Fransella, 2003). The question becomes one of how readily one’s disparate sub-systems, such as life working as a manager and personal life as a parent, can be related to each other in one’s personal construct systems.
Kelly (1955) views a person’s construct system typically as a hierarchy, ranging between constructs that are superordinate, to those that are subordinate to them. The hierarchical nature of a person’s construct system can be explored through laddering (Hinkle, 1965). Laddering is a procedure used to establish networks of implications operating between levels of an individual’s system of personal constructs, and can indicate the degree of superordination, or hierarchical nature, of one’s construct system (Cromwell, 2003). Laddered constructs have been found to be more important than non-laddered constructs to the individual, while superordinate constructs are considered more value-laden than those subordinate in the individual’s hierarchy of constructs (Fransella, 2003).

5.1.2.6 Bipolarity of constructs

A person’s construct system is made up of a number of dichotomous or bipolar constructs which Kelly (1955) describes as the reference axis upon which individuals may project events in an effort to make some sense of what is going on in their world. The bipolar construct serves to both distinguish between elements and to form some sensible grouping of them, by bringing order to those elements. Construct bipolarity can order elements by establishing a degree of element membership between them. One pole of the construct can indicate similarity between two elements, while the other construct pole defines contrast with another element.

5.1.2.7 Bipolarity and choice making

Fundamental to personal construing is the notion that bipolarity of constructs can allow individuals “a pathway of movement” (Kelly, 1955, p.128.) with “opportunities for the choice maker to choose between constructs or paths” (Kelly, 1955, p.64). Placing this notion within the current study, this pathway between construct poles could provide managers with opportunities to move between positive and negative construct poles in their construing and evaluation of themselves and their colleagues. Bipolarity of choice-making could allow managers’ impressions of themselves and their colleagues to be
identified according to their positive or less positive evaluations through use of bipolar construct pathways.

When taken together, these positive and negative evaluations could help identify managers’ choices, and ultimately judgments, between themselves and their work colleagues. Kelly (1955) assumed that an individual’s choice behaviour was anchored in their construct system’s characteristics, and could provide their opportunities for choice making and prediction. It is suggested, therefore, that managers’ choices or judgments could be identified through use of their personal construct systems in construing between themselves and their colleagues.

5.1.2.8 Individuality, commonality and sociality

Kelly (1955) asserts that people differ from one another in the way that they construe events. A person’s constructions are likely to reflect their unique arrays of experience in dealing with events. Individuality in interpretation is related to individual uniqueness, with one’s behaviour guided by one’s own construction of reality. People undergoing very different experiences are likely to adopt unique systems of construction, whereas there are those who might derive very similar constructions to one another, according to shared experiences. Commonality of construction enables those sharing systems of social construction to cooperate in joint enquiry, by sharing a common understanding of events.

For a person to be able to meaningfully communicate with another, they will need to be able to make accurate inferences about how that other person makes use of their personal constructions. Sociality is the term used by Kelly (1955) to describe relationships based on one’s attempts to construe another’s construing. People having worked together for a time may share important constructs and therefore construe events in similar ways. They may become able, metaphorically, to stand in one another’s shoes in interpreting, and predicting events. Adams-Webber (2003) maintains that similarities (commonality) and
differences (individuality) in both the content and structure of personal construct systems play an important part in the development of role relationships (sociality).

5.1.2.9 Fragmentation

People do not have to give up an old idea to take on a new one, and can employ a variety of construct subsystems which may be inferentially incompatible with one another. The requirement for people to co-exist in many social domains can require them to remain flexible enough to fit in all of those domains, despite their construct subsystems often not being congruent with their self-consciousness. The individual’s capacity for fragmentation can be a sign of that person’s ability to hold multiple memberships as, say, parent, worker, and citizen. Indeed, there can be many sides of the self capable of coexisting within one’s construct system (Mair, 1977).

5.2 Advantages in Use of PCT

PCT places great store on an individual’s construing, with no one person having an exclusive lien on knowledge. PCT is egalitarian and considers the individual’s striving for meaning as important to them and worthy of a personal scientist. The theory attaches value to an individual’s efforts at sense-making. There is a need, therefore, to actively involve those being researched in the research process in order to best gain participants’ distinctions between events, cast their interpretations in their own words, and make use of their terms, to actively involve those being researched in the research process. PCT holds that knowledge can be a product of the individual, with meaningful data found in their construct systems, rather than in knowledge systems, or remote entities. This theory takes the view that the researcher wanting to find out what someone means in relation to an event, needs to begin by asking the participant.

People’s experiences vary greatly and therefore contribute to individual differences in their meaning-making, interpretations, and anticipation of events. PCT stresses that individuals have unique personal approaches to gaining understanding of, giving meaning
to, and forming expectations around, people and events in their universes. This diversity in individual interpretations and expectations of one’s self and others offers individuality of thought. Individuals can, however, through shared experiences, develop similarities of meanings and beliefs with others, and come to share some understanding of another’s world. PCT offers a means of gaining insights into individual and group meaning-making processes and the distinctions that people make between events flowing on from those meanings.

PCT, importantly, lends itself to participant-centred enquiry using idiographic ideals, with enquiry largely free of researchers’ values, making use of information of direct relevance to those being researched. The approach provides a useful theoretical framework for gaining understanding and describing individual and group members’ knowledge use in human organisations. Its idiographic ideals allow for ready identification of the meanings managers attach to everyday use of people and events in their workplaces. This study will, however, make use of both idiosyncratic perceptions by individual managers, in the form of individualised assessment (idiographic data), while also forming quantitative comparisons between managers’ perceptions, in the form of standardised assessment (nomothetic data) (Neimeyer, 1993). This will be made possible through the advantages of PCT and flexibility in use of repertory grids (Repgrids). However, before discussing these, it is necessary to indicate how a constructivist perspective has been used to approach the issue of stereotyping in this study.

5.3 PCT and Repertory Grid Methodology

This Section introduces the repertory grid, describes its use in reporting personal construing, and outlines grid technique. The Section further points out the advantages of using grids to capture individual and group members’ construing.
5.3.1 What is the Repertory Grid?

The repertory grid (Repgrid) was proposed by Kelly (1955) and can be used as a structured interview procedure capable of accessing an individual’s view of the world, i.e. their construct system. The Repgrid is underpinned by the established theory (PCT) outlined, and provides a means of identifying a person’s ways of anticipating events. In doing this, the grid can provide a wealth of data. Repgrids can provide qualitative data from the nature of constructs and elements, while the relations between constructs and elements can yield quantitative data.

5.3.1.1 What is the procedure for administering Repgrids?

The administration of Repgrids involves the defining of elements, eliciting or providing of constructs and determining a means, such as a rating scale, to distinguish between elements by having those elements related to constructs in a grid. The procedure allows for constructs and elements to be either supplied by the researcher, or elicited from the participant, and for a construct rating scale to be provided. Elicited constructs have been found to better reflect individual meanings, with individuals preferring to work with their own elicited constructs. Grids with provided constructs, on the other hand, could be useful in collecting data from different sources by means of overlap in constructs across a number of completed grids in the study (Gammack & Stephens, 1994). An example of Repgrid use of provided construct to determine overlap in constructs can be found in research into group-wide commonality of construing using data derived from different individuals’ grids.

Repgrid procedure allows relationships between constructs and elements to be established through use of a suitable construct rating scale in a grid. This construct rating system typically requires each element to be applied to one pole or another of each bipolar construct in the grid. Participant assignment of elements to particular points on a rating scale can allow their ratings to illustrate construct and element relationships within a Repgrid matrix. The resultant matrix of constructs and elements can serve to bring to life
an individual’s construing, by illustrating their personal meanings and highlighting the ways that they distinguish between elements in their universe.

5.3.1.2 Factors covering design and construction of Repgrids

Writers in the personal construct research field have indicated that the design, construction, administration and analysis of Repgrids call for a number of choices to be made (Stewart & Stewart, 1982; Fransella, 2003; Jankowicz, 2004). Repgrids, not being standardised instruments, have to be adapted to fit workplace contexts and address research questions in the study. One such choice relates to the type and number of elements to be used; a second relates to how constructs should be produced; and another to the selection and use of a suitable construct rating scale. These will be discussed in the specific context of the current study.

The elements proposed for inclusion in the study were participants’ colleagues representing a variety of age-gender categories. Six age-gender categories would be selected for the study, consisting of young, mid aged and old together with male of female, with, for example, a male of less than 30 years of age forming one of the categories used. Following the position elaborated by Higgins et al. (1982) it was considered that the Self and its construction were critical to the process of construing others. Individuals’ assumptions about the Self are said to constitute a guiding principle in social comparison processes (Festinger, 1954), and operate as a systematic mode of persuasion (Chaiken, Libermann & Eagly, 1989). Lemon and Warren (1974, p.123) point to a person’s judgements of another involving a Self comparison process, with the Self acting as an anchoring point. Age-gender categories would form an important part of managers’ construing landscape as they sought to judge differences in age-gender related characteristics between themselves and colleagues. There was an expectation managers’ positive perceptions of Self would be reflected in their construing of colleagues along Self-relevant lines (Higgins et al., 1982). The Self element would therefore become the seventh element alongside the six age-gender classes of colleague for both individual and structured grids.
Kelly’s (1955) original list of six construct elicitation methods included the ‘minimum context form’ which has been described as the most influential of the methods (Bell, 2003, p.96). This bi-polar construct elicitation method calls on the respondent to deal with three sets of elements (triads) at a time and to specify, for each set, ways in which two elements are alike (the emergent pole of the construct) and therefore different from the third element (the contrast pole of the construct). Triadic elicitation, as a widely accepted Repgrid methodology, was to be adopted as the preferred method of elicitation used in this study. This method would take the form of eliciting constructs based on the rater’s perceived differences between sets of three elements. Contrast pole elicitation could, however, make use of two different approaches. One approach is the difference method, the other the opposite method. The opposite method is carried out by determining “the opposite of the elicited pole of a construct” (Fransella, Bell & Bannister, 2004, p. 2), and has been found to more clearly elicit bipolar constructs than the difference method (Epting, Suchman, & Nickson, 1971). The interviewer, in asking for the opposite of the elicited pole of a construct can, however, lead to that construct being rated more extremely, more so than if the person was asked how the third element might be different. An outcome of the participant placing a more extreme rating on the opposite pole has been found to lead, however, to that person not spreading their grid ratings as widely in completing their grid (Hagans, Neimeyer & Goodholm, 2000). The difference method of triadic elicitation was adopted for use in this study.

It was decided that in situations where participants construing between elements did not lead to elicitation of constructs, due to an inability to make use of the triadic elicitation processes, monadic or dyadic elicitation could be used to provide continuity of construing. Participants having difficulty eliciting constructs would be invited to search their data on cards for frequently occurring words, or terms attributed to colleagues. It was anticipated that those reaching a barrier to their construing would be able to overcome the difficulty by making use of this construct elaboration method to successfully generate constructs through often-used words drawn from interview materials. These words, with some initial assistance from the interviewer, could be formed into bipolar constructs and entered into the participant’s grid. Another interview procedure to be adopted, which could
add to the numbers of constructs elicited in grids, would be that of laddering (Hinkle, 1965). The laddering process will be outlined in Chapter 6, Method when describing construct elicitation processes. It was concluded that use of laddering would ensure contribution of an added number of constructs while capturing participants’ superordinate, or value-laden constructs through elicitation (Fransella, 2003).

The choice of elicited over provided constructs was an important one, as provided constructs have been criticised as being unsuitable for identifying perceptions of Self in relation to colleagues. Adams-Webber, (1998), as an example, posits that grids with elicited constructs (individual grids) can be more relevant to the people completing them and therefore more meaningful than grids with provided constructs (structured grids). It has also been suggested that people better infer differences between others and show significantly higher levels of cognitive differentiation when using elicited over provided constructs (Neimeyer, 1992). Research into grid design has, however, confirmed that construct elicitation, when conducted in association with the provision of constructs can elevate the levels of differentiation, and hence meaningfulness, of provided constructs used in grids (Moore & Neimeyer, 1997). Despite considerable debate surrounding relative advantages in use of elicited constructs and the apparent shortcomings of provided constructs, it was decided that both variants of construct would be used in the study. It was anticipated that grids with elicited constructs could offer greater uniqueness of individual meaning and therefore higher levels of cognitive complexity based on managers’ differentiation between their own and colleagues’ qualities. Grids using provided constructs would most likely provide, by virtue of their standardised lists of organisation specific terms, lower levels of construct differentiation.

It was considered important that data from individual grids be compared with data derived from structured grids by using appropriate summary indices, (Bell, 2003), and that use of provided and elicited constructs allow ready comparison between managers’ construing of Self relative to their colleagues. It was concluded that managers’ construing of Self, and their colleagues, by way of elicited and provided constructs, would be equally capable of identifying differential impressions and evaluations of themselves, relative to
their colleagues at work. Grids with elicited constructs offered the opportunity of capturing managers’ more personalised construal of colleagues, while provided constructs held the promise of less well differentiated perceptions between manager and colleagues. Importantly, consideration had to be paid to the individual nature of elicited constructs, which made them less likely to offer insights into commonality of construing than provided constructs.

The selection and use of a suitable rating scale was based on the results of different PCT researchers’ experiences working with Repgrids. Kelly (1955) originally used a two point rating scale which limited information available from that form of analysis (Bell, 2003). Others have found four, six and eight point rating scales do not offer a mid point facility conveying neutrality and have proved unsatisfactory for many respondents called on to quantify constructs in Repgrids. However, the use of a wider range, such as a nine point rating scale, could be considered spurious precision as those completing grids would be asked to make finer discriminations across all grid elements than they might reasonably find possible (Jankowicz, 2004, p.36). Research evidence suggests that a seven point scale is close to most peoples’ limits of discrimination and that much above a five point scale is difficult to examine visually (Stewart and Stewart, 1981). A construct rating system of five points was selected as it offered a centre midpoint and allowed sufficient precision for raters to work with large sized structured grids. A five point scale while considered to be easier to work with than larger scales allowed for raters’ judgements in Repgrids to be readily discerned. Further, five point rating scales have become widely accepted by PCT researchers and proved successful when used with computer-based scoring systems.

5.3.1.3 Taking account of extremity of rating, accessibility, lopsidedness, and cognitive complexity in Repgrids

It has been argued that measures of extremity of construct ratings can indicate construct meaningfulness to those completing grids (O’Donovan, 1964), and salience of constructs when describing other people (Tajfel & Wilkes, 1964). Research has further demonstrated that peoples’ impressions of others are heavily influenced by the salience of
their constructs (Yarrow & Campbell 1963). Participants’ use of extreme construct rating values in assigning constructs to elements in Repgrids have been found to be related more to use of elicited than provided constructs (Stringer, 1972). Further, there is held to be considerable stability over time in individual’s extremely-rated constructs (Dornbusch, Hastorf, Richardson, Muzzy, & Vreeland, 1965). Meanwhile, Higgins et al. (1982) established that extremity of construct ratings can describe readiness of access of constructs from one’s memory, and primacy of use in forming impressions and evaluating colleagues when using provided constructs. Moreover, readiness of an event’s accessibility from memory has been found to influence probability estimates of decision-making (Tversky & Kahneman, 1973). These findings, when taken together, hold important implications for the current study.

Lopsidedness of construct ratings in Repgrids refers to the consistent application of elements to extreme points on the construct rating scale. Lopsidedness can be problematic, and has been criticised for restricting differentiation between elements in grids. Where grids are, for example, used to capture differences in meanings between an individual, such as the Self and other people identified in a grid, it has been found that lopsidedness can prevent adequate differentiation between the Self and others, and indicate low stability in construing (Cochran, 1976). Lopsidedness, in assigning extreme ratings to elements can, on the other hand, indicate superordinacy (Bannister & Salmon, 1967; Chiari, Mancini, Nicolo, & Nuzzo, 1990). As two variants of grid were to be used in the study, it might be necessary to use grid lopsidedness measures to determine differences in participants’ preferences for particular elements, according to the variant of grid used. It was anticipated that the Self element would be more positively evaluated than colleagues were, but it was uncertain as to whether there would be differences in Self element lopsidedness according to the variant of grid used. However, Bonarius (1977) has demonstrated that people tend to assign more extreme ratings to elicited constructs over provided ones. Thus it was anticipated that grids with elicited constructs would exhibit greater lopsidedness of elements than grids with provided constructs.
Bieri (1955) has stressed the importance of the Repgrid measure of cognitive complexity in identifying a cognitively complex individual’s ability to make more accurate inferences on another person. Low differentiation individuals are far more likely, for example, to employ either predominantly positive or predominantly negative traits in their impressions of others (Crockett, 1965; Vannoy 1965). Measures of cognitive complexity can reflect managers’ personal meanings according to the “individual’s capacity to construe social behaviour in a multi-dimensional way” (Bieri et al., 1966, p.1985). The lesson for this study lies in the advantages offered in determining one’s ability to readily infer another’s constructions, as one’s inferences can be closely related to effectiveness in communicating with another. Establishing cognitive complexity measures could provide an indication of the cognitively complex individual’s readiness to enter into communication with another person.

5.4 Why PCT and Repgrids Selected for Use in Methodology

This Section outlines the advantages offered in using Repgrid technique and the rich research history associated with business applications of Repgrids and Repgrid technique.

5.4.1. Advantages in Use of Repgrid Technique

Kelly’s (1955) Repgrid technique represents a creative and flexible methodology which can allow qualitative data to be gathered, and if required, data to be quantified. Grids, when applied in these ways, can identify the distinctive ways individuals, or groups of people, organise and interpret aspects of their work experiences. Grids could be used, for example, to gather workplace interpretations of managers operating in diverse workplaces, to gain their insights into the world of work. Neimeyer et al. (2002) describe the wide usage of the Repgrid in research. The grid is generally accepted as an objective research method, founded on an idiographic emphasis on individual differences in personal construct systems (Kelly, 1955).
Repgrid technique is an efficient means of conducting interviews in an unbiased fashion, and held to offer distinct advantages over nomothetic methods in being able to gather data through structured interviews relatively free of interviewer bias (Winter, 1992). The Repgrid has been distinguished from questionnaires and interviewing techniques. When used as an interviewing tool, the grid is considered more interviewee-centred by virtue of those interviewed being able to address parameters of importance to themselves. Structured interviews making use of questionnaires can be less interviewee-centred, as questions can largely focus on areas of interest to the interviewer. Despite Daniels (2002) criticism of use of grid technique as a research method, the grid has been confirmed as an objective interview approach. Jankowicz (2004, p.52) describes the use of Repgrid as a “powerful but straightforward technique” capable of providing precise descriptions used by an interviewee. The grid interview, unlike a psychometric test, does not, however, require results to be meaningful. This study will make use of both high quality data derived from individuals completing grids in interviews, while also realising the benefits offered by comparing standardised responses from managers completing grids (as previously described in the Section on design of Repgrids, 5.3.1.2).

The grid has a rich research history having been widely applied to researching educational, cognitive, clinical, and social psychology fields (Neimeyer & Neimeyer, 1989), in organisational decision-making (Dutton et al., 1989; Hunter & Coggin, 1988), personnel management (Donaghue, 1992; Furnham, 1990), and organisational behaviour (Arnold & Nicholson; 1991, Brook & Brook, 1989). The grid has also been successfully used in researching organisational communication (Sypher & Zorn, 1986), recruitment (Anderson, 1990), and management decision-making (Dutton, Walton, & Abrahamson, 1989). Further, grid techniques, derived from personal construct theory (Kelly, 1955) have proved useful in investigating workplace meaning, identify marketing processes, knowledge management processes, organisational and general management issues.
Particular research interest has centred on the grid’s wide use in organisations and, most importantly for this study, in the field of judgment making (Gammack & Stephens, 1994), and prediction of decision behaviour (Fransella & Bannister, 1967). Brophy, Fransella, and Reed (2005) report the use of Repgrid technique in the development of a wide range of interventions in organisations, including identification of organisations’ cultures, addressing people relationship issues, and design and implementation of change programs. Stewart and Stewart (1981) describe their use of the Repgrid in researching personnel systems such as performance appraisal processes and the development and assessment of skills-based training programs.

There are many advantages associated with the Repgrid’s use as a research tool (Bell, 2003), with Repgrid technique reported as having its range of application limited only by the researcher’s innovation in application (Winter, 1992). Further, Repgrid technique is very practical (Jankowicz, 2004). It may be useful in overcoming high levels of suspicion typically displayed towards academic researchers in Australian workplaces. Repertory grid technique could be particularly suitable for gathering data from industrial settings, in hard to locate, geographically-dispersed industrial locations, in sometimes remote Australian centres. Low levels of technology in design and administration, and readiness of transport of grid materials, mean that high quality data can be readily gathered through grid interview. These advantages can translate into a minimum of research administration time in setting up, conducting, and following-up on interviews. Further, flexibility in design and administration of Repgrid technique could provide a ready means of objectively gathering individual and group-related data from diverse management populations, having different languages, ages, ethnicities, and work approaches.
5.5 PCT Application to Decision Research

This Section describes the application of Repgrids to the fields of managers’ judgement making and employment decision-making in business contexts

5.5.1 Repgrid Use in Decision Research

Chapter 2 described problems associated with established research in decision theory, decision models, and managers’ judgment-making. Repgrid technique is well suited as a decision research tool to overcome these problems and has proved capable of describing well an individual’s judgments and their decision-making (Fransella & Bannister, 1967; Gammack & Stephens, 1994). Further, grids have a sound research history as decision prediction tools with one researcher asserting they can “predict well, an individual’s decisions” (Winter, 1992, p.62). Researchers and practitioners have reported widespread use of the Repgrid in providing useful predictions of individuals’ decision behaviour (Fransella & Bannister, 1967; Shaw & McNight, 1981; Adams-Webber, 2003). Individuals’ choices and meanings associated with those choices could be readily established through use of Repgrids. Major advantages in use of Repgrid technique lie in grids’ use of bipolarity of constructs, which could be realised through “pathways for the choice maker” which enable them to choose between alternate paths in judging others (Kelly, 1955, p.64). Choosing between alternative pathways, or positive and negative construct poles, would allow managers, in their construing, to discriminate in their judgment-making between themselves and their colleagues.

5.5.2 Repgrids as Tools of Judgment Making

Repgrids offer a well-established research method capable of identifying managers’ impressions and choices through their construct system’s interpretive processes between their own age-gender category and those of colleagues (Gammack & Stephens, 1994). Grids are well placed to establish managers’ meanings and ways of choosing between different age-gender categories. Azjen (1996), in contrasting decision-making approaches,
posits that information embodied in individual’s salient beliefs about their behavioural alternatives is fundamental to understanding their decision-making. Azjen further posited that individual’s salient beliefs, together with their evaluations, can be responsible for their preferences and, in turn, their behavioural decisions. The current study adopts a Repgrid approach to establishing managers’ salient, or extremely-rated constructs consisting of belief and emotion. Access to managers’ more important meanings would be through salient constructs derived through discriminations made between categories of Self and colleagues. Differences between managers’ more meaningful impressions between their own and colleagues’ qualities could provide insights into managers’ judgment-making. The research method is well suited to identifying individual’s meanings and interpretations of different people at work, and judgments on those people based on construed differences between their own and others’ age-gender related characteristics in grids.

5.5.2.1 Importance of self element relative to other elements in judgments

As discussed in 5.3.1.2 the use of grids to establish managers’ judgment-making was guided by the likelihood that the Self element would be evaluated more positively than would colleagues by those completing grids. Further, there could be differences in managers’ cognitive complexities, and hence differential in evaluation between themselves and their colleagues. Importantly for this study, it has been established that people sharing constructions would be likely to communicate more readily with one another and, in turn, regard one another more positively (Fransella, 2003), with agreement in judging others held to influence people’s liking for one another (Newcomb, 1961). Degrees of alikeness have been found tied to similarity of constructs, and in turn to accuracy of interpersonal communication (Mehrabian & Reed, 1968). In similar vein, managers who have formed positive working relations with colleagues could view them more positively and make more positive decisions on them. Those colleagues not perceived as positively by managers, through perceived differences in understanding and hence communication would more likely be construed less positively than the Self in managers’ construing. Differences in impression and evaluation between Self and different categories of
5.6 PCT and Stereotype Research

This Section describes the application of PCT and Repgrids to business contexts but this time focuses on their use in researching stereotypes and stereotyping.

5.6.1 Drawing on Established PCT Research and Use of Repgrids to Identify Managers’ Stereotypes

As indicated in Chapter 3, little agreement has been reached in stereotype research on what constitutes a stereotype, and problems have been attributed to bias in research methods. Repertory grid technique has been used to overcome some of these difficulties. A useful starting point can be found in Fransella’s (1977) work in operationally defining stereotypes and describing the stereotyping process. Fransella, by adopting a grid-based approach, established that stereotypes could be identified through commonality of construction of particular construct sub-systems that society’s members had created through their construing. The researcher went on to describe how stereotypes could be identified by establishing ways in which society used those construct systems in taken-for-granted and constellatory, or pre-emptive ways, in construing given categories of people. By adopting a similar methodology, it could be possible to identify individuals’ stereotypes by means of their personal construct sub-systems and the manner in which their workplace colleagues’ characteristics are construed. This methodology could help determine ways in which managers assign taken-for-granted and constellatory constructs to particular categories of colleagues. Repertory grid-based methodology, when used in this way, could make a considerable contribution to stereotype research in the study.
5.6.2 Using the Tools of PCT to Understand Stereotypes, Individual Judgments and Discriminatory Decisions on Others

Kelly’s (1955) Personal Construct Theory (PCT) offers many advantages to researchers of stereotyping. While Brown (1995) posits that stereotypes are an individual’s hypotheses about the world, and people use stereotypes to make sense of their world, Hamilton and Rose (1980) suggest that an individual’s stereotypes can influence their expectations of future outcomes in their world. These assertions are very much in line with PCT, which holds that people are capable of acting like personal scientists, albeit poor ones, in making sense of a complex world by attaching meaning to people and events in their worlds, and hypothesising outcomes of future events. Indeed, PCT encapsulates the stereotyping process well by describing an individual’s ability to both categorise others according to interpretations of their different characteristics, and use those interpretations to anticipate the outcomes of future personal actions. This theory offers a means of identifying the category-based meanings (stereotypes) individuals use to differentiate between people in making sense of their world. By means of construing, reference axes can be set in place with which to fix the relativity of events to one another in their world, thereby attaching meaning, and allowing changes to be made to those events and likely future outcomes of social relationships to be predicted. An individual’s personal construing, or interpretations of people and their actions, can provide them with a useful means of anticipating their own and others’ likely future reactions. The use of a PCT-based methodology could provide a ready means of establishing managers’ stereotypes, and ways in which they might make decisions in anticipation of others’ likely future behaviour.

Personal Construct Theory (Kelly, 1955) posits that individuals can anticipate the likely outcome of events, and make their decisions accordingly. This decision-making process, being based on individual judgments associated with choices made between alternative constructions of events according to the similarities or differences in construction held by the individual of those events. Brown (1995) suggests that the stereotypes we hold on different groups bias our decisions in particular directions according to the beliefs or meanings we attached to those stereotypes. March (1978) has
suggested that all of one’s decisions involve predictions based on anticipation of our future feelings, while Schwarz (1990) confirms that our feelings can influence the decisions we make in positive or negative directions according to mood, or affective state. PCT offers a ready means of establishing relations between managers’ stereotypes and their decision-making.

Determining the potential interplay between cognition, prejudice and discriminatory decision-making could be well addressed through the use of a PCT-based methodology. Stereotype formation could be established by means of individuals’ construing between categories of people they work with. In turn, discrimination in decision-making could be readily identified through an individual’s judgments associated with their choice-making, or processes of differentiating between meanings attributed to colleagues, by way of their personal construing. PCT offers a means of determining the processes underpinning stereotyping and discrimination, by not only establishing stereotype formation and use, but also identifying the relationships operating between stereotyping and judgment-making, or discriminatory decisions.

Thus PCT offers a particularly useful theoretical framework on which stereotype research can be based. A research methodology using this framework could provide ready identification of stereotypes; help establish the degree of bias in individual’s judgements and the extent of discrimination in their decision-making, while determining relationships between those things. A leading researcher and author in the PCT field (Fransella, 1977) pioneered the exploration of stereotypes using PCT-based research

5.6.3 Fransella’s Research on Stereotypes

Fransella (1977) adopted an innovative approach to stereotype research by taking a PCT approach to the identification of stereotypes, the ways in which they may be reported, and their relation to discrimination. The following describes this work, from defining a stereotype, to describing the limiting nature of stereotypes on others’ behaviour, and
providing the individual with a means of overcoming the more negative aspects of stereotyping impacting on them.

Stereotypes, according to Fransella (1977), hold generally agreed-on meanings between members of a given culture: Meanings which, given the nature of members’ categorising and information processing, can narrowly prescribe others’ behaviour (Fransella, 1977). According to Fransella (1977), age-based stereotypes, can label older workers as being unhealthy, change resistant, and limit them to holding only those attributes. Fransella goes on to posit that society, in formulating stereotypes of older workers, lays down narrow sets of expectations which mature-aged workers, for example, are required to adhere to. As a consequence, older workers capable of performing a broad array of tasks may come to perceive themselves as being sickly, or unwilling to change, and behave accordingly, thereby making the stereotyping process self-sealing. Younger workers not wishing to be tarnished with these narrowly-defining, and highly limiting systems of meaning, may see the need to redefine themselves and adopt more positive sets of alternative behaviour drawn from different stereotypes to those ascribed to older workers.

In defining who and what older workers are, and how they should behave, younger workers can be free to adopt behaviours which define them as being different in value to older workers (Fransella, 1977). A narrowly-defined set of roles, incapable of wider construal, can become the boundaries for older workers’ behaviour. Stereotypical images of mature-aged workers suggest they are sickly and unwilling to change, and that is all they are, or might ever be. The limitations imposed by the stereotypes assigned to older workers can help define their roles and prescribe how they should behave, but allow them little room to move beyond those well-defined behaviours. They are free to take on diminished roles carrying well-prescribed expectations of behaviour, but little else.

Fransella (1977) points out that in a world where the Self is largely made up of the sum of an individual’s construed similarities and differences to their personal stereotypes, those very stereotypes can, at once, help define that individual by clarifying who they are,
and by implication, indicate who they are not. The ways in which socially-agreed stereotypes can place limitations on individuals, and deny them alternative ways of behaving, do not, however, have to remain unchallenged. While the process of challenging the dictates of a stereotype can be a difficult one, change is possible through close Self questioning. Through such questioning, the individual becomes able to redefine themselves and expand their sense of Self relative to others, and, in so doing, free themselves from the limited sense of Self prescribed by society’s stereotypes.

Fransella (1977, pp. 39-66) outlines the stereotyping process according to the following steps:

1. Society differentiates between its members by classifying people according to particular category memberships (stutterers, psychologists).
2. Society, in categorising people, forms stereotypes which associate individuals with those categories (energetic businessman).
3. Society operationalises stereotypes through the application of construct systems carrying expected behaviours for category members (females act more passively than males).
4. Stereotyping is carried out by means of constellatory construing of individuals from a given category, and can include emotional qualities, or extremes of feeling (actions of a female driver).
5. Some social categories hold society’s negative stereotypes, and are extreme in focus (arsonist). Other categories are construed positively, and ascribe largely positive behaviours (medical doctor).
6. Females can be construed according to a narrow range of constellatory constructs which lack the socially positive behaviours held by males. These constructs are not necessarily bipolar opposites of those assigned to males.
7. Society’s commonality in construing of males and females will result in differential expectations of behaviour between males and females (Males construed as fully functioning, females construed as less so).
8. Not all of society’s members will adopt a given stereotype. Once adopted, the stereotype can be difficult to change. Stereotypical constructs can become meaningful to holders, often superordinate, and value-laden.

9. Constellatory constructs, in influencing an individual’s core role, can limit their behavioural options (females adopt the male stereotype).

10. Society, on having construed females according to constellatory construct sub-systems, will expect them to conform to the stereotype’s prescribed behaviours.

5.6.4 Giving Meaning to The Self Through The Other

There are many theories and associated techniques available which can allow one to gain Self insight relative to other people in their world. Personal Construct Theory is a meta-theory, but based on the individual gaining Self understanding and, therefore, better social prediction. As already indicated, PCT suggests that an individual’s personal construing can give meaning to events in their world, by establishing a sense of Self relative to others in providing a roadmap with which they can traverse day-to-day social interactions with other people. It provides a framework within which individuals can distinguish between themselves and others, and anticipate the likely social outcomes stemming from their hypotheses on events. Further, the approach offers researchers a means of identifying an individual’s category-based perceptions (stereotypes), and the individual’s judgments flowing from those differential perceptions. PCT can use an individual’s personal construing of the world at large to establish relations between the individual’s Self and others, point to the meanings that individual has attached to themselves relative to others, and determine that person’s judgments flowing from the process.

PCT posits that people make decisions which initially affect themselves, and subsequently affect others, with one’s anticipations having aligned the Self in relation to others (Fransella, 2003). A PCT-related framework can, therefore, represent the Self in a dynamic state, as changes can be established between Self and others in different judgment
contexts. The psychological framework provided by PCT can, in addition to identifying an individual’s meanings and judgment-making on Self in relation to others, offer a dynamic view of one’s anticipated actions by adopting an evolving sense of Self:

- a dynamic Self, where the Self and others are said to be inextricably bound together in a symbiotic relationship and the Self has real meaning in relation to others;
- a state where Self can define another, and, in turn, the other can operate to define Self in a mutually reliant relationship;
- where otherness is held to be an integral part of Self, and in turn the Self structure is a function of others, or of otherness (Mair, 1977).

This framework assumes a central role for Self at the core, and a contrasting façade within which the real core Self may hide, thus allowing fragmentation of the individual’s processes while maintaining an anchoring core (Butt, Burr & Bell, 1997). Moreover, the framework holds to the notion that, at the core of the Self every individual holds ready a theory in anticipation of the demands likely to be placed on their psychological processes. Some Selves the individual will strive to understand, make changes to, and get to know; other potential Selves may, meanwhile, be viewed as set apart, outside the Self, and therefore “not us”. Changing established and narrow systems associated with the Self may, therefore, not be easy, as the individual, in taking on qualities of the other, may have to relinquish certain aspects of the Self. The prospect of change for the individual may create feelings of being unsettled, of threatening to destabilise their central definition of Self.

5.6.5 Shared Understandings Between The Community of Self and Others

The effectiveness of an individual’s relations with members of a given community can depend on levels of shared understanding of meanings of events and people in that world, and their ability to use those understandings in anticipating one’s own and others’ behaviour in different social settings. Understanding and predicting behaviour, learned through socialisation or experience, should ensure continued congruence between the
individual’s sense of Self relative to others in their community. It can be important for an individual to have the ability to usefully anticipate social action, as failure to correctly anticipate events in one’s social world can lead to feelings of anxiety (Stevens & Walker, 2002). Stereotypes are said to offer their greatest advantage in relieving those in a community of the anxiety of failing to anticipate how to behave in relation to others, while also giving advance understanding of what to expect of others in different social situations.

PCT offers a framework capable of identifying an individual’s personal stereotypes, and the judgments people make when considering themselves, or their own characteristics, in relation to others in the workplace. The notion of personal construing is central to PCT, and involves the individual developing a roadmap with which to make sense of, and traverse, the Self and others, thereby gaining some degree of understanding and control over that world. The process of personal construing is unique to the individual, and results in that individual making judgments based on their anticipations of others’ likely reactions. Fransella (1977) indicates in Section 4.7.1, above, that individuals can make use of their stereotypes in helping define how they want to behave as people, and by implication, how they might elect not to behave as dictated by their stereotypes. By gaining better Self insight the individual can come to grips with their personal stereotypes and take control over behaviour which others in the community have prescribed for them through their stereotyping.

5.6.6 PCT, Social Cognition and Social Categorisation

The PCT view of the individual is largely at odds with that of social cognition researchers who hold to the belief that individuals have limited control over their processing of information in making changes to their world. Social cognition places less attention on the individual as an active agent in their processing of information, and greater importance on the dynamics of the process acting on that individual (Fiske & Neuberg, 1990). According to social cognition’s view, the individual, anticipating likely social interaction with others, is faced with a complex and time-consuming task involving large amounts of data, often of an ambiguous nature, which invariably calls for simplifying
strategies, such as making use of stereotypes to predict others’ behaviour. In such a case, the process would rely on the individual using a knowledge model, or mental template (Walsh, 1995, p.280) in automatically stereotyping others as a means of reducing social anxiety. According to Gioia (1986) the process is essentially flawed, and, unlike the personal construing process of PCT where meanings are formed and manipulated by the individual, social cognition’s stereotyping process operates largely outside the control of the individual.

There can be no doubt that social categorisation is an essential part of the stereotyping process, and one which can reduce uncertainties surrounding ambiguous data by prescribing behaviours for those stereotyped, thereby freeing up an individual to go about their daily life. What is less certain, from stereotype research carried out to date, is just how stereotypes operate on different categories of people, and the outcomes of those stereotypes on different people. PCT provides a framework with which differences in personal construing can identify those perceived to be closer to the Self, (in group membership), and those perceived more psychologically remote from the Self (out group membership) as a means of determining those differentially judged more or less positive. A PCT-based methodology could establish where, for example, a manager sits in relation to their colleagues, in terms of how decisions will be made on those colleagues.

5.6.7 Application of Repgrids to Stereotype Research

Stereotype research, using repgrid technique, could make use of managers’ commonality in construing of their own and colleagues’ age-gender related characteristics. However, Repgrids, in standard form, collect essentially individual data whereas stereotypes, as identified in this study, require group data from grids related to managers’ commonality of construing. Group wide data would therefore need to be collected from all managers completing grids in the study. Managers’ stereotype content could be established by using grid technique in this way to determine managers’ commonality in construing of Self and different age-gender categories of colleagues. This process of data gathering would be in accord with established grid use in organisations, which tends to be more
concerned with determining the construing of groups of people over that of individuals (Fransella, 1988). The degree of managers’ extremity of rating of constructs, or grid lopsidedness, could help establish levels of construct salience, meaningfulness, superordinacy of constructs, and stability of construing. The use of grid-related measures, such as lopsidedness, could help identify managers’ stereotypes. These measures have been described in section 5.3.1.3.

5.6.8 Definition of Stereotypes From a PCT Perspective

One dictionary definition takes a more general view of stereotypes as being: “An image or idea that has become fixed through being widely held” (The Australian Concise Oxford Dictionary, 2004, p.1400). Fransella (1977), in her research referred to earlier in this Chapter, and in Chapter 3, extends on this dictionary definition by describing the stereotyping process through the use of a Repgrid approach. This study, in attempting to define a stereotype, draws on the stereotyping research work of Fransella (1977), the dictionary definition given above, and limitations in stereotype research outlined earlier in Chapter 4.

The definition adopted for this study views stereotypes as:

*Those commonly-held, extremely-rated constructs, derived through managers’ construing of Self and their colleagues’ age-gender related characteristics, which managers have assigned to themselves and different categories of their colleagues.*
This definition is based on the following components:

*Commonly-held constructs, extremely-rated constructs, managers’ construing of Self and colleagues’ age-gender related characteristics.*

*Commonly-held constructs*: Identification of stereotypes would need to establish levels of agreement between a group of managers, or commonality in construing among those operating in the work environment.

*Extremely-rated constructs*: Stereotype identification needs to take account of extreme construct ratings as managers’ stereotyping is likely to include their values, emotion (disappointment, resentment), and meaningfulness to the manager doing the stereotyping. Further, extremes of construct ratings and associated construct salience have been related to construct accessibility (Higgins et al., 1982), biased judgments (Ajzen, 1996) and stereotype formation (Jankowicz, 2004).

*Managers’ construing of Self and related colleagues’ characteristics*: Identifying the outcomes of managers’ construing of Self and different categories of colleague could establish managers’ perceptions of their own anticipated modes of behaving in relation to the behaviours expected of their colleagues.

*Colleagues’ age-gender related characteristics*: Social categorisation forms the basis for stereotyping people. Age and gender have been found to be among the broadest and most inclusive categories used by people when judging others (McCann, 1985). Age and gender have, in turn, been related to readiness to categorise people with stereotyping often associated with the distinctive stimuli of age and gender. Age and gender have been used jointly as the basis for managers’ construing in this study.
5.6.9 Forming Conclusions on The Methodology’s Ability to Relate Stereotypes to Decisions

Repertory grid technique offers a well-established method of determining managers’ ability to discriminate in making choices between the qualities of Self and their related colleagues’ age-gender related characteristics. Grids could make good use of the outcomes of managers’ construing, and related judgment-making between different age-gender categories to infer managers’ reported decisions. Grids could similarly be well-used to identify managers’ more meaningful interpretations of differences between their own characteristics, and those of their colleagues. Managers’ interpretations, in the form of widely-held, extremely-rated constructs, could be used to identify their stereotypes. Extremely-rated constructs could, following thematic analysis, be tested for statistical significance of relationship with reported decisions, and related to reported decisions in the study.

5.7 Research Aims

There are six research aims associated with the study. The first addresses the relationship between managers’ decisions and their colleagues’ age-gender characteristics. The second deals again with managers’ decisions, but this time with an emphasis on their relationship with managers’ own age-gender related characteristics. The third aim seeks to identify managers’ construing of themselves and their colleagues according to perceived differences between their own and their colleagues’ age-gender characteristics. The fourth seeks to determine if managers’ employment decisions vary according to perceived differences between their own, and their colleagues’ age-gender related characteristics. The fifth sets out to determine if managers’ stereotypes of colleagues vary according to those managers’ construing of age-gender categories of colleagues. The sixth aim strives to determine relationships between managers’ decisions on categories of colleagues and the age-gender related stereotypes they hold on those colleagues.
To determine if managers differ in the selection, promotion, or training decision-making of colleagues according to differences in their colleagues’ age-gender categories.

To determine if managers differ in the selection, promotion, or training decision-making of colleagues according to differences in the managers’ own age-gender categories.

To determine if managers’ perceived degree of difference between themselves and their colleagues vary according to differences in those managers’ own, or their colleagues’, age-gender categories.

To determine if managers’ selection, promotion, or training decisions vary according to those managers’ perceived degree of difference between their own and their colleagues’ age-gender categories.

To determine if managers hold age-gender related stereotypes on colleagues that vary according to managers’ construing of those colleagues’ age-gender categories.

To determine if managers’ decisions on age-gender categories of colleagues are related to managers’ age-gender stereotypes of those colleagues.
CHAPTER 6

METHOD
This Chapter outlines the method used to explore managers’ employment decision-making on colleagues, and relations between those decisions and outcomes of managers’ construing between themselves and their colleagues. The composition of those participating in the study, and processes surrounding the conduct of research-based interviews, are also described.

6.1 Arranging The Study

Chief Executive Officers of ten organisations were approached, in writing, requesting their organisations take part in the study. Six organisations agreed to participate, two of which were large-scale, and the remainder small to medium-sized employers. Each organisation was given a code in the study, and the codes are shown in Table 6.1. The types of organisations involved in the research are additionally illustrated in Table 6.1.

Senior management from participating organisations arranged meetings between their human resources personnel and the researcher, to facilitate conduct of the study. Following meetings with human resource personnel, organisation members agreeing to participate in the study were briefed about the nature of the research. Participating personnel were given the opportunity to attend group feedback sessions following analysis and write-up of the data.

6.2 Participant Recruitment

Line managers holding a direct responsibility for people at work were preferred over staff managers as participants in the study. Research has suggested that line managers hold greater responsibility for people issues at work, over human resource managers who provide more of an advisory role to line managers (Collinson, Knights & Collinson, 1990; Stone, 1998; Fagg, 2006). There was an emphasis placed, therefore, on the recruitment of line managers for the study.
Table 6.1

Organisation Codes and Descriptions

<table>
<thead>
<tr>
<th>Organisation Code</th>
<th>Organisation Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Publicly-Listed International Airline</td>
</tr>
<tr>
<td>C</td>
<td>NSW State Government Construction Department</td>
</tr>
<tr>
<td>E</td>
<td>Publicly-Listed Energy Distribution Organisation</td>
</tr>
<tr>
<td>F</td>
<td>Publicly-Listed Finance and Insurance Organisation</td>
</tr>
<tr>
<td>L</td>
<td>Major NSW Urban Local Government Body</td>
</tr>
<tr>
<td>T</td>
<td>Publicly-Listed Telecommunications Organisation</td>
</tr>
</tbody>
</table>
Generally, human resources staff provided intending research participants with information on the study, and research agreement sheets. Individuals were invited to complete participant agreement sheets prior to attending interviews scheduled by human resources staff in their workplaces.

6.3 Participant Composition

The six organisations agreeing to take part in the study made 99 staff members available for this study. Every staff member had a managerial or supervisory job title, and claimed at least six months, or longer, experience in their job. Eighty participants were line managers; the remainder were from human resource areas. Eight of the human resource personnel held supervisory positions involving provision of technical advice, but no direct managerial responsibility for people at work.

Table 6.2 illustrates the age-gender composition of members participating in the study. The under 30-years of age-gender group were the least well-represented. The mid-aged 30-44 years male and female group were the best represented, with the largest being the mid-aged male group.
Table 6.2

Distribution of Participants by Age-Gender and Organisation

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>A</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>L</th>
<th>T</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 30</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>30-44</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>7</td>
<td>9</td>
<td>2</td>
<td>38</td>
</tr>
<tr>
<td>45 and over</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>Totals</td>
<td>12</td>
<td>14</td>
<td>8</td>
<td>9</td>
<td>14</td>
<td>4</td>
<td>61</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 30</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>30-44</td>
<td>1</td>
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<td>5</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>45 and over</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Totals</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>9</td>
<td>38</td>
</tr>
<tr>
<td>TOTALS</td>
<td>16</td>
<td>20</td>
<td>15</td>
<td>15</td>
<td>20</td>
<td>13</td>
<td>99</td>
</tr>
</tbody>
</table>
6.4 Interviews

Interviews were conducted on a one-to-one basis with 99 managers and supervisors and were between 60 and 90 minutes in duration. A total of 14 work sites around Eastern Australia were used as interview venues in the study.

The structured interview process consisted of seven steps:

1. Opening and briefing
2. Agreeing on the employment area to be discussed
3. Identifying six categories of colleagues and providing descriptions of them
4. Making decisions about colleagues
5. Providing decision rationales
6. Completing individual grids
7. Completing structured grids

Step 1 involved welcoming participants and providing them with background information on the study, then asking a number of questions about their job and workplace. Data were gathered on the amount of time they had been in their job, their job title, levels and type of responsibility, nature of their work, number of staff they directly manage, and their perceptions of the organisation.

Step 2 involved gaining agreement on the employment area to be discussed. Promotion, selection and training were raised at the start of the interview, as optional areas for discussion. Each participant was then asked which of the three employment areas they felt best equipped to comment on in interview and that was selected as the interview focus. In the event that the manager being interviewed was ambivalent, or uncertain, an employment area was designated for discussion by the interviewer based on the interviewer’s understanding of the participant’s job and work experience.
Table 6.3 shows the distribution of employment areas discussed in interviews. It was anticipated that a large number of participants would claim expertise in the area of promotion of staff, over the selection of people or staff training areas. This was the case with, for example, fewer managers claiming expertise in the training decision-making area.

Step 3 involved the identification of colleagues for interview purposes, with each participant identifying six workplace colleagues from different age-gender categories. Participants selected three males and three females, one each from a different age-gender category. The age-gender categories to be used were, under 30 years, 30 to 45 years, and 45 years of age and older. Colleagues selected were to be drawn from managers’ workgroups, and have worked in those groups for at least one year. The names of those selected, however, remained anonymous to the interviewer, with participants using codes or initials to maintain confidentiality.

Participants then described six colleagues who fitted each age-gender category on cards, one colleague to a card, by listing each colleague’s good and bad points. Descriptions were to address the participants’ working experiences with each colleague, in terms of the ways in which each manager perceived that colleague.
Table 6.3

*Employment Areas Discussed in Interviews*

<table>
<thead>
<tr>
<th>ORGANISATION</th>
<th>A</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>L</th>
<th>T</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion</td>
<td>8</td>
<td>9</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>37</td>
</tr>
<tr>
<td>Selection</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>32</td>
</tr>
<tr>
<td>Training</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>TOTALS</td>
<td>16</td>
<td>20</td>
<td>15</td>
<td>15</td>
<td>20</td>
<td>13</td>
<td>99</td>
</tr>
</tbody>
</table>
Step 4 called for participants to make decisions on those previously identified colleagues in terms of the selected decision area of their colleagues’ promotability, selectability or trainability. Depending on the human resource area chosen, each participant was asked to address one of the three following scenarios in their decision-making about workplace colleagues:

**Selection:** The scenario calls for work colleagues to be considered for selection into more responsible positions in the participant’s organisation.

*The organisation has had a ‘spill’ of positions. All positions have to be re-applied for. Each job is newly approved, and has had some additional responsibilities added to the original job.*

**Promotion:** The scenario covers promotion of colleagues into new positions of responsibility in the participant’s organisation.

*A series of new positions have been established in the colleague’s working field. Each job is newly approved by the organisation. Job promotion will be into a similar job to the one previously held, but will carry more responsibilities*

**Training:** The scenario calls for colleagues to be considered for inclusion in career-related training programs being implemented by the participant’s organisation.

*You are being asked to select individuals from inside the organisation for participation in a major training and development program. The program is career related, fully funded, and training places are competitive.*
Participants were to make decisions as to whether to select the six nominated colleagues back into revised jobs in the organisation, promote them into more responsible positions, or to recommend them for attendance at significant training and development programs. The six decisions were to be entered on the reverse side of the cards to those earlier used to record participants’ descriptions of workplace colleagues.

Step 5 involved participants making use of the data they had earlier recorded on cards to explain their decisions on whether or not to promote, or select, or train colleagues. Each participant was asked to write down the rationale for each decision they had entered. They were required to provide a story, based on their thoughts about the people they had described, and their work together with them, which could explain why they had made the decisions they had.

Step 6 in the interview process called for each participant to use the data drawn from cards to construct an individual grid. Individuals were given a printed sheet with a matrix-type format, and introduced to the form and structure of an individual grid. This introduction covered the grid’s general features of columns, rows, and cells, and how data should be entered into grids. A grid format of columns of elements, rows of bipolar constructs, and the way in which age-gender categories of colleagues were to be entered as elements. Elements were to be identified by initials, as outlined in step 3, and Self added as the seventh element.

Completion of individual grids required, in the first instance, constructs to be elicited. Participants’ card-based data on colleagues’ differing in age-gender categories were used for elicitation, with these sorted according to the numbering system described in step 3. A process of triadic elicitation generated sets of bipolar constructs, by means of sorting of colleagues. Element sorting would start with colleagues 1, 2 and 3, and then move to colleagues 4, 5, and 6, on to colleagues 1, 3, and 5, then 3, 5 and 6 and finally 2, 4, and 6, with other combinations of colleagues adopted if required. Participants were asked to volunteer the words or terms that readily came to mind in this construct-elicitation process, with the interviewer writing them directly into the grid. The interviewer continued
writing down participant’s comments, while participants concentrated on changing the combination of elements and drawing new verbal relationships from the written material on their cards.

By this stage the participant typically volunteered seven to eight bipolar constructs, and witnessed their entry in the grid sheet. An average of eight constructs were elicited and entered in individual grids in the course of the study, with the range of constructs per grid varying between a minimum of five, and a maximum of fifteen. Participants entered colleagues as elements in grids and later rated them using the rating scale provided. Those completing grids were called on to confirm their preferred allocation of elements to particular poles to ensure that participants’ preferred poles were correctly identified. Participants were asked to ensure elements were aligned to one pole over another by associating constructs describing those elements to the left hand or right hand pole. The more positive poles of constructs and less positive poles of constructs were to be identified by participants and results noted by way of assigning positive constructs to the left hand and less positive to the right hand sides of each grid. In completing this process, participants were asked to refrain from using the centre, or ‘not sure value”, of the rating scale.

Table 6.4 shows a grid with bipolar constructs typical of those derived through this form of construct-elicitation process. A detailed description of the full interview format, including grid construct-elicitation procedures, is provided in Appendix A.
Table 6.4

*Example of an Individual Grid*

<table>
<thead>
<tr>
<th></th>
<th>1 Male ≤ 29 (initials)</th>
<th>2 Male 30-44 (initials)</th>
<th>3. Male ≥ 45 (initials)</th>
<th>4. Female ≤ 29 (initials)</th>
<th>5. Female 30-44 (initials)</th>
<th>6. Female ≥ 45 (initials)</th>
<th>7. Self (initials)</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very reliable</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Shows initiative</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>Tunnel vision</td>
</tr>
<tr>
<td>Relaxed</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>Aggressive</td>
</tr>
<tr>
<td>Good listener</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>Poor listener</td>
</tr>
<tr>
<td>Team player</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>Prefers solo</td>
</tr>
<tr>
<td>Hard worker</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>Lazy</td>
</tr>
<tr>
<td>Moves with changes</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>Resists changes</td>
</tr>
<tr>
<td>Totals</td>
<td>10</td>
<td>16</td>
<td>31</td>
<td>10</td>
<td>21</td>
<td>26</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>
The triadic elicitation process was supplemented by further construct-elicitation using laddering (Jankowicz, 2004). This construct-eliciting technique added to the number of constructs derived, and helped identify participants’ superordinate constructs. The laddering technique is capable of generating additional constructs through movement up (asking why questions of participants) and down (how questions) the construct hierarchy (Hinkle, 1965). The interviewer carried out laddering by asking exploratory questions of participants, and noting down their responses as illustrated in what follows:

*Interviewer, let's try and ladder some of the terms you've given me which I've written down on your grid. (Interviewer addresses constructs earlier elicited by participant). Let's look at this one; is good at analysis versus being supportive of others. You mentioned the importance of being good at analysis over being supportive of others. Why is it important in this organisation that you be good at analysis?*

Participant responds, “being analytical is more important in that it gets the job done. Being supportive, well that’s just soft stuff”.

*Interviewer, I'll note down here on the grid that you have indicated to me, gets the job done versus just soft stuff. Could you tell me why it is more important to get the job done than it is to deal with the soft stuff in the organisation?*

Participant responds, “getting the job done, it makes you look good”.

*Interviewer, let's look then at the other end of you looking good. What would you be in the organisation if you weren't looking good? What should I write down here?*

Participant, “you wouldn’t be doing your job”.

The underlined words gained through laddering constitute bipolar constructs which would be included in grids. Constructs, once derived through laddering, and before final entry in grids, would be checked for more positive and less positive status with participants.
Dyadic elicitation was used when the triadic process did not lead to construct elicitation. The dyadic process would take the form of participants dealing with two cards at a time in their construing. Monadic construing was also used to build on the number of constructs derived by way of managers searching through terms, or words, which had occurred more than once on their cards. The participant, on finding frequently written words, would volunteer them to the interviewer who would enter them in grids. Participants were asked “what would you have if you didn't have this (term from first pole quoted), or what would you be doing if you weren't doing (activity from first pole quoted)?” This process of searching for frequently-occurring words through dyadic elicitation added, on average, four constructs to the number provided in individual grids. Completed bi-polar constructs, derived through monadic and dyadic elicitation, were checked with the participant, as described before in step 5, to determine which pole of the construct was positive, and which less positive. Completed constructs could then be laddered as before.

Participants, on completing the construct-elicitation phase of the interview, were asked to use rating scales provided in grids to relate constructs and elements. Selection of an appropriate Repgrid construct rating scale has earlier been described in Section 5.3.1.2. The five-point rating scale consisted of values one and two, which could associate terms with the left-hand pole, and four and five, the right-hand pole of the grid. The value three, an intermediate rating, provided a not sure facility. Participants were requested to assign only one construct rating to each element/construct grid cell, and use the mid rating of three only when absolutely necessary. Following completion of their grids, participants were asked to look for any errors in their grids, such as reversal of constructs, and rectify these errors.

Step 7 of the interview process called for participants to complete a structured grid which included provided constructs, as described in section 6.5.
6.5 Constructing a Grid With Provided Constructs

A structured grid was compiled in a pilot study of 22 practising human resource managers attending a university course conducted by The Australian Human Resources Institute (AHRI) during 1999. This grid consisted of 20 provided constructs derived from 22 managers/students who had each been invited to complete a Repgrid. There were seven elements used to elicit constructs: One was Self and the others were six different age-gender categories of work colleagues. Provided constructs were drawn from frequently-occurring elicited constructs in grids, those constructs which were similar, and appeared at least three times in the AHRI study.

Structured grids, using the AHRI study format, were administered to five managers in organisation L. Results were discussed with two managers who had participated in the L study to date, but had not yet completed a structured grid. On the basis of discussions with these managers, three constructs considered not clear, ambiguous, or said “not to be real world”, were subsequently discarded in the grid design process. Discarded constructs were replaced with newly-derived constructs gained from research into organisation L’s individual and structured grids, and information derived from human resources personnel and material published in their organisation. The original grid of 20 constructs was ultimately increased to 26 provided constructs, and the seven original elements retained. This new grid format was discussed with human resources personnel in other organisations participating in the study. No further changes were made to the grid format. The structured grid format was finalised after the study had commenced with eight managers only of the twenty from organisation L participating in interviews completing the newly-created structured grid. The grid with 26 constructs provided, was ultimately completed by 79 managers in organisations A, C, E, F and T, and the data added to eight grids’ results from organisation L, to provide a total of 87 sets of data. Table 6.5 shows the format of structured grids completed by managers in six participating organisations in the current study. Care was taken in constructing this grid to randomise the order of presentation of preferred and non-preferred poles, to avoid contaminating response sets.
Table 6.5

Structured Grid Format Using 26 Provided Constructs

Elements Same as For I/Grids

| Welcomes change at work                      | Doesn’t welcome change at work                      |
| Works better alone                           | Works better with others                           |
| Good people skills                           | Lacks people skills                               |
| Traditional approach                         | Thinks ‘outside the box’                           |
| Inwardly focused                             | Customer focused                                  |
| Lazy                                         | Hardworking                                       |
| Easily distracted                            | Job focused                                       |
| Young                                        | Old                                               |
| Helpful                                      | Not helpful to others                             |
| Dislikes learning                            | Likes to learn                                    |
| Promotable                                   | Not promotable                                    |
| A clockwatcher                               | Very flexible with time                           |
| Accepts constructive criticism               | Blames others at work                             |
| Workplace “savvy”                            | Not workplace ‘savvy’                             |
| Not well organised                           | Well organised                                    |
| Not political                                | Political                                         |
| Extra training good investment               | Extra training not a good investment              |
| Quiet personality                            | Outgoing personality                              |
| A good work future                           | A limited work future                             |
| Slow to learn                                | Learns quickly                                   |
| Has high potential                           | Limited potential                                 |
| Set in ways                                  | Readily changes                                   |
| Values job                                   | Doesn’t value job                                 |
| No sense of humour                           | Has a keen sense of humour                        |
| High on energy                               | Lower energy                                      |
| Low performer                                | High performer                                    |
6.6 Finalising Completion of Structured Grids and Completing The Interview

Participants, following completion of structured grids, were asked to carry out final checks, changes, or erasures. Interviews were completed by giving participants information on the way data was to be processed, and how information was to be held confidential. Each manager participating in the study was invited to a group feedback session to be held in their workplace at a future date. Average time devoted to an interview was seventy-five minutes.

The following Chapter will introduce a two part data gathering process and analysis of data gathered from managers. Chapter 7 will firstly deal with the analysis and reporting of managers’ employment decision-making on their workplace colleagues, relating to Aims 1 and 2. The second part of the chapter will detail managers’ perceived differences between themselves and their colleagues and relations sought between those differences and managers’ decisions on those colleagues (Aims 3 and 4).

6.7 Developing Appropriate Software to Process Grid Related Data

Substantial amounts of data were derived from participants completing both individual and structured grids, and making decisions on colleagues. It was decided that a means of processing this large amount of complex data and reporting the results of grid-based calculations was required. Software was subsequently developed to carry out these tasks, with program operations described in The Lattice Two User Manual* in Appendix B. The Lattice Manual covers operational steps from the entering of data through to comparing predicted and actual decisions made by managers, and reporting those results.

* For convenience the Lattice Manual makes use of consecutive numbering of figures to enable ready access to software related information while leaving figure identification independent for use with PhD related materials.
CHAPTER 7

CONSTRUING AND DECISION RESULTS
This Chapter deals with the results of a two-part data gathering process. The first part involves the capture of managers’ descriptions of colleagues and their related employment decisions on them. The second makes use of the tools of personal construct psychology (PCP), (Kelly, 1955). The two processes commence with data being brought together, analysed, and reported through the use of managers’ descriptions of colleagues. The results of this process are then reported according to the age and gender of managers and their work colleagues, and decisions made on those colleagues in the employment areas of selection, promotion and training. This is followed by data illustrating the differences between manager’s construal of Self and colleagues, compared to managers’ decisions about those colleagues.

This part of the results presentation addresses four research aims detailed in 5.7. The first, to determine if managers differed in their selection, promotion, or training decisions according to differences in their colleagues’ age-gender categories (5.7.1). The second aim (5.7.2) sets out to determine differences in managers’ selection, promotion, or training decisions, according to their own age-gender categories. The third aim (5.7.3) seeks to identify differences in managers’ perceived similarities between themselves and their colleagues according to differences in their own and colleagues’ age-gender characteristics. The fourth, 5.7.4 sets out to determine relations between managers’ reported employment decisions and their perceived similarities between their own and their colleagues’ age-gender related characteristics. In addition, grid-based measures, such as lopsidedness, positiveness and cognitive complexity are provided, as described in Chapter 5, to evaluate the personal construct methodology used in the study.

7.1 Managers’ Decisions

Ninety-nine managers making employment decisions on each of six work colleagues contributed to a total of 594 decisions on people, from their workplaces differing in age-gender combinations, with each manager making decisions in areas of selection, promotion, or training. The 594 decisions in the study consisted of 325 supporting the hiring, promotion or training of colleagues, 55% positive, and 269 deciding
against hiring, promoting, or training colleagues, 45% negative. Sections 7.1.1 and 7.1.2 report on the frequency of decisions assigned to colleagues, according to their age and gender, and the employment areas of selection, promotion, and training, while Section 7.1.3 focuses on the age and gender of the manager.

7.1.1. Decisions Made on Colleagues According to Their Age and Gender (Research Aim Number One)

The research aim addressed in this Section was: To determine if managers differ in their selection, promotion, or training decision-making of colleagues according to differences in their colleagues’ age-gender categories.

Table 7.1 illustrates the frequencies and percentages of managers’ decisions made according to the areas of selection, promotion and training, and the age and gender categories of colleagues. Given that the data in Table 7.1 are not independent, chi-square and log linear analysis could not usefully be applied. A descriptive analysis of the data in Table 7.1 has however been provided.

Inspection of these results suggests that the younger and mid-aged female groups were decided on more positively. The older female category, on the other hand, was considered more negatively than their older male age-gender colleagues. The employment area of selection reported the greatest percentage of positive decisions, the field of training held similar results, and promotion showed lower percentages of positive decisions assigned to colleagues.
Table 7.1

*Frequencies and Percentages of Managers’ Positive Selection, Promotion And Training Decisions, by Colleague’s Age-Gender Categories*

<table>
<thead>
<tr>
<th>Employment Areas</th>
<th>Selection N (%)</th>
<th>Promotion N (%)</th>
<th>Training N (%)</th>
<th>Totals N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Colleagues Age-Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young (16-29)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>16 (48)</td>
<td>19 (46)</td>
<td>16 (64)</td>
<td>51 (52)</td>
</tr>
<tr>
<td>Females</td>
<td>22 (67)</td>
<td>21 (51)</td>
<td>19 (76)</td>
<td>62 (63)</td>
</tr>
<tr>
<td>Totals</td>
<td>38 (58)</td>
<td>40 (49)</td>
<td>35 (70)</td>
<td>113 (57)</td>
</tr>
<tr>
<td>Mid Age (30-44)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>21 (64)</td>
<td>23 (56)</td>
<td>12 (48)</td>
<td>56 (57)</td>
</tr>
<tr>
<td>Females</td>
<td>25 (76)</td>
<td>21 (51)</td>
<td>15 (60)</td>
<td>61 (62)</td>
</tr>
<tr>
<td>Totals</td>
<td>46 (70)</td>
<td>44 (54)</td>
<td>27 (54)</td>
<td>117 (59)</td>
</tr>
<tr>
<td>Old (45+)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>20 (61)</td>
<td>19 (46)</td>
<td>13 (53)</td>
<td>52 (53)</td>
</tr>
<tr>
<td>Females</td>
<td>15 (45)</td>
<td>16 (39)</td>
<td>12 (43)</td>
<td>43 (43)</td>
</tr>
<tr>
<td>Totals</td>
<td>35 (53)</td>
<td>35 (43)</td>
<td>25 (48)</td>
<td>95 (48)</td>
</tr>
</tbody>
</table>

| Total Frequency Of Positive Decisions | 119 | 119 | 87 | 325 |
| Percent Positive, % | (60) | (48) | (58) | (55) |
With regards selection decision-making, older aged colleagues were less likely to be selected than mid aged ones. Younger males had lower frequencies of positive decisions assigned to them while younger females had higher frequencies of positive selection decisions associated with their age-gender category. Mid aged females were the most likely category of colleague to be selected and older females the least likely.

In the area of promotion decision-making, there was some variability in the frequency of positive decisions assigned to colleagues. Promotion decisions provided the lowest level of positive decisions of the three employment areas being researched. Older females were found to be the least likely promoted age-gender group, with the mid aged male group the most likely age-gender category to be promoted.

With regard to training decision-making, inspection of results pointed to younger-aged females receiving the greatest percentage of positive training decisions, and older females the lowest. The older male was assigned a bare majority of positive decisions, younger males a higher percentage rate, and mid-aged males a percentage of positive decisions similar to the older female age-gender category.

7.1.2 Relations between Managers’ Justifications of Decisions on Colleagues and Their Actual Decisions on Those Colleagues
(Research Aim Number One)

This Section is similar to 7.1.1, where relationships were sought between managers’ reported employment decisions and perceived differences in colleagues’ age-gender related characteristics. In this case, relationships were sought between managers’ descriptions of their decision-making on different age-gender categories of colleagues (as evidenced through constructs used by managers in their decision rationales) and their employment decisions on those colleagues.
The methodology employed in this Section made use of a naturalistic approach to help identify, and relate, managers’ impressions of colleagues to their decisions on them and took the form of searching data provided by managers in decision-making interviews. Managers’ descriptions of colleagues resulted in over 1500 terms being identified. Little commonality was found in their use of terms with the most frequently occurring exact term used found only five times. However decision rationales were able to be scored to determine the extent of positiveness of managers’ impressions and for those scores, in turn, to be related to their decisions.

Positive terms were gathered from rationales with the assistance of an extensive listing of positive traits (after Anderson, 1968), and noted according to their incidence in each rationale. For example, terms such as: capable, skilled, having potential, being ready, competent, or balanced in work approaches, were taken as positive, while being immature, incapable, not ready, lacking enthusiasm, being plateaued, or unwilling to change, were interpreted as negative. Frequencies of positive terms were compared with managers’ related positive decisions on colleagues, and the results reported in Table 7.2. Managers’ 304 positive responses were found to have been assigned most frequently to younger and mid-aged females (frequency of 63, 56 positive responses, respectively) and least frequently to the older female category, (39 positive responses). The younger and mid-aged males were similarly assigned higher frequencies of positive responses (51, 53, respectively) relative to a low for the older male, (42).

This might have been as expected as results suggested that managers’ rationales were largely congruent with the decisions they sought to justify, and closely related to their decisions on four of the six age-gender categories. Positive terms drawn from managers’ decision rationales overall explained 94% of reported positive decisions. Differences were noted between the frequencies of reported decisions and positive terms associated with the younger and older age-gender groups, and reported in table 7.2. Decisions and colleagues’ age-gender were not however significantly associated. Results indicated the positiveness of managers’ decision descriptions and relation to younger age-gender categories of colleagues and were qualitatively in agreement with Research Aim Number One.
Table 7.2.

Comparison of Frequencies of Positive Terms Derived from Managers’ Decision Rationales, and Reported Positive Decisions, by Age-Gender of Colleague

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Young</td>
<td>Mid</td>
</tr>
<tr>
<td>Frequency of Positive Terms Determined through Content Analysis of Rationales</td>
<td>51</td>
<td>53</td>
</tr>
<tr>
<td>Frequency of Positive Reported Decisions</td>
<td>51</td>
<td>56</td>
</tr>
</tbody>
</table>

7.1.3 Managers’ Decisions Reported According to Their Own Age-Gender Categories (Research Aim Number Two)

Managers’ decisions on colleagues were reported in this Section in a similar manner to that of Section 7.1.1, and as outlined in Chapter 6, step 4. Managers’ decisions in this case, however, were reported according to managers’ own age and gender categories. Decisions were documented, and comparisons made between frequencies of reported positive decisions, according to managers’ own age-gender categories. Table 7.3 illustrates the frequencies and related percentages of decisions made on colleagues according to managers’ age-gender categories, and employment areas of selection, promotion and training.
Table 7.3  
*Frequencies and Percentages of Managers’ Positive Selection, Promotion, And Training Decisions, Reported According To Their Own Age-Gender*

<table>
<thead>
<tr>
<th>Employment Areas</th>
<th>Frequencies and (Percentages) of Positive Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Selection</td>
</tr>
<tr>
<td>Colleagues</td>
<td>N (%)</td>
</tr>
<tr>
<td>Age-Gender</td>
<td></td>
</tr>
<tr>
<td>Young (16-29)</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>14 (78)</td>
</tr>
<tr>
<td>Females</td>
<td>5 (42)</td>
</tr>
<tr>
<td>Totals</td>
<td>19 (63)</td>
</tr>
<tr>
<td>Mid Age (30-44)</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>45 (54)</td>
</tr>
<tr>
<td>Females</td>
<td>14 (58)</td>
</tr>
<tr>
<td>Totals</td>
<td>59 (55)</td>
</tr>
<tr>
<td>Old (45+)</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>9 (50)</td>
</tr>
<tr>
<td>Females</td>
<td>32 (76)</td>
</tr>
<tr>
<td>Totals</td>
<td>41 (68)</td>
</tr>
<tr>
<td>Total Frequency Of Positive Decisions</td>
<td>119</td>
</tr>
<tr>
<td>Percent Positive, %</td>
<td>(60)</td>
</tr>
</tbody>
</table>
The field of selection decision-making, as reported in Table 7.3, displayed high frequencies of positive decisions, with the younger male and older female categories providing the greatest percentages of positive decisions (78%, 76% respectively). Younger female managers, on the other hand, registered the lowest percentage of positive decisions, followed by the older male age-gender group (42%, 50% respectively).

In the area of promotion, as reported in Table 7.3, 48% of managers’ decisions were reported as positive, the lowest percentage of positive decision-making across the three employment areas. There was variability, however, in the frequency of positive decisions, according to the age-gender category of managers, making the promotion of workplace colleagues problematic. For example, the younger female group assigned a very low percentage of positive decisions to promotion of colleagues (22%), while the mid-aged male category was similarly low (40%). The older age group, on the other hand, assigned a higher percentage (57%) of positive promotion decisions for their category with older males (53%) and older females having (67%) of their promotion decisions as positive. Importantly, within promotion decision-making, the younger female age-gender category was found to have assigned the lowest percentage of positive decisions, and older females the highest percentage of positive decisions, across all age-gender categories.

In the area of training decisions making, Table 7.3 further shows the overall percentage of positive training decisions made by managers (58%). There was, however, an absence of younger males from the sample, leaving younger female managers as sole contributors to the younger-age category. The results of the younger female age-gender group’s decisions (43% positive) illustrated the low percentage of positive decisions made by this age-gender group, relative to other age-gender categories of decision-makers. The older female age group, meanwhile, assigned a higher percentage of positive decisions (67%) than their younger female colleagues. Age-gender categories assigning the greatest percentage of positive decisions were the mid-aged male (69%), followed by the older female manager category.
In order to further examine these relationships, a loglinear analysis was conducted. The factors associated with this analysis were Age, Gender and Decisions (that is, ‘yes’ and ‘no’ categories of decisions were included).

In the area of managers’ selection decision-making the results of loglinear analysis are reported in Table 7.4 and show the partial associations between managers’ age, gender, and decisions. Managers’ age and gender were not found to be associated with their selection decisions on colleagues.

Table 7.4

Partial Associations of Managers’ Age, Gender, and Selection Decisions Derived from Loglinear Analysis

<table>
<thead>
<tr>
<th>Effect</th>
<th>Degrees of Freedom</th>
<th>Partial Chi-Square</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age X Gender</td>
<td>2</td>
<td>35.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Age X Selection Decision</td>
<td>2</td>
<td>1.85</td>
<td>0.4</td>
</tr>
<tr>
<td>Gender X Selection Decision</td>
<td>1</td>
<td>0.24</td>
<td>0.63</td>
</tr>
<tr>
<td>Age</td>
<td>2</td>
<td>46.65</td>
<td>0.0</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>8.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Selection Decision</td>
<td>1</td>
<td>8.6</td>
<td>0.0</td>
</tr>
</tbody>
</table>
In the area of managers’ promotion decision-making, the results of loglinear analysis are reported in Table 7.5 and show the partial associations between managers’ age and gender and decisions. Managers’ age \((p < 0.01)\), and gender \((p = 0.05)\), were found to be significantly associated with their promotion decisions on colleagues.

Table 7.5

*Partial Associations of Managers’ Age, Gender, and Promotion Decisions Derived from Loglinear Analysis*

<table>
<thead>
<tr>
<th>Effect</th>
<th>Degrees of Freedom</th>
<th>Partial Chi-Square</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age X Gender</td>
<td>2</td>
<td>21.68</td>
<td>0.0</td>
</tr>
<tr>
<td>Age X Promotion Decision</td>
<td>2</td>
<td>8.73</td>
<td>0.01</td>
</tr>
<tr>
<td>Gender X Promotion Decision</td>
<td>1</td>
<td>3.71</td>
<td>0.05</td>
</tr>
<tr>
<td>Age</td>
<td>2</td>
<td>83.47</td>
<td>0.0</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>25.16</td>
<td>0.0</td>
</tr>
<tr>
<td>Promotion Decision</td>
<td>1</td>
<td>0.26</td>
<td>0.61</td>
</tr>
</tbody>
</table>
In the area of managers’ training decision-making, the results of loglinear analysis are reported in Table 7.6 and show the partial associations between managers’ age, gender, and decisions. Managers’ age and gender were not found to be associated with their training decisions on colleagues.

Table 7.6

Partial Associations of Managers’ Age, Gender, and Training Decisions Derived from Loglinear Analysis

<table>
<thead>
<tr>
<th>Effect</th>
<th>Degrees of Freedom</th>
<th>Partial Chi-Square</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age X Gender</td>
<td>2</td>
<td>56.55</td>
<td>0.0</td>
</tr>
<tr>
<td>Age X Training Decision</td>
<td>2</td>
<td>0.59</td>
<td>0.75</td>
</tr>
<tr>
<td>Gender X Training Decision</td>
<td>1</td>
<td>1.70</td>
<td>0.19</td>
</tr>
<tr>
<td>Age</td>
<td>2</td>
<td>24.08</td>
<td>0.0</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>2.17</td>
<td>0.14</td>
</tr>
<tr>
<td>Training Decision</td>
<td>1</td>
<td>3.86</td>
<td>0.05</td>
</tr>
</tbody>
</table>
Significant associations were not found to exist between managers’ age and gender and their respective selection and training decisions while managers’ age and gender were found to be associated with their promotion decisions on colleagues. The results in the promotion decision area therefore partially confirmed Research Aim Number Two:

To determine if managers differ in the selection, promotion, or training decision-making of colleagues according to differences in the managers’ own age-gender categories.

7.2 Use of Social Distance Measures as a Means of Determining Manager’s Construed Alike ness with Colleagues, and Hence Decisions on Them
(Research Aim Numbers Three and Four)

This Section deals with measurement of social distance, whereby manager’s construal of colleagues, evident through differences in those managers’ grid-based construing between themselves and their colleagues, were used as a means of predicting manager’s employment decisions, which could then be compared with their reported decisions. Grid-based social distance measures were determined according to managers’ perceived extent of similarity between their own characteristics and others’ age-gender related characteristics. It was expected that colleagues regarded as more socially proximate to the Self, would lead managers to form more favourable decisions on them. Conversely, it was hypothesised that colleagues with little perceived similarity to managers’ own age-gender related characteristics could lead to those colleagues being perceived as outsiders and negative employment decisions made on them. Given that the elements used in grids were colleagues varying in age-gender categories, social distance could then be examined according to the age-gender of both the manager and their colleagues. This Section’s Research Aims are:
Research Aim Number Three

To determine if managers’ perceived degree of difference between themselves and their colleagues vary according to differences in those managers’ own, or their colleagues’, age-gender categories.

And

Research Aim Number Four

To determine if managers’ selection, promotion, or training decisions vary according to those managers’ perceived degree of difference between their own and their colleagues’ age-gender categories.

7.2.1 Social Distance Measures Derived from Managers’ Construing Between Themselves and Their Colleagues

Social distance metrics refer to differences in managers’ construing between themselves and different categories of colleagues (after Mackay, 1992). Measures of distance were derived from both individual and structured grids by determining differences in managers’ construing, and their related evaluations between themselves, or Self, and different age-gender categories of colleagues. The extent of manager-raters’ differentiation between elements were calculated in a manner similar to that of an identification measure (Jones, 1954) with distance measurement in the study determined by identifying differences between aggregate values of construct ratings on elements in grids. Two elements, the Self and one other in a given grid, had relative differences in their element totals calculated by measuring differences between aggregate construct ratings on those elements (Fransella, Bell, & Bannister, 2004).
7.2.2 Determining Social Distance Measures by Means of Managers’ Construing of Differences Between Their Own and Their Colleagues’ Age-Gender Characteristics

Social distance values for individual and structured grids were processed using the software social distance facility. This software is described in the Lattice 2 Manual at Appendix B and was constructed to calculate numerical differences between aggregated element totals, or social distances by way of differential values between Self and colleagues.

Social distance measures were gained from construct totals in grids by ignoring the plus or minus sign, and noting the aggregate element totals. The magnitude of element values varied according to the extremes of size of the grid and the grids’ rating dimensions. Individual grids, for example, having a total of 10 constructs and a five-point rating scale had element totals vary between 10 and 50. Structured grids, on the other hand, held 26 provided bi-polar constructs, and had element totals varying between 26 and 130. Examples of a typical array of individual grid results illustrating total element ratings could be appreciated through the following element values: 10 for Self and 20 (younger male), 25 (mid-aged male), 40 (older male), 15 (younger female), 25 (mid-age-gender female), 50 (older female). Social distance values calculated by the software were typically: 20 – 10 = 10 for the younger male’s proximity to ‘Self’, and 15, 30, 5, 15, and 40 respectively for the other five Self-other social distances. These measures were suggestive of the relative closeness of the younger male and female to Self. Similarly, there was evidence of increased social distance between Self and others, with increases to colleagues’ chronological age categories.

Because of the way grids were arranged, with positive poles given a low rating, those people considered more positively were assigned smaller construct ratings, and were therefore placed closer to the Self’s typically positive position. Self values were expected to be the most positively viewed constructs and to be associated mainly with the left-hand, or positive grid pole end, at the extreme 1 rating on the 1-5 construct rating scale. The Self,
therefore, generally held a lower value of element rating while *others* more socially distant from the Self, typically held higher element total values. Social Distance values were however, positive or negative according to the proximity of social distance measures to zero indicating closeness to Self, and hence a positive decision on the part of the manager.

7.2.3 Individual Grids: Social Distance Measures, Determined According to Managers’ and Colleagues’ Age-Gender Categories (Research Aim Number Three)

Individual grids had their construct totals analysed to determine social distance measures, in the manner outlined earlier in Sections 7.2.1 and 7.2.2. Table 7.7 shows social distance measures for individual grids, according to managers’, and their colleagues’, age-gender categories. Some differences were noted in social distance measures between managers and colleagues according to managers’ own age-gender categories. The younger male category of manager, for example, had younger male colleagues as their most socially distant category (largest mean value relative to the total mean for category and furthest from zero). The mid aged male category of manager were similarly distant from their own category of male colleagues (socially distant, but not to the same degree as younger males were). The remaining four age-gender categories of managers had social distance measures more socially proximate to their own relevant age-gender categories (mean social distance measures below the total means for their categories). When looking at social distance measures within managers’ age-gender categories, younger male managers had their younger male colleague counterparts most distant and younger female and older male colleagues most proximate. Older male managers were found to be most proximate to mid aged males and furthest from older female colleagues while younger female managers were most distant from older females and closest to their own age-gender category of colleagues. Older females were closest to mid aged males and furthest from older males.

When looking into social distances between colleagues and managers, according to colleagues’ age-gender, measures were found to vary such that the younger female category of manager was the most socially distant from their colleagues (larger mean
values relative to total mean values for younger, mid aged, older males and mid-aged, older female colleagues). Meanwhile, older male colleagues were most distant from younger female managers and closest to younger male managers. In turn, younger female colleagues were most distant from older females and closest to younger male managers. The older female category of colleague was most socially proximate to the older male and most socially distant from the younger male category of manager. Social proximity to two age-gender categories of colleagues were reflected in negative social distance measures associated with younger male managers and their older male and younger female colleagues in Table 7.7. Social distance values carrying minus signs can be explained by way of differences in younger male managers’ more positive evaluations of younger female and older male categories of colleagues and slightly less positive evaluations on their own category. Considerable variability was found to exist around social distance measures for the younger female manager and their older female colleague. Variability, as evidenced by the large standard deviation measure associated with the older female manager, can be explained as being a function of both positive and negative values drawn from a wide array of social distance measures.

Differences in social distance measures were found to vary according to managers’ and their colleagues’ age-gender category membership. Younger male and mid aged managers were socially distant from their own age-gender category of colleagues while other managers, had their own age-gender category more proximate. There was general agreement however, among managers in their social distance measures of colleagues, derived from individual grids, that older male and older female colleagues were more socially distant and younger females more socially proximate.

Social distance values shown in Table 7.7, according to age-gender category of managers and their colleagues, could be summarised in the following form:

Younger Male Managers: Most socially proximate to younger females and most socially remote from younger males.
Mid-aged Male Managers: Most socially proximate to younger males and most socially remote from older females.

Older Male Managers: Most socially proximate to younger males and most socially remote from mid-aged females.

Younger Female Managers: Most socially proximate to younger females and most socially remote from older females.

Mid-aged Female Managers: Most socially proximate to mid-aged females and most socially remote from older males.

Older female Managers: Most socially proximate to mid-aged males and most socially remote from older males.

In summary, social distance measures derived from individual grids showed differences in managers’ perceived levels of proximity with colleagues, varying according to the age-gender category membership of manager and colleague. These results confirmed Research Aim Number Three:

*To determine if managers’ perceived degree of difference between themselves and their colleagues vary according to differences in those managers’ own, or their colleagues’, age-gender categories.*
Table 7.7

*Individual Grids: Mean Social Distance and Standard Deviation Measures, By Managers’ and Colleagues’ Age-Gender Categories*

<table>
<thead>
<tr>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Colleagues’ Age-gender Categories</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Males</td>
</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
</tr>
<tr>
<td><strong>Managers’ Age-Gender Categories</strong></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>14.0 (10.55)</td>
</tr>
<tr>
<td>Mid-aged</td>
<td>3.78 (6.56)</td>
</tr>
<tr>
<td>Old</td>
<td>1.59 (6.15)</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>9.40 (10.05)</td>
</tr>
<tr>
<td>Mid-aged</td>
<td>3.86 (5.92)</td>
</tr>
<tr>
<td>Old</td>
<td>1.08 (5.82)</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>7.97</td>
</tr>
<tr>
<td>(S D)</td>
<td>(9.44)</td>
</tr>
</tbody>
</table>
7.2.4 Structured Grids: Social Distance Measures According to Managers’ and Colleagues’ Age-Gender Categories
(Research Aim Number Three)

Social distance measures were derived from structured grids in similar manner to individual grids, outlined in Section 7.2.3 and the resulting social distance measures outlined in Table 7.8. Differences were found in social distance measures between managers’ own age-gender category and those of their colleagues. The younger male age-gender category of manager was, for example, socially distant from their own category (larger positive numerical social distance values). On the other hand, younger female and mid aged female managers were socially proximate to their own age-gender categories. Social distance measures between managers and colleagues showed that the younger male construed the older female as most distant and the younger female as most proximate (minus sign associated with social distance measure and magnitude closer to zero suggested greater social proximity than more socially distant larger positive values). Meanwhile, the younger female had the younger male and older female categories as most socially distant and their own category as most socially proximate.

There were substantial differences in social distances between managers and their colleagues when viewed from the perspective of managers’ own age-gender categories. For example, younger male managers were most socially distant from their own age-gender category of colleagues, while younger females were closest to their own category and both categories perceived older colleagues similarly distant in terms of social distance measures. Managers’ construing of social distances between themselves and their colleagues also varied according to differences in those colleagues’ age-gender categories. Mean social distances associated with different age-gender categories of colleague perceived the younger female, then the younger male, most proximate, while the older male was more distant and older female most socially distant.
Table 7.8
Structured Grids: Mean Social Distance and Standard Deviation Measures, By Managers’ and Colleagues’ Age-Gender Categories

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Young (Mean, SD)</td>
<td>Young (Mean, SD)</td>
</tr>
<tr>
<td></td>
<td>Mid-aged (Mean, SD)</td>
<td>Mid-aged (Mean, SD)</td>
</tr>
<tr>
<td></td>
<td>Old (Mean, SD)</td>
<td>Old (Mean, SD)</td>
</tr>
<tr>
<td>Managers’ Age-Gender Categories</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>23.33 (41.2)</td>
<td>27.4 (27.61)</td>
</tr>
<tr>
<td>Mid-aged</td>
<td>-4.67 (6.19)</td>
<td>25.1 (25.47)</td>
</tr>
<tr>
<td>Old</td>
<td>9.0 (27.87)</td>
<td>26.8 (16.7)</td>
</tr>
<tr>
<td></td>
<td>-0.67 (16.04)</td>
<td>5.1 (18.0)</td>
</tr>
<tr>
<td></td>
<td>27.67 (21.22)</td>
<td>17.0 (12.47)</td>
</tr>
<tr>
<td></td>
<td>41.0 (18.36)</td>
<td>30.5 (25.71)</td>
</tr>
<tr>
<td>Mid-Aged</td>
<td>8.78 (16.56)</td>
<td>7.55 (19.79)</td>
</tr>
<tr>
<td></td>
<td>10.65 (20.22)</td>
<td>9.0 (17.29)</td>
</tr>
<tr>
<td></td>
<td>18.0 (20.54)</td>
<td>15.36 (20.38)</td>
</tr>
<tr>
<td></td>
<td>9.88 (15.46)</td>
<td>15.36 (20.38)</td>
</tr>
<tr>
<td></td>
<td>8.66 (11.62)</td>
<td>4.55 (21.66)</td>
</tr>
<tr>
<td></td>
<td>18.69 (22.43)</td>
<td>6.73 (16.35)</td>
</tr>
<tr>
<td>Old</td>
<td>1.11 (14.21)</td>
<td>11.83 (23.19)</td>
</tr>
<tr>
<td></td>
<td>10.37 (19.92)</td>
<td>7.0 (20.96)</td>
</tr>
<tr>
<td></td>
<td>21.37 (20.88)</td>
<td>20.5 (24.14)</td>
</tr>
<tr>
<td></td>
<td>2.42 (17.74)</td>
<td>12.25 (24.03)</td>
</tr>
<tr>
<td></td>
<td>12.74 (18.3)</td>
<td>7.5 (18.38)</td>
</tr>
<tr>
<td></td>
<td>14.95 (16.07)</td>
<td>18.08 (23.77)</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>27.4 (27.61)</td>
<td>27.4 (27.61)</td>
</tr>
<tr>
<td>Mid-aged</td>
<td>25.1 (25.47)</td>
<td>25.1 (25.47)</td>
</tr>
<tr>
<td>Old</td>
<td>26.8 (16.7)</td>
<td>26.8 (16.7)</td>
</tr>
<tr>
<td></td>
<td>5.1 (18.0)</td>
<td>5.1 (18.0)</td>
</tr>
<tr>
<td></td>
<td>17.0 (12.47)</td>
<td>17.0 (12.47)</td>
</tr>
<tr>
<td></td>
<td>30.5 (25.71)</td>
<td>30.5 (25.71)</td>
</tr>
<tr>
<td>Mid-Aged</td>
<td>7.55 (19.79)</td>
<td>7.55 (19.79)</td>
</tr>
<tr>
<td></td>
<td>9.0 (17.29)</td>
<td>9.0 (17.29)</td>
</tr>
<tr>
<td></td>
<td>15.36 (20.38)</td>
<td>15.36 (20.38)</td>
</tr>
<tr>
<td></td>
<td>4.55 (21.66)</td>
<td>4.55 (21.66)</td>
</tr>
<tr>
<td></td>
<td>6.73 (16.35)</td>
<td>6.73 (16.35)</td>
</tr>
<tr>
<td></td>
<td>15.91 (20.86)</td>
<td>15.91 (20.86)</td>
</tr>
<tr>
<td>Old</td>
<td>11.83 (23.19)</td>
<td>11.83 (23.19)</td>
</tr>
<tr>
<td></td>
<td>7.0 (20.96)</td>
<td>7.0 (20.96)</td>
</tr>
<tr>
<td></td>
<td>20.5 (24.14)</td>
<td>20.5 (24.14)</td>
</tr>
<tr>
<td></td>
<td>12.25 (24.03)</td>
<td>12.25 (24.03)</td>
</tr>
<tr>
<td></td>
<td>7.5 (18.38)</td>
<td>7.5 (18.38)</td>
</tr>
<tr>
<td></td>
<td>18.08 (23.77)</td>
<td>18.08 (23.77)</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>13.33 (23.76)</td>
<td>13.38 (23.76)</td>
</tr>
<tr>
<td>(S D)</td>
<td>9.58 (18.34)</td>
<td>5.58 (18.82)</td>
</tr>
<tr>
<td></td>
<td>18.51 (21.75)</td>
<td>18.51 (21.75)</td>
</tr>
<tr>
<td></td>
<td>5.58 (18.82)</td>
<td>5.58 (18.82)</td>
</tr>
<tr>
<td></td>
<td>23.19 (21.2)</td>
<td>23.19 (21.2)</td>
</tr>
</tbody>
</table>
Social distance values shown in Table 7.8, according to age-gender category of managers and their colleagues, could be summarised in the following form:

Younger Male Managers: Most socially proximate to younger females and most socially remote from older females.

Mid-aged Male Managers: Most socially proximate to mid-aged females and most socially remote from older females.

Older Male Managers: Most socially proximate to younger males and most socially remote from older males.

Younger Female Managers: Most socially proximate to younger females and most socially remote from older females.

Mid-aged Female Managers: Most socially proximate to mid-aged females and most socially remote from older females.

Older Female Managers: Most socially proximate to mid-aged males and most socially remote from older males.

Social distance measures derived from structured grids were found to be similar to those from individual grids, with younger female colleagues most socially proximate and older females most distant. There were qualitatively minor differences between both variants of grid surrounding social distance measures of mid-aged and older male categories. There was, however, general agreement surrounding the pronounced differences in social distances between managers and their younger female colleagues (most proximate) and older male and older female colleagues (most distant). Measures of social distance derived from managers’ construing between themselves and their colleagues in both individual and structured grids provided results which generally confirmed Research Aim Number Three:
To determine if managers’ perceived degree of difference between themselves and their colleagues vary according to differences in those managers’ own, or their colleagues’, age-gender categories.

7.2.5 Use of Social Distance Measures to Predict Managers’ Reported Decisions (Research Aim Number Four)

This Section sought to use the social distance measures identified in Sections 7.2.3 and 7.2.4 as a means of determining age-gender related decision predictions. It was proposed that social distance measures derived from managers’ construal of Self and different age-gender categories of colleagues would be used as decision predictions to infer managers’ decisions to select, promote, or train those colleagues. Social distance-based measures used to predict decisions would be regressed against managers’ reported decisions, coded 1=Yes and 2=No, to establish the nature of relationships between predicted and reported decisions. It was proposed that the results of this process would confirm Research Aim Number Four:

To determine if managers’ selection, promotion, or training decisions vary according to those managers’ perceived degree of difference between their own and their colleagues’ age-gender categories.

7.2.6 Individual Grids: Regression of Social Distance-Based Predictions and Managers’ Reported Decisions

Ninety nine social distance measures derived from individual grids were used to determine the suitability of social distance measures as predictors of managers’ reported decisions. The results of binary logistic regression of social distance-based decision predictions and managers’ reported decisions, coded 1=Yes and 2=No, were reported in Table 7.9. This table illustrates, in summary form, significant and near-significant relationships between decision predictions and reported decisions in regression models.
Results show the older male and older female age-gender categories of reported decisions each having two age-gender categories of reported decisions significantly related to one category of decision prediction in their regression equations. The regression model for the older male category of reported decision was significantly related to two social distance-based predictions, younger male, \( p < 0.01 \), and older male age-gender category, \( p < 0.01 \). In turn, the older female and mid-aged male categories of decision prediction were similarly significantly related, \( p < 0.01 \) and \( p < 0.05 \), respectively, to one category of reported decision, the older female. Three remaining age-gender categories of social distance-based decision prediction variables, those associated with the younger male, \( p < 0.01 \), mid-aged male, \( p < 0.01 \), and younger female category of significant prediction, \( p < 0.01 \), were each, alone, significantly related to their respective age-gender category of reported decision. The mid-aged female category of decision prediction was, however, not significant, but approaching \( p = 0.05 \) in predicting the mid-aged female category of reported decision.

Overall, for individual grids, percentages correctly predicted for regression models, in explaining goodness of fit between a single decision prediction and reported decision, varied between a low for the mid-aged male=63.6%, to a high for the younger male category =78.8%. Social distance-based decision predictions drawn from younger male, mid-aged male, and younger female age-gender categories, in individual grids were, through regression, each found to be significantly related to their respective age-gender category of reported decision. Regression coefficients, B values in Table 7.9, showed relationships between different categories of social distance-based decision predictions and reported decisions on colleagues. Coefficients of regression, B Values suggested, that when negative in sign and with increasing social distance, the decision maker was more likely to decide in favour of employing people socially distant (different) from themselves. When positive in sign, and with increasing social distance, the decision maker was more likely not to employ those socially distant (different) but rather decide in favour of employing those most proximate (perceived as more similar) to decision makers. The B
value when near zero, suggested greater social proximity and a willingness by the decision maker to employ those perceived as similar, while increases in magnitude of the B value away from zero showed an increasing social distance (difference) between the parties.

Social distance measures consisted of both positive and negative values with exclusive use made of absolute values of social distance in the study. Careful consideration had therefore, to be paid to both the signs and magnitude of regression coefficients.

The younger male category was shown in Table 7.9 with a coefficient of regression, B value of -0.23 (negative value and high magnitude) Younger males’ regression coefficient, negative value, suggested, for them to employ colleagues from their own category, they would need those colleagues to be more socially distant (different from themselves). Younger male managers would therefore be unlikely to employ colleagues construed as holding younger male age-gender related characteristics. The older male category of manager had coefficient of regression values of 0.13 and 0.08 respectively (both values positive) associated with the prediction of both older and younger male colleagues. The younger male category of colleague prediction, with B value near zero, was suggestive of social proximity and the likelihood of being employed by older male managers with similar characteristics. Similarly, older male colleagues, with positive B value, were likely to be employed by those same older male managers.

Mid-aged female colleagues had a negative B value (-0.06) associated with their category with magnitude close to zero, suggesting close social proximity and likelihood of positive employment decision making on them by the mid-aged female category of manager. Older female managers’ predictions similarly showed a negative B value (B = -0.11) but with slightly greater magnitude than mid-aged females which, with increased social distance, suggested that older female managers might employ colleagues with characteristics different from their own age-gender category. The younger female category of manager in making social distance–based decision predictions on younger female colleagues displayed a negative B value (-0.95), of high magnitude, which pointed to younger females being employed, only if they held different characteristics to younger female managers.
Table 7.9

*Individual Grids: Results of Logistic Regression of Six Predicted Decisions, Based on Social Distance Measures, Against Managers’ Six Reported Decisions*

<table>
<thead>
<tr>
<th>Category Making Prediction</th>
<th>Category Decision is Made About</th>
<th>Decisions Correctly Predicted %</th>
<th>B</th>
<th>SE B</th>
<th>Wald</th>
<th>Sig.</th>
<th>Exp B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger Male</td>
<td>Younger Male</td>
<td>78.8</td>
<td>-0.23</td>
<td>0.05</td>
<td>10.45</td>
<td>0.00</td>
<td>0.79</td>
</tr>
<tr>
<td>Mid-Aged Male</td>
<td>Mid-Aged Male</td>
<td>63.6</td>
<td>-0.10</td>
<td>0.04</td>
<td>7.75</td>
<td>0.01</td>
<td>0.21</td>
</tr>
<tr>
<td>Older Male</td>
<td>Older Male</td>
<td>72.73</td>
<td>0.13</td>
<td>0.04</td>
<td>13.30</td>
<td>0.00</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>Younger Male</td>
<td>66.7</td>
<td>0.08</td>
<td>0.03</td>
<td>6.10</td>
<td>0.01</td>
<td>1.09</td>
</tr>
<tr>
<td>Younger Female</td>
<td>Younger Female</td>
<td>71.7</td>
<td>-0.95</td>
<td>0.04</td>
<td>6.93</td>
<td>0.01</td>
<td>0.91</td>
</tr>
<tr>
<td>Mid-Aged Female</td>
<td>Mid-aged Female</td>
<td>63.6</td>
<td>-0.06</td>
<td>0.03</td>
<td>3.36</td>
<td>0.07</td>
<td>0.94</td>
</tr>
<tr>
<td>Older Female</td>
<td>Older Female</td>
<td>66.7</td>
<td>-0.11</td>
<td>0.03</td>
<td>10.65</td>
<td>0.00</td>
<td>0.89</td>
</tr>
<tr>
<td></td>
<td>Mid-Aged Male</td>
<td>0.08</td>
<td>0.03</td>
<td>4.89</td>
<td>0.03</td>
<td>1.08</td>
<td></td>
</tr>
</tbody>
</table>
7.2.7 Structured Grids: Regression of Social Distance-Based Predictions and Managers’ Reported Decisions

This Section is similar to Section 7.2.6 in that it deals with social distance measures, but this time made use of social distance measures derived from structured grids. This Section aims to determine whether social distance measures derived from 87 structured grids are useful predictors of reported decisions. It explores the results of binary logistic regression of managers’ predicted decisions on colleagues, derived from social distance measures between Self and colleagues, against managers’ decisions. Managers’ reported decisions (N=522), reported according to six age-gender categories of colleague, were regressed against similar numbers and categories of decision predictions, coded 1 = Yes and 2 = No, drawn from 87 structured grids.

The binary regression models involved six categories of social distance-based decision predictions being regressed against each of six categories of reported decisions, and the results reported in Table 7.10. Results describe only significant relationships found between age-gender categories of decision predictions and reported decisions for each regression model. Non significant relationships, those with \( p \geq 0.05 \), are not shown. Further, Table 7.10 illustrates percentages of reported decisions correctly predicted, by way of age-gender categories of social distance-based measures associated with each regression model for constructs from structured grids.

Regression results, relating younger male and younger female age-gender categories of colleagues to reported decisions, show each category as having complex models, in that they consist of a category of predicted decision significantly related to two different age-gender categories of reported decisions. Table 7.10 shows the nature of these relationships with, for example, the younger male age-gender category of decision prediction, derived from social distance-based measure associated with two age-gender categories of reported decisions. The younger male category of predicted decision was significantly related to younger male, \( p < 0.01 \), and the older male, \( p < 0.05 \). The younger female age-gender category, similarly, has two categories of reported decisions, younger
female, \( p < 0.01 \), and older male, \( p < 0.05 \), significantly related to the younger female category of social distance-based decision prediction derived from social distance measures.

The remaining four age-gender categories of reported decisions, mid-aged male, older male, and mid-aged female, and older female, were each significantly related, \( p < 0.01 \), alone, to their respective age-gender categories of decision predictions. The regression models associated with the last-mentioned four decision predictions and related reported decisions describe degrees of fit. Models varied in overall percentages of decisions correctly predicted, between a low for the mid-aged male and female age-gender categories = 72.4%, and a high = 81.6% correct, for the younger male category. Six age-gender categories of social distance-related decision predictions, drawn from structured grids, were found to be significant, \( p < 0.01 \), in correctly predicting their related age-gender categories of reported decisions.

In similar fashion to the regression results reported for individual grids in Section 7.2.6, measures of coefficients of regression, B values relating decision predictions and reported decisions, showed negative values associated with a majority of social distance predictions. Table 7.10 shows regression coefficients, B values with negative signs associated with all age-gender categories of decision prediction other than the younger male (0.17) and older male (0.05, 0.04) respectively. Managers had social distance-based predictions on the younger female category with B close to zero and value low in magnitude suggesting that younger females would be employed who were perceived as similar to younger female managers (colleagues having social distance closer to their own age-gender category), but not employ those construed as more socially distant (different). Age-gender categories of employment decisions, such as those associated with mid aged male and female colleagues (B= -0.09) were shown as negative and of somewhat higher magnitude than most other categories. This suggested that mid aged male, female colleagues were unlikely to be employed by their respective categories of manager who preferred to employ colleagues who were socially different from decision makers.
Table 7.10

Structured Grids: Results of Logistic Regression of Six Predicted Decisions, Based on Social Distance Measures, Against Managers’ Six Reported Decisions

<table>
<thead>
<tr>
<th>Category Making Prediction</th>
<th>Category Decision is Made About</th>
<th>Decisions Correctly Predicted %</th>
<th>B</th>
<th>SE B</th>
<th>Wald</th>
<th>Sig.</th>
<th>Exp B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger Male</td>
<td>Younger Male</td>
<td>81.6</td>
<td>0.17</td>
<td>0.41</td>
<td>17.76</td>
<td>0.00</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>Older Male</td>
<td>0.05</td>
<td>0.02</td>
<td>4.60</td>
<td>0.03</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td>Mid-Aged Male</td>
<td>Mid-Aged Male</td>
<td>72.4</td>
<td>-0.09</td>
<td>0.01</td>
<td>0.37</td>
<td>0.00</td>
<td>1.01</td>
</tr>
<tr>
<td>Older Male</td>
<td>Older Male</td>
<td>78.4</td>
<td>-0.08</td>
<td>0.02</td>
<td>15.27</td>
<td>0.00</td>
<td>0.92</td>
</tr>
<tr>
<td>Younger Female</td>
<td>Younger Female</td>
<td>70.1</td>
<td>-0.07</td>
<td>0.02</td>
<td>11.62</td>
<td>0.00</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td>Older Male</td>
<td>0.04</td>
<td>0.02</td>
<td>5.67</td>
<td>0.02</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td>Mid-Aged Female</td>
<td>Mid-Aged Female</td>
<td>72.4</td>
<td>-0.09</td>
<td>0.02</td>
<td>13.64</td>
<td>0.00</td>
<td>0.91</td>
</tr>
<tr>
<td>Older Female</td>
<td>Older Female</td>
<td>78.2</td>
<td>-0.07</td>
<td>0.02</td>
<td>12.69</td>
<td>0.00</td>
<td>0.94</td>
</tr>
</tbody>
</table>
7.2.8 Summary Results of Regression of Structured and Individual Grids’ Social Distance-Based Predictions and Managers’ Reported Decisions

Different age-gender related categories of social distance measures, drawn from individual and structured grids, had their overall rates of success in predicting reported decisions shown in regression models, reported in Tables 7.9 and 7.10. Regression models derived from both variants of grid had minor differences surrounding younger and older age-gender categories of responses. It was concluded that social distance-based measures, using the two variants of grid, were both useful predictors of managers’ employment decisions. Individual grids had their categories of decision predictions (other than the older male and female categories), and structured grids (other than the younger male and female categories), each uniquely related to their respective age-gender category of reported decisions in regression models. Age-gender categories of decision predictions derived from both variant of grid, aside from the mid aged female category, were significantly related, ($p < 0.01$), with managers’ reported decisions.

Social distance-based decision predictions associated with five of the six age-gender categories of colleague derived from managers’ construing in individual grids, and six categories in structured grids, when regressed against related age-gender categories of reported employment decisions, were found to be significantly related. These results confirmed Research Aim Number Four:

\textit{To determine if managers’ selection, promotion, or training decisions vary according to those managers’ perceived degree of difference between their own and their colleagues’ age-gender categories.}

7.3 Determining Extremity of Construct Ratings, Cognitive Complexity, Lopsidedness, Grid Positiveness, and Self-Colleague Positiveness
Section 7.2 has discussed the use of one type of summary measure that can be derived from Repgrids. In this section several other commonly derived measures will be discussed. Extremely-rated salient, or accessible, constructs were identified in this study through Repgrid technique. Extremity in use of construct ratings scales provided an indication of the importance of constructs to an individual, with construct extremity related to construct salience and meaningfulness. The more extreme the rating assigned to a construct, the more superordinate that construct was considered to be for that manager-rater. Use of extremely-rated constructs figured largely in the work on stereotypes in this study, and is outlined in greater detail in Chapter 8. A second form of measurement derived from grids was that of cognitive complexity (Bieri et al., 1966). A third grid measurement used in the study was that of lopsidedness. A fourth measure used to determine grid-based characteristics, was that of positiveness. Processes relating to measuring extremity of constructs, cognitive complexity, grid lopsidedness, and differences in grid and Self positiveness have been outlined in Chapter 5.

7.3.1 Measuring Cognitive Complexity

Software, as outlined in The Lattice 2 User Manual at Appendix B, facilitated measurement of cognitive complexity. The cognitive complexity measurement system used in this study was developed using a well-established model which readily allowed grids to be analysed, their degree of construct differentiation determined, and the results reported (Bell, 2002). The software compared element ratings on each pair of constructs in a given grid, and assigned an overall value of one for correspondence of ratings, hence cognitive simplicity for that grid’s construct ratings. A grid’s overall cognitive complexity score could fall between unity, indicating absolute cognitive simplicity, and zero, absolute cognitive complexity. Where, for example, a grid’s constructs/elements had all been assigned a similar value by the manager-rater, the software’s cognitive complexity measuring facility would assign an overall value of one to that particular grid. This measure would indicate that participant’s low-level differentiation in use of constructs between elements, or cognitive simplicity in completing the grid.
7.3.1.1. Limitations of cognitive complexity measures

The Bieri et al. (1966) measure of construct differentiation used in this study has more recently been criticised as relatively insensitive in measurement of ratings between elements, and this form of calculating grid’s cognitive complexity/simplicity found to lack explanatory power (Rafaeli-Mor & Steinberg, 2002). The Bieri et al. measure, in identifying, and summarising grids’ construct systems by averaging construct pairs, has been found to provide inadequate descriptions of the hierarchical organisation of constructs within grids. Moreover, Fransella, Bell and Bannister (2004) describe two shortfalls in Bieri’s measurement process. One relates to the relevant size of related grids (grids should be standardised by number of construct sets), and secondly, the index used should be based on a simple matching process (binary data should be used). While both of Fransella’s recommendations were accounted for in this study, additional measures, such as extremity of construct ratings and construct lopsidedness were introduced. Still later, a measure of grid positiveness was added to provide an additional means of measuring differences in construct systems.

7.3.1.2 Determining Differences in Grids’ Cognitive Complexity According To Managers’ Age-Gender Categories

To better identify cognitive complexity measures of both individual and structured grids in the study and relate these to the study’s research questions, mean cognitive complexity measures were determined according to managers’ age-gender categories for both variants of grid. Table 7.11 shows mean cognitive complexity measures, according to managers’ age-gender categories and associated values of standard deviation drawn from individual and structured grids in the study. There were low levels of cognitive complexity across grids (range of 0.29 to 0.39 for individual grids and 0.33 and 0.47 for structured grids). Considerable differences were found in cognitive complexity measures according to manager-raters’ age-gender categories in both individual and structured grids.
Individual grids displayed greater cognitive simplicity (higher relative measures above the total mean for that variant of grid) for the older male and older female, (0.37 & 0.39) with variability greatest around the older male (standard deviation value above the total standard deviation measure for individual grids). On the other hand, measures associated with the younger male and younger female categories in individual grids were more complex (lower relative measures below the total mean for individual grids), (0.29 and 0.32). Younger male managers from individual grids were more cognitively complex than older male equivalents and younger females more cognitively complex than older females. Structured grid results, like those for individual grids, had the younger female more complex and the older female more cognitively simple (0.33 & 0.51). There was however, little consistency between grids in measures of cognitive complexity associated with different male age categories with older males becoming more cognitively simple in measures from structured grids.

Total mean cognitive complexity measures for individual and structured grids (0.35 and 0.45) pointed to structured grids being more cognitively simple than individual grids. Total mean standard deviation values for individual and structured grids (0.1 and 0.15) suggested greater variability surrounded structured grid mean cognitive complexity measures.
Table 7.11

*Individual and Structured Grids: Mean Values of Cognitive Complexity and Measures of Standard Deviation, by Managers’ Age-Gender Categories*

<table>
<thead>
<tr>
<th>Managers’ Age-gender Categories</th>
<th>Cognitive Complexity Individual Grids</th>
<th>Cognitive Complexity Structured Grids</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>SD</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>0.29</td>
<td>0.05</td>
</tr>
<tr>
<td>Mid-Aged</td>
<td>0.34</td>
<td>0.1</td>
</tr>
<tr>
<td>Old</td>
<td>0.37</td>
<td>0.14</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>0.32</td>
<td>0.08</td>
</tr>
<tr>
<td>Mid-Aged</td>
<td>0.36</td>
<td>0.12</td>
</tr>
<tr>
<td>Old</td>
<td>0.39</td>
<td>0.12</td>
</tr>
<tr>
<td>Totals</td>
<td>0.35</td>
<td>0.1</td>
</tr>
</tbody>
</table>
7.3.2 Measuring Construct Lopsidedness

As indicated previously in Section 5.3.1.3, degree of construct lopsidedness has been considered to reflect evidence of meaningfulness and superordinacy, with higher values of lopsidedness associated with greater meaningfulness and superordinacy. Overall grid lopsidedness was defined in this study as the number of 1 and 5 ratings in a grid divided by the total number of cell ratings in the grid. With each grid having 7 elements, e=7 and number of constructs c, where c= any number less than or equal to 26, and N= the frequency of 1 and 5 ratings, and L, the level of lopsidedness would equal L= N/e.c. The step-by-step application of software in determining construct lopsidedness in this study is described in The Lattice 2 User Manual at Appendix B. Computer-generated lopsidedness tables illustrated, for each element, e1 to e7, the frequency of occurrence of grid construct ratings of 1 and 5. Overall grid lopsidedness, L measures were calculated and displayed in each table, showing values for N=1, and N=5, levels of lopsidedness by positive and negative pole. Grid lopsidedness measures were determined, along with cognitive complexity measures with particular attention paid to identifying the degree of differentiation between elements, according to the age-gender category of colleagues associated with those elements.

7.3.2.1 Determining Construct Lopsidedness According to Managers’ Age-Gender Categories

Table 7.12 shows mean and standard deviation measures of lopsidedness associated with different age-gender categories of managers, drawn from individual and structured grids in the study. In similar fashion to cognitive complexity measures described earlier in Section 7.3.1.2, differences were found in lopsidedness measures, between age-gender categories for both individual and structured grids. Lopsidedness measures were relatively low in magnitude (range 0.44 to 0.60 for age-gender categories in individual grids, 0.32 to 0.47 for age-gender categories in structured grids).
Lowest lopsidedness measures for individual grids were associated with the mid-aged male and highest the younger female, then older male categories. Structured grids showed the highest level of lopsidedness associated with the younger female, and in decreasing order of lopsidedness, older male, then older female categories. Lowest level lopsidedness was found with the mid-aged male age-gender category of manager in both individual and structured grids. The greatest variability (highest value of standard deviation) for individual and structured grids surrounded the mid-aged female category mean lopsidedness value.

While differences in lopsidedness measures were relatively small in magnitude, these results overall, pointed to greater lopsidedness surrounding younger females in both individual and structured grids. The older male category similarly shared high levels of lopsidedness in both individual and structured grids. The younger male age-gender category of colleague was higher in lopsidedness in individual grids but lower in structured grids. Individual grids, while overall displaying greater lopsidedness, were found to have a greater range of difference in levels of lopsidedness of elements than structured grids and lower levels of variability about total mean lopsidedness than structured grids displayed.
Table 7.12

*Individual and Structured Grids: Mean Values of Lopsidedness and Measures of Standard Deviation, by Managers’ Age-Gender Categories*

<table>
<thead>
<tr>
<th>Managers’ Age-gender Categories</th>
<th>Lopsidedness Individual Grids</th>
<th>Lopsidedness Structured Grids</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>SD</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>0.55</td>
<td>0.16</td>
</tr>
<tr>
<td>Mid-Aged</td>
<td>0.44</td>
<td>0.17</td>
</tr>
<tr>
<td>Old</td>
<td>0.54</td>
<td>0.18</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>0.6</td>
<td>0.15</td>
</tr>
<tr>
<td>Mid-Aged</td>
<td>0.5</td>
<td>0.2</td>
</tr>
<tr>
<td>Old</td>
<td>0.5</td>
<td>0.18</td>
</tr>
<tr>
<td>Totals</td>
<td>0.52</td>
<td>0.17</td>
</tr>
</tbody>
</table>
7.3.3. Comparisons of Individual and Structured Grids Using Lopsidedness and Cognitive Complexity Measures

Grid lopsidedness, as outlined in Chapter 5 and described in Sections 7.3.2 and 7.3.2.1, was determined for 87 of the available 99 sets of individual grids, and 87 structured grids, using The Lattice 2 User Manual outlined at Appendix B. Lopsidedness measures were determined by means of noting the frequencies of extreme construct ratings in grids, and reporting those results in Table 7.12. The bulk of grids’ lopsidedness was found to fall towards that pole with an extreme construct rating of 1. A much smaller proportion, in the order of one tenth of grids’ total lopsidedness, was made up of construct ratings managers assigned to the other pole, having an extreme construct rating of 5.

Further, the t-test showed significant differences between lopsidedness of construct ratings in individual and structured grids, $t(85) = -6.71$, $p = 0.00$ (two-tailed). Mean lopsidedness values for individual and structured grids, overall were 0.52 and 0.41, respectively, while mean total standard deviations were 0.17 and 0.23 respectively. Table 7.13 illustrates the results of a paired sample t-test of overall lopsidedness of individual grids and structured grids, and shows elicited constructs’ higher measure of lopsidedness over provided constructs.

Measures of cognitive complexity were determined according to managers’ age-gender categories for both variants of grid, as outlined in Section 7.3.1.2, using The Lattice 2 User Manual at Appendix B, and, the results reported in table 7.11. An overall cognitive complexity measure for grids with elicited constructs was determined, reported in Table 7.13, and then correlated with the cognitive complexity measure of grids with provided constructs, and their paired sample correlation measure determined. Measures of cognitive complexity between individual and structured grids were found to be significantly different, $t(85) = -6.51$, $p = 0.00$ (two-tailed). This could however have been of lesser significance with grid construct numbers being standardised between variants of grid, in line with Fransella et al. (2004). Taken together, the results from both variants of grid suggested that individual grids were more cognitively complex and displayed greater levels of lopsidedness than structured grids.
Table 7.13

Summary of Lopsidedness and Cognitive Complexity Measures Derived From Individual and Structured Grids

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lopsidedness of Individual Grids</td>
<td>0.52</td>
<td>0.17</td>
</tr>
<tr>
<td>Lopsidedness of Structured Grids</td>
<td>0.41</td>
<td>0.23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pair 2</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Complexity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of Individual Grids</td>
<td>0.35</td>
<td>0.1</td>
</tr>
<tr>
<td>Cognitive Complexity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of Structured Grids</td>
<td>0.45</td>
<td>0.15</td>
</tr>
</tbody>
</table>
7.3.4 Measuring Grid Positiveness

Section 7.3.2.1 described construct lopsidedness in grids without establishing the extent of managers’ positive, or negative, ratings on constructs associated with different age-gender categories of colleagues. This Section sought to establish grids’ positiveness by noting participants’ preferences for allocation of elements to one pole over another and establishing which constructs were positive and which less positive, as earlier outlined in Section 6.4, step 6. Participants, in completing grids, responded by indicating which part of the construct was more positive (associated with the rating one end of the rating scale) or less positive (associated with the rating five end of the scale). The lower numerical construct rating value of 1 was considered more positive while the higher rating value of 5 was considered less positive. Using these numerical differences in rating, overall grid positiveness measures were determined by calculating the numerical averages of construct ratings for each grid’s six colleague elements and identifying the differences between them. Comparison between mean values of managers’ ratings on colleagues allowed relative positiveness to be determined, according to age-gender category membership of those colleagues.

7.3.4.1 Individual Grids: Determining Grid Positiveness According to Managers’ and Colleagues’ Age-Gender Categories

Table 7.14 shows measures of mean and standard deviations of positiveness derived from individual grids, according to managers’ and colleagues’ age-gender category membership. Measures of positiveness drawn from individual grids showed larger measures (less positiveness) among younger managers in relation to their younger male colleagues. Female managers, on the other hand, had larger measures (less positiveness) associated with their own age-gender categories. In turn, older male managers were more positive about their male colleagues than they were on females and least positive about mid aged and older female colleagues. Younger females were, on the other hand, most positive about their own age-gender category of colleagues but less positive on age-gender categories of colleague other than their own. The older female manager category showed greater positiveness towards mid aged male and female categories of colleague but low
levels of positiveness towards younger males and females. Variability was greatest (largest value of standard deviation) around the younger male colleague and least around the mid-aged female colleague. Table 7.14 shows younger female and mid-aged male colleagues as the most positive categories, while younger males and older females were assigned the least positive measures by managers.

7.3.4.2 Structured Grids: Determining Grid Positiveness
According to Managers’ and Colleagues’ Age-Gender Categories

Positiveness measures were derived from structured grids, in similar manner to that reported for individual grids in Section 7.3.4.1, and reported in Table 7.15. Measures of grid positiveness drawn from structured grids show younger male managers as most positive in relation to their mid-aged male colleagues and less positive towards older female colleagues. Mid-aged males managers were on the other hand, most positive about younger colleagues such as younger females and younger males but least positive about their own age-gender category and older female categories of colleague. Older male managers were found to be most positive about mid-aged and younger male colleagues, but least positive about mid-aged female colleagues. Younger female managers, on the other hand, were most positive with regards their own age-gender category of colleague and least positive about older female and younger male colleagues. Mid-aged female managers were similarly most positive on colleagues from their own age-gender category, while older female managers were least positive about their younger female colleagues. Considerable differences were found in grid positiveness from structured grids according to both managers’ and colleagues’ age-gender category membership.
Table 7.14

*Individual Grids: Mean Values of Positiveness and Measures of Standard Deviation, By Managers’ and Colleagues’ Age-Gender Categories*

| Colleagues’ Age-gender Categories | Males | | | | | | Females | | | |
|----------------------------------|------------------|------------|-------|------------------|-------|------------------|-------|------------------|-------|
|                                  | Young            | Mid-aged   | Old   | Young            | Mid-aged | Old
| Mean (SD)                        | Mean (SD)        | Mean (SD)  | Mean (SD)       | Mean (SD)        | Mean (SD)       | Mean (SD)       |
| Managers’ Age-Gender Categories   |                  |            |       |                  |            |                  |            |                  |            |
| Males                            |                  |            |       |                  |            |                  |            |                  |            |
| Young                            | 3.37 (0.64)      | 2.27 (0.84)| 1.85 (0.49)| 1.91 (0.65)      | 2.75 (0.61)| 3.04 (0.59)      |
| Mid-aged                         | 2.32 (0.88)      | 2.40 (0.82)| 2.40 (0.82)| 2.29 (0.81)      | 2.47 (0.85)| 2.82 (0.99)      |
| Old                              | 2.13 (0.85)      | 1.97 (0.71)| 2.25 (1.01)| 2.35 (1.02)      | 2.52 (1.21)| 2.26 (1.04)      |
| Females                          |                  |            |       |                  |            |                  |            |                  |            |
| Young                            | 2.95 (0.87)      | 2.54 (0.91)| 2.84 (1.01)| 1.82 (0.55)      | 2.53 (0.72)| 2.99 (0.82)      |
| Mid-aged                         | 2.43 (0.96)      | 2.24 (0.80)| 2.49 (0.76)| 2.24 (0.93)      | 2.04 (0.65)| 2.47 (0.84)      |
| Old                              | 2.58 (1.20)      | 1.88 (0.76)| 2.22 (1.02)| 2.36 (0.94)      | 1.98 (0.56)| 2.08 (0.83)      |
Table 7.15

*Structured Grids: Mean Values of Positiveness and Measures of Standard Deviation, By Managers’ and Colleagues’ Age-Gender Categories*

<table>
<thead>
<tr>
<th>Colleagues’ Age-gender Categories</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Young</td>
<td>Mid-aged</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>2.60 (1.24)</td>
<td>1.53 (0.31)</td>
</tr>
<tr>
<td></td>
<td>Mid-aged</td>
<td>2.40 (0.72)</td>
</tr>
<tr>
<td></td>
<td>Old</td>
<td>2.08 (0.72)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Young</th>
<th>Mid-aged</th>
<th>Old</th>
<th>Young</th>
<th>Mid-aged</th>
<th>Old</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.73 (0.83)</td>
<td>2.64 (0.92)</td>
<td>2.83 (0.65)</td>
<td>1.98 (0.64)</td>
<td>2.39 (0.46)</td>
<td>2.89 (0.73)</td>
</tr>
<tr>
<td></td>
<td>2.18 (0.80)</td>
<td>2.26 (0.56)</td>
<td>2.60 (0.73)</td>
<td>1.90 (0.47)</td>
<td>2.23 (0.63)</td>
<td>2.58 (0.75)</td>
</tr>
<tr>
<td></td>
<td>2.25 (0.83)</td>
<td>2.06 (0.76)</td>
<td>2.58 (0.82)</td>
<td>2.26 (0.81)</td>
<td>2.08 (0.69)</td>
<td>2.49 (0.80)</td>
</tr>
</tbody>
</table>
Table 7.16

*Individual and Structured Grids: Mean Values of Positiveness and Standard Deviation, According to Colleagues’ Age-Gender Categories*

<table>
<thead>
<tr>
<th></th>
<th>Positiveness Individual Grids</th>
<th>Positiveness Structured Grids</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>SD</td>
</tr>
<tr>
<td><strong>Colleagues’ Age-Gender Categories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>2.63</td>
<td>0.9</td>
</tr>
<tr>
<td>Mid Aged</td>
<td>2.22</td>
<td>0.81</td>
</tr>
<tr>
<td>Old</td>
<td>2.34</td>
<td>0.85</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>2.16</td>
<td>0.82</td>
</tr>
<tr>
<td>Mid Aged</td>
<td>2.38</td>
<td>0.77</td>
</tr>
<tr>
<td>Old</td>
<td>2.61</td>
<td>0.85</td>
</tr>
<tr>
<td>Totals</td>
<td>2.39</td>
<td></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td></td>
<td>2.39</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td></td>
<td>0.83</td>
</tr>
</tbody>
</table>
7.3.4.3 Comparisons of Grid Positiveness, Derived From Individual And Structured Grids by Managers’ and Colleagues’ Age-Gender

Table 7.16 illustrates positiveness measures drawn from individual and structured grids, according to colleagues’ age-gender categories. There was considerable similarity between the two variants of grids. Measures showed the younger female as the most positive of all categories of colleague while larger total mean values (hence lower levels of positiveness) were associated with the older male and older female categories of colleague for both variants of grid. Variability was greatest for mean positiveness of younger male colleagues from individual and structured grids.

7.3.5 Relating Measures of Grid Positiveness from Individual and Structured Grids with Managers’ Decisions

Grid positiveness measures on colleagues, derived from individual and structured grids, made use of data presented in Sections 7.3.4.1, 7.3.4.2. Mean values of construct ratings for each of six categories of colleague, drawn firstly from individual grids \( (N=99) \), were tested for correlation with managers’ decisions. Perhaps not surprisingly, results of correlation of grid positiveness and managers’ decisions, reported in Table 7.17 showed all six average element values significantly related \( (p < 0.01) \) to their respective categories of decisions.

A subsequent test for correlation was carried out between measures of grid positiveness, derived from structured grids, and decisions made on colleagues. Mean values of ratings on colleague elements, derived from structured grids \( (N=87) \), were tested for correlation with related categories of managers’ decisions \( (N=522) \) and the results reported in Table 7.18. Consistent with individual grids, all six age-gender categories of grid positiveness from structured grids were significantly related \( (p < 0.01) \) to managers’ decisions, though the size of relationships was noticeably smaller than for individual grids.
Table 7.17

*Individual Grids: Measures of Correlation between Mean Values of Managers’ Ratings on Colleagues in Grids with Elicited Constructs and Decisions Made on Colleagues*

**Decisions Made on Colleagues, by Age-gender Class**

<table>
<thead>
<tr>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young (N=87)</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Values of Construct Ratings According to Colleagues’ Age-gender</td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>Young</td>
<td>0.800**</td>
</tr>
<tr>
<td>Mid</td>
<td>0.776**</td>
</tr>
<tr>
<td>Older</td>
<td>0.537**</td>
</tr>
<tr>
<td>Females</td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>0.730**</td>
</tr>
<tr>
<td>Mid</td>
<td>0.740**</td>
</tr>
<tr>
<td>Older</td>
<td>0.776**</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (two tailed)**
Table 7.18

**Structured Grids: Measures of Correlation between Mean Values of Managers’ Ratings on Colleagues in Grids with Provided Constructs and Decisions Made on Colleagues**

Decisions Made on Colleagues, by Age-Gender Class

<table>
<thead>
<tr>
<th>Age-Gender Class</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleagues (N=87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>0.610**</td>
<td>0.445**</td>
</tr>
<tr>
<td>Mid</td>
<td>0.513**</td>
<td>0.424**</td>
</tr>
<tr>
<td>Older</td>
<td>0.495**</td>
<td>0.503**</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (two tailed)
The following Chapter, number 8, will describe the methodology employed to identify differences in managers’ stereotypes according to colleagues’ age-gender categories. Stereotype table construction will be covered and ways in which data drawn from managers’ construing in grids may be used to establish their stereotyping processes. The Chapter will go on to determine the relationships between those stereotypes and managers’ reported employment decisions on colleagues. The decision-making processes used by managers on their colleagues will be used to explain managers’ stereotypes and ways in which those stereotypes and managers’ employment decisions are related.
CHAPTER 8

CONSTRUING AND STEREOTYPE RESULTS
This Chapter is concerned with the identification of managers’ differential impressions in construing of their own and their colleagues’ age-gender categories and stereotypes associated with those impressions. Age-gender categories formed the basis for identifying stereotypes, by identifying managers’ commonly-used constructs (or attributes) applied to those varying in age and gender. Stereotypes, identified in this way, were then contrasted with managers’ reported decisions, and relationships between them determined. Significance of relationships between managers’ stereotypes and decisions were established by regressing commonly-held stereotypical attributes assigned to colleagues against managers’ reported decisions. This Chapter addresses two research aims. The first, Research Aim Number Five:

To determine if managers hold stereotypes on colleagues that vary according to managers’ construing of those colleagues’ age-gender related characteristics.

And the second, Research Aim Number Six:

To determine if managers’ decisions on age-gender categories of colleagues are related to managers’ age-gender categories of stereotypes of those colleagues.

8.1 Construction of a Stereotype Table Based on Decision Rationales from Cards

Managers’ logical explanations for their employment decision-making noted on cards were used to identify their stereotypes. The words managers had used to describe their decisions on different age-gender categories of colleague helped in identifying their frequently-occurring, commonly-used terms, as outlined in Chapter 5. Managers’ commonly-used, frequently-occurring terms, derived from their decision-making, allowed their stereotypes to be identified and a stereotype table to be constructed using the following steps:
8.1.1 Identifying Managers’ Frequently-Occurring, Commonly-Used Constructs

Terms managers applied to different age-gender categories of colleagues in their decision-making, which had earlier been identified through a process of qualitative analysis and reported in Section 7.1.2, were analysed and qualitative differences noted across age-gender categories. Differences in frequency of usage of terms were found to apply to different age-gender categories with terms appearing at least 5 times in decisions on cards across the study regarded as frequently occurring, and clustered by age-gender category. Some overlap was found in use of terms however between age-gender categories with, for example, the positive attribute of “being hardworking” associated with younger and mid-aged male and female colleagues. Managers’ frequently-occurring, commonly-used terms were treated as age-gender category-related stereotypical attributes. While use of the frequency of five as frequently occurring was somewhat arbitrary, it was considered a rational process in the absence of rules governing stereotype table construction.

8.1.2 Determining Differences in Managers’ Perceptions of Colleagues

Frequently-occurring terms, drawn from managers’ perceptions of colleagues associated with decision rationales, provided both positive and less positive attributes. Qualitative analysis of managers’ perceptions confirmed differences in relative frequencies of positive and less positive terms managers applied to different age-gender categories of colleagues. Greater frequencies of positive stereotypical attributes were associated with younger age-gender categories, while greater frequencies of less positive attributes were attached to older age-gender categories of colleagues. These results were in accord with analysis conducted earlier and reported in Section 7.1.2 relating frequency of positive terms and frequency of positive decisions on colleagues.
8.1.3 Making Use of Managers’ Terms to Construct a Stereotype Table

Positive and less positive attributes assigned to different categories of colleagues were assembled, noted according to age-gender category, and summarised in Table 8.1. Younger males and females had been attributed positive stereotypical qualities of being hardworking or competent, and less positive ones of being unskilled or immature. Older male colleagues, on the other hand, were perceived as experienced or reliable but inflexible and unwilling to change. Meanwhile, older females were attributed qualities of being team players or competent but unskilled or low in energy. Some of the frequently occurring more positive terms additionally associated with younger colleagues included them being reliable or working well with clients. Less positive, frequently-used terms shared by older age-gender groups of colleagues included them being immature, inexperienced, job plateaued, or lacking the drive to move up in the organisation.

8.1.4 Limitations in Use of Decision Rationales for Stereotype Research

While this Section made use of the logic associated with managers’ decision-making on colleagues in identifying stereotypes, there were limitations surrounding the methodology. These included difficulties in categorising positive versus negative terms and of weighting their relative importance. It was decided therefore to make use of Repgrids as a means of identifying managers’ stereotypes as those terms that were included in the grids were identifiable. Chapter 5 outlined the advantages of using a well established body of knowledge associated with Repgrids to identify much more than managers’ logic in their construing between colleagues’ characteristics. The next Section will make use of Repgrid technique to identify stereotypes and provide a basis for later comparison of managers’ stereotypes with their decision-making processes.
Table 8.1

*Decision Rationales: Stereotype Table Derived from Frequently-Occurring Terms, Reported According to Colleagues’ Age-Gender Categories*

<table>
<thead>
<tr>
<th></th>
<th>More Positive Terms</th>
<th>Less Positive Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>Hardworking; Competent</td>
<td>Unskilled; Uncommitted</td>
</tr>
<tr>
<td>Mid</td>
<td>Hardworking; Skilled</td>
<td>Inflexible; Lacks Energy</td>
</tr>
<tr>
<td>Old</td>
<td>Experienced; Reliable</td>
<td>Inflexible; Slow to Change</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>Hardworking; Nice Person</td>
<td>Immature; Needs Supervision</td>
</tr>
<tr>
<td>Mid</td>
<td>Hardworking; Competent</td>
<td>Inflexible; Low Energy</td>
</tr>
<tr>
<td>Old</td>
<td>Team Player; Competent</td>
<td>Unskilled; Low Energy</td>
</tr>
</tbody>
</table>
8.2 Using Rep grids to Identify Managers’ Stereotypes

Repertory grid technique offered a means of identifying managers’ stereotypes by extending beyond the methodology outlined in Section 8.1.1. This grid-based methodology took the form of determining attributes managers had commonly assigned to themselves and different categories of their colleagues. Identification of extremely-rated constructs which had been commonly applied to particular categories of colleague allowed for managers’ stereotypes to be determined. The ways in which salient constructs were applied to colleagues of different age-gender categories were examined with the emphasis placed on identifying group-wide stereotypes over individual stereotypes. This was achieved by determining managers’ commonality of construing across all grids in the study.

Although there were some differences in approach to the use of individual over structured grids, the general process involved in this analysis consisted of the following steps:

1. Identification of extremely-rated, salient constructs
2. Establishing the frequency of salient constructs associated with different categories of element
3. Determining commonality of occurrence of salient constructs according to category of usage
4. Classification of categories of commonly occurring salient constructs according to theme
5. Considering how construct categories can be related to colleagues of differing age-gender

8.2.1 Identifying Managers’ Extremely-rated Constructs

Identification of extremely-rated constructs, those carrying extreme ratings on the construct rating scale associated with an element, formed an important part of this study of
stereotypes. It had earlier been determined in Chapter 5 that the more extremely an element was rated the more meaningful that element was likely to be to the rater (Fransella, Bell & Bannister, 2003). Moreover, more extremely-rated, frequently-occurring constructs were found to be more accessible from memory, and, hence, more readily used (Higgins et al., 1982), and to be a measure of superordinacy (Landfield, 1977). It was considered, therefore, that identification of extremely-rated constructs could give useful insights into the accessibility and readiness of use of constructs, superordinacy, and therefore, differential importance managers placed on categories of colleagues in their construing.

Following Higgins et al. (1982), constructs in the study were deemed to be of the extremely-rated, superordinate type, if at least three elements were rated extremely on those constructs. This meant that in order to be identified as an extremely-rated, superordinate construct, the Self plus two colleagues (elements), or three colleagues (elements), not including the Self, had to be assigned extreme construct ratings of one or five. For any one grid, positive extremely-rated salient constructs were deemed to be those that had ratings at the extremes of the construct pole earlier identified by participants as being more positive, and associated with a rating of 1 on the construct rating scale on at least three elements. Analogously, for any one grid, extremely-rated salient constructs deemed negative for the purposes of research, were drawn from the contrast pole designated less positive by participants completing grids, and having a rating of 5 on the construct rating scale for at least three elements.

Because stereotypes and shared construing were the focus in this study, those extremely-rated constructs found to be commonly occurring across the study were deemed to be stereotypes. The manner of determining this differed between individual and structured grids and will be outlined in what follows. The software facility developed for this study (see Appendix B) was used to identify extremely-rated constructs and determine their frequency of occurrence in both individual and structured grids. Table 8.2 reports on the frequency of extremely-rated positive constructs found in individual and structured grids.
8.2.2 Establishing Frequency of Occurrence of Salient Constructs on Different Categories of Element

This Section set out to determine frequencies of occurrence of extremely-rated constructs in the study. It was determined that 99 individual grids yielded 468 extremely-rated constructs, 420 positive and 48 negative. Structured grids featured 1058 extremely-rated constructs with 906 positive and 152 negative. Frequencies of positive and negative extremely-rated constructs found in individual and structured grids are shown in Table 8.2, according to their application to Self and different age-gender categories of elements.

Individual grids were found to have the highest percentages of occurrence of positive extremely-rated constructs associated with the Self element (83%, \( N=347 \)) and lowest for the older female category (52%, \( N=219 \)). Structured grids, similarly had the Self element with the highest frequency of extremely-rated positive constructs (70%, \( N=633 \)) and lowest frequency of occurrence of salient positive constructs (45%, \( N=407 \)) for the older female category. To the contrary, the frequency of occurrence of negative extremely-rated constructs in individual grids was lowest for the Self (31%, \( N=15 \)) of low frequency for the mid aged male and younger female age-gender categories (42%, \( N=20 \)) and greatest for the older male category (67%, \( N=32 \)). In similar fashion, structured grids had the Self element with the lowest frequency of occurrence of negative salient constructs (36%, \( N=55 \)).
Table 8.2

_Individual and Structured Grids: Frequencies and (%) Occurrence of Positive and Negative Salient Constructs Applied to Categories of Self and Colleagues’ Age-Gender_

<table>
<thead>
<tr>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Young</td>
</tr>
<tr>
<td>Frequencies and (%) Occurrence of Salient Positive Constructs</td>
<td></td>
</tr>
<tr>
<td>Individual Grids</td>
<td>243 (58)</td>
</tr>
<tr>
<td>Structured Grids</td>
<td>560 (62)</td>
</tr>
<tr>
<td>Frequencies and (%) Occurrence of Salient Negative Constructs</td>
<td></td>
</tr>
<tr>
<td>Individual Grids</td>
<td>24 (50)</td>
</tr>
<tr>
<td>Structured Grids</td>
<td>84 (55)</td>
</tr>
</tbody>
</table>

8.2.3 Determining Commonality of Occurrence of Salient Constructs According to Category and Type of Grid

This Section sought to establish managers’ commonality of usage of salient constructs in their construing of Self and different categories of colleagues derived from two variants of grid. It was first necessary however, to establish a suitable framework for identifying commonly occurring constructs in grids. In establishing a framework, ninety nine individual grids were searched to determine the frequency of occurrence of similar salient constructs. It was rare for similar salient constructs to occur more than five times (the level of individuality among elicited constructs was substantial, and led to little overlap of personal constructs). Similar salient constructs appearing on at least five occasions were therefore, considered to be commonly occurring, and clustered
accordingly. The eighty seven structured grids were studied to establish commonality of occurrence of extremely-rated constructs. Each structured grid featured 26 sets of bi-polar constructs, \(N=2262\), nearly two and one half times the number found in individual grids \(N=891\), suggesting that structured grids could yield a much greater number of extremely-rated constructs than individual grids. Commonality of occurrence of salient constructs in structured grids was therefore, taken to relate to those constructs occurring at least 10 times (compared to 5 times for individual grids).

The likelihood of finding lower frequencies of extremely-rated constructs in individual grids proved to be the case with individual grids found to have on average, 4.7 salient constructs per grid compared with structured grids’ 12.2 per grid. Benchmark rates of five and ten were therefore, left standing. The processes of selecting frequencies of five similar salient constructs from individual grids as commonly occurring and ten as commonly occurring for structured grids were arbitrary, as rules have yet to be established governing construction of stereotype tables. Moreover, experience suggested that the use of benchmark numbers of five and ten respectively, as a framework for identifying commonality of occurrence of salient constructs in individual and structured grids, was a rational one.

8.2.4 Thematic Classification of Commonly-Ocurring Salient Constructs Derived From Individual and Structured Grids

Salient commonly occurring constructs, noted according to colleagues’ age-gender categories were further clustered through thematic analysis. The work of clustering extremely-rated constructs by theme was carried out using two raters working independently, and a third, adjudicating. Raters completed their individual analysis of constructs and compiled sets of suggested themes. Raters then met together and jointly explored each other’s thematic analysis, to ensure reliability of outcomes, and reach final agreement on themes. Joint discussion led to a final listing of extremely-rated constructs and agreement on sets of themes. The adjudicator reviewed each independent rater’s progress and joint final work, to ensure consistency and accuracy in thematic analysis and
inter-rater reliability of data. Some discussion was directed to the potential for overlap between two of the four themes agreed to by raters (Persona and Job Holder). This led to the Persona theme being initially considered for inclusion in the Job Holder theme. Raters, (those adjudicating the thematic analysis) rejected this suggestion as difficulties were foreseen in comparing data from individual and structured grids when using different thematic structures in analysis and it was resolved to leave the four thematic areas separate.

The thematic labels finally agreed on were those of: Persona, Job Holder, Job of Work and Organisation themes, determined by independent judges according to the pronounced emphasis demonstrated by clustered terms, were later discussed between judges, prior to final agreement being reached. It was therefore finally agreed to cluster salient, commonly-occurring constructs, noted according to colleagues’ age-gender category by using the themes of Persona, Job Holder, Job of Work, and Organisation.

Salient constructs associated with the Persona theme included colleagues being perceived as: meek, balanced, unassuming, assertive, aggressive, and confident. The Job-Holder domain, meanwhile, included colleagues being construed as: skilled, professional, methodical, experienced, analytical, and trainable, while the Job of Work domain included the colleague being assigned constructs such as: job-oriented, punctual, effective, challenged, meeting work deadlines, or having a regulated approach. The final domain or theme, that of Organisation, included constructs relating to: customers service abilities safety orientation, senior level experience, career orientation, impact on the company’s reputation.

The four themes, earlier determined in thematic analysis of constructs from individual grids, were applied to provided constructs in structured grids. The Job Holder, Job of Work and Organisation themes were each assigned to 7 constructs and Persona the remaining 5, or 19% of provided constructs. Thematic analysis of salient constructs from structured grids was carried out in a similar manner to that for individual grids but the results differed greatly. The Job Holder and Persona themes associated with 12 constructs in structured grids, were found to be associated with only nine extremely-rated, frequently-
occurring constructs, or 38% of the total number, compared to 46% of the total number of salient constructs derived from individual grids. The Organisation theme attached to 7 constructs was associated with five salient, frequently occurring constructs, or 24% of the total compared to 36% of salient constructs from individual grids. Twenty of the 26 provided constructs in structured grids were treated, by way of frequencies of salient constructs, as meaningful in managers’ construing.

Table 8.3 shows the relative frequencies and percentages of occurrence of extremely-rated constructs drawn from individual and structured grids, classified according to theme. The Job of Work theme is shown to have the greatest frequency and percentage occurrence among structured grids (38%, N=402) while the Organisation theme is shown to have the greatest frequency and percentage occurrence of salient constructs (36%), N=174 among individual grids. The Job Holder and Persona themes, when taken together, formed the most important theme associated with individual grids. When combined, frequencies of Job Holder and Persona themes, derived from structured grids, were as notable as the Job of Work theme.

Table 8.3 Individual and Structured Grids: Frequencies and (%) Occurrence of Salient Constructs, Reported According to Theme.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Persona (%)</th>
<th>Job-holder (%)</th>
<th>Job of Work (%)</th>
<th>Organisation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Grids</td>
<td>83 (17)</td>
<td>140 (29)</td>
<td>87 (18)</td>
<td>174 (36)</td>
</tr>
<tr>
<td>Structured Grids</td>
<td>95 (9)</td>
<td>307 (29)</td>
<td>402 (38)</td>
<td>254 (24)</td>
</tr>
</tbody>
</table>
8.2.5 Constructing Stereotype Tables by Making Use of Salient Constructs Associated With Colleagues’ Age-Gender

This Section of the study set out to establish managers’ age-gender related stereotypes by using particular categories of salient construct associated with differing age-gender of colleagues. To facilitate identification of positive and negative stereotypical attributes assigned to colleagues, extremely-rated positive and negative constructs, documented according to their commonality of occurrence and colleagues’ age-gender categories, were reported in Table 8.4. This stereotype table reflects managers’ more extreme construing of colleagues from different age-gender categories with younger male and female colleagues, for example, described as having potential, but being inexperienced. In a similar vein, the mid-aged male and female categories were considered as skilled, capable but non performing. The older male and female categories were, construed by managers as being experienced, but career-plateaued and change-resistant.

In similar fashion to that for individual grids, a stereotype table was constructed (Table 8.5) using commonly-occurring salient constructs, this time from structured grids. Positive and negative commonly-occurring, salient constructs, noted according to colleagues’ different age-gender categories were brought together, using the results of work carried out in Sections 8.2.3 and 8.2.4. Table 8.5 shows younger males and females construed as high in potential and performance or not helpful or flexible, while mid-aged males and females were perceived as high in energy and performance or inflexible. Meanwhile, older male and female colleagues were construed as having a keen sense of humour, good people skills but not being able to think outside the box, as less promotable and more political, than their younger age-gender colleagues. The results of qualitative analysis in this Section generally, confirmed Research Aim Number Five:

To: determine if managers hold age-gender related stereotypes on colleagues that vary according to managers’ construing of those colleagues’ age-gender categories.
Table 8.4

*Individual Grids: A Stereotype Table Derived from Commonly-occurring Extremely-Rated Constructs, by Colleagues’ Age-Gender Category*

<table>
<thead>
<tr>
<th>Age-Gender Category</th>
<th>More Positive</th>
<th>Less Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Young</td>
<td>Mid-Age</td>
</tr>
<tr>
<td>Males</td>
<td>Has Potential; Can Grow</td>
<td>Skilled; Capable</td>
</tr>
<tr>
<td></td>
<td>Inexperienced; Immature</td>
<td>Non Performer</td>
</tr>
<tr>
<td></td>
<td>Old</td>
<td>Experienced; Respected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plateaued; Slow to Change</td>
</tr>
<tr>
<td>Females</td>
<td>Young</td>
<td>Mid-Age</td>
</tr>
<tr>
<td></td>
<td>Has Potential; Dedicated</td>
<td>Capable; Competent</td>
</tr>
<tr>
<td></td>
<td>Unskilled; Inexperienced</td>
<td>Poor Inter-Personal Skills</td>
</tr>
<tr>
<td></td>
<td>Old</td>
<td>Team Player; Experienced</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plateaued; Inflexible</td>
</tr>
</tbody>
</table>
Table 8.5

Structured Grids: A Stereotype Table Derived from Frequently Occurring Extremely-Rated Constructs, by Colleagues’ Age-Gender Category

<table>
<thead>
<tr>
<th>Age-Gender Category</th>
<th>More Positive</th>
<th>Less Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>Hardworking; Extra training; good investment</td>
<td>Not helpful; Not focussed; Not workplace savvy</td>
</tr>
<tr>
<td>Mid Age</td>
<td>High energy; High performance; Job focused</td>
<td>Not flexible; Not promotable; Extra training not good investment</td>
</tr>
<tr>
<td>Old</td>
<td>Keen sense of humour; Job focussed</td>
<td>Can’t think outside box; Not flexible; Too political</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young</td>
<td>Hard working; Promotable; Extra training good investment</td>
<td>Not helpful; Not job focused; Not flexible</td>
</tr>
<tr>
<td>Mid</td>
<td>High energy; High performance; Job focussed</td>
<td>Not flexible; Not promotable</td>
</tr>
<tr>
<td>Old</td>
<td>Good people skills; Helpful; Values job</td>
<td>Not Promotable, Too political; Can’t accept criticism</td>
</tr>
</tbody>
</table>
8.3 Comparisons Between Stereotype Tables

Two stereotypes tables, 8.4 and 8.5, based on managers’ construing of colleagues’ age-gender related characteristics in the study, were assembled and contrasted with one another. The objectives in comparing these tables were to identify similarities and differences in managers’ more commonly-held perceptions of others at work and document those attributes managers frequently applied to different age-gender categories of their colleagues. Positive and less positive salient, commonly-occurring constructs, drawn from managers’ construal of different categories of colleagues, formed the basis for identification of managers’ age-gender related stereotypes.

Age-gender related attributes derived from individual grids and shown in Table 8.4, point to younger and mid aged colleagues having potential and being skilled, or of being inexperienced and non performing. Table 8.5, in making use of stereotypes drawn from structured grids, suggests that younger and mid aged colleagues are hardworking, high in energy and performance, or not helpful, focussed, or promotable. Older males were ascribed qualities of being experienced and job focussed, but slow to change and inflexible while older females were assigned attributes of being team players and having good people skills, but as job plateaued and not able to accept criticism. There was some agreement between both stereotype tables on the attributes associated with older males and females with both age-gender categories perceived as being too political.

Stereotype tables based on salient constructs drawn from individual and structured grids, assigned similar negative age-gender related personal characteristics to younger colleagues in describing them as being immature, inexperienced, having poor interpersonal skills, and not being helpful. Meanwhile, stereotypes held on older age-gender categories pointed to colleagues’ lack of future, as career plateaued and not promotable while change resistant and inflexible. Stereotypes showed a greater focus on the interpersonal dimensions of colleagues’ behaviour through the Job Holder and Persona themes, while managers adopted a more future oriented view of older colleagues through the Organisation theme. Importantly, stereotypes derived from managers’ more important
meanings assigned to different age-gender categories of colleagues provided evidence of managers’ emotionality together with their beliefs surrounding differences in colleagues’ age-gender related characteristics.

8.4 Bringing Together Managers’ Construing and Stereotypes With Their Decision-making
(Research Aim Number Five)

Managers’ construed differences between colleagues, drawn from individual and structured grids, were used to identify stereotypical attributes managers assigned differentially to colleagues at work. Further, managers’ evaluations of colleagues were used to help describe the relative importance of stereotypical attributes differentially assigned to colleagues. Managers’ use of extremely-rated constructs in their construing of colleagues’ differences pointed to the readiness of access, and superordinacy of criteria managers used to interpret people and events in the study. Managers’ superordinate, accessible, commonly-held constructs formed the basis for identification of colleagues’ stereotypical attributes. Attributes, drawn from grids, differentially assigned to colleagues, and clustered by theme, confirmed managers’ stereotypes held on colleagues varied according to those colleagues’ age-gender category membership and confirmed Research Aim Number Five.

To determine if managers hold stereotypes on colleagues that vary according to managers’ construing of those colleagues’ age-gender related characteristics.

8.4.1 Results Gained From Regressing Positive Extremely-Rated Constructs Derived from Individual and Structured Grids Against Reported Decisions

Managers’ stereotypes, identified in Sections 8.2.3 and 8.2.4, were regressed against their employment decisions to determine the nature of relationships existing between them. Extremely-rated commonly-occurring constructs, derived from grids having elicited constructs, clustered according to theme and managers’ own age-gender categories,
were regressed against managers’ employment decisions using logistic regression techniques, and the results found not to be significant. A similar exercise, but this time using stereotypes associated with colleagues’ age-gender categories when regressed against managers’ decisions, were again found not be significantly related.

In similar manner, positive extremely-rated construct-based decision predictions, drawn from 87 structured grids, were regressed against managers’ decisions. Positive extremely-rated, commonly-occurring constructs, those with a preferred emergent pole rating of one, assembled according to each of four themes and related age-gender categories of colleague, were regressed against managers’ six age-gender categories of reported employment decisions, and the results reported in Table 8.6. Regression results revealed that some age-gender categories of themed, commonly-occurring, extremely-rated constructs were better able to infer managers’ reported positive decisions than other categories of salient constructs were able to do.

Table 8.6 reports on the significance of relations found between different age-gender categories of decision predictions and employment decisions. Non-significant relationships, those with $p \geq 0.05$, are not shown in this table but are represented in Table C-1 at Appendix C. Table 8.6 shows extremely-rated construct-based decision predictions, drawn from the themes of Job Holder and Persona, were significantly related, $p < 0.05$, to each of the younger male and younger female age-gender categories of employment decisions. The regression model, describing fit between predicted and reported decisions associated with the younger male category, showed an overall percentage of 73.6% of decisions (Yes and No) correctly predicted, the younger female category 74.7% of total decisions correctly predicted. Extremely-rated construct-based decision predictions associated with the Job Holder and Persona themes were similar in attributes assigned to younger colleagues and regarded as overlapping themes of constructs. The two themes had been initially considered for amalgamation, this was ultimately rejected by raters, as noted in Section 8.2.4. Table C-1, representing significant and near significant relationships derived from regression of employment decisions and decision predictions, shows the
older male category of decision predictor as not significant, but approaching $p = 0.05$, in correctly predicting 66.7% of employment decisions reported on that age-gender category.

Logistic regression results indicated that decision predictions drawn from positive extremely-rated constructs in structured grids, those having commonly-occurring construct ratings of 1, clustered by theme, and age-gender category of younger male and female colleague, provided significant predictions of managers’ employment decisions on the younger male and younger female categories, respectively. Two decision predictions were found, however, to interact in their prediction of relevant employment decisions. Decision predictions associated with the Job Holder and Persona themes and younger male age-gender categories, drawn from structured grids were significant, $p < 0.05$, in correctly predicting, 72.1% of negative and 75% of positive employment decisions. Similarly, the younger female age-gender category of positive employment decisions was significantly related, $p < 0.05$, to two decision predictions associated with the Job Holder and Persona themes, which, together, correctly predicted, 70.6% of No and 77.4% of Yes employment decisions in the model.

8.4.2 Results Derived From Regression of Structured Grids’ Less Positive, Commonly-Ocurring, Extremely-Rated Constructs, Against Managers’ Reported Decisions

(Research Aim Number Six)

Extremely-rated less positive constructs, those with construct rating of five, derived from manager’s construing of colleagues in structured grids, were assembled by theme and colleagues’ age-gender category. Decision predictions, derived from salient, less positive constructs were regressed against managers’ employment decisions in similar fashion to that used with positive extremely-rated constructs reported in Section 8.4.1 above. Results of logistic regression tests are shown in Table 8.6, and illustrate the importance of the Organisation theme of decision prediction associated with the older female age-gender category.
The older female age-gender category of decision predictions, based on less positive constructs, was found to be significantly related, through the Organisation theme, to the older female category of decisions in correctly predicting 64.4% of overall decisions, 64.7% of negative and 63.9% of positive reported decisions associated with that age-gender category. Results of logistic regression of themed, less positive extremely-rated, commonly-occurring constructs against managers’ decisions confirmed the older female age-gender group of colleague as significant, \( p < 0.05 \). Table C-1 at Appendix C shows the older male category as near significant, \( p = 0.07 \) through the Organisation theme of less positive constructs in predicting 71% of total decisions.

Relationships between constructs derived from managers’ construal of younger male and female and older female colleagues, and decisions reported on those categories were significant at the \( p < 0.05 \) level. Overall, managers’ construing resulted in a greater frequency of negative salient constructs being assigned to their older colleagues than to younger ones. Similarly, managers attributed their younger colleagues a greater frequency of positive salient constructs than they did to older colleagues. Relative frequencies of positive and negative salient constructs, according to Job Holder-Persona and Organisation themes were found to be significantly related to managers’ differential decisions on younger colleagues and older colleagues, respectively.

Manager’s positive stereotypes of younger colleagues, by way of the Job Holder and Persona themes were, through regression, found to be significantly related to managers’ positive employment decisions. Managers’ negative perceptions of older colleagues, by way of the Organisation theme, pointed to very different decision results. Negative stereotypes held on older females were found to be significantly related to managers’ decisions not to select, promote, or train older female colleagues. This Section’s results confirmed Research Aim Number Six:

*To determine if managers’ decisions on age-gender categories of colleagues are related to managers’ age-gender categories of stereotypes of those colleagues.*
Table 8.6 *Structured Grids: Results of Logistic Regression of Themed Positive and Less Positive, Extremely-Rated Constructs against Managers’ Reported Decisions*

<table>
<thead>
<tr>
<th>Category That Makes Decisions</th>
<th>Category of Significant Predictions</th>
<th>Decisions Overall</th>
<th>B</th>
<th>SE B</th>
<th>Wald</th>
<th>Sig.</th>
<th>Exp B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Themed More Positive Extremely-Rated Constructs</td>
<td>Younger Male</td>
<td>Younger Male</td>
<td>73.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job Holder 1</td>
<td></td>
<td>0.45</td>
<td>0.22</td>
<td>4.19</td>
<td>0.04</td>
<td>1.57</td>
</tr>
<tr>
<td></td>
<td>Persona 1</td>
<td></td>
<td>10.54</td>
<td>0.22</td>
<td>5.87</td>
<td>0.02</td>
<td>1.72</td>
</tr>
<tr>
<td>Themed Less Positive Extremely-Rated Constructs</td>
<td>Younger Female</td>
<td>Younger Female</td>
<td>74.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job Holder 4</td>
<td></td>
<td>0.64</td>
<td>0.25</td>
<td>6.57</td>
<td>0.01</td>
<td>1.89</td>
</tr>
<tr>
<td></td>
<td>Persona 4</td>
<td></td>
<td>-0.59</td>
<td>0.26</td>
<td>5.42</td>
<td>0.02</td>
<td>0.55</td>
</tr>
<tr>
<td></td>
<td>Organisation 6</td>
<td></td>
<td>-0.58</td>
<td>0.28</td>
<td>4.17</td>
<td>0.04</td>
<td>0.56</td>
</tr>
</tbody>
</table>
8.4.3 Analysis of the Content of Stereotypes Associated With Managers’ Decisions

The Job Holder and Persona themes of salient constructs associated with younger colleagues and the Organisation theme associated with older colleagues were analysed to determine the nature of their stereotype content. It was anticipated that by gaining a better insight into the salient constructs housed within the three themes the nexus between managers’ decision-making and stereotyping processes could be better identified. Managers’ decisions were noted according to colleagues’ age-gender category and related frequencies of salient constructs from within the Job Holder, Persona and Organisation themes and the results reported in Tables 8.7 and 8.8. Table 8.7 shows frequencies of salient positive constructs, derived from Job Holder and Persona themes associated with positive decisions on younger male and female colleagues while Table 8.8 shows frequencies of salient negative constructs, derived from the Organisation theme, associated with negative decisions on older male and female colleagues.

Managers’ positive stereotypes attributed to younger colleagues, reported in Table 8.7, show marginal differences between younger males and younger females. Younger males are attributed with having a keen sense of humour while younger females are perceived as being a better training investment and learning quickly. Both age-gender categories are seen to be helpful, hardworking, and liking to learn. Despite marginal differences in frequencies between older males and females in Table 8.8, older female colleagues are shown as not being promotable and not able to accept criticism. Meanwhile, taken together, older colleagues are described as not being able to think outside the box, as too political, inflexible, and not being a good training investment.

The following Chapter provides a discussion of the results flowing from the research carried out into stereotypes, stereotyping and decision-making in the study. The implications of study’s results will be discussed for the design of suitable stereotype and decision research methods and opportunities outlined for managers to improve on their work practices by making use of the study’s outcomes.
Table 8.7  
*Frequencies of Positive Salient Constructs Attributed to Younger Colleagues through the Persona and Job Holder Themes*

<table>
<thead>
<tr>
<th>Positive Salient Constructs From Job Holder, Persona Themes</th>
<th>Younger Male</th>
<th>Younger Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helpful to Others</td>
<td>41</td>
<td>42</td>
</tr>
<tr>
<td>Extra Training A Good Investment</td>
<td>35</td>
<td>41</td>
</tr>
<tr>
<td>Hardworking</td>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td>Learns Quickly</td>
<td>32</td>
<td>38</td>
</tr>
<tr>
<td>Likes To Learn</td>
<td>35</td>
<td>37</td>
</tr>
<tr>
<td>Keen Sense of Humour</td>
<td>36</td>
<td>30</td>
</tr>
</tbody>
</table>
Table 8.8
*Frequencies of Negative Salient Constructs Attributed to Older Colleagues through the Organisation Theme*

<table>
<thead>
<tr>
<th>Negative Salient Constructs From The Organisation Theme</th>
<th>Older Male</th>
<th>Older Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can’t Think Outside The Box</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Not Promotable</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Too Political</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Not Flexible</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Extra Training Not Good Investment</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Can’t Accept Criticism</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>
CHAPTER 9

DISCUSSION
This study set out to identify managers’ stereotypes held on different age-gender categories of colleague and relationships between those stereotypes and managers’ employment decisions. A PCP-based methodology (Kelly, 1955), introduced to help answer questions surrounding these issues, made use of managers’ construing to identify the stereotypical attributes they assigned to themselves and their colleagues and describe ways in which managers’ stereotyping and decision-making processes were related. It was expected that a wider understanding of the type and nature of managers’ age and gender related stereotypes and association between those stereotypes and their discriminatory decisions could address some of the uncertainties surrounding research gaps that have followed on from over sixty years of research into stereotypes, stereotyping, and discrimination in decision-making.

Six Research Aims gave direction to this thesis, each of which will be addressed in this Chapter. The results of research into managers’ decision-making and stereotyping and will be discussed in relation to their relevant Research Aims. This will be followed by an exploration of the practical and theoretical implications of the study’s findings. The last part of the Chapter will be devoted to discussing limitations surrounding earlier stereotype and decision research and contributions made by the study’s stereotype and decision research findings. The research methodology’s limitations will be considered and finally, conclusions will be drawn on the study’s results and future directions for research given.

9.1 An Overview of Research into Managers’ Decisions Made According to Differences in Their Own and Colleagues’ Age, Gender, and Age-Gender (Research Aims Number One and Two)

This study sought to redress the paucity of research into workplace discrimination by identifying the extent of age and gender-based discrimination evident in managers’ employment decisions. As managers had applied a greater proportion of positive employment decisions to younger colleagues than older ones in the study, evidence was firstly sought on age-based discrimination in managers’ decision-making. Qualitative
analysis of decision rationales provided evidence of managers’ salient beliefs associated with discriminatory decisions by way of variations in positiveness of age-related descriptions in rationales relative to managers’ positive decisions. While managers’ age-related perceptions indicated discriminatory judgement making on the part of managers, other factors could have been at play, such as gender, or age and gender differences. Clearly more discrimination research work needs to be carried out to better identify the nature of age-based discrimination processes operating in workplaces. With regards the effect of managers’ or colleagues’ gender on decisions, there was little evidence of gender alone being related to managers’ discriminatory decision-making on colleagues in the study. Study results differed from established discrimination research which suggests gender plays a major role in discriminatory employment decision processes (Date-Bah, 1997), though these studies commonly overlooked possible interactions between age and gender.

The study meanwhile, sought quantitative support for the level of effect age differences had on managers’ employment decisions. Decision results showed managers’ promotion decision-making varied according to their own and colleagues’ age categories. Younger managers assigned a lower percentage of positive promotion decisions to colleagues than older managers did, results which generally agree with available discrimination research. However, when decision results were viewed from the perspective of managers’ age-gender category membership, rather than age alone, major differences were found in positiveness of decisions made on colleagues. Younger male managers, for example were more positive in their promotion decisions than their younger female counterparts. The study’s decision results illustrated younger male managers were more positive and younger females less positive in their decision-making on older colleagues, results which vary from current research portraying younger manager-raters as discriminatory in their employment decision-making on older colleagues (Hassel & Perewe, 1995). Study results confirm the need for discrimination research to adopt a methodology which can explore differences in decision-making according to managers’ or colleagues’ age-gender category membership.
To date, research has not sufficiently considered the joint effect of age and gender on discriminatory employment decision-making. To the contrary, researchers have developed employment decision frameworks to predict on job success, based solely on job applicants’ age category membership (McCrindle, 2006). There is an urgent need for discrimination researchers to adopt a research framework which can make parsimonious use of available age-based and gender-based research results (Perry, 1997) and provide a more effective means of identifying managers’ discriminatory decisions in workplaces.

The study sought to determine differences in managers’ employment decisions according to their colleagues’ age-gender category membership but found no statistically significant association existed between colleagues’ age-gender categories and managers’ selection, promotion, or training decisions on those colleagues. Research Aim Number One was therefore not confirmed by these results:

To determine if managers differ in the selection, promotion, or training decision-making of colleagues according to differences in their colleagues’ age-gender categories.

Managers’ own age-gender categories were similarly found not to be associated with their selection decisions and training decisions. Significant associations were however found between managers’ own age-gender categories and positiveness of promotion decisions. Managers’ age-gender based promotion decisions demonstrated an overall majority of negative decisions assigned to colleagues. While younger female managers contributed a greater proportion of negative decisions than other categories of manager, older male and older female managers were found to be more positive in their promotion decision-making on colleagues. These results confirmed in part, Research Aim Number Two:

To determine if managers differ in the selection, promotion, or training decision-making of colleagues according to differences in the managers’ own age-gender categories.
Managers’ generally low frequency of positive promotion decisions on colleagues could be attributed to the shorter term risks to decision makers of selection and training decisions, over those on promotion. On job failure following promotion can carry substantial longer term risk for those advocating promotion and therefore cause promotion decisions to be approached with greater caution than selection or training. Low frequencies of positive promotion decisions might also be due to the risk averse nature of certain age-gender categories of decision makers in this study. Again little research is available on the employment decision preferences of different age-gender groups of managers. The limited discrimination research available has tended to concentrate on gender effect on selection decisions (Perry, 1997) and more recently on training decisions (Smith, 2003; Murray & Syed, 2005). Meanwhile, researchers have neglected the importance of age and gender differences on managers’ promotion decisions and the role of work context on decision-making (Kramar, 2004). The methodology used in this study took care to research different age-gender categories of practicing managers, close to their jobs of work, making employment-related decisions on different age-gender categories of colleagues who were well known to managers and operating in well understood workplace contexts.

9.2 An Overview of Research into Managers’ Construing and Related Decision-making

(Research Aims Number Three and Four)

This Section differed in the nature of decision research from that carried out in Section 9.1, by using a PCT-based methodology to identify managers’ construal of their own and their colleagues’ age-gender related characteristics and establish relations between that construing and managers’ decision processes. Managers, in their construing of colleagues, used perceived personal alikeness with colleagues to guide their preferences and give directionality to their judgement making. Decision-making in the study was treated not so much as a rational, ordered process driven by statistical rules or economic theories but based on managers’ judgements on themselves and their colleagues. Managers’ salient constructs, together with their evaluations, gave direction to their preferences between colleagues and hence decisional intentionality towards them.
9.2.1 The Results of Managers’ Construing
(Research Aim Number Three)

Managers’ construing of colleagues’ age and age-gender related characteristics in decision rationales provided qualitative evidence of positiveness of decisions on colleagues. In similar fashion to decision rationales, measures of grids’ positiveness showed age and age-gender related differences in managers’ positiveness of construing of colleagues. There were similarly differences in frequencies of salient constructs assigned to colleagues according to managers’ age and age-gender based construing. These results support the notion that managers’ judgements on colleagues can vary according to differences in those colleagues’ age and age-gender related characteristics. However, study results failed to provide substantial evidence of managers holding gender-based discriminatory perceptions of their colleagues. These results illustrate the importance of colleagues’ age and age-gender based differences on managers’ construing but run counter to the considerable gender-based discrimination literature, outlined in Chapter 2.

The methodology employed in the study expanded investigation into managers’ construing by adding the Self element to Repgrids. With the Self serving as a positive prototype against which colleagues could be compared, numerical measures were able to quantify difference between managers and related colleagues, in terms of social proximity. Social distance measures, based on construed age-gender category-related differences between manager and colleague, provided valuable insights into managers’ perceived workplace relations with colleagues and contributed significantly to research into decision-making and managers’ discriminatory decision-making processes.

Managers’ perceived differences between their own and their colleagues’ age-gender related characteristics indicated the proximity of manager and colleague in their workplace social relations. Those colleagues holding younger age-gender category membership in the study were construed to have characteristics similar to those held by managers and, in turn, to be more socially proximate, while managers perceived themselves to be more socially distant from their older colleagues, by virtue of them
holding different age-gender related qualities. These results generally confirmed Research Aim Number Three:

To determine if managers’ perceived degree of difference between themselves and their colleagues vary according to differences in those managers’ own, or their colleagues’, age- gender categories.

9.2.2 Use of Summary Measures to Augment Research into Managers’ Construing

Cognitive complexity measurement was introduced to identify variations in managers’ differentiation of colleagues when using two variants of Repgrid in the study. Managers showed significantly higher cognitive differentiation in construing when using grids with elicited constructs over provided ones, results which agreed with established research findings (Adams-Webber, 1998). There were however, age-gender related differences in cognitive complexity measures associated with those completing grids. Younger female managers were found to be more cognitively complex and older female managers more cognitively simple in their construing. These results, in showing managers’ differentiation, can vary according to differences in managers’ age category membership, deserve additional research efforts to explore age and gender effect on cognitive complexity measures and add to currently available research in the field (Fransella, 2003). While cognitive complexity has been criticised as a relatively insensitive measure (Rafaeli-Mor & Steinberg, 2002) use of the measure proved useful in this study and could provide valuable new directions for PCT researchers.

In similar fashion to cognitive complexity measurement, lopsidedness measures were used to identify differences in managers’ construing, with those completing individual grids demonstrating greater lopsidedness of construing than when structured grids were used. Study results agree with current research which associates lopsidedness of construing in grids using elicited constructs with meaningfulness to those completing grids (Fransella, 2003). Managers were found, through their lopsidedness of construing in individual grids, to associate greater importance (or meaningfulness of relationship), to the
younger male and younger female age-gender category of colleague. Despite lopsidedness having a long and controversial history as a means of measuring Repgrid related characteristics, lopsidedness measures proved useful in establishing the relative importance managers’ associated with different age-gender categories of colleague, in their construing.

Similar to cognitive complexity and lopsidedness, positiveness measures were used to identify variations in managers’ construing. Managers’ positiveness of construing of different age-gender categories of colleague was found to be significantly related to managers’ decisions. Positiveness, like cognitive complexity and lopsidedness measures, augmented research into managers’ construing by highlighting the greater usefulness of grids with elicited constructs and the importance of using an age-gender framework when researching the effectiveness of grid-related measurements.

9.2.3 Social Distance Measures and Their Relation to Managers’ Decisions
(Research Aim Number Four)

The methodology used to research discriminatory decisions in the study made use of social distance measurement to identify managers’ differential perceptions on colleagues and establish those managers’ judgements. Social distance measures reflected managers’ perceived proximity with colleagues and provided an accurate means of predicting managers’ decisions on colleagues. The methodology, in regressing social distance-based decision predictions against reported decisions, confirmed the significance of relations between different age-gender categories of colleague and respective categories of employment decisions made on them and provided a useful discrimination research tool.

Social distance measures derived from Repgrids found younger female managers to be unique in perceiving themselves as more socially proximate to their own age-gender category while distant from other age-gender categories of colleagues. Younger male managers, on the other hand, perceived themselves as more socially distant from their own age-gender category of colleague and more proximate to their younger and mid aged colleagues. There was however, general agreement between managers on their close social
proximity to younger female colleagues and remoteness from older male and female colleagues. Differences in managers’ social proximity with colleagues were significantly related to managers’ positiveness of decision-making, results which serve to explain decision-making processes in terms of managers’ perceived workplace social relations with colleagues. Use of social distance measurement, based on managers’ construing of their own and colleagues’ age-gender related characteristics, gave insights into managers’ discriminatory decision-making processes. The results from this part of the study give important new directions for research into established decision theory and development of new forms of decision practice.

Social distance measures helped establish the degree of positive or negative discrimination associated with managers’ age-gender related decisions but led to results which run counter to prevailing discrimination research findings. Current research holds younger people are more discriminatory in their decision-making than older people. Study results confirmed younger female managers fitted this criticism, while younger male managers, to the contrary, were more likely to decide positively on older male colleagues and negatively on their own age-gender category. Given this study’s results, it would seem inappropriate to use managers’, or colleagues’, age category membership as the sole criterion for explaining discriminatory decision-making. Equally, job applicants’, or job holders’ age related characteristics, should not be used as the sole means of predicting an individual’s on job performance. Research suggesting younger job holders (generation Y) are more likely to demonstrate greater energy and idealism at work than their older colleagues (and should therefore be preferred) (McCrindle, 2006), should be brought into question.

The methodology confirmed, by way of social distance measurement, that managers’ differential decisions on colleagues were significantly related to perceived differences between managers’ own and colleagues’ age-gender related characteristics, results which confirmed Research Aim Number Four.
To determine if managers’ selection, promotion, or training decisions vary according to those managers’ perceived degree of difference between their own and their colleagues’ age- gender categories.

9.2.4 Limitations of Earlier Decision Research and Original Contributions Made by Decision Research Findings in This Study

Considerable criticism surrounds currently used decision models and much of the decision research associated with them. Decision theory remains an under researched area relative to the work conducted in stereotype research. Currently available decision models, and the theories underpinning them, have been criticised for providing overly narrow descriptions of human decision behaviour. Decision research has long been based on rational choice theory involving the individual pursuit of selfish economic gain, perfect availability of information, heroic levels of objectivity and choice making free of the constraints of emotion, assumptions which have been largely discredited as useful ways of describing human decision behaviour in the twenty first century. Attempts at overcoming these many criticisms have led to the development of more complex decisions models which, while aiding conceptual understanding, have not been able to adequately support empirical qualification of variables. Decision research has more recently become the preserve of cognitive psychologists whose work has led them to develop decision models, largely in laboratory settings using student as research participants, which operate remotely from people for whom the decision models have been designed.

The social distance-based decision model described in this study served to address many of the trenchant criticisms levelled against established decision research and associated decision models. The model did not deal solely with the cognitive demands placed on individual decision makers, nor call for absolute objectivity, but has worked to identify the variables of emotion and cognition supporting decision making. Importantly, the individual was not the focus of the model, but rather social demands faced by individuals in their working relationships. Demands associated with managers’ perceived differences in social distance, or social tensions likely to arise in workplace relations
between managers and colleagues, formed the basis for managers’ choice making in the model. The motivation to minimise social tensions and provide continuity of workplace social relationships, rather than pursuit of economic gain or rationality of thought, was found to underpin managers’ choices. Managers’ choice making was motivated by actions to minimise social discord through the reduction of anxiety between themselves and colleagues. While choice making worked in favour of the managers’ primary social group, it could also however lead to negative discriminatory decisions on colleagues holding different age-gender related characteristics. Research findings contributed significantly to the identification of discriminatory decisions and identified relationships between managers’ social perceptions, judgements and anticipated workplace decisions. Further, the decision research methodology made use of practicing managers in Australian organisational settings which ensured high levels of external validity for the study.

9.3. An Overview of Managers’ Stereotyping Identified in the Study

The study set out to determine the levels of abstraction at which managers held information in their stereotypes, and, in turn, the uses to which managers put that information in judging, and making choices between their colleagues. The PCT-based methodology described the processes underpinning managers’ stereotyping of colleagues and established the role stereotypes play in workplace discrimination. Stereotype research carried out in the study identified managers’ stereotypes and their relation to managers’ decision-making processes, thereby overcoming shortfalls in current research which have, to date, been unable to achieve these results (Finkelstein et al., 1995). Stereotype research employed a methodology capable of changing currently held research assumptions surrounding stereotyping and human information processing: Assumptions which hold that stereotypes are derived from individuals’ error-prone, largely irrational information processing (Ajzen, 1996), with stereotype formation beyond the individual’s immediate cognitive control (Jussim et al., 1995). Stereotypes were provided through managers’ active participation in the study and found to be naturally occurring, effortful, largely within managers’ understanding and the results of their more meaningful construing of
Self and colleagues’ age-gender related characteristics, rather than cases of passive involvement and faulty information processing on the part of managers.

Stereotype research results in this study differed from those provided by cognitively-based stereotype researchers. Stereotypical attributes assigned to colleagues included emotional qualities, or feelings associated with colleagues’ attributes, results which confirm the importance to managers of their working relationships with different categories of colleague, in their stereotype formation. Stereotype research made use of bi-polar constructs in managers’ construing providing them with pathways with which to apply both positive and negative attributes to different age-gender categories of colleague. This study, took a different approach to that used by traditional stereotype research which places greater interest on negative stereotypes and more exclusive focus on gender-based stereotyping. This study sought to identify managers’ differential stereotypes, positive and negative, assigned to different age-gender categories of colleague in the workplace.

9.3.1 Identification of Managers’ Stereotypes and Stereotypical Attributes Held on Colleagues

(Aim Number Five)

The PCT-based methodology employed in the study used data held on cards and managers’ construing in Repgrids, to identify positive and negative salient constructs managers associated with themselves and their colleagues. Managers’ more meaningful interpretations of colleagues, when expressed through saliency of constructs and noted according to commonality of usage, helped establish managers’ stereotypes and identify their stereotyping processes. Stereotypical attributes, drawn from managers’ construing, indicated that managers could simultaneously hold prejudicial and positive perceptions of the same person, results very different from established stereotype research (Fiske, 1998).

Managers’ stereotypes were initially identified in the study according to colleagues’ age related categories with younger colleagues assigned, on balance, greater positiveness and older aged colleague’s greater negativeness in attributes. Age related
stereotype results painted younger job applicants as holding positive personal qualities offering greater promotional opportunities while older colleagues were attributed an absence of those positive personal qualities and a cluster of negative ones. Despite the negativeness of attributes associated with certain categories of colleague, managers displayed highly positive perceptions of themselves. Managers’ Self perceptions were associated with qualities of being more skilful, of greater help to others and higher-performing than colleagues. Positive qualities attributed to Self were similarly attributed to younger colleagues and resulted in managers’ Self perceptions consisting largely of positive younger type attributes. Older managers in the study denied themselves older age category related characteristics and, in so doing, sought immunity from the negative workplace attributes they attached to their own age categories of colleagues. Age-based stereotyping, carrying the potential for workplace discrimination, is clearly not the sole preserve of the young but can stem from older managers holding negative stereotypical perceptions on older job holders, or on older job applicants.

While there was considerable evidence of age-related stereotyping in the study, difficulty was experienced identifying stereotypes based on managers’ own, or colleagues’ gender-related differences. Gender, when used alone proved to be relatively ineffective as a means of establishing differences in managers’ stereotypes. These results differ from stereotype research (Perry, 1997) which asserts age is the more difficult variable to establish in stereotype formation and gender the easier, and gender therefore the more readily identifiable variable in stereotype research. When the association of age and gender was the stereotype research focus, managers’ age-gender related stereotypes were found to contain a greater variety of information on colleagues and their jobs, than stereotypes based on age alone.

Qualitative analysis showed managers’ stereotypes differed according to colleagues’ age-gender category membership with younger females considered faster learners than younger males, who were in turn, perceived to have a keener sense of humour than younger females. Both younger age-gender categories were however perceived as equally hardworking, high in energy and helpful. Older females were meanwhile perceived
as similar to older males in being inflexible and not hardworking but different in not being able to accept criticism, as too traditional in approach and not promotable. Both age and age-gender related stereotypes held positive and negative attributes and varied in degree of positiveness according to colleagues’ age category. The results of stereotype research in the study differ greatly from traditional stereotype research relying on gender-based enquiry alone (Plous, 2003).

Managers’ stereotypes provided them with a useful and quick method of accessing attributes associated with different categories of colleague with which to predict colleagues’ behaviour. However, these attributes were going to be wrong as often as they were right as they were based on assumptions rather than a deep understanding of which qualities were necessary for successful on job performance. Stereotypes, while providing managers with a ready means of filling gaps in their understanding of human behaviour, provided a most ineffective means of correctly predicting colleagues’ on job performance. The research methodology employed in the study confirmed stereotypes may be generated by individuals (individual’s salient personal constructs), or by groups (Managers’ group-wide, shared salient provided constructs) as both were evident in the study. These findings serve to address arguments operating between the individual (Stangor, 2000) and collective schools (Pickering, 2001) of stereotype research which argue as to whether stereotypes are created by individuals or are a function of social groups’ activities.

Differences in perceived attributes, derived from managers’ personal construing of different age-gender categories of colleague, were central to the stereotype research methodology. Stereotypes were a function of managers’ shared perceptions of working relationships with colleagues. Stereotypes, derived through managers’ superordinacy of construing of colleagues’ qualities, indicated the workplace social behaviour managers expected from each category of colleague. Managers’ differential stereotypes on colleagues varied according to differences in their construing of their colleagues’ age-gender related characteristics, results which confirmed Aim Number Five:
To determine if managers hold stereotypes on colleagues that vary according to managers’ construing of those colleagues’ age-gender related characteristics.

9.3.2. A Review of Managers’ Stereotypes and Their Relation to Managers’ Decisions on Colleagues (Aim Number Six)

The stereotype research methodology used in the study took account of Fransella’s (1977) assertion, that stereotypes can include narrow-range clusters of constructs which explain differences in social behaviour according to the category being stereotyped. Managers’ construing of different age-gender categories confirmed differences in attributes in their stereotyping and served to identify clusters of extreme positive and negative perceptions held on colleagues (Jankowicz, 2004). Clusters of managers’ frequently-occurring salient constructs were thematically analysed and used to establish relations between managers’ decisions and stereotypes represented by those salient constructs.

Clusters of salient positive constructs from the Job Holder and Persona themes describing younger colleagues as helpful to others, high in energy and hardworking were significantly related with managers’ positive decisions on younger colleagues. These salient constructs correctly explained 74% of positive decisions made on younger males and 75% of those on younger female colleagues. A cluster of salient negative constructs, through the Organisation theme, describing older female colleagues as traditional in approach, too political and not being a good investment for extra training was significantly related with negative decisions on their age-gender category. Importantly, the study allowed the processes underpinning managers’ discriminatory decisions, once identified, to explain managers’ stereotyping processes, results which researchers have, to date, been unable to adequately provide (Finkelstein et. al. 1995; Kunda & Thagard, 1996). The study’s stereotype research results make an important contribution to current research findings and confirm Research Aim Number Six:

To determine if managers’ decisions on age-gender categories of colleagues are related to managers’ age-gender categories of stereotypes of those colleagues.
9.3.3 Limitations of Earlier Stereotype and Discrimination Research and Original Contributions Made by Stereotype and Discrimination Research Findings in This Study

Despite stereotype research having been said to be over researched and discrimination under researched, stereotype researchers have worked extensively to explain, largely unsuccessfully, discriminatory decision-making in terms of stereotypes. In the process, stereotype researchers have failed to gain agreement on what constitutes a stereotype, whether stereotypes are created by individuals or groups, have been unable to describe the stereotyping process, not been able to adequately establish a relationship between stereotyping and the process of discriminatory decision-making and been criticised for using research methods lacking external validity. As a consequence little stereotype research has been carried out which is capable of adequately explaining workplace discrimination in terms of stereotyping, or managers’ stereotypes.

Stereotype research has been largely based on the canons of cognitive psychology and assumptions that treat stereotypes as errors in personal information management. Stereotypes derived from poor information processing, within which emotion has been deemed not to play a significant role and the stereotyping of others at work, are based on shortcuts stemming from automaticity associated with cognitive overload. Stereotype research holds that stereotyping is brought about by faulty information processing and is considered an irrational act, one beyond individual control.

The results of stereotype research in this study pointed to stereotypes not operating in the ways proposed by stereotype researchers. Opportunities to use stereotypes to explain discrimination in the study were limited as stereotypes, when identified, often failed to influence managers’ judgement making. While significant relations were found to exist between age-gender related stereotypes and managers’ discriminatory decisions, stereotypes were not always necessary and sufficient conditions for managers’ discriminatory decision-making. While stereotypes were not always present in managers’ discriminatory decisions, social distance-based choice-making was evident in most cases
of discrimination observed. The social distance model provided a far better predictor of managers’ evaluations of others than stereotypes were able to do in the study.

Stereotypes identified in the study could neither be considered the product of cognitive malfunctioning on the part of study participants, nor the product of biased information processing. Discriminatory decisions generally resulted from judgments based on perceived differences in age-gender related characteristics operating between managers and colleagues, rather than collective beliefs on categories of colleagues. A lack of symmetry, or similarity in characteristics between different age-gender categories of manager and colleague, was found to lead to discriminatory judgements, but often with different outcomes. Younger male managers and younger female managers both lacked symmetry of age-gender related characteristics with their colleagues. Younger males were more negative in their self perceptions relative to others while younger females were more positive about their own age-gender related characteristics over other age-gender categories. This lack of social symmetry resulted in younger males making negative employment decisions on their own kind and younger females preferring to employ their own kind while making negative employment decision on others. Older managers similarly preferred to employ younger categories of colleague over their own kind, findings which hold important implications for diversity management in organisations and provide significant contributions to both stereotype and discrimination research.

9.4 New Directions for Research into Managers’ Stereotypes, Age-Based Stereotyping and Discriminatory Decision-making

This study set out to provide new directions for stereotype and discrimination research. The methodology overcame criticisms levelled at the narrowness of established research into discriminatory decision-making, researchers’ failure to adopt sufficiently rigorous research methodologies (Fiske, 1998), researchers’ concentration on gender-based discrimination (Finkelstein et al., 1995) and exclusive investigation of selection decisions in organisations (Perry, 1997). Study results describe well, managers’ age-gender based stereotyping processes and significance of association between managers’ stereotypes and their discriminatory decisions on colleagues.
Stereotype research has to date, contributed little on the effect that age, or age-gender category membership may have on managers’ employment decisions at work (Perry, 1997). The study employed a rigorous research methodology, one which made use of practicing managers’ construing of differential age-gender related characteristics rather than researching the effect of gender alone on stereotyping and discriminatory decision-making. Further, discrimination research investigated managers’ promotion and training decisions rather than limiting enquiry to selection decision-making. Rather than attempting to use managers’ stereotypes to explain their decision intentions on colleagues, managers’ age-gender related decision-making processes were able to provide a most effective means of explaining managers’ stereotyping processes. A methodology, of the type employed in this study, could make stereotypes more transparent in workplaces while facilitating changes to managers’ stereotyping and discriminatory employment practices (Wilcox, 2006).

The methodology served to overcome current shortcomings in stereotype and discrimination research which include the presumptions that human information processing is largely a malfunctioning process and as such, a major contributor to individuals’ discriminatory judgment making (Ajzen, 1996). Further, study results confirmed managers’ decisions were not made by passive automatons, as social cognition researchers maintain, with cognition operating outside the individual’s control according to the dictates of mental templates or knowledge structures (Walsh, 1995). Rather, managers’ decisions resulted from preferences derived from their construing of perceived social differences between their own and colleagues’ age-gender related characteristics, differences in workplace social relations rather than cognitively-based mechanisms. Managers’ decisions were not the result of malfunctioning human information processes but managers’ judgments based on workplace social information available to them at the time. These results provide important new directions for the conduct of decision research and opportunities for decision researchers to develop new forms of decision models for use in managers’ more emotionally charged 21st century workplaces (Sparrow, 2000).
There is a need for stereotype researchers to be better able to use stereotypes to identify workplace discrimination and to reconsider attempts at relating ill defined stereotyping processes to under researched discriminatory decisions. Further, the cognitive research mindset surrounding stereotype research needs to be modified to take account of cognition and emotion in stereotype formation to address the high levels of emotionality evident in twenty first century workplaces. Future discrimination and decision research needs to take the direction of questioning researchers’ assumptions surrounding rationality of information processing, and the role of heroic information processing by individuals in their judgement making. Research needs to move on and investigate discriminatory decision-making in terms of differences in perceptions held between people in workplaces and the social evaluations they hold on one another. Future discrimination research should be extended to make use of the social distance model and determine differences in discriminatory judgements made on colleagues according to social distance-based perceptions held by managers.

The parsimonious use of a dual age-gender research framework in the study could advance understanding of age-gender-based discrimination and contribute to stereotype, decision theory, and discrimination research. Future research will however need to investigate possible interaction between the age and gender variables and establish whether age and gender related information can interact in the formation of stereotypes or the making of discriminatory judgements. Differential judgements were found to be associated in the study with managers having different perceived age-gender related characteristics. Younger male managers were more others centred and younger females more own kind centred with, in turn, both categories differing from older male and older female categories of manager. Most importantly, the under researched nature of discrimination, increased anti-discrimination legislation in operation, increased evidence of age-based discrimination and the hard to change nature of age related discrimination, will require considerable future research to minimise the negative outcomes associated with age-based discrimination.

Decision research carried out in this study found evidence of both individuality and automaticity in decision-making, but no clear division between the two. There was
of decision behaviour operating between the two decision states in the form of
heuristics, or simplified choice making, allowing managers to dispense with full cognitive
deliberations. While this finding questions the assumption that stereotypes and
automaticity are related, there was a significant relationship found between stereotypes and
managers’ decisions. Stereotypes were however frequently absent from many managers’
judgements made on colleagues. Further, researchers’ assertions that stereotypes are
cognitive errors and useful predictors of discriminatory decisions were not fully born out in
this study. Future research will be needed to better identify the nature of heuristic decision
processes and their relation to stereotypes and, in turn, to managers’ discriminatory
decision-making.

9.5 Use of a PCT-Based Methodology for Stereotype, Decision and
Discrimination Research and Additions to the Canons of
Personal Construct Theory

The PCT-based methodology used in the study provided valuable insights into
managers’ discriminatory judgments and explained their decision-making processes. The
meta-theory (Kelly, 1955) underpinning the PCT-based methodology considered reason
and emotionality as essential components of the construing process (Crittenden, 1991;
Bannister, 2003). Managers’ decisions were not based entirely on rationality of decision
processes (Moorehead & Griffin, 1992), nor individual use of rational beliefs and
adherence to utility theory (Ajzen, 1996), nor biased use of decision models in information
processing (Fiske & Neuberg, 1990). Decision-making rested on managers’ perceived
social proximity with different categories of colleague with decision positiveness guided
by manager-colleague workplace social processes.

Two variants of Repgrid were employed in the study and use made of a social
distance-based methodology to infer managers’ employment decisions. Structured grids
were found superior to individual grids in more correctly predicting percentages of
decisions on all age-gender categories of colleague, other than the younger female. These
results run counter to research suggesting Repgrids with elicited constructs are invariably
better able to differentiate between people than those using provided constructs (Adams Webber, 1998). Despite the superiority of structured grids in this area of the study, both variants of grid could prove useful in social distance-based decision research into workplace discrimination. Further, decision researchers could benefit from a social distance-based decision framework which makes use of quantitative differences in managers’ workplace social relations in researching discriminatory decisions. The PCT-based methodology described in this study could prove particularly useful when carried out in organisational settings in the conduct of discrimination research.

The PCT-based methodology, in making use of structured grids in the study, proved particularly useful in establishing managers’ stereotypes and discriminatory judgments in areas which have traditionally been difficult as most people are reluctant to discuss their discriminatory practices. Care was taken in research design to ensure the participation of practicing managers, operating close to their jobs, dealing with workplace related issues, to overcome criticisms of poor external validity. The methodology allowed research to be conducted in close proximity to managers’ jobs and individual data to be readily brought together from managers operating in disparate work locations around Australia. The introduction of cards to capture data facilitated the participant-centred nature of the interview process. The methodology’s rigour and flexibility of application provided a valuable research tool capable of identifying and reporting on normally hard to identify aspects of managers’ day-to-day workplace stereotyping and managers’ discriminatory decision behaviour directed towards their colleagues.

The PCT-based methodology allowed considerable flexibility in use with grids having provided or elicited constructs used in the conduct of stereotype and discrimination research. Grids with provided constructs allowed managers’ workplace meanings to be investigated from a workgroup perspective while individual grids gave insights into managers’ personal meanings, through elicited constructs. Provided constructs allowed differences in managers’ perceptions to be noted according to membership in workplace social groups and for those perceptions and associated evaluation of colleagues’ attributes to be identified. Repgrid methodology using provided constructs, helped identify the
generally held nature of managers’ stereotypes, despite the widespread geographic differences between managers and their work organisations. Grids with provided constructs allowed managers’ stereotypes to be listed and for their discriminatory decisions to be determined, through the use of the social distance model. Further, structured grid results helped to show the significance of relations between managers’ stereotypes on colleagues and discriminatory decisions made on them. The PCT-based methodology used in the study provided findings which extended the canons of PCT-based research and contributed to the fields of stereotype, decision and discrimination research.

9.6 Limitations Associated With the Study

A most important limitation associated with this study related to social desirability effect. Respondents could have been seen to respond according to what they thought the older male researcher wanted by way of responses. There could also have been social desirability effect in managers’ age-gender construing of colleagues when using elicited constructs in interviews. A greater frequency of positive salient constructs was subsequently found assigned to older males in individual grids which carried higher levels of meaningfulness for those completing grids with elicited constructs over those using provided constructs.

When dealing with commonly held constructs in the study consideration was not given to the range of possible meanings participants could have attached to those constructs. Participants, in their construing, could have provided similarly labelled commonly held constructs which nevertheless individually, held different meanings. This is a limitation of all studies using language-based results.

Results became available from researchers during completion of field studies which suggested different types of information could be required during the selection or access employment phase to that for promotion or training decisions occurring later in the decision-making cycle (Perry, 1997). To meet this requirement the study ensured only participants with expert knowledge of the people under their consideration, their jobs, work responsibilities, and work contexts, were involved in the study. This research strategy
could pose problems however, in situations where limited applicant, job, or organisational information is made available to those involved in access, promotion or training decision-making as limited information could lead to increased discriminatory decision-making.

Measurement of grid-related characteristics in this study, such as cognitive complexity, could require careful review given researchers’ more recent criticisms of the accuracy and suitability of these measures (Bell, 2003) and potential difficulties associated with use of non standardised numbers of constructs in grids. Similarly, the interpretation of lopsidedness measures used in the study has been subject to some controversy in the research community. While PCT researchers have, on occasions, expressed preferences for different grid measurement systems (Fransella et al., 2004), there has been a general lack of agreement among researchers on the most appropriate measures to use in evaluating grid-related characteristics. While the forms of measurement used in this study could be questioned, cognitive complexity and lopsidedness measures employed were able to contribute positively, to age-gender based stereotype and decision research results.

The absence of older staff in some organisations led to some managers, lacking working experience with older colleagues, having their interview participation terminated, actions which required considerable extra field time and effort to build up participant numbers. Similarly, a paucity of younger male and female managers in organisations required extra efforts to gain their category’s participation in the study. The limited availability of some age-gender categories of staff in organisations or participants’ lack of experience in working with older staff reflect well differences in workforce demographics at the time, but could pose particular problems for future discrimination research. This researcher’s experience was that better access could have been provided by personnel departments to age related information on participants and saved considerable time.

Little research has been conducted into the use of a PCT-based methodology in stereotype, discrimination research. Limited information is therefore available to determine appropriate numbers of constructs needed to design a stereotype table, or desirable frequencies of salient constructs required to identify stereotypes. An arbitrary system used
to construct stereotype tables proved particularly useful, while the process used to identify group-wide stereotypes was particularly effective and well suited to research in industrial and commercial settings. The study provided results which served to identify the type, nature and function of stereotypes operating in workplaces, areas around which there has been little agreement between stereotype researchers to date (Pickering, 2001).

9.7 Study Results: Implications for Research and Practice

9.7.1 Implications for Research

The PCT-based methodology employed in this study successfully identified managers’ age-gender related perceptions on colleagues, their stereotypes and the extent of their discriminatory decision-making. Given the paucity of age-based discrimination research currently available, there could be value in adding this study’s outcomes to currently available gender-based research. The changing nature of the industrial landscape, including increased levels of anti age related legislation and greater availability of information on people, suggests that age-based discriminatory activities have become harder to identify and more prevalent in twenty first century workplaces. Given the changing world of work and greater degree of difficulty in researching discrimination in organisations, increased use of the social distance model in discrimination research, of the type developed in this study, could contribute to greater understanding of the nature and extent of age related discrimination and reduction in the incidence of age-based discrimination in organisations throughout Australia.

One organisation researched in the study reported a large frequency of negative salient constructs in managers’ construing which included a high frequency of less positive Self evaluations than those on colleagues. It could be concluded, based on the frequency of negative salient constructs provided, that the organisation was a depressed one (Higgins et al., 1981) and reflected a lower level of management health than other organisations in the study. Further research would be needed however, to establish whether differential frequencies of salient constructs, derived from lower perceptions of Self relative to colleagues, constituted a suitable method of determining organisational well-being.
9.7.2 Implications for Practice

Given this study’s results, organisations could benefit greatly from using a similar PCT-based methodology to make managers’ stereotypes more transparent and thereby reduce their discriminatory decision-making. The methodology is rigorous, well supported through extensive research, and could contribute to more equitable workplace practices. Importantly, the methodology is capable of operating at tacit levels of social perception and identifying well, managers’ stereotypes and related discriminatory judgements. The methodology provides an excellent means of overcoming practising managers’ reticence to discuss their stereotyping and discrimination on colleagues and could extend a useful learning intervention for managers, one which is capable of changing their discriminatory decision-making behaviour at work.

The PCT-based methodology could increase managers’ understanding of the stereotypical images they bring to work and relations between those images and their employment decisions. Decision results show a lack of symmetry in age-gender related characteristic between younger managers and their colleagues. It is important therefore that younger managers before taking up employment decision-making positions be encouraged to make use of the methodology employed in this study to gain insights into their likely stereotyping and how to minimise their potential discriminatory decision practices. This anti discrimination strategy, when employed in organisations, could help reverse problems associated with both positive and negative employment discrimination.

Perceived positive or negative attributes managers associated with differences in colleagues’ age-gender category membership point to well-established discriminatory perceptions and stereotypes. Constructs, of the type found in managers’ perceived social differences from their colleagues and associated stereotypes in this study, have been found to be highly stable in their interpretation of people and events and therefore could be hard to change (Higgins et al., 1982). While perceived social differences and negative stereotypes on older colleagues and positive imagery associated with younger colleagues remain firmly held by managers in Australian workplaces, change interventions will need to be well targeted, sustained, and make good use of a PCT-based social distance
stereotype-discrimination methodology to bring about longer term reductions in discrimination.

9.8 Conclusions and Future Directions for Research

Managers’ differential perceptions, based on colleagues’ age-gender related characteristics, reflect differences in positiveness of judgments on colleagues and point to managers’ decision-making being, guided by their perceived differences between their own and their colleagues’ characteristics. Decision-making is therefore more a function of the dynamics of managers’ workplace social relations than logic of choice and rationality of judgement. Managers, young and old, generally identify positively with younger colleagues in agreeing that younger male and female colleagues are socially more proximate and deserving of positive employment decisions, while older colleagues are socially more distant and more deserving of negative employment decisions.

This study’s results show the joint importance of cognition and emotion to decision-making processes. Future decision model design will need to take account of this study’s decision research results when designing decision models suitable for 21st century use. Decision theory has denied the importance of intuition to decision makers and failed to take account of the emotionality of managers’ workplaces. Further, research into discriminatory decisions should not be limited to gender-based enquiry but further take account of age-gender related differences in managers’ decision-making. Decision research in making use of an age-gender related framework could move beyond the traditional limits of age, or gender-based enquiry by incorporating the broader concept of perceived social distance.

Age-based discrimination has become a major diversity challenge for twenty first century organisations. This is occurring at a time when governments are urging older people to stay on in the workforce well beyond accepted retirement age, or are working to have older people return to work in organisations. There are factors working against these policies being realised due to the insidious nature of age related stereotyping and age-based discrimination, both of which can be hard to change. Age-based discrimination, positive or negative, deserves further research and urgent attention in many organisations to ensure
members are made aware of the age-based imagery they bring to work and relationships between those images and workplace related discriminatory decision behaviour. The creation of discrimination free organisations could lead to healthier work environments having greater attraction for older people to be employed in.
MANAGERS’ STEREOTYPES AND THEIR RELATION TO
EMPLOYMENT DECISION-MAKING IN THE WORKPLACE

A thesis submitted in fulfilment of the requirements for the degree

DOCTOR of PHILOSOPHY

From

UNIVERSITY OF WOLLONGONG

By

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Cert. ENG., Dip. Tech., B. BUS., MBA

DEPARTMENT of PSYCHOLOGY
(2007)
Volume Two

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**Appendix B**  *Repertory Grid-Based Methodology, Software Users’ Manual*

**Appendix C**  *Results of Regression of Themed Positive and Less Positive Salient Constructs and Managers’ Decisions*
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LIST OF APPENDICES
APPENDIX A

A DESCRIPTION OF THE INTERVIEW PROCESS
Appendix A

A Description of the Interview Process

Thanks for agreeing to talk about management decision-making for this study. This study is trying to establish how managers and supervisors in different part of the organisation make decisions about people at work.

I’m particularly interested in how you make decisions at work about selectability, trainability or promotability of people you work with or have worked with during your career.

Our discussions will take about one and one quarter hours to complete and will require you to:

1. Fill out some cards
2. Complete a grid
3. Construct a table
4. Fill out a table, perhaps in a 2nd meeting
5. Answer some questions about your job and the organisation you work in.

1. Fill out Some Cards

To start with I’ll get you to think about some people with whom you've worked in the past or are currently working with and to describe them in terms of their selectability, trainability or promotability. Here are six cards for you to write these descriptions on. I'd like you to write one set of descriptions to a card for each of the six people - three males and three females - from different age-gender groups whose work you know something about. I’d like you to think of these six people, and identify them from three different age groups: three males, one each 29 ≤, 30 - 44, ≥ 45 years of age and three females, one each: 29 ≤, 30 - 44, ≥ 45 years of age.

When I refer to selectability I mean the decisions you would make as to whether to select or not to select people whose jobs you know something about. I'm going to ask you to identify a number of different people you've worked with and to assume that they have all lost their jobs. You will then be asked to decide in turns of their selectablility as to whether or not they should be re-engaged by the organisation in the positions they formerly held, with some additional responsibility, and to outline the reasons behind your decisions in terms of their selectability

2 When I refer to trainability I mean the decisions you would make as to whether to send people to training sessions at the company's expense to help raise their skills, and the levels of responsibility that they may carry, or not. I'm going to ask you to identify a number of different people you've worked with and to make decisions about sending them on training, in terms of what you consider to be their trainability. You'll also be asked to give reasons behind your decisions to have people trained or not, in terms of their trainability.
Could you describe now on one side of each card, the individuals whose initials you've written on the card, in terms of their selectability, trainability or promotability. In describing each of them could you give both positive and negative descriptions, in terms of their selectability, trainability or promotability.

Have you been able to identify, describe the six-workplace colleagues?

Could you now turn the cards over, you may have to ensure their initials are on both sides of the card, and write down your decisions as to whether you would select, train or promote each of these people with whom you've worked. Could you write down on the blank side of the card your decision - yes or no and the reasons behind those decision, why 'yes' or why 'no'

2. Complete a grid

Could you bring together the six cards that you've written your selectability, trainability or promotability decisions on and number those cards one to six? One to three for the youngest to oldest males then four to six for the youngest to oldest females - one number per card. Could you now take together cards numbered one, two and three and sort them in terms of their selectability, trainability or promotability.

From among the three cards, select any two people described on the cards who are similar in terms of their selectability, trainability, or promotability and therefore different from the third person. I'm giving you a table now which is divided down the middle to give you left hand and right hand sides to write statements on. Write down, on the left-hand side of this grid, words you would use to describe how the people on the two cards you selected are similar and therefore different from the third in terms of selectability, trainability or promotability.

Now could you write on the right-hand side of the grids words that describes how the person on the third card differs from the other two in terms of selectability, trainability or promotability? I’d like you to tell me the more positive of the two terms you gave me and ensure that it is entered on the left hand side. The other end of the term, is it less positive or more positive than the other? If less positive then could you ensure that term is entered in the column on the right hand side of the grid.

Could you now move on to cards you have numbered four, five and six and sort them in the same way, any two cards similar and therefore different from the number of different people you've worked with and to make decisions about whether you would promote these people or not in terms of their promotability. Write the words down that describe how any two of the people described on the cards are similar in terms of their selectability, trainability or promotability and different therefore from the person on the third card. The words describing the way in which the two are similar should be noted on the left-hand side of the table whilst the words describing the difference of the third person should be entered on the right-hand side of the table. Again could you make sure that the more positive term is entered on the left hand side of the grid.

When I refer to promotability I mean the decisions you would make as to whether to promote people to jobs of greater responsibility in the organisation. I’m going to ask you to identify a number of different people that you have worked with and to make decisions about whether you’ll promote these people into positions of greater responsibility, or not in terms of their promotability. You’ll be asked to give reasons behind your decisions to promote these people or not in terms of their promotability.
Could you now move on and sort cards one, three and five in the same way that you sorted cards one, two and three and four, five and six. Could you now move and carry out the same sorting procedure, noting down on the table words describing similarity and difference for cards two, four and six as you have done previously. In situations where those competing grids felt blocked, two cards were concentrated on at a time, rather than three being used to elicit constructs. Another approach was to use frequently occurring words.

Let's have a look over the cards you have been working from. Do your cards have words or terms appearing frequently, perhaps two or three times? If you can find them and call them out to me I'll write them into the grid. Interviewer: You've given me a frequently occurring term from your cards, of reliable worker and I've written it down here: What would it, you be if you weren't this person/ doing this thing? What I'm looking for is the other end of things here (interviewer points to other pole in grid). What are the words to describe what you would be if you weren't a reliable worker. Participant, you can't be trusted. Fine I've noted down reliable worker versus can't be trusted. Let's move on to the next one.

Let's try and ladder from the terms you've given me and I've written on the grid. Is it important in this organisation that you be good at analysis? Why is that? Yes I'll note down, important to be analytical and why is that important? Respondent indicates that it gets the job done. Let's look now at the other end of things just soft stuff you just mentioned. What should I write down here describing what you would be if you weren't doing soft stuff? What's the word, or term for the other end of things here? Respondent replies would be doing your job well. Underlined words gained through laddering constitute bipolar constructs which would be included in grids.

Let's look now at anchoring each of the bi-polar statements you have written down on the grid by using a numerical scale, numbered 1 - 5. Could you take the grid page with the initials you entered across the top and the statements down both side and use the following scale to partition off or anchor statements in relation to each of the workplace colleagues we have been talking about.

Your grid identifies six workplace colleagues and Self by initials, starting from the younger male in the extreme left column on through to Self on the extreme right column. The relationship between each workplace colleague and bi-polar statements that you have written down on the grid, need to be identified in the cells in the grid, and so we’ll use a rating scale.

The rating scale I have noted down on your grid has a 1 and 2 on the left hand side, a 3 in the middle and 4 and 5 on the right hand side (as shown in Figure A-1). The number 1 in the scale refers to the ‘general case’ and the 2 refers to ‘sometimes associated with’ statements in the left-hand side. The 4 and 5 relate to ‘sometimes and general cases’ respectively, for terms on the right hand side. The 3 in the middle refers to ‘midway’ between the statements or ‘not sure’. Please refrain from using the number 3 rating unless you consider it to be absolutely necessary.
Figure A-1 *Individual Repertory Grid*

Rating scale applicable to each construct/element

<table>
<thead>
<tr>
<th>Left hand side ratings</th>
<th>Middle rating</th>
<th>Right hand side ratings</th>
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<tr>
<td>I  2        3                4  5</td>
<td></td>
<td></td>
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</tbody>
</table>

Elements (Workplace colleagues and Self) one element per column

| 1 Male 29 ≤ (initials) | 2. Male 30-44(initials) | 3. Male ≥ 45 (initials) | 4. Female 29 ≤ (initials) | 5. Female 30-44 (initials) | 6. Female ≥ 45 (initials) | 7. Self (initials) |

Bi-polar statements (constructs) elicited from subject - one set per row

<table>
<thead>
<tr>
<th>XXX</th>
<th>Left hand side statements</th>
<th>YYY</th>
<th>Right hand statements</th>
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<tr>
<td></td>
<td>Participant Completes Rating of Constructs, One Element at a Time</td>
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<tr>
<td></td>
<td>(Note Construct More Positive, As Directed)</td>
<td>(Note Construct Less Positive, As Directed)</td>
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</tbody>
</table>

In completing the grid, it will probably be easier to do it one column at a time. So take the first individual i.e. the younger male and anchor the relevant left or right hand statement that applies to him in terms of his *selectability, trainability or promotability* by assigning a number to that particular cell in the grid. Then move down to the next cell with its associated set of statements and select a number that applies to the relevant statement about him in terms of his *selectability, trainability or promotability*.

Let's take the first set of statements XXX on the left-hand side and YYY on the right-hand side. Would you say that the statement on the left-hand side (XXX) applied more to him than the statement on the right-hand side (YYY)? Or would you say that the reverse was true and the right-hand side statement was more applicable to him in terms of his *selectability, trainability or promotability*?
If the statement is generally true of him on the left-hand side (XXX) assign a 1, for the right-hand side (YYY) assigns a 5. If the statement is sometimes true, in terms of his selectability, trainability or promotability, on the left-hand side, assign a 2, for the statement on the right-hand side, assign a 4. If the individual is considered to fall somewhere between the right and left-hand statements, in terms of selectability, trainability or promotability, then assign a 3. Repeat this until you have completed the table for all six individuals and then complete it for your Self by applying ratings to the Self column in terms of your selectability, trainability or promotability. Please refrain from using the number 3 rating unless you consider it to be absolutely necessary.

Thanks for completing work on the cards.

3. Construct a Table

After analysing the constructs contained in the Repertory Grids collected earlier in the study, select the most commonly occurring constructs and enter them into a composite grid or table for use and completion by managers during the second stage of the study.

4. Complete a Table

Where it is necessary to conduct two separate interviews to complete the grids the second stage should take the following form:

Let's look now at this next stage of completing a table. I'm going to give you this sheet with ruled lines to fill out. Do you have a pencil or pen? You'll note that it is set up like a matrix or grid and that it is divided up into seven columns and has a number of statements down each side. The constructs or sets of statements fall on the left-hand and right-hand sides of the table and have been drawn from earlier discussions with people in your workplace.

Could you write down the initials of those people you described on the cards earlier in our discussions together, in the columns across the top of the table? Don't write their names down on the table, as I'll be taking this sheet away with me.

Could you enter their initials, one to a column from left to right at the top of the table? Enter the three males in columns 1, 2 and 3 in ascending age-gender order. Then do the same for the three females in columns 4, 5 and 6. Then enter you own initials in column number 7.

Let's now look at positioning the left-hand side and right-hand side bi-polar statements on the page in relation to the work colleagues you have introduced by initials across the top of the table. You'll note that there is a scale given across the top of the page.
This scale shows 1 and 2 on the left-hand side, a 3 in the middle and 4 and 5 on the right-hand side (as shown in Figure A-1). This is a similar scale to that used the last time we met. The number 1 in the scale refers to the ‘general case’ and the 2 refers to ‘sometimes associated with’ statements in the left-hand side. The 4 and 5 relate to ‘sometimes and general cases’ respectively, for terms on the right hand side. The 3 in the middle refers to ‘midway’ between the statements or ‘not sure’.

When you complete the grid I'll be taking it away to process it together with the other information you gave me the other day. I'll be giving you all information in our feedback forum in xx weeks.

5. Answer some questions about your job and organisation

Could you describe to me your job and its relationships with other jobs?

How long have you worked at your current job?
How long have you been in the organisation?
Do you have staff reporting to you? How many?
What is your job called? Does the title reflect the true nature of the job?
How would you describe your organisation as a place to work?

Could you describe your immediate work environment; your job, your management, the staff, and internal and external customers?

How well do people relate to one another in your workplace - your peers, your boss, team members, suppliers and customers?

6. Goodbyes

Many thanks for being part of the study. There will be general feedback session conducted for the group of people from your organisation who have participated in this study. This session will give those attending an insight into the results of the study in your organisation. You’ll be advised of the date, place and time of that meeting by the Human Resources Department.
APPENDIX B

USERS’ MANUAL FOR LATTICE SOFTWARE

Please see print copy for Appendix B
APPENDIX C

RESULTS OF REGRESSION OF THEMED POSITIVE AND LESS POSITIVE SALIENT CONSTRUCTS AND MANAGERS' DECISIONS
Table C-1 *Structured Grids: Results of Logistic Regression of Themed Positive and Less Positive, Salient Constructs Against Managers’ Reported Decisions*

<table>
<thead>
<tr>
<th>Category That Makes Decisions</th>
<th>Category of Significant Predictions</th>
<th>Decisions Overall</th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>Sig.</th>
<th>Exp B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Themed More Positive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely-Rated Constructs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger Male</td>
<td>Younger Male</td>
<td>73.6</td>
<td>0.45</td>
<td>0.22</td>
<td>4.19</td>
<td>0.04</td>
<td>1.57</td>
</tr>
<tr>
<td></td>
<td>Job Holder 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Persona 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Older Male</td>
<td>Older Male</td>
<td>66.7</td>
<td>0.48</td>
<td>0.26</td>
<td>3.27</td>
<td>0.07</td>
<td>1.61</td>
</tr>
<tr>
<td></td>
<td>Job Holder 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Themed Less Positive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely-Rated Constructs</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Older Male</td>
<td>Older Male</td>
<td>71.3</td>
<td>-0.49</td>
<td>0.27</td>
<td>3.26</td>
<td>0.07</td>
<td>0.61</td>
</tr>
<tr>
<td></td>
<td>Organisation 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Older Female</td>
<td>Older Female</td>
<td>64.4</td>
<td>-0.58</td>
<td>0.28</td>
<td>4.17</td>
<td>0.04</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td>Organisation 6</td>
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<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>